



# Strategies to Achieve Balanced Inclusive Educational Development

## —2011 Dujiangyan International Forum

Organizing Committee of Dujiangyan International Forum

### Sponsors

Chinese National Commission for UNESCO

Chengdu Municipal Government

Beijing Normal University

### Organizers

UNESCO International Research and Training Centre for Rural Education (INRULED)

Chengdu Education Bureau

Institute of International Education (IIE), Stockholm University

Southwestern University of Finance and Economics

Dujiangyan Municipal Government

Chengdu University



# **Strategies to Achieve Balanced Inclusive Educational Development**

—2011 Dujiangyan International Forum

*Equity • Quality • Internationalization*

Editors

**Vinayagum Chinapah**

Institute of International Education (IIE), Stockholm University

And

**Li Wang**

UNESCO International Research and Training Centre for Rural Education  
(INRULED)

Organizing Committee of Dujiangyan International Forum

May, 2012

Additional copies of this book including a PDF version are available at the Institute of International Education, Department of Education, Stockholm University, Stockholm, Sweden; and UNESCO International Research and Training Centre for Rural Education (INRULED). Beijing, China.

Cover Artwork: John Foxx/Getty Images

Printed in China by UNESCO International Research and Training Centre for Rural Education (INRULED)  
Beijing, 2012

Copyright and distribution:

© Institute of International Education,  
Department of Education,  
Stockholm University,  
Sweden

UNESCO International Research and Training Centre for Rural Education (INRULED)  
Beijing, China

ISBN: 978-91-979971-9-5

## Contributing Authors

Vinayagum Chinapah  
Manzoor Ahmed  
Gerhard Kutsch  
Qutub Khan  
Wolfgang Vollmann  
Pushpanadham Karanam  
Yuhong Du  
Yongmei Hu  
Ke Lu  
Abetu Kefyalew Waktole  
Joel Jonathan Kayombo  
Greg Shaw  
Yonggong Liu  
Wei Wu  
Pengfei Ning  
Martha Mweneni Kashea  
Awol Endris

Mzingisi Gqwede  
Jiaying Zhang  
Zhiyong Qi  
Zhaoyu Jia  
Fumin Lei  
Yu Lei  
Qiang Wang  
Wen Zhang  
Greg Rudd  
Qi Dong  
Garry de la Pomerai  
Seunghwan Lee  
Kalimili Sujatha  
Ling Ke  
S.C. Panigrahi  
Li Wen  
Jian Tian

*Report from The 2011 Dujiangyang International Forum:  
UNESCO Chengdu Conference*

*Sponsored by Chinese National Commission for UNESCO, Chengdu  
Municipal Government and Beijing Normal University*

*Organized by UNESCO International Research and Training Centre  
for Rural Education (INRULED), Chengdu Education Bureau,  
International Institute of Education (IIE), Stockholm University,  
Southwestern University of Finance and Economics, Dujiangyan  
Municipal Government, and Chengdu University (Chengdu, China,  
August 2011)*





Inauguration ceremony of the Forum attended by Mr. Tao Xiping, Mr. Yang Xingping, Ms. Irina Bokova, Mr. Tang Qian, Mr. Dong Qi and Mr. Du Yue (from the left).



Mr. Dong Qi, President of Beijing Normal University, Director of UNESCO International Research and Training Centre for Rural Education, meets Ms. Irina Bokova, Director-General of UNESCO.



Keynote speech by Ms. Irina Bokova, Director-General of UNESCO, at the opening ceremony of the Forum.



Mr. Li Chuncheng, Member of Standing Committee of Sichuan Province and Secretary of Chengdu Municipal Party Committee, meets Ms. Irina Bokova, Director-General of UNESCO.



Keynote speech by Mr. Ge Honglin, Mayor of Chengdu, at the opening ceremony of the Forum.



Keynote speech by Mr. Vinayagum Chinapah, Head of the Institute of International Education, Stockholm University, at the opening ceremony of the Forum.



Keynote speech by Mr. Du Yue, Secretary-General of Chinese National Commission for UNESCO, at the opening ceremony of the Forum.



Mr. Fu Yonglin, Deputy Mayor of Chengdu chairs the opening ceremony and presents the 2011 Annual Report of the Educational Development of Chengdu.





Mr. Lu Xinwei, Director of Chengdu Education Bureau presents the 2011 Monitoring Report on Balanced Compulsory Education in Chengdu.



Inaugurating ceremony of the establishment of Dujiangyan Associated Centre of UNESCO International Research and Training Centre for Rural Education attended by Mr. Dong Qi, Mr. Yang Xingping, Mr. Tang Qian, Mr. Liu Junlin and Mr. Lu Xinwei (from the left).



Plenary session of the Forum.



Some participants of the Forum.

**Address by Irina Bokova, Director-General of UNESCO  
on the occasion of Dujiangyan International  
Forum – UNESCO Chengdu Conference  
China, Chengdu, 7 August 2011**

Mr. Honglin, Mayor of Chengdu,

Mr. Dong Qi, Vice President of Beijing Normal University and Director of UNESCO International Research and Training Centre for Rural Education,

Mr. Liu Junlin, Secretary of the Party Committee of Dujiangyan,

Distinguished panelists, guests, ladies and gentlemen,

It is indeed a real pleasure for me to be with you today in this ancient and I would say very dynamic, modern and flourishing city of Chengdu.

I would like to first of all thank you, Mr. Mayor, for your warm hospitality, and congratulate the Municipal Government, the National Commission for UNESCO, Beijing Normal University and INRULED for joining forces to organize this second Dujiangyan International Forum.

The theme of this Forum is relevant to education worldwide. You have chosen to focus on strategies to achieve balanced inclusive educational development. This is not only a key to individual fulfillment but also to national prosperity. It is a key to globally reducing poverty and achieving the internationally agreed development goals. It is fitting that China is organizing these annual Forums. China has made educational developments at all level a foundation for its remarkable economic and social transformation. The country has taken stock of inequalities and acted on them.

Equity and quality are the two overarching objectives of China's National Plan for Medium and Long-Term Education Reform and Development, which runs from the year of 2010 to 2020. I would go as far as saying that they should be the two pillars of education reform everywhere globally. Globalization has made our world more integrated, but it has also led to increasing inequalities. This is a threat to social cohesion, to security and to peace. Marginalization is a reality that exists in all countries to different degrees. It can be linked to migration, to urban or rural poverty, to gender, to ethnic belonging or to disruptions caused by natural disasters and armed conflict. Here in Chengdu, we know all too well the consequences after the devastating earthquake in 2008. Allow me to say that I am pleased we are working together to build capacity in the area of disaster risk reduction. This is an increasingly vital area for education programming.

Ladies and Gentlemen, education is UNESCO's top priority. We systematically advocate for an inclusive and holistic approach to education. We do this because learning is a lifelong journey. An education system is only as resilient as its parts – from early childhood through to primary, secondary and higher education, along with literacy and technical and vocational skills and training. This vision was endorsed by Ministers at the High-Level Segment of the UN Economic and Social Council, which convened for the first time on the theme of education in Geneva last month. The Ministerial Declaration recognizes education as a catalyst for the achievement of the global goals against poverty. It affirms that "education plays a fundamental role in creating an inclusive society and reducing inequity and inequality, as well as for achieving sustained, inclusive and equitable economic growth, poverty eradication and sustainable development." To achieve this vision and reach the 2015 goals, we must bridge several gaps. I know you will be focusing on them during this Forum.

First, the equity gap. If we fail to reach the marginalized and to protect the vulnerable, we jeopardize our achievements. This must start with early childhood. The earlier, the better. China's national plan pledges to achieve universal preschool education and to direct more resources towards rural, impoverished and ethnic areas. This is clever pro-poor spending. I would like particularly to thank and to commend the work of UNESCO

International Research and Training Centre for Rural Education. Bridging the equity gaps means quality education for all girls and women. To this end UNESCO launched in May a new Global Partnership for Girls' and Women's Education, with the United Nations Secretary-General Ban Ki-moon. It focuses on girls' secondary education and women's adult literacy – the weak links in many countries. Women account for the majority of the world's 793 million illiterates. This situation is holding back all efforts to reduce poverty and improve human development.

UNESCO will also mobilize all political attention around literacy next 8 September, on International Literacy Day. China has pledged to eliminate illiteracy. It generously supports and finances the UNESCO Confucius Prize for Literacy, which every year, serves to reward excellence and innovation in promoting literacy throughout the world. We need to share these best practices and this knowledge through reinforced international cooperation. We also know that the foundations for literacy lie in quality schooling and quality lifelong learning programmes.

Quality is next gap we need to cross. We must understand the causes of poor learning outcomes and how to improve the relevance of all learning. This is imperative in today's fast-changing times. Individuals must increasingly be capable to adapt, to solve problems, to think critically and to act responsibly. UNESCO is supporting countries in diagnosing and monitoring the quality of education systems through the development of a special framework, a process in which China has been actively engaged. Improving quality means also making national priorities of teacher education, training and recruitment. This is the objective of UNESCO's ten-year Teacher Training Initiative for sub-Saharan Africa (2006-2015) and of our International Task Force on Teachers for Education for All, of which China is a member country. All of this requires political will. All of this calls for resources. This means we must bridge also a financing gap through increased domestic spending and increased aid. It is not only a matter of the international community meeting the commitments it has made. The importance of new donors on the global scene and innovative financing lies here.

China is playing an increasingly influential role in supporting educational development in low-income countries. UNESCO is benefiting from your confidence. You are contributing to the development of our International Institute for Capacity Building in Africa, based in Ethiopia, the granting of fellowships in Africa and to the South-South Cooperation Fund for Education, just to mention a few examples. This is solidarity in action. It is a recognition of education's fundamental role in the advancement of countries and in building a more just and equitable world. Chinese are helping to bridge the gaps that I just mentioned. We must privilege collaboration over competition. All societies will gain when they stand on a more equal footing. Global poverty and lack of opportunity are threats to security and to peace. Less than four years away from 2015, renewed commitment, more innovation and a sharp focus on bridging these key gaps are part of the agenda for accelerating progress towards achieving Education for All. Sharing knowledge about what works and building up the evidence base – as we do with our annual Education for All Global Monitoring Report – is important for both advocacy and action. We can better harness the potential of ICTs to increase access to education and encourage more interactive learning. We can improve the linkages between education and employment, in particular through strengthening and modernizing technical and vocational education and skills programmes. With this in mind we are actively preparing for the Third TVET Congress that will take place in Shanghai next May.

Finally, we must never forget the ethical dimension of education. Education is a force for peace, for building understanding and promoting intercultural dialogue. In our increasingly interdependent world education must be based on shared values, respect for fundamental rights and freedoms. Harmony – a principle so cherished by Chinese philosophy and civilization – lies in striking the right balance – in recognizing our diversity and our universality.

I am confident that this Forum will touch on all these themes.

I wish you every success in your discussions.

Thank you for your attention.

|                          |      |
|--------------------------|------|
| Table of Contents        | xiii |
| Acknowledgements         | xix  |
| Introduction and Summary | xxi  |

## PART ONE

### THE EQUITY CHALLENGE

#### THE ROLE AND IMPORTANCE OF INCLUSIVE EDUCATION

|                  |  |    |
|------------------|--|----|
| <b>CHAPTER 1</b> | Education of Quality for All (EQFA):<br>Is it a Quality-Equity<br>Trade Off! (Keynote Address)   | 3  |
|                  | <i>Vinayagum Chinapah, Institute of International<br/>Education, Stockholm University, Sweden</i>  |    |
| <b>CHAPTER 2</b> | Bridging the Rural-Urban Gap:<br>Towards Integrated Development and Rural<br>Transformation  | 21 |
|                  | <i>Manzoor Ahmed, BRAC University, Dhaka,<br/>Bangladesh</i>   |    |
| <b>CHAPTER 3</b> | Addressing the Diversity of Students in<br>Rural Areas: Primary Schooling and the Quality<br>Puzzle  | 29 |
|                  | <i>Qutub Khan, Former Regional EFA and Literacy<br/>Coordinator for the Arab States, UNESCO Beirut,<br/>Lebanon</i>                                  |    |
| <b>CHAPTER 4</b> | Poverty, Demography, Health and the<br>Development of Basic Education in South-Asia.<br>A Critical Analysis of Selected Data on Human<br>Development | 61 |
|                  | <i>Wolfgang Vollmann, Kathmandu University, Nepal</i>  |    |

|                  |  |     |
|------------------|--|-----|
| <b>CHAPTER 5</b> | Education for Rural Transformation:<br>An Effective Approach to Inclusive Development in<br>China                                  | 71  |
|                  | <i>Yonggong Liu, Wei Wu and Pengfei Ning, College<br/>of Humanities and Development, China Agricultural<br/>University, China</i>  |     |
| <b>CHAPTER 6</b> | Innovation in Mechanism and Development<br>of Content in Education Promotion of Balanced<br>Development in Education of the Region | 85  |
|                  | <i>Yu Lei, Pujiang County, China</i>   |     |
| <b>CHAPTER 7</b> | To Establish an Education Community for<br>the New Rural Construction  | 93  |
|                  | <i>Ling Ke, Chengdu University, China</i>  |     |
| <b>CHAPTER 8</b> | Reaching the Marginalized Rural Poor:<br>A Study of a Multi-Purpose Community Learning<br>Centre in Yunnan Province                | 99  |
|                  | <i>Wen Zhang, INRULED Beijing, China</i>   |     |
| <b>CHAPTER 9</b> | Rural Human Resource Development<br>in China's Dual Social Settings: Policies, Strategies<br>and Equity                            | 115 |
|                  | <i>Qiang Wang, INRULED, College of Education<br/>Nanjing Normal University, China</i>  |     |

## PART TWO

### THE QUALITY CHALLENGE

#### THE NEED FOR SKILLS DEVELOPMENT, VOCATIONAL EDUCATION AND TRAINING

- CHAPTER 10** Skill Development for Rural Transformation 133  
National, International and Comparative  
Perspectives

*Vinayagum Chinapah, Institute of International  
Education, Stockholm University, Sweden*

- CHAPTER 11** Skill Development and Economic Sustainability 145  
among Rural People: Policies, Programs,  
Impact and Future Challenges in India

*K. Pushpanadham & S.C. Panigrahi, M.S.  
University of Baroda, India*

- CHAPTER 12** Education for Rural Transformation through 159  
Principals' Professional Development in Indonesia

*Greg Shaw, Charles Darwin University, Australia*

- CHAPTER 13** Improving the Learning Achievement of the 181  
Disadvantaged Students: Evidence from BEWAP

*Yuhong Du, Yongmei Hu and Ke Lu, Institute for  
Economics of Education, Beijing Normal University,  
China*

- CHAPTER 14** Meticulous Monitoring and Macro 199  
Coordination to Promote Equilibrium in the  
Development of Education: Report on Inter-School  
Equilibrium of Compulsory Education in Shuangliu  
County

*Zhaoyu Jia, Chengdu Municipality, China*

|                   |   |     |
|-------------------|---|-----|
| <b>CHAPTER 15</b> | Managerial Actions Based on the Results of Monitoring and Promotion of Coordinated and Balanced Development of Education in the Region  | 209 |
|                   | <i>Fumin Lei, Wuhou District, China</i>   |     |
| <b>CHAPTER 16</b> | Vocational Education and Training Policy Reform Analysis: the Current State of Skills Development in Namibia  | 215 |
|                   | <i>Martha Mweneni Kashea, East China Normal University, China</i>   |     |
| <b>CHAPTER 17</b> | The Role of Higher Agriculture Vocational Education for Rural Transformation: The Significance of Skill Development in China  | 229 |
|                   | <i>Jiaying Zhang, Institute of International Education, Stockholm University, China</i>   |     |
| <b>CHAPTER 18</b> | Practice and Experience of Rural Community Learning Centres in China  | 247 |
|                   | <i>Zhiyong Qi, Gansu Institute for Educational Research, China</i>  |     |
| <b>CHAPTER 19</b> | The Foundation Project to Improve the Quality and Fairness of our Compulsory Education: Project Survey of Chinese Children and Teenagers' Psychological Development Characteristics | 261 |
|                   | <i>Qi Dong, Beijing Normal University, China</i>  |     |
| <b>CHAPTER 20</b> | Vocational Education and Training System in India: Policies, Status and Best Practices for Rural Transformation   | 269 |
|                   | <i>Kalimili Sujatha, National University of Educational Planning and Administration, India</i>  |     |



- CHAPTER 21** Deeply Promote Cooperation among Schools, Collaboratively Create a Well-Balanced Quality Education: An Exploration to Promote Education Balance by Schools' Chain Development 319

*Li Wen, Chengdu Yandaojie Primary School, China*

- CHAPTER 22** “Quality of Education”: How Far is an International Consensus Conceivable? 329

*Gerhard Kutsch, Senior Educational Specialist, France*

## **PART THREE**

### **THE CHALLENGE FOR INTERNATIONALIZATION**

#### **CASE STUDIES AND LESSONS LEARNED**

- CHAPTER 23** Education Internationalization: How China Prepares Students for the 21st Century and a Globalizing World 347

*Abhimanyu Singh, Director and Representative, UNESCO Beijing, China*

- CHAPTER 24** Rural Transformation through Inclusive Education: Experiences from Africa 353

*Awol Endris, UNESCO IICBA, Addis Ababa, Ethiopia*

- CHAPTER 25** Equity Promotion in EFA Initiatives in Tanzania: Achievements and Shortfalls 371

*Joel Jonathan Kayombo, Tutorial Assistant, Dar Es Salaam University College of Education, Tanzania*

|                   |  |     |
|-------------------|--|-----|
| <b>CHAPTER 26</b> | Higher Education Quality Assurance and Accreditation Systems in Africa: Origins, Structures and Challenges                 | 389 |
|                   | <i>Adetu Kefyalew Waktole, Wollega University, Ministry of Education, Ethiopia</i>   |     |
| <b>CHAPTER 27</b> | Curriculum Standards for Quality Basic Education: the Case of Namibia  | 419 |
|                   | <i>Mzingisi Gqwede, Deputy Director, Ministry of Education, Namibia</i>  |     |
| <b>CHAPTER 28</b> | There are No Bad Students, Only Bad Teachers: We Must Never Forget There Are Two Sides to Life's Coin                      | 433 |
|                   | <i>Greg Rudd, Chairman, GPR Asia, Australia</i>  |     |
| <b>CHAPTER 29</b> | Disaster Reduction Considerations to Enhance Rural Sustainability  | 443 |
|                   | <i>Garry de la Pomerai, Specialist in Disaster Prevention Education, UK</i>  |     |
| <b>CHAPTER 30</b> | Revisit the Aim of Education from EIU Perspective  | 449 |
|                   | <i>Seunghwan Lee, Director, UNESCO Asia-Pacific Centre of Education for International Understanding, Republic of Korea</i> |     |
| <b>CHAPTER 31</b> | To Amalgamate Chinese-Foreign Cultures in Open Institutional Education   | 457 |
|                   | <i>Jian Tian, Chengdu Shishi High School, China</i>  |     |
| <b>Appendix</b>   | List of Participants   | 465 |
| <b>Index</b>      |  | 473 |

## ACKNOWLEDGEMENTS

The current quality crisis facing education and its further development hinders the achievement of the international standards set by the Millennium Development Goals (MDGs) and Education for All (EFA) by 2015. The questions of quality and equity have been discussed at length and the recognition of the effects of poverty, inequalities of geographical regions (rural and urban), inclusion, and political stability are widely known. Globalization has the ability to foster communication and the sharing of challenges of quality and equity to find common solutions as well as the ability to emphasize and increase the disparity between and within nations. One of the means to reverse the increasing disparity and increase equity is the development of vocational education, skills development and training. Especially within rural and remote populations, vocational education has the ability to lead to the sustainable development through the transformation of both human and physical environments. The current situation has yet to achieve this transformation.

Within this context the 2011 Dujiangyan International Forum held on August 7-8, 2011 in Chengdu, China, intended to continue the discussions begun by the previous UNESCO-INRULED 1<sup>st</sup> Dujiangyan International Forum in 2010. The purpose was to clarify and elaborate on the issues and challenges surrounding education in reaching the goals of balanced sustainable development in rural and urban areas. Equity, Quality and Internationalization of Education were the main themes with a variety of sub-themes of balancing the development of rural and urban areas, skills and vocational training, and internationalization intended to focus the international debate within the broad context of sustainable, balanced rural transformation.

The Dujiangyan International Forum was greatly honoured by the presence, participation and support of several high level representatives from International Agencies such as the Head of UNESCO, Director-General Mrs. Irina Bokova, the Assistant Director-General for Education of UNESCO, Mr. Qiang Tang, the Director and Representative for UNESCO Beijing Office, Mr. Abhimanyu Singh and Ms. Ann Herbert from the International Labour Organization Office for China and Mongolia.

On behalf of all those who co-sponsored the conference, we wish to express our deepest appreciation and thanks to all the contributors, honoured guests, participants, and presenters for their valuable contributions to the discourse surrounding strategies to achieve balanced inclusive educational development. Several education specialists, academics and policy makers from governments, international organizations, research institutes, universities and schools across the globe came to participate. This present book is a result of their collected wisdom and experiences. We would also like to thank specially the editorial team members, Ms. Zhang Dian, Mr. Ren Chao and Ms. Wang Wanlin of UNESCO-INRULED and Mrs. Kareanann Blom of the Institute of International Education (IIE), Stockholm University for their professional hard work in the finalizing of the different contributions for this book.

Professor Vinayagum Chinapah

(IIE)

Professor Li Wang

(UNESCO-INRULED)

# INTRODUCTION AND SUMMARY

## I. Background

Both developed and developing countries are well aware of the quality crisis within education and its development consequences. Poor education quality, therefore, is detrimental to poverty reduction efforts, social equity and inclusion, social coherence and political stability. It stands in the way of attaining poverty reduction related to the Millennium Development Goals (MDGs) at an individual, national, regional and global level. At the same time, it presents obstacles to attaining Education for All (EFA) goals, each of which has education quality aspects; and particularly goals 2, 5, and 6. Quality, within the MDG and EFA framework, is integrally interwoven with the notion of equity which, however is defined, is the cornerstone of the notions of inclusiveness. In considering educational and national development, globalization is well recognized as a phenomenon that can neither be denied nor ignored. It offers great possibilities and poses grave risks at the same time. Positively, it provides opportunities for nations to share ideas and practices about common problems of quality and equity in education. Education and training, recognized as the vehicle to transform the human and physical environment and lead to sustainable development, need to be transformed in themselves in the first place. Thus, it calls for attention and attempts to readdress current situations, challenges and trends of two pillars of education- quality and equity - in the context of globalization.

Addressing the above-mentioned educational issues, the 2011 Dujiangyan International Forum was held on August 7-8, 2011 in Chengdu, China. It was co-sponsored by the Chinese National Commission for UNESCO, Chengdu Municipal Government and Beijing Normal University; and co-organized by UNESCO International Research and Training Centre for Rural Education (INRULED), Chengdu Education Bureau, International Institute of Education (IIE), Stockholm University, Southwestern University of Finance and Economics, Dujiangyan Municipal Government and Chengdu University.

## **II. Themes**

The 2011 Dujiangyan International Forum identified three overarching themes to be developed by participants. These themes were Equity, Quality and Internationalization of Education. Under this umbrella, a number of sub-themes were introduced to focus the Forum on the current international debate concerning the Millennium Development Goals (MDGs) and Education for All (EFA) within the broad context of balanced rural transformation in the broadest sense to encompass sustainable practices within the local and global environment. The sub-themes were identified as Promoting Balanced Development of Education in Rural and Urban Areas; Education and Training for Rural Transformation; and Enhancing the Level of Internationalization of Education.

## **III. Aim and Expected Outcomes**

The overarching aim of the Forum was to clarify the crucial issues concerning the use of education and training to realize the goal of balanced sustainable development in rural and urban areas. The focus of the Forum is on the harmonious development of education and training within the context of local, regional, national and global challenges of the 21<sup>st</sup> century. Balanced sustainable rural transformation is the key concept within these challenges.

The expected outcomes of the Forum were 1) to share experiences and good practices on narrowing the urban-rural divide that put the lives of millions of people in jeopardy and limits their prospects for the future, on balancing educational equity and quality, and on promoting the internationalization of education through partnerships; 2) to provide empirical evidence for stakeholders and clarify their roles and responsibilities for achieving balanced sustainable development; 3) and to reach a consensus on immediate joint actions for empowering rural communities especially the rural poor, for enhancing quality and promoting equity of education, and for inclusive sustainable development of a nation and the world at large.

## IV. Participants

The Forum was attended by 120 national and international participants, including educational specialists, academics and policy makers from governments, international organizations, research institutes, universities and schools in different countries, especially in developing countries.

## V. Chapter Summaries

The thirty chapters of the book have been selected and organized within the context of the 2011 Dujiangyan International Forum and are according to three thematic portions, which reflect the challenges and opportunities to learn from in-depth case studies and research. The three portions are Part One: The Equity Challenge: The Role and Importance of Inclusive Education; Part Two: The Quality Challenge: The Need for Skills Development, Vocational Education and Training; and Part Three: The Challenge for Internationalization: Case Studies and Lessons Learned.

In **Chapter One**, Chinapah acknowledges the paradigm shift of policy discourse in regards to what constitutes as educational quality. He questions, who does quality benefit and for whose interest, problematizing the relationship between quality and equity. Chinapah argues for the refocus of Education of Quality for All (EQFA) on its intent purpose of learner, learning and teacher centred process. Using evidence from surveys and previous research to reinforce the importance of addressing the teaching-learning process, Chinapah further recommends that EQFA should not be restricted to formal education alone, but rather have a holistic perspective and approach. Chinapah highlights the importance of all partners (national, regional and international) to work together towards strengthening the EQFA perspective based on learner-centred pedagogy, in order to meet the needs of basic and lifelong learning.

Rural communities' learning needs have increasingly diversified, becoming more complex and demand driven. Ahmed in **Chapter Two** emphasizes the need for an agenda for action, stating that Education for Rural Transformation (ERT) proposed an outline for such critical needs of the overarching Education for All (EFA) issues: access and equity, quality and relevance, and efficiency and accountability.

Objectively measuring the progress in the last decade, Ahmed concludes that the issues raised a decade earlier, remain critical and un-amended while, the intensity and extent of poverty has dramatically increased.

**Chapter Three** addresses the concern for quality of basic education and its need to match employment sector needs, have deeper meaning and relevance to daily lives, and encompass new technologies. Qutub Khan observes primary schools in relation to the question of quality and proposes an integrated model. Observing key components of this model, Khan concludes that although there are a variety of ways to improve the quality of basic education those crucial to be successfully implemented are: more active involvement of local stakeholders in development of curriculum in order to increase both relevance and responsiveness to the needs of children in the varying socio-economic contexts, and the need for the corresponding production of relevant teaching and instructional materials with the improved usage of child to child learning opportunities.

Vollmann, in **Chapter Four**, states the aim to reduce the gap of knowledge between the conception of socio-economic realities and the declared educational goals and strategies. Examining the four countries: India, Pakistan, Nepal and Bangladesh, Vollmann uses select human development data to remark on the two themes of: forms of poverty and forms of basic education. Observing key indicators such as fertility, family planning and contraception juxtaposed to literacy and the weak enrolment in Technological and Vocational Education Training (TVET), Vollmann concludes that new and innovative policies need to be developed based on the unique socio-cultural barriers in South Asian Societies.

Rural development and poverty reduction remain a fundamental challenge in light of increasing globalization and population growth especially for countries like china and other developing nations. In **Chapter Five**, Yonggong Liu, Wei Wu and Pengfei Ning, review the present situation and challenges faced by rural education and the skill development of farmers. The authors present the case of farmers' education/training in rural transformation an integral part of inclusive development.

**Chapter Six** relays a detailed account of the formulation of a management and alliance of schools to contribute to a balanced joined development and progress of education. Yu Lei attributes one of the keys to the success of this chain of schools to the equal development of teachers from both rural and urban areas. Teachers and



management shared goals and training modules which increased the quality of instruction and shared resources.

Ling Ke in **Chapter Seven** investigates and surveys the education status of outside-school children in 165 villages in Pixian County. The results of the study recognized new educational resources available to rural communities. By focusing the rural community around the vitality of school education, it has expanded the space of children's growth to comprise of their families, partners, neighbours and schools. This in turn has increased children's love and loyalty to their community. There by successfully reversing the shift of "education for departure from the countryside" into "education of agricultural service."

In light of the diverse rural contexts, Education for Rural Transformation (ERT) requires the integration of formal, non-formal and informal through a multi-sectoral educational approach that administers to the specific learning needs for skills and capacity development. In **Chapter Eight**, Wen Zhang observes the Community learning centre (CLC), in the Yunnan province. The CLCs compose of four pillars: a training centre, a library, a development centre and a cultural activity centre, reflecting the context of the community. Participatory- learning and more relevant linkage between schools and the community result in beneficial results in terms of gender, age and rural people. Zhang concludes that education must be flexible in order to effectively spur rural transformation.

**Chapter Nine** discusses the dichotomy of rural and urban social structures in Chinese society. Qiang Wang examines the national plan for training of rural workers put forth by the national government from 1993-2010. Wang examines the case study of the Sunshine Program that provides pre-service training of surplus labourers to aid their transfer to non-agricultural industries. Wang also examines the contributions of non-government organizations. Three models of rural human development are introduced: process-focused training, skills-focused training and rights-focused training. Wang also examines the ways of training as well including on-the-job and learning for self-development. Finally Wang looks at challenges rural human resources are faced with concluding that strategies to improve human resource development can directly improve migrants with knowledge and skills needed to improve their employment and quality of life. Wang also acknowledges that this improvement of life needs to include improved understanding and appreciate between rural and urban populations.

In the first chapter of **Section Two** focusing on quality and the needs for skill development, vocational education and training, Vinayagam Chinapah makes a convincing argument for a re-evaluation of present educational policies and priorities. In the in-depth on going comparative study of ERT in China and India, **Chapter Ten** highlights many issues raised from the International symposium on ERT hosted by the Institute of International Education (IIE), Stockholm University. Several of these issues include ICT / E-learning, the importance of teachers, integrated development and of educational services, exploration of vocational and skill development to name a few. Several challenges and opportunities were also raised from the symposium and these lead into Chinapah's charge for the Dujiangyan International Forum to further contribute and build upon what has already been learnt, to re-examine the educational practices and the role of education in rural contexts, through fresh perspectives in order for education practices to effectively aid in sustainable rural transformation.

Pushpanadham and Panigrahi in **Chapter Eleven** address the rationale for skill development and innovative programs introduced as a result by the Indian Government. The authors highlight the importance of lifelong learning, youth and women empowerment and the result on economic sustainability. Pushpanadham and Panigrahi also discuss the challenges specifically in regards to the Indian context.

In **Chapter Twelve**, Shaw examines the pivotal nature of principal leadership and management in ensuring the effectiveness of schools. Focusing on Indonesia's recent changes in education policy effect on principal professional development, a programme of principal selection, training and professional development was initiated using a five level approach for development. Competency Based Training focused on workplace competency and workplace learning is at the centre of the program. The preliminary results are reported as successful with the implications of further development in educational practices, administration and the transformation of Indonesian basic education.

Yuhong Du, Yongmei Hu and Ke Lu, in **Chapter Thirteen**, disclose the impact of project intervention on student learning achievements in primary school in the Sichuan, Gansu and Yunnan provinces and the Ningxia Hui and Guangxi Zhuang autonomous regions in China. Their impact assessment of the 'Basic Education in Western Areas Project' or BEWAP observed the key indicators of inputs and outputs and the specific project contributions. BEWAP was

intended to increase access and completion of good-quality basic education through the intervention of teacher training and school facilities. The results were found that those students attending BEWAP project schools had a larger improvement in learning achievement, especially for girls, ethnic minorities and other disadvantaged students.

In **Chapter Fourteen**, Zhaoyu Jia describes the implementation and monitoring of six projects employed in the Shuangliu County of China. The projects were intended to optimize school facilities and talents in order to promote education quality and reduce urban – rural differences. The monitoring system was established to ensure basic rights and the equal distributions of education resources was both balanced and sustainable. Jia found that the projects to be successful and the monitoring feedback and act itself useful in the administration of education development. The imbalance between urban-rural schools and between individual schools was greatly reduced and coordination was promoted.

Likewise in the Wuhou District, in the Chengdu Municipality, China, monitoring of inter-school equilibrium and balanced development was also undertaken. In **Chapter Fifteen**, Fumin Lei describes Wuhou District's decision making process to increase equality. Financial Investment, distribution of material and human resources, and the improvement of management were as a result, distributed more effectively and equally.

Martha Mweneni Kashea in **Chapter Sixteen**, observes Namibia and explores the debates of skill development, the current state of skills in Namibia and the lessons the could be learned from experiences in China. Concluding that immediate intervention is required in Namibia, Kashea's study recommends that skill development be put into all levels of education including early childhood development and basic education in order to ensure effective skill development and reduce the unnecessary cost remedial education.

**Chapter Seventeen** looks at the role of higher agriculture vocational education's role in rural transformation in China. Jiaying Zhang explores the challenges faced by China's rural society and observes economic growth and the resulting increase of farmers' incomes, intergenerational mobility, modes of higher vocational institutes and the improved education of the rural population through various training programs.

Zhiyong Qi introduces the project of “Rural Community Learning Centres for Poverty Alleviation” that started in 1997 in the Gansu, Yunnan provinces and the Guangxi Qi Autonomous Region of China in **Chapter Eighteen**. The community Learning centres promoted the development of reaching the educated un-reached and improve the quality of the local community context. Through case study examples Qi observes that although the community centres are making improvements, the overall functions could be improved with the increase of personnel training, previous successes should be reviewed, summarized and distributed, theoretical research should be reinforced and implemented, and further resources are need to meet the growing needs.

**Chapter Nineteen** looks at the “Survey of Chinese children and teenagers’ psychological development characteristics” project from the Chinese Ministry of Science and Technology China. Qi Dong argues that although China has the largest number of children and teenagers in the world research in the psychological development has not yet been accomplished. The paper emphasizes that in order for China to formulate a valid scientific evaluation of the students’ psychological development standard tools, representative modules and databases are needed. Dong reveals that the survey provided a framework and method for improving the quality of compulsory education.

Kalimili Sujatha investigates vocational education in India in **Chapter Twenty**. Examining institutions and several education indicators such as drop outs and completion rates, Sujatha juxtaposes government policies and the expansion of outreach to troubled areas. Observing in comparison several states to all of India, the author focuses on the rural and urban divide. Concluding the report with best practices for rural development, Sujatha gives several case studies including: Community Polytechnics, Self-employment Training Institute, the Mahila Samkhya Programme for women empowerment, and Jan Shikshan Sansthans, providing vocational training to non- and neo-literate individuals.

In **Chapter Twenty One**, Li Wen describes Yandaojie Primary School Education Chain as a successful example of balanced development between the rural and urban schools in China. Wen explains how the balanced development was due to the integration of schools, modernizing the schools by working effectively with information technology, optimizing teacher effectiveness through exchanges of both urban and rural, and experienced and newer

teachers, and through the employment of projects such as collaborative curriculum building.

Gerhard Kutsch in **Chapter Twenty Two** discusses what is meant by the term “quality of education” and points out similarities and differences in regards to quantity. Observing the “quality content for education” Kutsch stresses that the perception of quality is dependent on a society and global contexts and therefore emphasizes that caution is needed when working with statistics about quality. The deliverance of quality education posits new practical challenges addressing relevance, equity in access and outcome and individual rights. Kustch concludes that there is a need to work internationally but in order to do so effectively the basic definition of what “high quality” is must be agreed upon.

The final section on the challenge for internationalization, **Part Three**, begins with Abhimayu Singh’s paper on how China prepares students for the 21<sup>st</sup> century and an increasingly globalized society in **Chapter Twenty Three**. Reviewing China’s educational policies and programs Singh observes how China has increased both international cooperation and exchange and international competitiveness of China’s education. Singh concludes in order for China to continue to making strives to lead globally in education, several things need to occur including: continued modernization and integration of emerging technologies, curriculum needs to be responsive to the market and society, the knowledge gap of global subjects needs to be reduced, memory based teaching methods need to be replaced with interactive and innovative methods and, international experiences and linguistic competence needs to be further developed.

Selected inclusive education experiences from selected Sub-Saharan African countries are examined in **Chapter Twenty Four**. Awol Endris defines inclusive education as considering all learners being equally capable of success and valuing the contribution of each individual in the education process. Endris presents the case studies of Botswana, South Africa, Ethiopia, Kenya, Ghana and Nigeria concluding that inclusive education has is still often misunderstood as only catering to disabled students, that there are a lot of challenges in its implementation, that a multi-sectored approach is necessary for success and that the education sector is only one piece although important, in the transformation of rural societies.

Joel Jonathan Kayombo looks at the initiatives of Education for All in Tanzania in **Chapter Twenty Five**. Contextualizing the topic, Kayombo presents both the achievements and remaining challenges

for Tanzania from an equity perspective. Concluding with the acknowledgement that the four factors of institutional, economic, socio-cultural and motivation barriers constrain the majority of Tanzanians, Kayombo questions if equity in education is truly possible considering the vast uncontrollable inequities outside of the school.

In **Chapter Twenty Six**, Adetu Kefyalew Waktole analyse African Higher Education accreditation systems origins, structures and challenges. Concluding that the accreditation systems do not have the capacity to improve or monitor quality due to the lack of self-governance and the dependence on international and government financial assistance. This failure to accurately monitor HEI reflects in the quality and competitiveness of African Higher Education Institutions in the knowledge driven, globalized economy.

Mzingisi Gqwede examines the case of Namibia's curriculum standards for quality based education. Observing the standards, structure and evaluation in **Chapter Twenty Seven** Gqwede notes the advantages and challenges of the curriculum's implementation. Concluding that the curriculum is merely a statement of intent, that in order to be successful, relies on the competency and commitment of the teachers.

**Chapter Twenty Eight** gives a personal perspective on internationalization of education from Greg Rudd. Giving several examples from various schools in Australia Rudd describes an international context that requires educators to be flexible and be ready to discuss and teach both the positive and negatives of life.

Garry de la Pomerai in **Chapter Twenty Nine** looks at the role of Disaster Risk Reduction in the context of Education for Rural Transformation, quality and sustainable development. Pomerai discusses the realistic strategies for Disaster Reduction which he argues is in the hands of political willingness. The largest challenge Pomerai concludes, is the potential erosion of the rural physical environment and social deterioration of the rural society.

Seunghwan Lee revisits Education for International Understanding (EIU) in the current context of the widening economic gaps, international financial crisis, increasing conflicts between people and various groups and countries. **Chapter Thirty** concludes with Lee argues that more than ever before EIU's key elements are needed: respecting and building a culture of peace; universal values of human rights and environmental ethics and solving conflicts in a peaceful and non-violent manner.

**Chapter Thirty One** Jian Tian takes a closer examination of Shishi High School in Chengdu of Sichuan Province in China, the first institution of the country to be sponsored by local authorities. Shishi High School has attempted to sustain not only Chinese education traditions, but also bridging Chinese-foreign cultures through a global perspective. Tian explains that the High School has been very successful with the international cooperation from countries around the world on all continents, except for Africa. The new training modes of domestic and international has allowed for two-way cultural exchanges amongst teachers and students creating not only an internationalized school but a society of understanding and acceptance.





**PART ONE**

**THE EQUITY CHALLENGE**  
**THE ROLE AND IMPORTANCE OF INCLUSIVE**  
**EDUCATION**



## CHAPTER ONE

### EDUCATION OF QUALITY FOR ALL (EQFA)

#### IS IT A QUALITY-EQUITY TRADE OFF!<sup>1</sup>

*Vinayagum Chinapah, Institute of International Education, Stockholm University, Sweden*

#### **I. Introduction**

The international community as well as the national educational stakeholders have in recent years witnessed serious paradigm shifts in the policy-discourse of what might constitute education quality, leaving a number of pertinent questions unanswered, for example who defined it, in which contexts, for what purpose, in whose interests, and for whose benefits, the latter being the most crucial one for the inclusion of the “problematic” of quality and equity with one and the same perspective. The grand educational paradigms have not changed that much in order to effectively address learner-centred pedagogy, learning or what goes on in the classroom. Noah and Eckstein (1998, p.76) talked of two schools of thought where the focus continues to be on schooling or “teaching to the test” and not on learner-centred pedagogy for improved quality of education for all.

*Schooling is a mass enterprise. As such there is value in analyzing its correlates and outcomes, using techniques of mass data collection and analysis. Because education is an international enterprise that is not limited to any particular time and place, it is therefore properly studied cross-culturally. This is not to reject the view of education as a small-scale individual process in which techniques of micro-observation, analysis of small-group behavior, and observations of classroom interaction and culture are desirable. The two approaches*

---

<sup>1</sup> This Keynote Address is based on the Paper (Chinapah, V. 2010a) presented at the International Invitational Conference-Mauritius, Millennium Development Goals Revisited: Transforming Teaching, Learning and Leadership in Commonwealth Contexts, 29 June - 1 July 2010, Mauritius.

*should properly be regarded as complementary and, as they are developed, they should contribute to better understanding of the educational process at all levels.*

Likewise, several initiatives were taken to assess Education of Quality for All (EQFA) through worldwide surveys of learning outcomes. Chinapah and Cars (2010, p.4) argued in their review of such surveys that “(t)hese national, regional and international assessments allow for the benchmarking of student performance against corresponding international standards. Learning outcomes in classrooms are often characterized by diversity with a wide range of abilities, which may include some students requiring special needs and supports. Failing or passing learners do neither represent nor justify what is learnt and what is not learnt. There is therefore a need, more than ever, to understand the dynamics in teaching and learning within the framework of a learner-centred pedagogy so as to establish what must be taught and how each learner must be better prepared to optimize her/his learning potentials and attributes (Chinapah, 2010a, p.15). It is within this framework that I can think of any new educational paradigm for learning and instruction. However, I fervently believe that “research for research-sake” which is based and locked only within the research community with barely any impact on educational policy-making and day-to-day educational practices will make no difference to the community of learners and their teachers whatsoever the so-called new educational paradigm for learning and instruction is about. Husén and Kogan (1986) already devoted an entire book several years ago entitled *Educational Research and Policy-Making – How Do they Relate?* with regards to this enduring “epidemic” of the social sciences research as a whole. To this effect, I would like to propose in this presentation that learner-centred pedagogy is part and parcel of an Education Quality For All (EQFA) and henceforth, it cannot be separated from EQFA policies or implementation strategies.

This indicates that standards and how to achieve them have to be tailored to every student. These concerns for equity and diversity can be seen as alarm against external prescriptive standards, which is developed at national or international levels.” Education for All (EFA) is by itself an ambitious plan to provide learning opportunities to every man, woman and child throughout the world by the year 2015. The regular and systematic monitoring of EFA progress constitutes a central strategy for achieving Education for All by 2015. By highlighting successful strategies as well as corrective actions, monitoring and evaluation would therefore lie at the centre of efforts

for EFA goals to be met by 2015. The Global Action Plan to Achieve the EFA Goals (GAP) constitutes the framework for the Review and Stocktaking of EFA Progress (Chinapah, 2006, p.1).

UNESCO, immediately after the World Forum of Education For All (EFA) in March 2000 in Dakar, Senegal made an in-house inventory to come to its own reasoning in order to provide a solution to this burgeoning issue for its Member States. I had the honour to be assigned the coordination of this task and wrote the UNESCO position paper of Education Quality from the inputs drawn in this inventory (Chinapah, 2003). Much of the elements from this UNESCO position paper will be used in my presentation and discussion in addition to several important contributions in this field (Delors et al., 1996; UNICEF, 2000; UNESCO, 2005; Chinapah and Cars, 2010).

At the international development cooperation level, focus on research on learning outcomes has increased various stakeholders attentions on results, which may increase accountability based on performance. In the academia itself, such a pursuit has been very enriching through school survey research initiatives. The richness, implications, strengths and weaknesses of these surveys, whether they are international, regional, national, cross-sectional or longitudinal, has been constantly under review (Husén, 1989; Chinapah, 1997; UNESCO-Prospects, 1992a, and 1992b; Tuijnman and Posthlethwaite, 1994; Kellaghan and Grisay, 1995; UNESCO, 2005). Further, in their recent review of the findings from such kind of research, Chinapah, et al., (2010, p.4) argued that much is still needed to arrive at a learner-centred pedagogy for EQFA to be really inclusive and reachable.

*However, from a comparative research perspective across different nations, barely very little is known about what constitutes effective teaching and effective learning in different situational contexts, both between- and within- countries. The more so, hardly any explanation is given for children from different socio-economic and cultural backgrounds in different types and school locations. “An equal opportunity to learn is no less a human right than an equal entitlement to be in school, regardless of parental income, gender, language or ethnicity.... In many countries, however, large disparities in learning achievement point to deep disparities in opportunity. What students achieve is heavily influenced by both the type of school they attend and the characteristics of their family backgrounds” (UNESCO 2010: 107). Even in a country like Sweden, it is recently argued that among the different factors influencing*

*educational achievement, “segregation”, “decentralisation”, “streaming” and “individualization” are all important features determining the level of attainment in the Swedish compulsory schools (Skolverket – Swedish National Agency for Education, 2010).*

I can bear witness however, of several exceptions of educational systems’ performance that EQFA is not a myth but it is a reality and after having assessed them in my earlier responsibility at UNESCO for the program Quality of Education. I am therefore here today to plead in my capacity as a member of the international educational community, for EQFA. I believe that we urgently need at international, regional, national and local levels genuine leadership, collective wisdom and a clear vision for EQFA. Only then, right decisions could be made by the right people and for the right purposes in order to achieve EQFA. This is possible and it is precisely why we are all gathered here.

## **II. Education of Quality For ALL (EQFA) – The Pillar for Human Development**

Guaranteeing human rights to an education of quality for all still remains one of the greatest challenges of the 21st century. There are no more excuses. An education of quality for all can empower humankind to make choices, to improve the quality of our life, and to foster our positive attitudes towards each other. The annual Education for All (EFA) Global Monitoring Reports (GMRs) continues ringing the alarm bell. It is for sure that most of the EFA Goals set 10 years ago at the World Forum of Education for All (Dakar 2000) would not be fully reached – this is in fact a lost decade for education. The latest 2010 GMR Report that came few months ago entitled Reaching the Marginalized just gave us another education shock. The Director-General of UNESCO described this shock at the launch of the GMR Report in January 20, 2010 at UN Headquarters in New York, in the following words: “(T) here is a lost generation of children who have been deprived of their chance for an education that might lift them out of poverty”. The head of this Report argued that “Rich countries have mobilized a financial mountain to stabilize their financial systems and protect vital social and economic infrastructures, but they have provided an aid molehill for the world’s poor”. A financial gap of some \$ 16 billion a year must be provided by the donor community to

reach the EFA goals (UNESCO, 2010).

There is therefore no time to spare as the evidence shows. There is more than ever a genuine concern about an Education of Quality for All. More than one and a half decade after the World Conference on Education for All (WCEA) held in Jomtien, Thailand, March 1990, and half the way to the realization of the Goals set a decade later in Dakar, at the World Forum of Education for All (EFA) in April 2000, our world still has 72 million out-of-school children, the majority of them (57 per cent) are girls mostly living in rural areas and slums. If the current trend persists some 56 million children will still be out of school in 2015. Likewise, there are 759 million adults deprived of their human rights to achieving basic literacy skills, the majority of them women of the poorest segment of the world community living also in rural areas and city slums. School quality varies across countries and absolute levels of learning are very low in many poor countries. Ensuring that there are adequate, well-motivated and trained teachers is vital for effective learning. However, some 1.9 million new teacher posts will be required to achieve universal primary enrolment by 2015.

Furthermore, there is a broad consensus in the international educational community that the achievement of the Millennium Development Goals (MDGs) and namely those associated with educational development goals would only remain “wishful thinking” if no significant efforts are made to improve the quality of education and students’ learning outcomes. There is no doubt that the world would require ambitious but doable multilateral framework to accelerate progress towards 2015 education goals.

### **III. Towards a Learner-Centred Pedagogy: Needs for an Expanded Vision For Educational Policy-Making**

New approaches to improve quality education for all throughout life are equally proposed in order to better address the whole area of interventions within the framework of a learner-centred pedagogy. Hawes and Stephens (1990) as cited in Chinapah and Cars (2010:3) provide systematic inquiry on elements of quality itself, arguing that quality can imply: a) efficiency (better use of available resources) in meeting set goals; b) relevance to context (embedded in a society and a culture which learners can comprehend and ultimately relating to

developing the human potential in individuals); c) needs which has to be investigated systematically e.g. whose needs? The timeframe: immediate needs and long-time needs, and the different levels of needs: physiological needs, safety needs, love and belonging needs, self-esteem needs, self-actualization needs; and finally d) something more than merely efficiency and relevance, in relation to the pursuit of excellence and human betterment. Further, Cheng and Tam (1997) introduces seven models of quality in education namely the goals and specifications model; the resources input model; the process model; the satisfaction model; the legitimacy model; the absence of problems model; and the organizational learning model. They conclude that these models can form a comprehensive framework for understanding and conceptualizing quality in education from different perspectives and facilitating development of management strategies for achieving it.

Kanjee (2008, p.13) proposed an interested conceptual learning model – the AQEE model - (Figure 1) for examining the Six Education for All (EFA) Goals. It is useful in our case, to address the expanded vision for a learner-centred pedagogy with consideration of all frame factors and the water-tight relationships among them. He argued that AQEE model is a comprehensive evidence-informed decision-making model based on the four policy goals of Access, Quality, Efficiency and Equity.

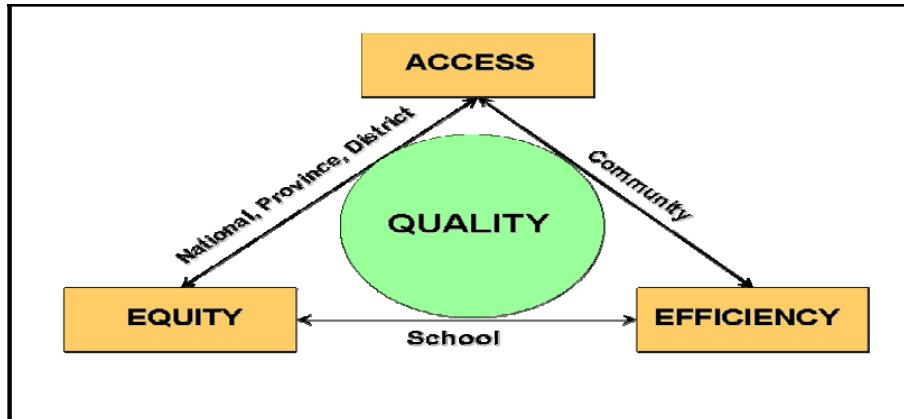
The AQEE Model embodies a systems approach that recognizes the inextricable links between the technical, cultural and political factors in the formulation, implementation, monitoring and evaluation of education policy and practice. Central to the AQEE model is its focus on the learner and the learning and teaching process. Thus “Quality” comprises the essential focus of the model, while interdependence between the four policy goals is also recognized. In addition, the model accounts for the inter-relatedness of data and information at the system level (national, provincial, district), community level and school/classroom level, so as to maximize the information provided to decision makers. In the AQEE model, Kanjee (2008, p.14) argued that quality which is learner- centred and not simply “teaching to the test”, would require revisited existing paradigms for learning and instruction.

Quality is henceforth measured as to:

- i) What a learner should know, which refers to the content and goals of the education system as reflected in mission and value



- statements and as noted in the curriculum and standards;
- ii) Where learning occurs, that is, the context within which learning occurs (e.g. class size, the level of health and safety of the learning environment, availability of physical and human resources, and facilities to support learning, i.e. learning materials, books, classrooms, etc.);



*Figure 1:1. AQEE to improve learning model*

- iii) How learning takes place, which refers to the implemented curriculum and the characteristics of learner-teacher interaction such as whether teaching is learner-centred, whether teachers are qualified, the role that learners play in their learning (e.g. homework practices), parental involvement, teacher and learner attitudes and other teacher practices (e.g. homework, assessment and record keeping), for example; and
- iv) What is actually learnt, which refers to the outcomes of learning or the attained curriculum; that is, the knowledge, skills, attitudes and values that learners acquire.

EQFA as emphasized in this paper cannot be limited to only increasing the material inputs for school systems or enhancing school effectiveness, important though they are. It must be geared to enhancing each individual's potential and the full development of a learner's personality, including flexible adaptation of educational provision. It should also be intertwined with values forming the basis of social cohesion and respect for human dignity. An education of quality for all must necessarily contribute to peace and solidarity. EQFA should also encompass and reflect the diversity of education

needs, expectations, interests and cultural contexts. Likewise, educational policies and strategies should be promoted to foster cultural and linguistic diversity in a curriculum. Methodological guidelines and indicators for the assessment of learning achievements and for quality assurance are to be developed for such untapped domains in order to effectively ensure an education based upon a learner-centred pedagogy.

EQFA calls upon promoting experimentation, innovation and the diffusion and sharing of information and best practices as well as policy dialogue in education. For instance, ICTs may offer the potential to expand the scope of learning, breaking through traditional constraints of space and time as well as boundaries of current education systems while promoting a learner-centred pedagogy. The accelerating privatization of educational goods and services, partly driven by the potential and impact of ICTs, poses an entirely new challenge for the international community. The challenge is to define the best use of ICTs for a learner-centred pedagogy that can improve the quality of teaching and learning, that can introduce a higher degree of flexibility in response to societal needs, and that can lower the cost of education and improving internal and external efficiencies of educational system.

Strategies for improving the quality of instruction should provide learners with choices on how they receive information (input modes); on how they practice what they learn (the activities, the process), and on how they demonstrate what they have learned (output modes). In curriculum differentiation there are many instructional strategies that help teachers vary their input and output modes and methods of practice based on individual learner needs. For example, in field of vocational education and training, it is proposed that such learner-centred pedagogy should be equally oriented towards school directors and support personnel to focus on learning methodologies and activities that encourage discovery, critical and independent reflection, and auto-learning process. Better use of the new information communication technologies (ICTs) can boost the quality of teaching and learning when conceived and geared towards policies and practices of an education of quality for all along the principle of learner-centred pedagogy. Thoughtful programs may, however, be more effective in specific in-service teacher training such as simulated practice-teaching opportunities, and professional upgrading opportunities. Use of communications technologies inevitably shifts

interpersonal relations among learners, teachers, parents and stakeholders. These shifts will improve education quality only if they can expand and promote mutual understanding based on the respect of diversity and learner-centred education instead of the dominant paradigm for a “one size fits all” and “teaching to the test” practice.

Likewise, EQFA cannot be conceived without partnership and participation of major stakeholders. Promoting policy dialogue between all actors and stakeholders in education (governmental, non-governmental - in particular teachers’ associations, civil society and private sector and intergovernmental organizations) is a major prerequisite for quality in education. Altogether, good quality teaching and learning processes require an instruction which is appropriate to each child’s learning needs, abilities, and learning styles (active, co-operative, democratic, gender-sensitive learning). Structured content and good quality materials and resources are to be provided. Teacher capacity, morale, commitment, status, and income - and their recognition of child rights are to be enhanced.

EQFA within the framework of learner-centred pedagogy should not be restricted to formal schooling alone, i.e. education within the four walls of the classroom or lecture room. Instead, it should encompass and made accessible other forms, types and channels of learning. It goes without saying that there are important educational quality tensions to be overcome: those between the global and the regional, between and within nations, between the universal and the individual, between the traditional and the modern, between the need for competition and the need for equality of opportunity, between knowledge expansion and its capacity to be assimilated, and between the spiritual and the material. The International Commission on Education for the Twenty-first Century, and the report, *Learning the Treasure Within*, UNESCO (1996) which is also known as the Delors report has insisted on the notion of learning instead of education and training. The 21st century framework of the Delors commission for ‘learning throughout life’ is built under four pillars of learning and their quality constituents, namely: learning to know; learning to do; learning to live together and learning to be, all four pillars place great importance to quality in education. The UNICEF’s publication *Defining Quality in Education* (June, 2000) looked at quality in education from five inter-related dimensions: quality learners; quality learning environments; quality content; quality processes, and quality outcomes.

As we have observed, definitions of quality in education are

mushrooming today due to the complexity and multifaceted nature of the concept, the more so when it encompasses learner-centred pedagogy. The terms excellence, value for money, efficiency, effectiveness and world class education have been used interchangeably while referring to quality in education. There is however, considerable consensus that exists around the basic dimensions of quality education. For example, the recent results from an international survey carried out in diverse historical, socio-economic, cultural and political settings (e.g. United Kingdom, Uzbekistan, Thailand and South Africa) showed that there are three major components forming good quality and effective schooling, namely: (1) Good Teacher-Pupil Relationships; (2) Support for Learning Difficulties; and (3) Good Communications with Parents.

#### **IV. Monitoring and Its Importance for Learner-Centred Pedagogy through Teaching-Learning Effectiveness**

In this paper, I have tried to emphasize to the extent possible that EQFA will continue dominating the world educational scene as long as we believe in education for human development, human choices and human progress. The EQFA movement needs a forward-looking perspective. It should be inspired by a more holistic approach than by the conventional and sectoral approach to education. Evidence from studies and surveys of learning outcomes clearly show that quality education for all cannot be addressed without improving teaching-learning processes. Learners should remain at the centre and as targets for any educational cum pedagogical intervention, be it at the level of curriculum development, teacher education and training, or at the level of learning environment as a whole. In a similar vein, enormous efforts would be needed to have a stable, qualified, better-rewarded and less mobile teaching-force. Critical problems such as scarcity of teaching and learning resources, multiple school shifts, large class size, long distance to school and so on, must be seriously re-addressed in order to improve the quality of education. Such evidence should therefore be used to empower educators, educational policy-makers and practitioners for an education of quality for all through, for example, targeted capacity-development modalities and strategies.

The provision of an education of quality for all requires therefore the holistic approach to teaching and learning based upon a

learner-centred pedagogy. The environmental conditions and contexts at home, in the community, at school and in the classroom have direct bearings on the quality of teaching and learning and on learning achievement, in particular. The latter is often measured through high-stakes examinations, which in turn, are used to screen out, to select and to push out the majority from the elected few for future educational or occupational opportunities.

Monitoring what our children are learning, how and under which conditions is crucial. Such monitoring mechanism can only help ensuring the quality and effectiveness of the education offered. There is therefore a greater need to revitalize the quality in education from conceptual, methodological, analytical and empirical standpoints.

Findings from large-scale school surveys, namely those from the Joint UNESCO-UNICEF Monitoring Learning Achievement (MLA) Project, from the Third International Mathematics and Science Studies (IEA, TIMSS), and from the PISA, point at the importance of monitoring and evaluation of the quality of education at national and international levels. In the OECD/PISA survey, teachers and the teaching-learning processes were found to having important and significant influence on student's success and improved quality of education, (OECD-PISA, 2000, pp. 22-23).

- Qualified teachers are among a school's most valuable resources. Having more of these teachers is associated with better student results.
- The ratio of students to teaching staff matters most where it is relatively high.
- Some aspects of school policy and practice tend to be associated with better student performance, for instance: teacher related factors affecting school climate (such as teacher expectations of students), teacher morale and commitment, and school autonomy.
- Some aspects of classroom practice are associated with better student performance, for instance: teacher student's relations, disciplinary climate of the classroom, and the extent to which teachers emphasize academic performance and place high demands on students.

Another important trend is noted among learners' own assessment of what makes a teacher a good teaching and what makes teaching effective. Students' idea of a good teacher with a learner-centred pedagogy was of two dimensions, namely: (1) human traits – those

having to do with character and temperament, and (2) professional traits – competence and intelligence. A good teacher has to be an interesting person; she/he should have a sense of humour; should like to and should know how to make jokes; should be fair towards everyone; should understand student needs, and should be a good expert in his or her field.

The European Report Quality of School Education – Sixteen Quality Indicator (May, 2000) is an important constituent for the Quality Education for All movement. Results from large-scale school surveys and from secondary analyses of nationally available educationally statistics were used to map the progress of European Education across sixteen quality indicators related to: (1) educational attainment of learners; (2) success and transition across the educational systems; (3) monitoring processes and practices of education; and (4) educational resources and structures. Five challenges to quality of education in Europe were also presented in this report, namely: (i) the knowledge challenge; (ii) the challenge of decentralisation; (iii) the resource challenge; (iv) the challenge of social inclusion; and (v) the challenge of data and comparability.

Several EQFA issues have been raised in the European Community with regards to learner-centred pedagogy and the implication for teacher education and training. The balance of time given to teaching of subject knowledge and pedagogy is a matter of concern to all countries. What provision should now be made to ensure that teachers update their knowledge and practice? What can be learned from countries with a surplus of teachers, and from others with a shortage, in order to plan for the future? What can be done to reward and retain particularly effective teachers?

Promoting policy dialogue between all actors and stakeholders in education (governmental, non-governmental—in particular teachers' associations, civil society, private sector and intergovernmental organizations) is a major prerequisite for achieving a learner-centred pedagogy for an educational of quality for all. Active and participative parent-teacher associations (PTAs) at local community level are also potential sources for quality improvement in education. Effective educational management, improved supervision, guidance and counselling, built-in system of monitoring and evaluation, and strengthened capacities for local governance are common determinants of good quality education. The interchangeability among these components of quality education needs also some fundamental changes, for example, the inspectorate role must be changed from

“policing” to “supporting” and educational management should be made effective and participatory.

## **V. A Framework for Action**

EQFA is the driving force for moving towards a learner-centred pedagogy. Without clear vision and mission accompanied with informed educational policy-making, resourceful implementation strategies, well trained “educational front-line implementers”, and last but not the least, an empowered targeted beneficiaries, all the theoretical advancements or scientific discourses will have very little impact on what goes on at the classroom level where the dominant practice of “teaching to the examination” (Foster, 1998, p.1) is omnipresent. In light of this remark, let me now propose now a Framework for Action that can be of interest for further discussion and elaboration.

EQFA should be able to satisfy both basic as well as lifelong learning needs of the individual. A learner-centred pedagogy should enrich the lives of learners for their all-round development. The 2000 Dakar Framework for Action should therefore be implemented in its totality; otherwise it will continue being a myth. In this context, we need to re-emphasize that “ Regardless of gender, wealth, location, language or ethnic origin, quality education for all requires: (1) healthy, well-nourished and motivated students; (2) well-trained teachers and active learning techniques; (3) adequate facilities and learning materials; (4) a relevant curriculum that can be taught and learned in a local language and builds upon the knowledge and experience of the teachers and learners; (5) an environment that not only encourages learning but is welcoming, gender-sensitive, healthy and safe; (6) a clear definition and accurate assessment of learning outcomes, including knowledge, skills, attitudes and values; (7) participatory governance and management; and (8) respect for and engagement with local communities and cultures”. Further:

- EQFA policies and strategies based upon learner-centred pedagogy would necessitate integrated and well-balanced perspectives for all levels, types and forms of education. There is also an urgent need to adopt effective policies and strategies to identify and include the socially, culturally and economically excluded. This requires participatory analysis of

exclusion at household, community and school levels, and the development of diverse, flexible, and innovative approaches to learning and an environment that fosters mutual respect and trust.

- Measurable and monitoring indicators of quality education and learner-centred pedagogy should not only focus on learning inputs but also on learning environments at home, and in the community, on learning processes, and learning outcomes (short-term and long-term). For example, in the area of life skills, multiple quality indicators are needed to account for health, prevention, nutrition, civics and environmental awareness as well as social and communicative skills of learners. Such quality indicators are very important for both formal and non-formal education programs.
- Strengthening of democratic structures and institutions, participatory governance and the empowerment of civil society organizations, local educational managers, planners and administrators are indispensable for broad-base commitment towards quality education and learner-centred pedagogy. Quality education requires good leadership and appropriate human resource development policies and implementation strategies.
- Think-tank mechanisms and networks for quality education are to be set-up to assist countries in promoting a trans-disciplinary approach within the curricula and educational processes through guidelines, methodologies and other special instruments.
- A global dialogue on quality education needs to be cultivated through synergies and strategic alliances. Sharing experiences, outcomes and knowledge of innovative and successful programs and research or development initiatives on quality education for all with a learner-centred pedagogy should be strengthened.

All partners of education - nationally, regionally and internationally – should be brought together to further strengthen this collective EQFA perspective based upon a learner-centred pedagogy.



## References

- Cheng, Y.C. and Tam, W. M. 1997. Multi-models of quality in education. in *Journal: Quality Assurance in Education*, Volume 5, Issue 1. pp. 22 – 31.
- Chinapah, V. 1996. Towards a learner-centred curriculum. In: Zinkovic-Vukadinovic. G., Chinapah. V., Milanovic-Nahod. S., Havelka. N., Saranovic-Bozanovic. N., Krnjajic. S., and Sarivan. L 1996. *Towards a Modern Learner –Centred Curriculum*, Institute of Educational Research, Belgrade. pp. 61-77.
- Chinapah, V. 1997 *Handbook on Monitoring Learning Achievement: Towards Capacity*
- Chinapah, V. 2003. UNESCO Position Paper on Quality Education. Chapter 6:1 in UNESCO (ed.), *The Renewal of Secondary Education in Africa* (pp. 398-408). UNESCO Publishing, Paris.
- Chinapah, V. 2006. Review and Stocktaking of EFA Progress (RASEP). Programme Proposal, Education Sector, UNESCO, Paris.
- Chinapah, V., Kanjee, A., Fredriksson, U., Claassen, N.C., Sayed, Y., and Cars, M. 2010. Improving Quality of Education. Research proposal submitted to Swedish Research Council. Stockholm, Sweden.
- Chinapah, V., and Cars, M. 2010. Global Efforts towards Quality Education for All, Paper accepted and presented at the World Comparative Education Society, Istanbul, Turkey, (forthcoming).
- Chinapah, V. 2010a. Education of Quality For All – Myth or Reality! Keynote Address at the INTERNATIONAL INVITATIONAL CONFERENCE-MAURITIUS, Millennium Development Goals Revisited: Transforming Teaching, Learning and Leadership in Commonwealth Contexts, 29 June - 1 July 2010, Mauritius (forthcoming).
- Chinapah, V. 2010b. From Education For All (EFA) Towards Education of Quality For ALL (EQFA) – International and Comparative Perspectives. Keynote Address at the “SIXTH EDUCATIONAL FORUM FOR THE YEAR 2010 THE SULTANATE OF OMAN. The Effective Role of School in Enhancing Academic Learning Achievements: 31 July – 4 August, 2010. Salala, The Sultanate of OMAN (available in Arabic also), MOE, Muscat, Oman.
- Chinapah, V. 2010c. Education of Quality For All – A Global

- Perspective. Keynote Address at the INTERNATIONAL SEMINAR - The Development of a Framework for Basic Education Quality Indicators, 5th August, 2010, Beijing – China (forthcoming).
- Chinapah, V. 2010d. Education of Quality for All - A Critical Review. Chapter 3: In Daun, H., and Strömquist (Eds) Education and Development in the Context of Globalization. Nova Science Publishers, Huntington, NY. (forthcoming).
- Delors, J., Al Mufti, I., Amagi, I., Carneiro, R., Chung, F., Geremek, B., Gorham, W., Kornhauser, A., Manley, M., Padron Quero, M., Savane, M., K; Singh., Stavenhagen, R., Won Suhr, M., and Nanzhao, Z. 1996. Learning – the Treasure Within. Report to UNESCO of the International Commission on Education for the Twenty-First Century, UNESCO Press, Paris.
- European Commission Report, 2000, Quality of School Education – Sixteen Quality Indicators, Brussels.
- Hargreaves, A., Earl, L., Moor, S., & Manning, S. 2001. Learning to Change: Teaching Beyond Subjects and Standards. Jossey-Bass, San Francisco.
- Hug, H. and Stephens, D. 1990. Questions of Quality. Primary Education and Development. Longman, Essex.
- Husén, T. (1989) Educational Research at the crossroads? An exercise in self-criticism. Prospects, Vol. XIX, N. 3. UNESCO, Paris.
- Husén, T. and Kogan, M. eds. 1986. Educational Research and Policy: How Do they Relate? Oxford Pergamon Press, Oxford.
- Ivic, I., Marajevic, S. & Chinapah, V. 2001. Comprehensive Analysis of Primary Education in the Federal Republic of Yugoslavia, UNICEF, Belgrade.
- Kanjee, A. 2008. Guidelines for Monitoring and Evaluating the Implementation of EFA Goals in Africa, HSRC, Pretoria, South Africa.
- Kellaghan, T. & Grisay. A. 1995 International Comparisons of Student Achievement: Problems and Prospects. In OECD, Measuring What Students Learn. OECD, Paris.
- Hoah, H.J., and Eckstein, M. A. 1998. Doing Comparative Education: Three Decades of Collaboration. CERC Studies in Comparative Education 5, The University of Hong Kong, China.
- OECD/PISA. 2000. Knowledge and Skills for Life. First Results from PISA 2000. OECD, Paris.
- OECD. 2007. PISA 2006: Science Competencies for Tomorrow's World. OECD., Paris.

- Postlewaite, T.N. and Ross K.N. 1992. *Effective Schools in reading: Implications for educational planners*. IEA, The Hague, The Netherlands.
- SACMEQ – The Southern Africa Consortium for Measuring Education Quality. 1998. *The Quality of Education: Some Policy Suggestions Based on a Survey of Schools*. International Institute for Educational Planning – IIEP, UNESCO, Paris.
- Skolverket-Swedish National Agency for Education. 2006. *With a focus on Mathematics and Science – An analysis of the differences and similarities between international comparative studies and national syllabuses*. Stockholm: Author.
- Skolverket-Swedish National Agency for Education. 2010. *What influences Educational Achievement in Swedish Schools? – A Systematic Review and Summary Analysis*. Stockholm: Author.
- Tuijnman, A. C. & T.N. Postlethwaite. 1994. *Monitoring the Standards of Education*. Pergamon, UK.
- UNESCO. 1990. *Final Report of the World Congress on Education for All: Meeting Basic Learning Needs*, Jomtien, Thailand. UNESCO, Paris.
- UNESCO. 2004. *EFA Global Monitoring Report 2005. Education for All: Quality Imperative*, UNESCO, Paris.
- UNESCO. 2005. *EFA Global Monitoring Report 2006. Education for All: Literacy for Life*, UNESCO, Paris.
- UNESCO. 2010. *EFA Global Monitoring Report 2010. Reaching the Marginalized*, UNESCO, Paris.
- UNESCO – Prospects. 1992a. Vol. XXII, No 3. UNESCO, Paris.
- UNESCO – Prospects. 1992b, Vol. XXII, No 4. UNESCO, Paris.
- UNICEF. 2000. *Defining Quality in Education*, UNICEF, New York.
- UNITED NATIONS. 2007. *The Millennium Development Goals Report 2007*, New York.
- UNITED NATIONS. 2010. *The Millennium Development Goals Report 2010*, New York



## **CHAPTER TWO**

### **BRIDGING THE RURAL-URBAN GAP**

#### **TOWARDS INTEGRATED DEVELOPMENT AND RURAL TRANSFORMATION**

*Manzoor Ahmed, BRAC University, Dhaka, Bangladesh*

#### **I. The Origin of ERT**

In 2001, the report published by INRULED titled “Education for Rural Transformation: Towards a Policy Framework” made a plea for rethinking education in rural areas and rural people with a focus on “rural transformation.” The term rural transformation – rather than rural development, rural change or rural education - was used advisedly to convey a vision of pro-active and positive process of change and development of rural communities in the context of national and global changes in which education is seen as a key instrument for shaping and fulfilling the goal of rural transformation. The report focused on the links between education and rural transformation, seeking to underscore the inexorable forces of change rural communities face and how education, by equipping people with appropriate knowledge, skills and fostering values of human dignity, can expand their choices and capabilities to exercise these choices. The report asserted that goals set globally and by individual nations for education and development in the 21st century cannot be realized without giving special attention to the situation of rural populations in developing countries. It pointed out that in spite of the rapid pace of urbanization, over three billion or 60 per cent of all the people in developing countries and half of the people of the world lived in rural areas. Three quarters of the world's poor, those subsisting on less than a dollar of earning a day, lived in rural areas. Breakdown of numbers for rural areas on education indicators were often not reported - a sign of neglect of the problem. Urban-rural disparity in educational investments and in the quality of teaching and learning was widespread and persistent. It was emphasized that in the efforts to

achieve the global and national goals, the paramount need, largely neglected so far, was to adapt strategies and resources to the specific conditions of diverse and changing rural communities. It was essential to turn the continuing and inevitable transition of rural areas, the environment and people's life, into an active and positive force for transformation of rural communities.

The aim of the report was to initiate a dialogue and help develop a framework for policy to make education the vehicle for rural transformation. The challenge of education in serving rural transformation must become one of the main themes of the education for all effort, it was said. Not taking up this challenge was to imperil the total education for all effort; it was affirmed by the report. It was argued by the report that the solutions to the problems of poverty and deprivation in rural areas and their spill-over into urban areas did not lie in trying to preventing urbanization and keeping the rural people confined to rural areas - which would be impossible in any event. Nor was it a realistic option to promote the mythical autarky or self-sufficiency of rural communities.

The report advocated for a new policy perspective for education in rural areas to make education the vehicle for rural transformation. The focus on rural transformation called for recognizing new dimensions in the criteria for judging quality and relevance of educational activities. The rapidly changing rural scene and the dynamics of rural-urban interaction required flexibility and creativity in educational programmes, not often found in the conventional formal system.

The concerns and priorities of rural people, and the transforming rural communities needed to figure specifically and prominently in the educational responses to the contextual trends and influences that have a bearing on national education systems. For example, the human rights perspective, human development imperatives of education, effects of the new information technology, and the crucial importance of pursuing sustainable development objectives needed to be assessed from the point of view of advancing rural transformation. It was argued that rural people and rural areas were not homogeneous in any country, not to speak of a whole region or the world. Educational activities had to respond to diverse needs of building skills and capacities for seizing economic opportunities, improving livelihood and enhancing the quality of life in diverse rural circumstances. The major educational system issues of access, equity, quality, relevance and efficiency, had to be re-examined from the point of view of the

changing rural scenarios. The vitally important concept of the learning society could become real only when every village and hamlet became a learning community with lifelong opportunity for learning for all in the community.

### **The Triad of Equity, Quality and Efficiency**

The report noted that the overarching EFA issues identified in Jomtien and Dakar could be described as the triad of (a) access and equity, (b) quality and relevance and (c) efficiency and accountability.

The dynamics of rural transformation in the “globalized” world of the 21st century created new educational imperatives which required that the EFA triad of equity, quality and efficiency is examined in new ways with special attention to:

- a) increasing opportunities for post-primary and secondary education, with countries recognizing it as a part of basic education;
- b) new and expanded opportunities for vocational and occupational skill development relevant to changing rural needs;
- c) re-orienting and giving a higher priority in tertiary education to serving the dynamic needs of rural development;
- d) revisiting national educational development priorities with a focus on overcoming the urban-rural educational disparities;
- e) re-examining the purposes and content of education in the light of the 21st century realities and challenges
- f) the urban-rural digital divide and making better use of ICT for combating education, knowledge and information disparities.

### **Building the Learning Community**

The learning needs of rural communities, it was emphasized, had grown more diverse, more complex and more demand-driven, which required a lifelong learning approach and building every community as a learning community. At a minimum, services of acceptable quality were demanded in (a) early childhood care and education, (b) quality primary education for all, (c) second chance basic education for large numbers of adolescents and youth who miss or drop out from primary education, (d) literacy and continuing education for youth and adults, (e) production, vocational and entrepreneurial skill development, and (f) skills, knowledge and information for improving the quality of life.

### **ERT: Developing the Agenda for Action**

The report tried to ring an alarm bell. It proposed the outline for action agenda. It pointed at themes and propositions which needed urgent attention. These included:

- a) Closing the resource gap in education, especially in rural areas;
- b) Reflecting rural concerns in EFA implementation strategies;
- c) Redesigning educational statistics and educational management information systems to better reflect the rural realities;
- d) Facilitating transfer, adaptation, dissemination and use of appropriate technologies from rich to poor countries and to rural people;
- e) Bringing the benefits of information and communication technology to rural people;
- f) Moving from rhetoric to action to build the learning community in rural areas; and
- g) International and regional actions to articulate, build the constituencies of support, learn from each other, plan and guide follow-up activities to promote ERT agenda.

The report pleaded that UNESCO and INRULED should give priority and be active in building a grand alliance for ERT. How far this has happened, is something we need to consider objectively. Has any progress been made in the last decade? Have there been new and promising initiatives? Have there been strategies, programmes and activities in China, India and other developing countries which are pertinent to addressing ERT concerns and which can be exemplars and providers of relevant lessons? Has the radar screen of ERT research, documentation and exploration missed creative innovations and potential models?

## **II. Stockholm ERT Symposium, 2010**

In November 2010 the International Symposium on ERT, with the theme of: National, International and Comparative Perspectives and Lessons in ERT, was hosted by the Institute of International Education (IIE) at the University of Stockholm. The concluding statement of the symposium pointed out:

*In the decade since the UNESCO/INRULED study, the urgency has heightened further for paying attention to*



*rural transformation and making education the vehicle for this transformation. New sources of vulnerability for the poor, especially the poor people in the rural areas, have arisen ... graphically illustrated by the recent economic crisis originating in the financial markets of the West but affecting poor people everywhere; new threats to food security of people; and man-made and natural disasters including effects of climate change endangering life and livelihood of millions. These hazards affect disproportionately the rural people, because more of the poor are them.*

The symposium noted that the UN General Assembly's review in September, 2010 of progress towards 2015 MDG had concluded that many of the MDG goals including those for education, that envisioned a new future for humanity in the 21st century, could not be fully achieved. A reason for this was the fact that a large proportion of the rural people in the developing world remained deprived educationally, missing the opportunity to acquire the skills and knowledge to develop their capabilities and expand their choices in life.

The symposium drew attention to the structural problems of the global and national economies inherent in the dominant development model of unlimited consumption. This is manifested in diminishing share in GNP of agriculture and rural production in China and India and other developing countries, while more than half of the economically active people remained dependent for their livelihood and wellbeing on agriculture.

An even larger structural challenge, the symposium noted, lay in the economic development goals and aspirations of China and India and the rest of the developing world. These are premised on the consumption habits and patterns of North America and Europe, dependent on ravaging the non-renewable resources of the planet. This is unsustainable, leading to the collapse of the system of natural and biological balance of resources of the planet. The symposium asserted that rural transformation, even if it is not fully recognized yet, is at the epicentre of this tectonic shift. But this shift in thinking and vision would not happen by natural force like the physical tectonic shift. People and nations have to will it and work for it.

The participants in Stockholm agreed that the dynamics of rural transformation in the "globalized" world of the 21st century created new educational imperatives which went beyond the traditional

concerns regarding rural communities and needed special attention and looking at it with a new pair of lenses.

The general conclusion from Stockholm was clear - that in the discourse on policy and strategy and, more importantly, in action, we did not move very much from where we were in 2001. Meanwhile, the challenges became more acute and urgent.

### **III. IFFAD Rural Poverty Report 2011**

The International Fund for Agricultural Development released its Rural Poverty Report 2011 in December 2010 – its second report since the first published in 2001. The basic premise of this report is that poor rural people find it very difficult to manage the multiple risks they face arising from their personal and household circumstances, the natural and climatic hazards, and economic and development factors at national and global levels. The rural poor, the majority in most countries, therefore, cannot seize the opportunities in agriculture and the non-farm economy alike.

The report re-iterated the familiar story. Despite massive progress in reducing poverty in some parts of the world over the past couple of decades – notably in East Asia – there are still 1.4 billion people living on less than US\$1.25 a day, and close to 1 billion people suffering from hunger. At least 70 per cent of the world's very poor people are rural, and a large proportion of the poor and hungry are children and young people. Moreover, widespread urbanization and demographic changes will not change this situation in the near future. South Asia, with the greatest number of poor rural people, and sub-Saharan Africa, with the highest incidence of rural poverty, are the region's worst affected by poverty and hunger, although levels of poverty vary greatly not just across regions and countries, but also within countries. Participation in the rural non-farm economy – both wage employment and non-farm self-employment – is an important route out of poverty for growing numbers of rural people, but has remained neglected by policymakers in many countries. The report notes:

*Ten years into the new millennium, the challenges of addressing rural poverty, while also feeding a growing world population in a context of increasing environmental scarcities and climate change, loom large. Robust action*

*is required now to address the many factors that perpetuate the marginalization of rural economies. It needs to enable rural women, men and youth to harness new opportunities to participate in economic growth, and develop ways for them to better deal with risk. Above all, this action needs to turn rural areas from backwaters into places where the youth of today will want to live and will be able to fulfil their aspirations.*

The report argues for a more systemic approach to growth for rural poverty reduction and a new approach to agricultural intensification that is both market-oriented and sustainable. Four cross-cutting action areas are identified by IFFAD: a) improving the overall environment of rural areas with improved basic amenities and services, b) improving capacity of poor rural people to manage many risks arising from personal circumstances, national and global factors and natural hazards, c) strengthening individual capabilities through improved education and skill development, and d) strengthening the collective capabilities of rural people, building social capital, improving governance, promoting participatory practices, and expanding their own membership-based organizations. It can be concluded from the IFFAD Rural Poverty Report that the issues raised a decade earlier still remain critical, while the magnitude and intensity of rural poverty have grown.

#### **IV. What Now?**

As mentioned in the first section, the 2001 report urged UNESCO and INRULED to give priority and be active in building a grand alliance for ERT. It is now necessary to consider critically and objectively how far this has happened and what should be done. UNESCO, INRULED and their national and international partners need to develop a research, advocacy and action agenda to build the coalition and promote practices in ERT. Exploration and analysis have to be undertaken of the role of education in improving social and economic development prospects and quality of life of rural people in the context of the changing global scenario and to formulate; on the basis of this analysis, a policy framework for programme focus and strategies for INRULED need to be developed and refined.

**The Research and Analysis Agenda Need to Include:**

- Further examining the conceptual issues regarding the definition of “rural” and “rural development” and the role of education
- Reviewing the status and trends in educational opportunities for rural people and how key challenges of access, equity, quality and relevance in education are addressed
- Considering the dimensions and features of education in rural areas in the context of the global economy, the knowledge society and the urban-rural dynamics, and
- Indicating the policy and programmatic implications for UNESCO, INRULED and their national and international partners in the light of the above analyses

**The Key Activities in This Agenda Will Include:**

- Review of research findings regarding rural development concepts, policy priorities, programme strategies and successful practices, especially in respect of the role education. Skill development, training and knowledge dissemination
- Case studies and thematic papers on programmes, activities and issues that shed light on the role of education in rural transformation
- Analysis and presentation of relevant statistics drawn from databases of UNDP, World Bank, FAO and others
- Review and refinement of the study findings and the preliminary study report through dissemination and consultation at national and international levels

**References**

- Institute of International Education (IIE), Stockholm University (2010). *Summary of Conclusions, International Symposium on ERT, Lessons and National, International and Comparative Perspectives*. Stockholm, Institute of International Education, Stockholm University.
- International Fund for Agricultural Development (2010). *Rural Poverty Report 2011*. Rome: IFFAD.
- UNESCO and INRULED (2001). *Education for Rural Transformation: Towards a Policy Framework*. Beijing: INRULED.

# CHAPTER THREE

## ADDRESSING THE DIVERSITY OF STUDENTS IN RURAL AREAS

### PRIMARY SCHOOLING AND THE QUALITY PUZZLE

*Qutub Khan, Former Regional EFA and literacy Coordinator for the Arab States, UNESCO Beirut, Lebanon*

*“Education is not a miracle cure or a magic formula opening the door to a world in which all ideals will be attained, but is one of the principal means available to foster a deeper and more harmonious form of human development and thereby to reduce poverty, exclusion, ignorance, oppression.....”<sup>2</sup>*

#### **I. The Manpower Mismatch**

Most nations across the world acknowledge that the relationship between their educational output and their manpower needs is disquietingly skewed. Educational systems of the developing countries in particular are falling far short of turning out the right numbers and combinations of manpower needed for optimum development. On the other hand, employment structures and incentives are poorly geared to make the best use of educational personnel, and hence to serve the real needs of development. Individuals who have been “turned out” without proper vocational guidance, and thus cannot find a job, rightly feel embittered after a substantial investment of time, money, and energy. It is little wonder then that such individuals become hostile to the educational system and even to society itself. *Dissonant* students have indeed become *dissident*. Many have joined their parents in calling for accountability particularly in the realm of relevant curricula, which will prepare them for careers and better opportunities. Thus, the challenge posed to education in virtually all countries of the developing world is, on the one hand, the imparting of appropriate

---

<sup>2</sup> Jacques Delors: Report to UNESCO of the International Commission on Education for the Twenty-First Century.

knowledge, attitudes and skills, and on the other, the development of positive behavioural characteristics, which would produce responsible, productive citizens. There is little doubt that this calls for renewed thinking on the means and ends of learning.

## **II. The New World and the Impediments to Learning**

Many labels have been attached to the world in which we live today: it is the post-Cold-War age; the post-industrial age; the age of the Internet; the age of globalization. Indeed, the world is witnessing myriad changes and challenges and the quality of life issues loom ever larger on the global landscape. Solutions are needed for many environmental problems that beset humanity. Population growth continues to exacerbate economic, social, and environmental problems, particularly in the poorest parts of the world. These issues are inseparably linked with Education for All.

The progress achieved in the field of education during the last three decades is a source of pride and at the same time a source of shame. The achievements of the last three decades have raised remarkably, the net enrolment rates and literacy rates throughout the globe. Yet, at the same time, it is becoming increasingly evident that present education systems are ill-equipped for taking on the challenges that lie ahead. The provision of learning opportunities in the Asia-Pacific region to an estimated 65 million (57%) of the world's 113 million out-of-school children and 625 million (71%) of the world's estimated 885 million adult illiterates is no longer a matter of choice but a clear and unmistakable imperative.<sup>3</sup>

The aggregated figures hide striking disparities, such as those among religious and ethnic minority groups, between rural and urban areas and between boys and girls. That is, a large number of children not enrolled in school live in remote rural areas or urban slums and hovels; they pass their days in over-crowded refugee camps, displaced by man-made or natural disasters, or wander with their herds of animals eking out a marginal existence. Often side-lined and discriminated against because of language, life-style and culture, they do not enjoy a basic human right – the right to education. The inhibiting and impeding forces to learning do not relate merely to time, age, circumstances and socio-economic factors. The problem that confronts today's world runs much deeper than simply inadequate

---

<sup>3</sup> Source: UNESCO databank.

delivery mechanisms. The formal education system can often, in itself, constitute a barrier to learning.

The problems of “access, performance, efficiency and relevance” of education are also not fully recognized by almost all the stakeholders of basic education. It has been observed that a greater part of the national education budget is devoted to access and enrolment, infrastructure and central administration, to the detriment of quality, teaching-learning inputs and products. Non-enrolment, repetition and drop-out and low learning achievement, on the one hand, and their ensuing outcomes in the form of growing number of illiterates and functional illiterates, on the other, have assumed alarming proportions in recent years.

The industrialized countries maintain a virtually negligible dropout rate at the primary level mainly due to the enforcement of compulsory education laws. In the less developed regions, however, the phenomenon of early dropouts is a major problem. Of the approximately 96 million pupils who entered schools in developing countries for the first time in 2002, 24 million (25%) are likely to abandon school before reaching grade five. The situation becomes even grayer and grimmer when one takes cognizance of about 7-9 percent repeaters in total primary level enrolment during 1999-2000<sup>4</sup>.

### **III. The Broader Meaning and Role of Learning**

An increasing number of traditional approaches that have embodied and guided our thinking about the nature of work, social relationships, the environment, cultural diversity, political participation, etc. seem increasingly out of place and inappropriate. In order to manage and cope successfully and effectively with these transformations and facilitate them in a socially constructive manner, it is imperative for learning to take on a broader meaning and role. Learning within this context should be viewed as assisting people in their individual and collective struggles, in providing them with the tools to make sense of a changing world marked by social fragmentation and conflict, and in encouraging them to contribute to peaceful development.

Most educational systems stress and focus predominantly on the teaching-learning process, rather than on promoting and supporting a culture of learning. The school system tends to rely primarily on daily lesson planning, rigid curriculum and standardized tests and as a result,

---

<sup>4</sup> Source: UNESCO databank.

learning assumes a series of repetitive, mechanical and technical actions where the teacher becomes a technician rather than a facilitator. The roles and responsibilities of teachers and learners have often been narrowly defined and perceived with little scope for growth and change.

It is also unfortunate that discussions in educational decision-making circles continue to focus mainly on construction of new and maintenance of existing school buildings and on trying to get children into them, rather than on what actually happens inside the classroom. Education is, all too often, seen as an activity for the early part of one's life and a stage to prepare for life ahead. There is also a growing tendency to draw strict demarcations between formal and non-formal areas of learning leading to an isolation of formal primary schools from their surroundings and the communities to which they belong.

#### **IV. The Challenges and Limitations of New Technologies**

The recent outgrowth in information and communication technologies (ICT) using computers and multimedia, digital compression and satellites, fibre-optics and wireless networks, artificial intelligence and virtual reality has opened several options for effective teaching-learning processes at the individual, community and societal levels. A strong awareness is also emerging among education circles for making better use of technologies – radio, television, photography, video, digital imagery etc. – that hitherto have been under-utilized in supporting learning processes and learning communities. The concept of open learning communities as viable alternatives to traditional forms of education is gaining ground mainly due to new developments and possibilities in the field of information processing and communication networks.

However, discussion around new technologies has also led to a whole array of emotions from optimism and hope to scepticism and anxiety—some consider it as leap-frogging development, others the widening information gap and still others as dehumanization of society. Much of this occurs from the history of technology, which has provided many instances of predicted revolutions that failed to materialize. For instance, when the telegraph was invented, people predicted that it would help world communities restore and enjoy a peaceful co-existence in the future by “annihilating space and time”



and thus “bringing mankind into a common brotherhood”. Reflecting on these failures, analysing trends and experiences, several important concerns have been raised around the use of technologies, specifically in education.

All this suggests a complete overhauling of the education system and a search for modalities and mechanisms, which will help liberate learning within and outside the classroom. The time has come when the narrow and confined visions of schooling, learning and personal growth need to be transformed. The existing structures and mechanisms linked to schooling often do not permit us to think about supporting learning within and outside the school systems and for *doing things differently rather than doing more of the same*. This, in turn, implies a complete transformation of existing structures, developing new ones and utilizing optimally the opportunities that surround us. One **composite catalyst for change** might lie in a package that includes *school autonomy, curriculum reforms and school- and classroom-based management* which, in turn, would have serious implications on pre- and in-service teacher training programmes.

## V. Quality – the Key Determinant

In this paper, an attempt has been made to clarify the complex, sometimes controversial aim that is now the inspiration of policies for schools in so many countries – raising quality. The paper analyses the concept of quality and the reasons for its emergence as the contemporary educational priority; it examines the policy areas that are critical in the quest for improvement that include, curriculum, school and classroom-based management and organization, headmasters and teachers as school managers, and resources and facilities.

### The Expanded Vision

Dakar, April 2000, at the start of the millennium, was host to a major global assessment of Education for All. It reviewed the progress towards achieving the goals set for basic education and the strategies adopted for overcoming obstacles and accelerating progress. The assessment process provided opportunities for refocusing attention on basic education and reinvigorating efforts to meet basic learning needs. Countries, regions, and continents evaluated themselves, made

comparisons across communities, programmes and strategies, and outlined the main accomplishments, shortfalls and difficulties. Along with this, through active interaction, emerged the Framework of Action and Strategies for meeting both existing and emerging challenges.

The Dakar EFA Framework states that designing national policies for actions to improve basic education should focus on, “specific strategies, addressed to improve the conditions of schooling. These should be addressed to respond to learners’ needs and learning processes, personnel (teachers, administrators, others), curriculum and learning assessment, materials and physical facilities.” The Framework further states that strengthening educational management would require organizational restructuring, management information systems, capacity for assessing pupils’ achievement, monitoring systems, economic and education research. It underscores the need for developing managerial capacity in school supervision of teachers together with improving school relations with the local community. Increased acquisition by individuals and families of the knowledge, skills and values required for better living and sound and sustainable development has to be facilitated through all educational channels including the mass media. Meeting basic learning needs also involves action to enhance the family and community environment for learning and to correlate basic education with the larger socio-economic context.

Quality education empowers people to participate in the transformation of their lives and the societies in which they live. It enables people to use and extend their capabilities, develop skills, improve their livelihoods and increase their earning potential. Education is central to the achievement of greater equality in society, including that between men and women and between urban and rural settings.

The Framework for Action places prime emphasis on improving education quality and effectiveness with reference to the school environment. It underlines that:

*“Quality is at the heart of education, and what takes place in classrooms and other learning environments, is fundamentally important to the future well-being of children, young people and adults. A quality education is one that satisfies basic learning needs, and enriches the lives of learners and their overall experience of living”<sup>5</sup>.*

The Framework for Action focuses on the achievement of Universal Primary Education by 2015, and progress towards gender equality and empowerment of women, demonstrated by the elimination of gender disparities in primary and secondary schooling by 2005.

For these targets to be achieved there must be sustained commitment by national governments to sound, long-term policies, which recognize the strategic contribution of primary education to development. Governments will need to tackle the core issues of access, affordability, quality, inclusion and the effective application of modern technology. Achieving gender equality will require major culture shifts. The problem of insufficient, inefficient and inequitable financing for education, and weak institutional capacity to design and implement reform and development, must be addressed squarely. Real and active participation by civil society will be crucial and essential.

Against this backdrop, the Framework suggests five principal inputs for quality basic education and improved learning, viz.; curriculum, teaching-learning materials, instructional time, classroom conditions and environment, and pupils learning capacity. When countries are framing their own renewed EFA strategies, they must, in particular, stress four inter-related policy issues, namely, relevance, quality, equity and efficiency for meeting the expanded vision of basic education.

## **VI. Increasing Relevance**

Primary schools, disregarding their rural-urban locations, play two important roles. Firstly, they impart basic cognitive and life skills and knowledge, i.e. curriculum, and secondly, they prepare pupils for continuing studies. To measure relevance, it is first necessary to specify the desired effects of primary schooling and to define the relative value of those effects. Many of these effects are qualitative in nature and some of these effects can be measured only long after the pupils leave school.

### **Improved Quality**

Quality of primary schooling is closely associated with four sets of endogenous and exogenous factors, namely, student personal characteristics and traits, education inputs, education processes and

---

<sup>5</sup> *The Dakar Framework for Action, Education for All: Meeting our Collective Commitments*, Para 42.

education outputs and outcomes. Some of the input variables, which indicate the quality of primary education, are characteristics of the teacher, which include teacher effectiveness, availability and condition of school buildings and educational material, school and education administration. The priorities for reforming primary schooling include:

- Responding to educational needs of students (child-centred education);
- Improving the availability, quality and use of instructional materials;
- Enhancing teacher effectiveness by emphasizing mastery of the subject, communication skills and motivation;
- Improving managerial skills, community and institutional structures, and individual and organizational incentives;
- Increasing the time actually spent on learning.

### **Promoting Equity**

Inequities in the provision of education facilities are most commonly associated with poverty, gender, location (rural/urban), religious, linguistic or ethnic identification and physical or mental disabilities. Poverty is correlated with low education achievement of parents, poor nutrition and health care, inadequate intellectual stimulation for young children, paucity of learning opportunities, a reduced motivation for the benefits of schooling, and difficulty in meeting school expenses (whether explicit fees or implicit opportunity costs).

### **Enhancing Efficiency**

With decentralisation, the school remains accountable for its use of public funds and must continue to meet curricular standards and conform to general education regulations (emphasizing reducing costs without significantly altering the desired effects). Decentralisation and local support can be efficiently used to mobilize resources for schooling.

## **VII. Primary Schools and the Quality Puzzle**

### **The Concept**

The term “quality” means different things to different observers and interest groups and not all share the same perceptions or priorities for change. It can be a descriptive rather than a normative term. Also it

can refer simply to a *trait* or an *attribute*. Thus, a pupil or teacher, a school or school district, a regional or national education system, can have any number of qualities or defining characteristics. Again, “quality” may be used as a mere aggregate or collective term.

The importance of the term “quality” in the educational context, including its political significance, increases substantially when it is given a normative interpretation. A dictionary will include such definitions of the word as “*degree of excellence*” or “*relative nature or kind or character*”. When quality means “degree of excellence”, two aspects are encompassed: that of judgments of worth and that of position on an implied scale of good and bad. To judge the quality of a school, for instance as “poor”, “mediocre”, or “excellent” means both applying, whether roughly or precisely, a certain notion of merit, and identifying, again more or less approximately, where that school is positioned relative to other schools (OECD, 1989). The quality of primary education depends on the selection of relevant elements, the assessment of the character of these elements and the weighting assigned to their relative importance. Thus the concept of quality is complex and value-laden. It is hard to find a simple unified dimensional measure of quality. In the same way as the definition of what constitutes high quality education is multi-dimensional, so there is no simple prescription of the ingredients necessary to achieve high quality education. Many factors interact – pupils and their background characteristics; teachers and administrators and their skills; schools and their infrastructure and ethos; curricula; and societal expectations.

Thus, there is no agreement among educationists concerning the definition of quality in primary education and its constituents. It is generally agreed that the quality of education can be more objectively and concretely seen in terms of the quality of primary schools. But then again, what should one look for while assessing the quality of primary schooling? Should it be measured in relation to the material and human resources expended or should quality be predominantly about outcomes? Implicit in this concept is a mixture of applied common sense and metaphors borrowed from economics. Whether a new refrigerator or a washing machine is of high quality is not judged ultimately by the rational owner in terms of the materials that went into their manufacturing or the time it took to construct them but whether or not it functions satisfactorily. Similarly, so the common-sense argument follows, whether schools and school systems are of high quality should be judged ultimately by the standard of their

“graduates” – not by the ingredients that went into the schooling “mix”.

However, many believe this is a narrow concept of quality and argue that it reflects only the normative side hardly providing any idea of its descriptive dimensions (processes that take place in the school). Recognizing this problem, Beeby (1979) views “quality” as ‘qualitative change’ which can be defined as “a simple linear expansion or diminution of current practice, more or less, of what already exists: more buildings, more students and teachers, fewer examinations of the present type and standards” (Beeby, 1979). This *qualitative change* may be further amplified in terms of (a) qualitative change in the classroom – what is taught and how it is taught; (b) qualitative change in the flow of students – who is taught and where he/she is taught. A relative merit of this definition is that it views “school quality” in a dynamic perspective focusing on the actors and actions involved rather than on the passive material inputs available in the school.

Although the above concept of ‘quality’ recognizes the dynamic perspective, many still argue that ‘quality’ has to be seen with particular reference to the objectives of primary schooling, which delimit the scope of activities carried out in school. This implies viewing quality purely on the basis of “school effectiveness” where pupils’ learning achievements and outcomes are considered as the basis for assessing school quality. A relative merit of this concept is that it provides a much broader notion of quality as it assesses quality in terms of both inputs and processes provided in the school. Yet, it is not clear that all learning in school is an outcome of factors internal to the classroom. Exogenous factors, such as parental attitudes, community perceptions, political climates, socio-economic backgrounds, all affect the pupils’ learning achievement. Govinda and Varghese (1993) suggest: “...for understanding school quality, each aspect of schooling, namely, the material and human inputs available, the teaching-learning processes in the school and the learning outcomes, needs to be viewed in an *independent* fashion as well as together in an *interactive* framework” (Govinda and Varghese, 1993).

In this paper, the terms “quality of education” and “school efficiency” have been used interchangeably. School efficiency is measured in terms of three commonly found factors. *First*, efficient schools are those whose outcomes are good, in terms of examination results. This operational definition makes it easy to quantify efficiency because examination results are a measurable entity. However, this

definition has its own limitations. It may have negative implications as far as the school processes are concerned. In order to be efficient, schools may tend to be examination-oriented, which is hardly a welcome feature, especially at the primary level. *Second*, efficient schools are those, which are well managed. This definition focuses on the internal management of the school. It starts with the belief that any school is efficient where the interaction between different stakeholders is cordial and mutually reinforcing so that the teachers are happy to teach, parents are willing to send their children to school, and children enjoy the learning process. *Third*, efficient schools are those which give good results at reasonable cost, affordable to the society as a whole and to the different individuals in that society. In this definition, it is the cost and equity considerations which are dominant. A closer look at these definitions indicates four dimension of efficiency or quality, namely, focus on outcomes, favourable internal management, cost effectiveness and equity. Needless to add, all these four dimensions should be an integral part of an efficient school and quality of education.

### **VIII. Determinants of Quality Primary Education: An Integrated Model**

Recent studies of educational effectiveness have tended to narrow the discussion towards equating what happens in schools with the total educational effort, and towards elevating the single priority of educational achievement to a high plateau of concern. Education is concerned with much more than cognitive achievement, and much education takes place outside schools. It may be convenient for the researcher to narrow the debate, but this would tend to reduce the likelihood that the other important questions – i.e. those that are of major interest to the other actors involved in the educational effort – would receive adequate attention. The new commitment to EFA, with its definitive stress on universal access, should remind all those concerned of the need to broaden their understanding of educational effectiveness.

**Figure 3:1. Determinants of Quality Primary Education: An Integrated Model**

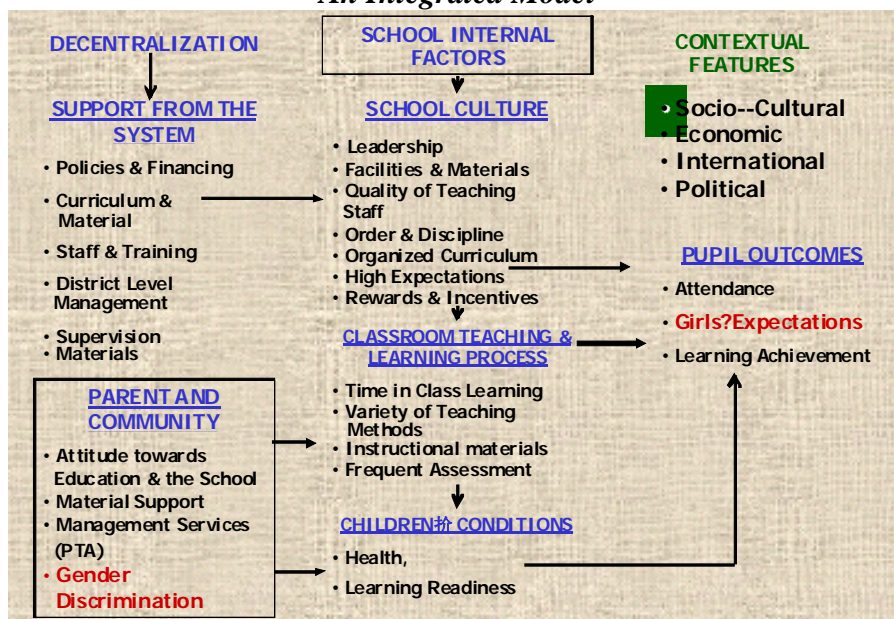


Figure 3:1 introduces the several determinants of quality in primary education and a schema for classifying the various sub-components. Because they originate in different places, it is quite common to propose educational initiatives that focus on specific components such as maintenance and construction of school buildings, teachers training or curriculum change. Focusing on single components is easy to handle and manage – and sometimes it works; however, empirical evidence suggests that a multi-pronged approach is more likely to make a difference. Figure 3:1 depicts this composite conception.

## IX. Decentralisation and School Autonomy

Educational authorities in an increasing number of developing countries have started to recognize that reform measures have not succeeded in achieving their goals. Consequently, large numbers of children are leaving school long before they learn anything worthwhile. There is also a dawning realization that schools can do better when they do not feel imprisoned by national directives.



There is no denying that in each country there are some schools, which poses a wide variety of talents and excellence. The uniform application of policy in all schools alike tends to heighten rather than heal the imbalances between the developed and under -developed sections of the system. This is particularly so when the national standards in management, discipline and the quality of education remain stagnant. The prescribing and imposition of uniform curricula, textbooks and examination standards from the central administration leads to adverse and undesirable effects. It not only fails to impart education to all children but also results in driving large numbers of children out of school long before the acquisition of anything useful from their education. Teachers however sympathetic and understanding of the individual differences and capabilities of their pupils, find themselves left with little freedom to deviate from the official examination requirements which at best will benefit only a handful of the school-age population.

If schools are to be freed at least to some degree, from the shackles of centrally imposed curricula and other standards, they must be granted a certain level of autonomy or freedom. This leads us to the concept of *school autonomy*. Literally, “autonomy” means the right of self-governing. However, the concept assumes a different meaning when used in relation to schools. In the schooling context, it implies a relative independence to carry out commonly agreed goals, with a view to making schooling more efficient and effective.

Grauwe and Varghese (2000) suggest three important points for consideration. *First*, there is the concept of granting more authority to schools in decision-making in the belief that this will improve school efficiency. However, research in this area has demonstrated that such a link remains vague and elusive. A *second* approach is that the central administration continues to provide a framework for school autonomy but at the same time adheres to a regulatory role i.e. it sets up norms for quality; the actual interventions for improving efficiency are introduced at the school level and in the classrooms. *Finally*, the independence of schools is relative and contextual. The level of development of a country and the type and size of a school are among the more obvious factors to consider.

Furthermore, there is no *optimal locus* for decision-making on education which applies to all countries or schools. *Nowhere does school autonomy imply total independence* (Govinda, 2000). It generally implies operational freedom to organize and galvanize school and community resources to make its functioning more

efficient and cost-effective. When this principle is applied in practical situations, it entails many different scenarios; school-based management, school-site management, local-level management, self-management of schools, etc. All of these forms point towards the wide spectrum of experiences and varied patterns of school autonomy.

Most education systems around the world advocate and support the idea of school autonomy, yet the efforts made so far have failed to operationalize the idea. There is no comprehensive response to the key problem: which level will be responsible for which issues? The directives, circulars and mechanisms currently in vogue are, in fact, more constraining than enabling. Thus, in order to offer more autonomy to schools to be accountable to society and responsive to local needs, *four critical areas* – curriculum, teachers' role (leadership style), examination and performance evaluation, and school finances - deserve special attention.

Transfer of decision-making authority to schools in each of these four areas has relative advantages and limitations. For instance, curriculum development based on local needs would lead to more relevant, more adapted schools and would facilitate teachers becoming more active partners. But this would certainly impose difficulties in multicultural and multiracial societies where the promotion of solidarity and unity of the nation is the prime goal of education. In these societies the curriculum content is a sensitive issue, not least politically. Therefore, schools are required to follow the centrally-designed curriculum. Further, many countries still do not have adequate administrative and organizational structures to support and facilitate curriculum development at school level.

Similarly, autonomy in curriculum reform is directly associated with the issue of examination and students' performance evaluation. The aftermath effect, which a national examination system can have on classroom teaching, is well known. A centrally designed and administered examination system may well impede and restrict school freedom. Yet, such a restriction might well be necessary when schools receive more autonomy for controlling effectively their quality. By offering school autonomy, the state should make it a point that it continues the necessary financial support to the school. In other words, school autonomy does not mean withdrawal of funding support by the state. On the contrary, since many educationally backward regions are found in economically weak and deprived areas, it would not be possible for them to mobilize sufficient resources for the provision of quality education to all. Thus, it is vital for the state to assure

continued funding in order to ensure that these schools become more efficient and effective.

In reality, however, this has generally not been happening. The funding arrangements and flow mechanisms in many developing countries have been so designed and operationalized that they neither promote school autonomy nor the efficient use of resources at school level. Most schools operate without any substantial claim on or control over their finances. The funds are allocated by the government through several administrative channels and complex procedures and often earmarked in item-wise accounting mode. That is, the provision is purely in terms of teachers' salaries, equipment, etc. rather than in financial flows. For administrative reasons, central authorities presuppose a uniform system of education to allow for a uniform pattern of spending.

Offering to schools a block-grant based partly on size of enrolment and partly on equipment requirements and other teaching-learning needs (pedagogic materials) appears to be a more practical and pragmatic strategy. At the same time, the state should confer to the headmasters the authority to reallocate the funds for various school activities within certain limits. However, in order to avoid the negative impact of such funding mechanism on equity, the state has to appraise well in advance the context and needs of each school. Enrolment alone should not be the criteria of such a funding mechanism; the criteria should reflect the special and specific requirements of the area where the school in question is situated. Along with that several other characteristics, such as quality and expertise of its staff, the number of children with learning difficulties, and so on should be taken into account. The whole argument of block-grant and autonomy to headmasters to manage funding for quality and equity seems to be simple. Yet, from a practical point of view, it is indeed a highly complex matter to institutionalize such a need-based resource allocation system particularly in countries where information on social issues is scarce. Further, the capacity of school heads to manage these funds cannot always be taken for granted.

Grauwe and Varghese (2000), and Govinda (2000) suggest an intermediate solution. A satisfactory level of school autonomy objectives may well be achieved by providing schools with limited funds to implement specific school improvement projects. These projects could be conceived of and developed by the schools themselves and could range from the construction of extra rooms or the setting up of school libraries to the organization of in-school

teacher training. School heads could involve other teachers as well as students, parents and local community representatives in the selection and execution of such projects.

## **X. Enhancing the Contribution of the Curriculum**

Before beginning to discuss the role which the curriculum and curriculum changes might play in helping to improve the quality of basic education, it would be useful to mention how the term is used in this paper. Curriculum refers to:

- The content of the instructional programme, which includes all the learning experiences provided formally and informally by schools;
- The instructional strategies used to achieve stated curriculum goals;
- The instructional materials and facilities available to schools; and
- The methods of evaluation used to assess whether the curriculum goals have been achieved.

Thus, the term used here refers to the total programme planned and given to the child within the formal and informal setting of the school. As such, it includes the teaching learning strategies used to achieve curriculum objectives, teaching-learning materials; and evaluation methods. Curriculum reforms can thus be viewed as a starting point for major changes in an educational system, and such reforms will also bring about changes in other related areas, including materials development, teacher preparation and the mechanics of school management. However, its greatest significance is for the teacher, since curriculum reform clearly implies that some change is introduced into the teaching-learning process in the classroom. This broad definition of curriculum puts it at the centre of any effort to improve the quality of basic education and implies that a coordinated effort in all the areas included above is necessary to achieve an overall improvement in school education.

In order to enhance the contribution which the curriculum can make towards improving the quality of basic education, it is necessary to be quite clear and realistic about the major goals of basic education. Ministries of Education in their efforts to consider the school as the only educational agency in society often include in their curriculum guides a long list of objectives of basic education. It might be necessary to establish some order of priority among these goals and

identify those which should be the key responsibility of the school system, particularly when the resources are limited.

Curriculum planners must view schools in their proper perspective and should ask a few basic questions such as:

- (a) “What are the most crucial educational goals which can only be achieved by schools and not by other institutions in society”?
- (b) “What other agencies – both formal and non-formal – exist in society to assist in the achievement of other important goals such as the transmission of cultural values to the younger generation”?

For enhancing the contribution of the curriculum, planners are also faced with another critical issue: should primary education be regarded as a goal in itself, aimed at helping to equip pupils with appropriate skills, knowledge and dispositions, or should it be primarily for preparing students for entry into secondary schools? This has always been a difficult problem for many developing countries to solve. Some educators have argued in favour of the second alternative, suggesting that the kind of academic preparation which is usually required for a secondary education is what primary schools are often best equipped to offer. Others prefer the first goal. These are critical choices and have lasting implications on curriculum reforms and need the involvement of all stakeholders at the initial stage of school-based curriculum development.

In order to overcome this dilemma, Bacchus (1991) suggests that for students in the developing countries who have received a basic education over a period of about 7 to 9 years should not be allowed to pursue secondary education. Instead, they should all be required to enter the world of work, usually in an ‘apprenticeship’ role, in an attempt to find out the types of jobs for which they are likely to be most suitable. They would then follow up their basic education with the preparation required for these jobs through some form of planned and supervised practical or on-the-job training or even a combination of part-time work and part-time schooling. After this work experience lasting about one or two years, some might return to secondary schools, possibly after taking some evening classes, in order to pursue advanced studies for those occupations, which require higher levels of education and training. Innovations such as these appear, on the surface, to exert significant impact but in reality they are extremely

difficulty to operationalize since there are inherent in them serious political and practical implications.

As stated earlier, curriculum change and reforms at the primary level of education are based on a list of well-defined goals and objectives. For instance, if the focus of basic education is to prepare students better to cope with the realities of life in their communities, the curriculum offered will be somewhat broader than if the students were being prepared simply to gain access to secondary schools. This means that the expected performance of these students in some of the more academic subjects, such as mathematics, might not be as “deep and profound”, although it might be wider in scope. In situations such as these, secondary schools need to restructure their instructional programmes and be prepared to help students make up these academic deficits before they leave. On the completion of a secondary school course, students would not only achieve the required levels of performance in their selected subjects so as to secure admission to higher levels of education, but would also have a broader educational background as a result of their earlier primary education.

The underlying premise is that when schools are confronted with limited and shrinking resources and, at the same time, are being challenged to enhance the contribution of the curriculum in order to improve and augment the quality of education, it might be a useful strategy for them to concentrate on developing the more essential educational knowledge and skills. For the remaining tasks, concerted efforts should be made to seek help from other agencies, groups or individuals in the community. In other words, if schools attempt to assume full responsibility for the whole array of educational tasks, their efforts to improve or even maintain the quality of basic education which they are trying to provide will be placed in jeopardy.

## **XI. Quality Basic Education and Curriculum Planning**

Many developing countries have not yet fully recognized the role curriculum planning can play in improving the quality of schooling. This may appear surprising given that many of them have a well-defined national curriculum. But a highly centralized and detailed published curriculum does not necessarily ensure the anticipated outcomes. Neither is the policy of giving full autonomy to individual schools for curricular decisions a desirable alternative solution. Therefore, there is a need in these countries for restoring a careful

balance between centrally-negotiated national guidelines and school-based planning for curriculum implementation. Evolving such a balanced approach is by no means a simple task, and specific problems will certainly vary from one country to another depending on the ways in which the educational systems have unfolded historically.

Both at national and local levels, curriculum planning must be centred on an *a priori* theory. Most educational systems, consciously or unconsciously, appear to be working with some kind of curriculum in mind based on “social and individual needs”. In order to improve the curriculum planning mechanism and machinery, it is necessary to highlight these underlying values in a more explicit manner by a conscious programme of specification such as cultural analysis. Thus for improving the quality of the curriculum, it is necessary that it should be “broad, balanced, relevant and differentiated”. But such an exercise is not as simple as each of these broad objectives conceals and involves a wide variety of difficulties. All of us will endorse the idea of the curriculum being broad and balanced, but these words become meaningless unless they are accompanied by a clear indication of the territory to be covered and the ingredients to be included. In other words, both these terms should clearly amplify a prior commitment to some kind of theory of tenable curriculum. In most cases of curriculum planning this fundamental proposition is taken for granted. A major contribution towards improving the quality of the curriculum can be made by making explicit the underlying purposes of education, and then by determining how they can be realized in classroom practice.

Likewise, the concept and meaning of *relevant* curriculum is not clear and transparent. The term is often used to denote work-oriented curriculum. However, there are other types of relevance which deserve serious consideration and must necessarily be included within the ambit of a well-planned curriculum; for instance, the perception that knowledge is built up in ways that enable the student to see and understand how the parts fit together. “Lack of relevance is also used to criticize curricula which are unduly academic and therefore not susceptible to practical application for the majority. This is an important aspect of curriculum planning, but it needs to be spelt out carefully rather than simply labelled” (OECD, 1989).

Lastly, a differentiated approach also needs to be given careful consideration. *Differentiation* can be explained and interpreted in different ways. A narrow approach is to consider that curriculum must

cater for all levels of ability without stratification. All students are not alike in terms of intelligence and cognitive abilities. This is one kind of difference with which curriculum planners are always concerned. Motivation and application are other kinds of differences that have serious implications on teaching and learning styles and processes. In this context, gender differences also need special attention.

Cultural lag and curriculum inertia is another important problem in curriculum planning. It is a well-known fact that the response of educational institutions to social change is relatively slow. That is probably both inevitable and reasonable. "Education is necessarily tradition-oriented to some degree and there are some features of modern society which are anti-educational and should be resisted. But many schools also tend to be resistant to changes of any kind" (OECD, 1989). In order to distinguish between desirable and undesirable change, some form of curriculum theory, including criteria for reacting to change, is therefore vital. This kind of curriculum planning has serious implications for the role and responsibilities of school headmasters and teachers as well as for the preparation of teachers in teacher training institutions.

A common core curriculum is not necessarily a uniform curriculum. A key element in the art of curriculum planning is to provide a variety of choices and "routes" into important areas of knowledge, skills and values, as well as different "sorties" which can develop individual interests and abilities to the highest possible levels. Some planning of this kind for differentiation can take place nationally, but it is likely to be most effective when planned and implemented at the school level in relation to specific individual and group needs for differentiation.

## **XII. School-Based Management and Community Involvement**

Experience tells us that resistance to curriculum reform and change often comes from the general public. This might be reduced through attempts to involve community members in the process of curriculum development. It is sometimes argued that parents, especially those in rural areas or those who are illiterate or not well educated, cannot make a useful contribution to curriculum development in schools. But empirical evidence suggests that educators who have attempted to involve communities in a meaningful way in this activity have found



that this is not necessarily true. Based on their research experiences in several developing countries, Chinapah (1997) on the one hand, and Chatterjee and Khan (1997) on the other, suggest that all community members are quite capable of sufficiently understanding the complex issues involved provided that someone takes the time and the trouble to explain them adequately.

In order for appropriate decisions to be made about problems within the community, it must first be established what the needs, desires and problems within a given community might be. The greater the community involvement in the process of curriculum change, and the greater the input of different groups within the community, the more likely that curriculum change and content will reflect actual needs and wants. The following six areas are the most popular areas of concern and reflect the need for increased community involvement in schools.

- Policy-making: community participation will contribute to the development of school policies and practices which are most effective and equitable for that community;
- Service delivery: the capacity of the school to solve educational problems is enhanced if parents and community members are part of the problem-solving mechanism;
- Community development: effective community participation may contribute to the development of a healthy and stable community, where services are adequately and fairly distributed and where people have a sense of community pride, responsibility and power.
- Individual development: involvement in community activities can contribute to the development of self-confidence can improve people's abilities and social skills and lead to a feeling of personal contribution.
- Organizational effectiveness: community participation can contribute both to increased usage of the school and improved performance by the people in the school. This increases cost effectiveness, as well as organizational effectiveness;

- Performance of students: community involvement can contribute to improved academic performance and less problems within schools.

Improved student performance is a cogent reason for increasing community involvement in the school, and possibly the best place to start when attempting to involve greater numbers of parents. Much research can be cited as evidence that parental aspirations, interests and involvement have a positive effect on children's academic ability, self-esteem and aspirations.

These arguments clearly suggest that when efforts at curriculum development are carried out in cooperation and consultation with the key members of the community, the outcome can be of immense help in alleviating potential resistance. It certainly helps to develop an integrated curriculum espousing "school knowledge" with "common sense knowledge".

Although communities can play a positive role, it is, however, unfortunate that their potential has not been fully exploited. There are many constraining factors; but the following appear to be the most important:

- Lack or absence of clear legislation, empowering communities to participate in the local management of schools and defining what are the roles and responsibilities of communities and of the other partners
- Lack or absence of suitable and efficient structures, which allow communities to be involved in schools
- Democratic decision-making processes not deep-rooted in local social interactions;
- Inadequate efforts to evoke people's participation and the negative impact of petty, local politics
- Lack of a platform for discussion and the orientation of activities.

Therefore, to ensure stronger school-community relations, national authorities should take action in three core fields. *First*, national authorities need to evolve legislation to provide a legal framework, defining with some precision the role and contribution of communities. The legislation should not constrain communities nor limit their creativity. *Second*, there needs to be further development of appropriate structures. Many countries have set up some management committees with representations from the community but very few of

these have been able to harness the real involvement of communities. Their membership, their constitution, their relationship with the more official educational administration, and their localization in the hierarchy (should they be set up for each school, for a cluster, for a village or a district?) are some of the elements which need further consideration. *Finally*, it concerns organizing orientation programmes to create awareness among communities and building capacities among them to participate more actively and effectively in matters related to school management (IIEP, 2000).

### **XIII. The Changing Role of Headmasters and Teachers**

The erosion and decline in the quality of basic education in developing countries has been a largely unperceived but *very real emergency*. The World Conference on Education for All (Jomtien 1990) and the World Forum on Education for All (Dakar 2000) duly recognized that the new functions of schools call for a teacher with a variety of skills. Admittedly, ability to teach continues to be the fundamental requirement for the teaching profession, but the nature of this ability has also changed. A teacher is no longer visualized as someone who just “gives lessons”; but someone who has the ability and capacity to organize, observe, stimulate, assess and foster the various learning processes in children and to take remedial measures whenever necessary.

Teachers numbering more than 55 million throughout the world now constitute probably the largest group among the various categories of intellectual workers. Yet, the available evidence revealed a shortage of 9.5 million qualified primary school teachers in the developing countries by the end of the year 2000. It has also become evident that an adequate supply of qualified teaching staff will not be forthcoming without an improvement in the professional, social and economic conditions of the teaching profession on the one hand and reforms in their roles and responsibilities on the other. Although a vast plethora of laws, regulations and customs apply to this large profession around the world, teachers, particularly in developing countries, have common and similar problems, needs and aspirations.

During the last three decades of educational development, there has been a phenomenal increase in student enrolment in primary schools. There has also been significant progress in the establishment and in the consolidation of curriculum development processes and the

production of textbooks. This rapid growth of primary education has not, however, been accompanied by an adequate provision of operational teachers who can respond to the specific needs of a particular situation and bring about positive changes in school instructional practices. A majority of primary school teachers, after undergoing training, are unable to put into practice specific strategies and functional skills that are presumed to be relevant to raising the level of the teaching-learning process. Needless to say, the process of achieving teacher training objectives and relating them to specific instructional acts and pupil- outcomes requires constant attention and commitment.

Most primary schools in developing countries do not have even the basic facilities (buildings and furniture) that are so essential for making any classroom instruction effective. The school curriculum and textbooks are centrally prescribed with little room provided for making modifications or adjustments. The teacher's role is mostly passive. Teachers get practically no encouragement to be innovative and have little scope for enhancing and/or updating their knowledge and skills. The outcome is that in schools not much professional activity takes place to raise the standard of classroom instruction. A general state of inertia tends to prevail in the teaching-learning process. In fact, the efficiency (input-output coefficient) and the effectiveness (achievement level at the terminal grade) of primary school education have been very low.

Teacher training programmes, as they are being conducted in a large number of developing countries, tend to be largely academic and do not adequately meet the training needs of teachers. Not enough emphasis is laid on practical training and acquisition of new skills. Once teachers are trained, hardly any worthwhile follow-up programmes are undertaken to update knowledge. All these factors demoralize teachers and discourage their professional commitment. Their motivation is adversely affected by insufficient supervisory and support services. The lack of regular supervision impedes the adoption of improved teaching practices and encourages absenteeism.

Traditionally, legally and functionally, the headmaster is the person entrusted with the total management of the school while being accountable only to the higher-level bureaucrats in the State Department/Ministry of Education. Yet, the concepts of school boards/councils and teacher-parent associations redistribute the authority and responsibility for governing a school to a representative elected body of the school community, reducing the headmaster's

position to one amongst them. Thus the most important challenge that a headmaster faces is to understand this new situation and improve his/her skills in interpersonal relations, communications, and collaborative working arrangements with other stakeholders. He/she is also expected to enlist the support of the school community. Thus the headmaster is placed in a position where he/she is unable to take decisions by him/herself and issue instructions expecting them to be obeyed by the staff and students. The altered role required him/her to articulate his/her views on policy and convince other school board members, so as to arrive at a consensus at least on the major issues.

In the context of school autonomy, the headmaster is required not to change only his leadership style but also modes of operation. He/she is also required to motivate, guide, and organize others to do their own work be they sub-administrators, teachers, or students. There is need to spend a great deal of time thinking through the modalities by which measurable objectives can be realized. Then there are the issues related to the effective management of the school. This in turn requires the submission of progress reports on the implementation of decisions to the school board and an annual report to the entire school community and to the system. The establishment of an effective network of communications to the staff, students, parents and community is another challenging task. Unless the information flow becomes smooth, adequate and accurate there could be problems resulting in dysfunctions in certain areas of the school organization.

Figure 2 shows a comprehensive list of challenges faced by the school headmaster (Gamage 1993).

**Figure 3:2. Challenges Faced by a School Headmaster**

|  |  |
|--|--|
| <b>Collaboration</b>   | <b>Empowerment</b>   |
| Participatory decision-making<br>Multiple ownership of policies<br>Developing loyalty to school  | New participatory structures<br>Delegation and empowerment<br>Theory Y approach to staff                   |
| <b>Human Resources Management</b>  | <b>Non-traditional Role</b>  |
| Orderly student and staff management<br>Staff and student development<br>Trust and confidence    | Collaboration with community<br>Commerce and industry relations<br>Negotiations for services               |
| <b>Allocation of Resources</b>   | <b>Governance</b>  |
| Strategic planning<br>Global budgeting<br>Prioritizing   | School council/board<br>Modified bureaucracy<br>Committee structure  |
| <b>Leadership Styles</b>   | <b>Entrepreneurial Skills</b>  |
| Transformational<br>Instructional<br>Situational   | Competitive school improvement<br>Innovative approaches in OD<br>School's image and marketing              |
| <b>Learning Programmes</b>   | <b>Leadership Styles</b>   |
| Programmes to meet students' needs<br>Programmes for the community<br>Peer and community support | Interpersonal and communication<br>Negotiations and public relations<br>Conflict management and resolution |

To keep abreast of the progress of educational research, interpret information received “from above”, decipher the messages of society at large, translate them into operational terms and contribute actively to the drawing up, implementation and monitoring of their school’s activities, headmasters and teachers will have to make quite extraordinary efforts. They will also have to combine all this with the conception of schools as organizations, demands of teachers, new aptitudes for communication, social relations and teamwork. This implies a complete overhauling and reorganization of contents and methods of pre- and in-service teacher training programmes commensurate with the national priorities as well as the goals put forward in the World Education Forum agenda. The basic issues to be addressed in these programmes include:

- What are the strengths and limitations of teacher education in the country? What types of strategies for introducing and managing innovations in pre- and in-service teacher training programmes have been or can be evolved?
- What kinds of mechanisms (school forums, parent-teacher associations, school governing boards, etc.) have been or can be evolved through which teachers could seek to cooperate and interact fully in order to:
  - a) identify crucial issues related to the teaching-learning process,
  - b) share experiences in the attempted solutions to problems, and
  - c) exchange ideas for making teaching-learning more broad and need based, effective and relevant?
- What pedagogical and training skills can be incorporated in teacher training programmes to transform the teacher from merely a “lesson giver” into a “learning facilitator”?
- How can communities contribute to improved learning?

All this clearly suggests that an increasingly important aspect of the teacher’s role is to guide students’ choices and to negotiate teaching-learning contracts with them. In this way the teacher-student relationship can become much more productive, and the student will be motivated to play a more active part in learning, curriculum planning at the individual level and self-assessment. Good teachers

capitalize on the motivation of students, who nearly always wish to enter the labour market well prepared, but it is dishonest and counter-productive to pretend that the only purpose of the curriculum is to prepare young people to work. A balanced approach to the whole of adult life is an indispensable feature of a well-planned curriculum.

There is, therefore, a need for “a comprehensive, action-research agenda” to ensure that teacher training is reorganized as a continuous, coordinated process which begins with pre-service training and continues throughout the teacher’s professional career. The agenda should integrate pre- and in-service teacher training programmes, and foster the concept of life-long learning and recurrent education, provide an effective framework for effective teaching-learning process and ensure an improvement in teacher motivation, perceptions, autonomy, status, skills, and empowerment. The guiding principle of such an agenda should be an improvement in school performance, effectiveness and student achievement levels.

The relationship of teacher training to teacher action in the classroom and its subsequent effect on pupil outcomes may not be a simple one. However, that should not prevent us from specifying teacher training objectives in consonance with problems faced by the teachers, or from relating training to more effective teaching-learning processes. All this requires constant attention and commitment of all the partners involved in the development of basic education.

#### **XIV. Concluding Remarks**

Concern for the quality of basic education is today among the highest priorities in all developing countries; it will undoubtedly remain so in the foreseeable future. But there are no ready-made and instant remedies for raising quality nor is it a one-off exercise. In many education systems, it is rather a question of consolidating the numerous reforms of recent years and making painstaking efforts over a long haul to bring about improvements in every aspect of schooling. In some systems, however, it may call for radical departures from established arrangements and practices. An outstanding difficulty is that the concept of quality is so widely interpreted, both within and across countries, as to defy exact analysis. Given this, it would be futile to suggest a tight and universally accepted definition but it is important to attempt to clarify the concept itself and to understand the implications of adopting different interpretations of it.



There are many different ways through which curriculum changes aimed at improving the quality of basic education might be introduced and more successfully implemented. Crucial among these is the need for the more active involvement of local communities and teachers in the development of a school-based curriculum to help ensure that it are more responsive to the needs of children in different socio-economic settings. In addition, there is need for the production of more relevant instructional materials including more detailed teacher guides and self-instructional modules, the greater use of child-to-child learning possibilities, the development and use of distance education techniques, the improvement in the quality of supervision, and the adoption of more innovative teaching strategies. Particular attention needs to be given to the provision of a curriculum likely to help empower the poor to play a more active role in improving the quality of their lives.

Finally, despite the possible contribution of education in general, and a more relevant curriculum in particular, it must be recognized that education can only play a supporting role in such endeavours. Prior to, or accompanying these developments, there must be changes in the socio-economic and political fabric of many societies if education and curriculum changes are to make an enduring contribution to the achievement of greater social equality and to the improvement of the lives of poor and marginalized groups.

## References

- Bacchus, K. (1991) *Improving the Quality of Basic Education Through Curriculum Development and Reform*, Quality in Basic Education, Background/Policy Paper, Commonwealth Secretariat.
- Beeby, C.E. (1979) *Assessment of Indonesian Education: A Guide in Planning*, Wellington, New Zealand, Council for Educational Research in Association with Oxford University Press.
- Bell, A. (1988) The Federation: A Support System For Rural Primary Schools, *Cambridge Journal of Education*, Vol. 18, no .3.
- Benford, M. (1988) Beyond Clustering of Small or Rural Schools, *Education*, Vol.172, No 13.
- Brown, D.J. (1990) *Decentralization and Schools Based Management*, The Falmer Press: London.
- Caldwell, B. (1990) *School-Based Decision-Making and Management: International Development*.

- Carron, G. and De Grauwe, A. (1997) *Current Issues in Supervision: a literature review*, IIEP, UNESCO, Paris.
- Chapman, J. (ed.) *School Based Decision Making and Management*, The Falmer Press, London.
- Chatterjee, B. and Khan, Q. (1997) *Impact of Non-Formal Education Adult Education in the Asia-Pacific Region*, UNESCO Principal Regional Office for Asia and the Pacific (PROAP), Bangkok.
- Cheng, C.Y. (1996) *School Effectiveness and School-based Management; A Mechanism for Development*, The Falmer Press, London.
- Chinapah, V. (1997) *Handbook on Monitoring Learning Achievement: Towards Capacity Building*, Paris: UNESCO.
- Commonwealth Secretariat (1991) *Curriculum Reform: Quality in Basic Education*, Background/Policy Paper.
- Evans, D. and Hood, P. (1997) *School Based Management: Challenge and Opportunity*, Anglia Business School, United Kingdom.
- Gamage, D.T. (1996) The Impact of School-based Management and New Challenges to School Leaders, *Perspectives in Education*, Vol. 12, and No.2.
- Govinda, R. (2000), *School Autonomy and Efficiency: Some Critical Issues and Lessons*, ANTRIEP Report, IIEP, UNESCO, Paris.
- Govinda, R. and Varghese, N.V. (1993) *Increasing and Improving the Quality of Basic Education: Quality of Primary Schooling in India, A Case Study of Madhya Pradesh*, IIEP, UNESCO, Paris.
- Grauwe, A., de, and Varghese, N.V. (2000), “*Improving School Efficiency: Issues and Priorities*”, ANTRIEP Report, International Institute for Educational Planning, UNESCO, Paris.
- IIEP (1998) *Improving School Efficiency: The Asian Experience*, Meeting of the Asian Network of Training and Research Institutions in Educational Planning, ANTRIEP Report.
- Jacques Delors: *Report to UNESCO of the International Commission on Education for the Twenty-First Century*, UNESCO, Paris.
- Khan Qutub, and Chatterjee, B. (1999) *Reaching the Unreached: Innovative Strategies for Providing Out-of-School Children with Access to Basic Education*, A Seven-Nation Synthesized Study, UNESCO-PROAP, Bangkok.
- OECD (1989) *Schools and Quality: An International Report*.
- Perera, W.J. (1997) *Changing Schools from Within: A Management Intervention for Improving School Functioning in Sri Lanka*, UNESCO, IIEP, Paris.

UNESCO (2000), *The Dakar Framework for Action, Education for All: Meeting our Collective Commitments*, Paris.





## CHAPTER FOUR

# POVERTY, DEMOGRAPHY, HEALTH AND THE DEVELOPMENT OF BASIC EDUCATION IN SOUTH-ASIA

## A CRITICAL ANALYSIS OF SELECTED DATA ON HUMAN DEVELOPMENT

*Wolfgang Vollmann, Former Director UNESCO, Dhaka Bangladesh,  
Visiting Professor, Kathmandu University, Nepal*

### I. Introduction

The purpose of this paper is to reduce the knowledge-gap between our conceptions of existing socio-economic realities on the one hand, and declared educational goals and strategies on the other. In the field of basic education, and especially in South-Asia, issues like progress, bottlenecks, stagnation or lack of quality, need to be examined in a more holistic, contextual way. Key challenges such as gender, access, or the potential of Technical and Vocational Education and Training (TVET) cannot be considered separately from other educational, social and cultural issues.

Concerning the primary education sub-system in South-Asia, research projects generally consider data about net enrolments, teachers, curriculum, textbooks, teaching/contact hours, PT-ratio etc. The possible impact and significance of other educational facts (like ECCE, or the literacy status of parents), or those situated outside of the education system, like employment, poverty, health, availability of key infrastructures, are much too often neglected. In this respect it is heartening to read in the GM reports on EFA, of 2009 and 2010 that “unlocking the wider benefit of education”, would lead to a more systematic re-appreciation of education in society and the economy. It is true that numerous policy makers are not yet fully aware of the empowering role of EFA, and particularly literacy, in national development. Experts and of course the GMR reports stress that “the impact of education is strongly conditioned by other factors, from

macroeconomic and labour market conditions to the state of public health provision and demography”.

## **II. India, Pakistan, Nepal and Bangladesh**

The recent editions of HDR published by UNDP provide a large range of data pertaining to specific aspects of the extent of poverty as a major obstacle to positive human development. The following data, targeting EFA in S-Asia in the context of poverty and development, are preceded by considerations covering specifically the significance of exclusion and poverty in the still largely rural societies of South-Asia.

The following countries have been examined: India, Pakistan, Nepal and Bangladesh. These countries share a certain number of commonalities, as shown by the data, and therefore allow developing a certain number of policy considerations. Sri-Lanka and the Maldives have not been considered, due to their relatively high level of educational development. The case of Morocco has been quoted here for reasons of comparisons and astounding similarities in the field of health, demography and education. China data have been added to show the gap with S-Asia.

An effort has been made to focus also on data which reflect the historical dimension of progress achieved; a notion all too often neglected by UN policy makers and development specialists. In addition to the possibility of the identification of progress, the history of data may also be helpful in the early identification of likely difficulties and pitfalls lying ahead.

In particular, two controversial issues, *reproductive behaviour* and the notion of *census-based literacy data*, will be discussed in the light of recent research findings.

## **III. Reproductive Behaviour**

Data here indicates that over a period of 30 years, considerable progress has been made, due to education, better access to health services, better quality of food and other services. Surprisingly Pakistan, Nepal and Bangladesh show better data than India.

**Table 4:1. Public Expenditure % of GDP**

|            | <b>Health</b> | <b>Education</b> |             | <b>Military</b> |             |
|------------|---------------|------------------|-------------|-----------------|-------------|
|            | <b>2007</b>   | <b>1991</b>      | <b>2007</b> | <b>1990</b>     | <b>2008</b> |
| India      | 1.1           | 3.7              | 3.2         | 3.2             | 2.6         |
| Pakistan   | 0.8           | 2.6              | 2.9         | 5.8             | 2.6         |
| Nepal      | 2.0           | 2.0              | 3.8         | 0.9             | 2.0         |
| Bangladesh | 1.1           | 1.5              | 2.4         | 1.0             | 1.0         |
| Morocco    | 1.7           | 5.3              | 5.7         | 4.1             | 3.4         |
| China      | 1.9           | 2.3              | 1.9         | 2.7             | 2.0         |

Source: HDR 2010

**Table 4:2. Life Expectancy at Birth (Years)**

| <b>Country</b> | <b>1970/75</b> | <b>2000/05</b> | <b>2010</b> |
|----------------|----------------|----------------|-------------|
| India          | 50.7           | 62.9           | 64.4        |
| Pakistan       | 51.9           | 63.6           | 67.2        |
| Nepal          | 44.0           | 61.3           | 67.5        |
| Bangladesh     | 45.0           | 62.0           | 66.9        |
| Morocco        |                | 70.0           | 71.8        |
| China          |                | 72.5           | 73.5        |

Source: HDR, 2010

**Table 4:3. Population Size, Total (Millions)**

| <b>Country</b> | <b>1990</b> | <b>2010</b> | <b>2030</b> |
|----------------|-------------|-------------|-------------|
| India          | 862         | 1,214       | 1,484       |
| Pakistan       | 115         | 184         | 265         |
| Nepal          | 19          | 30          | 40          |
| Bangladesh     | 115         | 164         | 203         |
| Morocco        | 25          | 32          | 40          |
| China          | 1,142       | 1,354       | 1,462       |

Source: HDR 2010

The increase is particularly spectacular in Pakistan and in India, due to persistently high fertility rates, as we shall see below. Decline in terms of natural increase is evident in all countries, especially in China where increase has been reduced by 50% which explains stable population data since several years. On the other hand Pakistan experiences still high levels of increase, which are reflected in the relevant educational data (like low enrolments), which impacts on its development performance in general.

**Table 4:4. Demographic Data: Rate of Natural Increase (%)**

| Country    | 1990/1995 | 2005/10 | 2010/15 |
|------------|-----------|---------|---------|
| India      | 2.0%      | 1.4%    | 1.3     |
| Pakistan   | 2.8%      | 2.2%    | 2.1     |
| Nepal      | 2.3%      | 1.8%    | 1.7     |
| Bangladesh | 2.2%      | 1.4%    | 1.3     |
| Morocco    | 1.9%      |         | 1.2     |
| China      | 1.2%      |         | 0.6     |

Source: Col 1 and 2: GMR 2011 data; 3rd col. HDR 2010 data

**Table 4:5. Total Fertility Rate (Births per Woman)<sup>1</sup>**

| Country    | 1970/75 | 2000/05 | 2010/15 |
|------------|---------|---------|---------|
| India      | 5.3     | 3.1     | 2.5     |
| Pakistan   | 6.6     | 4.0     | 3.6     |
| Nepal      | 5.8     | 3.7     | 2.7     |
| Bangladesh | 6.2     | 3.2     | 2.2     |
| Morocco    | 6.9     |         | 2.3     |
| China      | 4.9     |         | 1.8     |

Source: HDR 2010

This is a key indicator as to the future of populations and countries. It also reveals the impact of current levels of education and health services, as well as the role played by traditional kinship structures. For example, in Pakistan the combination of strong patriarchal-linear kinship and low levels of girl's education contribute to a still high fertility rate.

<sup>1</sup> The GMR report 2010 proposes slightly different data: India: 2.8; Pakistan 3.5. Bgd: 2.8; Nepal 3.3. GMR 2011 does not mention fertility rates!



**Table 4:6. Contraceptive Prevalence Rate, Any Method**  
*(% of married women aged 15-49)*

|            |       |
|------------|-------|
| India      | 56.3% |
| Pakistan   | 29.6% |
| Nepal      | 48.0% |
| Bangladesh | 55.8% |
| Morocco    | 63.0% |
| China      | 86.9% |

Source: HDR 2010

Family planning and contraception contribute increasingly to declining fertility rates, except for Pakistan as it seems. Concerning Pakistan, there may be hope at the horizon! A recent study in the *Asia-Pacific Population Journal* (June 2010, p. 5-26) reveals that in some areas of rural Punjab and NWFP there has been a generalised rise in contraceptive use.

The authors, Zeba Sathar and Sharon Ghuman insist on the fact that low levels of investment in women's education and poor access to family planning facilities have inhibited behavioural change. But change seems to be on the way, according to the findings of the two authors, who, based on their findings, confirm that: broader social factors, especially as they relate to values around education have a profound influence on fertility. Their findings also expose that: rural communities that have private primary schools or higher average levels of women's schooling are forerunners of fertility change. Finally the authors point to the fact that "in terms of policy, the findings indicate that investment in human development in rural communities is just as important for facilitating fertility limitation as are family planning programmes." Further one can read: "the recent sharper declines in rural fertility may be a response to the notable rise in primary schooling enrolment owing to the establishment of private low-fee primary schools that help to narrow the rural and urban gap in schooling..." (Ghuman and Sathar, 2010).

The researchers stress that their "research provides yet another strong policy rationale for investing in schooling in rural areas, for example via the construction of new government schools, particularly for girls..." (Ghuman and Sathar, 2010).

**Table 4:7. Adult literacy (15+); %**

|            | 1985/94 |      |        | 2008  |      |        |
|------------|---------|------|--------|-------|------|--------|
| Country    | Total   | Male | Female | Total | Male | Female |
| India      | 48      | 62   | 34     | 63    | 75   | 51     |
| Pakistan   |         |      | 54     | 67    | 40   |        |
| Nepal      | 33      | 49   | 17     | 58    | 71   | 45     |
| Bangladesh | 35      | 44   | 26     | 55    | 60   | 50     |
| Morocco    | 42      | 55   | 29     | 56    | 69   | 44     |
| China      | 78      | 87   | 68     | 94    | 97   | 91     |

Source: UIS/GMR 2011

**Table 4:8. Youth Literacy Rate (15-24)**

|            | 1985/94 |      |        | 2008  |      |        |
|------------|---------|------|--------|-------|------|--------|
| Country    | total   | male | female | total | male | female |
| India      | 62      | 74   | 49     | 81    | 88   | 74     |
| Pakistan   |         |      |        | 69    | 79   | 59     |
| Nepal      | 50      | 68   | 33     | 81    | 86   | 75     |
| Bangladesh | 45      | 52   | 38     | 74    | 73   | 76     |
| Morocco    | 58      | 71   | 46     | 77    | 85   | 68     |
| China      | 94      | 97   | 91     | 99    | 99   | 99     |

Source: GMR 2011

#### IV. Census-Based Literacy Data

Literacy rates are used to indicate a certain level of development and therefore have a high political status. In the case of S-Asia, rates are still low, despite some spectacular progress over the last ten years, thanks to pro-active policies, especially in India and Bangladesh. When we are confronted with data based on census or questionnaires, and not on testing (as in Bangladesh), do those data translate the reality of literacy?

In a recent article in IRE (2010) Kothari and Bandyopadhyay, ask themselves *Can India's 'literate' read?* Over-reporting on literacy, and its political implications, appear to have been the starting point of the study. Bangladesh is quoted where a recent study by Nath (2007) found that self-reporting over-reported the literacy rate by 5.6% when

compared to testing. Over-reporting was also found to be higher among females (same like in India) and in rural areas. Kothari and Bandyopadhyay admit that over-reporting rates are much higher in Laos (29%) and Bhutan (38%).

Kothari and Bandyopadhyay launched a comprehensive research study targeting 3170 households, with 17 782 individuals of 7 years and older. The study and testing took place in selected villages in Rajasthan, UP, MP and Bihar, and was based on numerous reading tests. Their conclusion is devastating. In a local sample of 68.7% census literate adults, only 52.6% were 'reading-literate' (Kothari and Bandyopadhyay, 2010, p.714). The census method was proven to over-estimate literacy by at least 16.1%!

Further the gender gap is even wider here (45% m - 26% f) than among the official census data. Their research also covers the low literacy levels in primary schools: while the census assumes that 90% of G1 students are able to read, tests have shown that only 27% can be considered *readers*! Worse: they also found that the minimum threshold for acquiring lifelong reading ability at G2, at present quality of formal education in rural India, is a G 8-9 education.

Kothari and Bandyopadhyay conclude by saying: "...we caution that an increase in the literacy rate, as measured by the census, can give policy-making an exaggerated sense of accomplishment, so much so that it is ultimately detrimental to the cause of genuine literacy."

Concerning the NLM, "based on our findings, it is our contention that most of those who became 'literate' via the NLM's literacy campaigns did not acquire the necessary foundation to become lifelong readers." In short the research reveals two major points: i) the inadequacy of literacy campaigns because of a lack of literate environment and insufficient literacy teacher training; ii) the alarmingly low levels of learning literacy in primary schools.

Despite some shortcomings in the quoted study (literacy is measured after 7+), and also the fact that already the GMR attempts to scale down the general literacy rates (from the official 65.4% to 63%), the fact remains that census and self-reporting cannot reflect objectively the literacy situation. One has to retain here that this specific research reflects the learning and literacy situation in rural India. Possibly urban data would have been slightly different, because of a different literate environment Kothari and Bandyopadhyay stress the objective of a Home Literacy Environment, as the complex of attitudes, resources and activities related to literacy; an objective yet to be achieved in rural India. Kothari and Bandyopadhyay conclude,

for the attention of policy makers of all kinds and brands, that “only 40% of the officially ‘literate’ people in India can, at present, read and understand newspaper headlines.” Research conducted by Kothari and Bandyopadhyay is proof for the present insufficiencies of census data for literacy in India. It is likely that similar caution may have to be exercised when looking at data from Pakistan and Nepal. Bangladesh data are globally based on testing.

**Table 4:9. Enrolment in Technical and Vocational Ed. 2007/8: Total In (000), Compared To Total Enrolment In Sec. Ed.**

| Country    | TVET    | Total           |
|------------|---------|-----------------|
| India      | 750/742 | (91.5 millions) |
| Pakistan   | 331/342 | (9.1m)          |
| Nepal      | 15/15   | (2.3m)          |
| Bangladesh | 254/254 | (10.4 m)        |
| Morocco    | 122     | (2.1m)          |
| China      | 19 m    | (101.5 m)       |

Source: GMR2011

Enrolment in TVET is still extremely weak in S-Asia countries, surprisingly also in Morocco where only 5% of the secondary students enrol in TVET courses. China has embarked on a different road, since almost 20% of secondary education students enrol in TVET courses; it remains to be seen how many of these students live and then work in rural areas. The question of the impact of social behaviour patterns, governed by rigid traditional kinship structures in S-Asia, remains on the table, and requires discussion.

## V. Conclusion

The preceding remarks are centred basically around two themes: forms of poverty and forms of basic education. The various forms of poverty have been discussed, like income, access to health services, energy, water etc. Likewise the role of population growth has been re-assessed especially in the light of declining fertility rates. In this respect the current situation of Pakistan deserved special attention, because of recent research findings made accessible.

EFA has been examined across key indicators, but keeping in mind the inherent potential of education, especially for girls, to impact

positively on various social behaviour patterns. In this connection, the obvious progress of adult literacy has been highlighted, but also the danger of over-estimating achievements, if real tests are not applied. I have exposed extensively the findings of recent research, pointing to the insufficiencies of the census method as applied in India as over-rating existing levels of literate knowledge. In particular the researchers identified the lack of a literate environment as the most serious obstacle on the road to rural literacy. Despite the fact that progress has been achieved in many fields of basic education, like enrolments, completion rates and access to secondary education, especially for girls, one major obstacle, TVET remains on the chart. Current levels of enrolments are still far from satisfactory. New and innovative policies need to be developed, but based on a precise analysis of the current socio-cultural barriers in S-Asian societies.

## References

- Ghuman, S. and Sathar, Z. (2010). Is Fertility Behaviour Changing in Pakistan? Evidence from Rural Punjab and the NWF province, 1997-2004. In: *Asia-Pacific Population Journal* (ESCAP), vol. 25, June, pp. 5-26.
- Kothari, B. and Bandyopadhyay, T. (2010). Can India's 'literate' read? In *International Review of Education*, vol.56, N°5-6, pp. 705-728.
- UNDP (2009). *Human Development Report 2010. The Real Wealth of Nations: Pathways to Human Development*. UNDP-New York; 216 p;
- UNESCO (2011). *EFA Global Monitoring Report 2011 The Hidden Crisis: armed conflict and education*. UNESCO Publishing Paris, p. 416.
- UNESCO Institute of Statistics (UIS) (2010). *Global Education Digest*. UIS/UNESCO. Montreal. p.276.



## **CHAPTER FIVE**

### **EDUCATION FOR RURAL TRANSFORMATION**

#### **AN EFFECTIVE APPROACH TO INCLUSIVE DEVELOPMENT IN CHINA**

*Yonggong Liu, Wei Wu and Pengfei Ning, College of Humanities and  
Development, China Agricultural University, Beijing, China*

#### **I. Introduction**

China is the largest developing country in the world at about 670 million with the rural population accounting for 50.36% of the total population (China National Statistic Bureau, 2011). Large scale migration of rural labourers and population to urban, well developed and coastal regions took place in 1990s. It is reported that the migrated rural population reached 260 million<sup>1</sup>, 39% of the total rural residents. How to include the migrant people in the social service including education and skill training before their migration and provide education service to their children are the challenges for both governments at origin and destination.

Although the Chinese rural population significantly benefited from the fast economic development in the past thirty years, the number of rural poor still remained at a high level. Measured by the international poverty line of 1 dollar PPP, there are still 120 million rural poor living in relative poverty. Besides the poverty, while the fast economic development, the income and welfare disparities between rural and urban population measured by Gini Coefficients are further enlarging in China and exceeded the unacceptable warning line since 2000<sup>2</sup>. According to UNDP, the inequality of Human Development Index in China is 0.51, even higher than the income Gini Coefficient. The same disparity enlargement trends have been found in other

---

<sup>1</sup> The figure is the rural population of leaving home residency for more than 6 months a year

<sup>2</sup> The China Gini coefficient is varying from 0.40 to 0.46 from 2000 to 2010

developing countries in South East Asia, Africa and South America. The large income inequality in China and other developing countries leads to social conflicts and constrains the overall national development. In the international society Chinese government has committed to achieve MDG indicators by 2015. In its national development strategy China has adopted the “*Inclusive Development*” and “*Human Centred*” development concept<sup>3</sup>. Equal sharing the development achievements by all social groups and ensuring the poor and vulnerable social groups being benefited from the increased social welfares are cores of the inclusive development strategy. Institutionally ensuring the access to education and employment for rural people is an effective approach for achieving the goal of inclusive development and narrowing the gap between rural and urban development.

## **II. Challenges and the Gaps between Rural and Urban Education**

### **Challenges and Constraints Faced by the Chinese Rural Education**

Lack of opportunity to rural education and training facilities and services are still the main reasons for lower education and production skills of the rural poor. According to the estimation of a research conducted in 2006, the average education length of rural population is less than 7 years, 40.31% of rural labourers received a primary school education, of which about 10 are illiterate, 48% received middle school education and only 11.62% completed high school education. Less than 5% of rural labourers received agricultural vocational education and training. In the remote and minority areas, the average education level of farmers and herders is much lower than the national average<sup>4</sup>.

Although the central and local governmental investment to rural education has been significantly increased since 2000, Chinese rural education is still facing a number of challenges, such as:

- (1) Shortage of financial input for rural education in west provinces: Fund shortage has been always a major constraint

---

<sup>3</sup> State Council, 2010 , 12<sup>th</sup> Five Year National Development Planning

<sup>4</sup> Liu Yonggong and Li He, Developing Skills for Rural Population in China, IIEP Newsletter, 2007



and challenge for rural primary and middle schools for providing effective compulsory education services to rural poor population.

- (2) Poor education facilities in rural schools: Due to the shortage of education funds, most of schools in poor areas cannot purchase necessary teaching equipment and tools;
- (3) Qualification and number of teaching staff in the remote rural areas are both low and cannot meet the demand. Due to the lower payment and poor living and working conditions in the poor western townships and villages there are lack of qualified teachers at the grassroots level.
- (4) Difficulty in accessing to school education: In most of mountainous areas of central and western provinces, due to the scattered rural population, government launched the village school merging program, cancelling small scale village schools and moving students to township central schools by providing boarding conditions. part of students have to give up their school due to the limited boarding conditions;
- (5) Migration from rural to urban region causes migrant children to lose their primary and middle school education opportunity in the destination cities although the governments in the urban communities promoted urban schools to enrol migrant children.
- (6) Lack of agricultural and rural livelihood skill development education in the current rural compulsory education. The current compulsory rural education system is orienting to further higher education, is neglecting agricultural knowledge and skill development. Once students failed to go to the universities, colleges or vocational schools, they still need to develop their skills for engaging in agriculture or migrating to work in the urban areas. This kind of skill training is in most of the poor communities not available.
- (7) There are too many governmental line agencies related to rural education and farmer's skill training and capacity building. Besides the compulsory rural education system, there is no unified farmer's training system or institutions. Multi-stakeholder involvement in farmer's skill training restricts the training effectiveness and efficiency. Institutional reform for effective farmer' training is to urgently be initiated.

These challenges and constraints result in lower rural education efficiency and further restrict the rural development. In the course of

urbanization and globalization, with severe outside competition and higher requirements on the overall labour qualification and skills, farmers in the poor communities in western provinces of China might be further marginalized.

### **The Gap Between Rural and Urban Education in China**

Overviewing the Chinese educational development institutional and policy concept in the past 60 years, a pro-urban education investment scheme was implemented. Due to the lack of development capital for industry and social development in 1950s, the government put urban areas as a development priority. The pro-urban development policy affected the rural education development. As consequence of this policy a significant and unacceptable education inequality between rural and urban and between eastern and western regions was encountered. To change the situation of inequality of education investment, a pro-rural education investment strategy has been adopted since 2000. However, as shown in Table 2:2 the Gini Coefficient of per capita education expenditure has not yet significantly changed. Many researchers reported that the rural education conditions have not yet been improved. Inequality of education investment directly causes the income inequality between rural and urban residents (Xie Qianglian and Jiang Junyi<sup>5</sup>, 2009; Liu Xiaofeng<sup>6</sup>, 2010).

**Table 5:2. China Education Gini Coefficient**

| Year | Gini Coefficient |
|------|------------------|
| 2007 | 0.2600           |
| 2006 | 0.2670           |
| 2005 | 0.2698           |
| 2004 | 0.2715           |
| 2003 | 0.2695           |
| 2002 | 0.2793           |
| 2001 | 0.2920           |
| 2000 | 0.3007           |

---

<sup>5</sup> Xie Qianglian and Jiang Junyi, Education Equality and Income Equality: Empirical Analysis of Data from 1994 to 2007, Statistic Information Forum, March 2009)

<sup>6</sup> Liu Xiaofeng, Education investment disparity between rural and urban China, Journal of Hubei Economic College, 2010, No 6, Volume 8

As the general education Gini Coefficient is slowly declining from more than 0.30 to 0.26, many researchers continuously reported significant education investment differences between eastern and west provinces and between rural and urban regions within the provinces (Zhong Xiaoling<sup>7</sup>, 2007; Shen Baifu<sup>8</sup>, 2004). In 2002, the per primary school student education investment in Beijing and Shanghai were 6-7 times the investment in Gansu and Jiangxi Province (Fu Yao<sup>9</sup>, 2011). Due to a long period of pro-urban education investment policy implementation over the past half century, the quality gap between rural and urban education services still needs time to be narrowed. The regional education investment differences are directly correlated with the per capita GDP and per capita income differences between different provinces. In this context, the institutional reform on education investment is urgently needed for narrowing the investment gap between rural and urban communities within the province and balancing the regional investment differences.

### **III. Farmer's Skill Development and Education Needs in the Process of Rural Transformation**

The fast economic growth in China initiated and stimulated the fast rural transformation. Besides the constraints existing in rural compulsory education, in the process of rural transformation, Chinese farmers are facing extraordinary challenges caused by the fast economic development in China and in the world. The challenges include:

- (1) Large scale and unorganized rural labour migration, lack of employment skills in the urban areas;
- (2) Livelihood shock for farmers who lost farmland due to the land acquisition by government and industrial development;
- (3) Small scale production and high production costs faced the market competition from intensive and modern production pattern in China and other countries;

---

<sup>7</sup> Zhong Xiaoling, Analysis of education investment differences in different regions, *Journal of Economic Analysis*, 2007 Volume 4

<sup>8</sup> Shen Baifu, Analysis of investment differences for compulsory education, *Education Science*, 2004, June, No. 3 Volume 20

<sup>9</sup> Fu Yao, Regional Urban Education Investment Differences Analysis, *Journal of Beijing Normal University*, 2011, Vol. 3

- (4) Unorganized and individual family based small scale production faced the market pressure and market risk.
- (5) Technical challenges: intensive and high tech-based agriculture and horticulture, food quality and food safety requirement by the domestic and global consumption market, resource saving the environmental friendly production technologies;
- (6) Vulnerabilities and risks of agriculture: climate changes, natural disasters, animal epidemics caused by the intensive production pattern;
- (7) Rural social problems: the social and income disparities within the community have been enlarging in the past twenty years. Lack of social capital and commitment from individual farmers to community development. Lack of collective and cooperative actions in dealing with the market risks and natural disasters.
- (8) Lack of community and individual participation capacity in the resource management and development planning. Lack of capacity in sustainable maintenance of community infrastructures.

Obviously, these challenges and problems are complex and cannot be resolved only by development of rural compulsory education. Skills and capacity building training after completion of the compulsory education are required. Following table summarized the skill and capacity building training needs in the course of Chinese rural transformation.

For effectively providing for the farmers' needs, oriented technical, awareness raising and capacity building training, effective training institutions need to be established at county and township level. Clearly defined training functions and roles should be designated to different governmental line agencies, public service organizations and NGOs. Skill development training also needs financial investment from government and other social donors.

**Table 5:1. Skill and Capacity Building Training Need in Rural Transformation in the Chinese Context**

| Category and Areas                                  | Needs  | Actors for the training service   |
|---|--|---|
| <b>1. Skill Development and Technology Adoption</b> |  |   |
| Crops production                                    | <ul style="list-style-type: none"> <li>✓ Cultivation techniques</li> <li>✓ Fertilization techniques</li> <li>✓ Pest management</li> <li>✓ Water saving irrigation</li> <li>✓ Machinery</li> </ul>  | <ul style="list-style-type: none"> <li>✓ Agricultural bureau at county level</li> <li>✓ Central Agricultural Radio and TV School-CARTS</li> </ul> |
| Horticulture  | <ul style="list-style-type: none"> <li>✓ Vegetable/flower/cash crops(Chinese medicine herbs) cultivation</li> <li>✓ Greenhouse production techniques</li> <li>✓ Irrigation management in intensive vegetable production</li> <li>✓ Pest management of vegetable production</li> <li>✓ Green food/organic food production techniques</li> </ul> | <ul style="list-style-type: none"> <li>✓ Agricultural Bureau and Vegetable Office/Station</li> <li>✓ CARTS</li> </ul>                             |
| Fruit/Agro-forestry                                 | <ul style="list-style-type: none"> <li>✓ Fruit cultivation techniques, plantation management</li> <li>✓ Pest management for fruit orchards</li> <li>✓ Irrigation techniques for fruit production</li> </ul>  | <ul style="list-style-type: none"> <li>✓ Forestry bureau and forest extension station at county and township levels</li> <li>✓ CARTS</li> </ul>   |
| Animal production                                   | <ul style="list-style-type: none"> <li>✓ Animal and poultry breeding/feeding techniques</li> <li>✓ Preparation of feedstuff</li> <li>✓ Vaccination and epidemic prevention</li> <li>✓ Proper use of animal drugs</li> <li>✓ Disposal of animal waste and hygiene of animal and poultry farms</li> </ul>  | <ul style="list-style-type: none"> <li>✓ Animal husbandry bureau and vets station</li> <li>✓ CARTS</li> </ul>                                     |
| Farm management techniques                          | <ul style="list-style-type: none"> <li>✓ Farm investment planning</li> <li>✓ How to estimate the costs and profit when selecting new products</li> <li>✓ Market assessment and risk analysis</li> <li>✓ On-farm book keeping etc.</li> </ul>   | <ul style="list-style-type: none"> <li>✓ Agriculture economic station at county and township level</li> <li>✓ CARTS</li> </ul>                    |

**Table 5:1 Skill and Capacity Building Training Need in Rural Transformation in the Chinese Context (Continued)**

|  |   |  |
|--|---|--|
| Farmers' Cooperative Development and Capacity Building | <ul style="list-style-type: none"> <li>✓ Concept of farmer's cooperatives</li> <li>✓ Organizational structure and functions of farmer's cooperatives</li> <li>✓ Capacity building of farmer's cooperatives</li> </ul>   | <ul style="list-style-type: none"> <li>✓ Agricultural economic station</li> </ul>  |
| Household based income generation technologies         | <ul style="list-style-type: none"> <li>✓ Handicraft production and process skills (women and ethnic minority)</li> <li>✓ Household based food processing</li> <li>✓ Other income generation activities</li> </ul>   | <ul style="list-style-type: none"> <li>✓ Poverty alleviation office</li> <li>✓ Relevant bureaus at county level</li> </ul>                                     |
| <b>2. Training for migration workers</b>               |   |  |
| Skill Preparation Training                             | <ul style="list-style-type: none"> <li>✓ Construction skills</li> <li>✓ House decoration techniques/carpenter skills</li> <li>✓ Other skills required by the processing industry in coastal areas</li> </ul>  | <ul style="list-style-type: none"> <li>✓ Labour bureau at county level</li> <li>✓ County Vocational School</li> <li>✓ Science and Technology Bureau</li> </ul> |
| Preparation Training prior to migration                | <ul style="list-style-type: none"> <li>✓ Safety traveling to the destination city</li> <li>✓ How to find a proper job in urban areas</li> <li>✓ How to protect yourself during work</li> </ul>  | <ul style="list-style-type: none"> <li>✓ Labour bureau</li> <li>✓ All China Women's Federation</li> </ul>  |
| <b>3. Rural health and hygiene Training</b>            |   |  |
| Household Health and Hygiene                           | <ul style="list-style-type: none"> <li>✓ Management of household nutrition and health</li> <li>✓ Household hygiene and health</li> <li>✓ Nutrition and care of kids</li> <li>✓ Hygiene of kitchen</li> <li>✓ Health and hygiene of pregnant women</li> <li>✓ Drink water hygiene</li> <li>✓ etc.</li> </ul> | <ul style="list-style-type: none"> <li>✓ County public health Bureau</li> </ul>  |
| Community health and hygiene                           | <ul style="list-style-type: none"> <li>✓ Community environment planning</li> <li>✓ Disposal and treatment of community waste and sewerage water</li> <li>✓ Biogas-facilities and community hygiene</li> <li>✓ Community hygiene campaign</li> </ul>   | <ul style="list-style-type: none"> <li>✓ Public health bureau</li> </ul>   |

**Table 5:1 Skill and Capacity Building Training Need in Rural Transformation in the Chinese Context (Continued)**

| 4. Community development capacity building                  |  |  |
|---|--|--|
| Participatory community development planning and management | <ul style="list-style-type: none"> <li>✓ Problem diagnosis and poverty analysis</li> <li>✓ Participatory land use and resource management planning</li> <li>✓ Participatory village development planning</li> </ul>  | <ul style="list-style-type: none"> <li>✓ Rural Development Institutions</li> <li>✓ Development related NGOs</li> <li>✓ Poverty Alleviation Office</li> </ul> |
| Participation and empowerment in community decision making  | <ul style="list-style-type: none"> <li>✓ Why community stakeholders should participate in the community decision making?</li> <li>✓ How to promote the negotiation and consultation in community decision making and with outsiders</li> <li>✓ Publicity and informing community stakeholders</li> <li>✓ Public hearing, etc.</li> </ul> | <ul style="list-style-type: none"> <li>✓ Rural Development Institutions</li> <li>✓ Development related NGOs</li> <li>✓ Poverty Alleviation Office</li> </ul> |
| Community leader capacity building                          | <ul style="list-style-type: none"> <li>✓ Community public service</li> <li>✓ How to facilitate the participation of villagers in the decision making process</li> <li>✓ Community conflict mediation and settlement process and methods</li> </ul>   | <ul style="list-style-type: none"> <li>✓ Party school at county level</li> <li>✓ CARTS</li> <li>✓ NGOs</li> </ul>  |

## IV. Successful Cases in Rural Education and Farmer's Training

### Governmental Policy and Institutional Reform

In the past decade the Chinese government launched educational institutional reform aimed to increase the rural education investment and eliminate the inequality in rural and urban education. These include:

- (1) Increasing the overall education financial budget in the national expenditure with focus on rural education investment and infrastructure improvement (Table 2). The gap between urban and rural education starts narrowing. The goal of 9 years

compulsory rural education has been achieved in most of the western provinces in the 11th Five Year Plan period.

- (2) Cancellation of the collection of rural education fees and providing financial subsidy to poor households who cannot afford the primary and middle school compulsory education;
- (3) Inclusion of migrant children into the urban formal primary and middle schools and by setting up migrant kid schools in the resident areas of migrant workers;
- (4) Building and improving the township central primary schools with boarding and dining facilities in order to effectively use the rural education investment funds. The teaching conditions and teaching quality through merging the village schools to township central schools has been increased.

**Table 5:2 Government Investments to Rural and Urban Education (2000- 2008)**

| <b>Year</b> | <b>Investment to rural education (Yuan)</b> | <b>Investment to urban education (Yuan)</b> |
|-------------|---|---|
| 2000        | 9,199,778                                   | 7,750,387                                   |
| 2001        | 11,022,692                                  | 9,089,570                                   |
| 2002        | 12,660,393                                  | 10,416,391                                  |
| 2003        | 13,652,576                                  | 11,730,821                                  |
| 2004        | 16,447,744                                  | 14,744,293                                  |
| 2005        | 19,386,638                                  | 15,948,614                                  |
| 2006        | 21,772,746                                  | 17,960,521                                  |
| 2007        | 29,877,737                                  | 20,152,519                                  |
| 2008        | 37,264,310                                  | 23,460,286                                  |

Source: China Education Statistic Year Book 2009

### **Farmer’s Vocational Skill Training Program Launched by Ministry of Agriculture**

In 1999, the Ministry of Agriculture launched a national program called “Training of young farmers toward 21st Century”. Until 2005, 520,000 young farmers selected from 198 counties received skill training. According to a training impact survey conducted in Hunan Province in 2004, the average per capita net income of young farmers who received the vocational training is 24% higher than the average income of farmers who did not receive the training. According to a training impact survey to 6 provinces conducted by a team from China Agricultural University in 2005, the production and management



skills and qualifications of trained farmers are significantly higher than the farmers who did not attend the training program.

Supported by the Ministry of Agriculture, a national-wide farmer's distance education network has been built at provincial and county levels all over the country. Curricula for crops production, animal husbandry, fishery and aquaculture, horticulture and green house production, fruit production and other cash crops cultivation, etc., have been developed and delivered. The skill training program has systematically integrated with the local agricultural and animal husbandry sector development strategy. Innovative farmers and village leaders who received training from the program play important roles in facilitating the community development and helping other farmers in adoption of new technologies (Liu Yonggong, Wu Wei<sup>10</sup>, et al, 2011).

### **Mainstreaming Farmer's Skill Training in Poverty Alleviation Program and Agricultural and Rural Development Program**

Since 2000, the State Leading Group Office for Poverty Alleviation (LGOP) and provincial, county poverty alleviation offices has implemented the national-wide poverty alleviation program aiming to eliminate rural poverty by supporting household income generation activities and improving community social and economic infrastructures. Capacity building and technical skill training, as an important component has been mainstreamed in the program. About 5-10% of the poverty reduction funds were allocated for the community development capacity building and farmer's skill training. The needs on technical and management training were assessed during carrying out participatory village development planning. Poor farmers, ethnic minority farmers and women received special skill training linked with the selected income generation activities. The skills and capacity development training ensured the achievement of the planned objectives and outputs of the program.

Another case of mainstreaming farmers' skill training is the National-wide implemented Integrated Agricultural Development Program implemented by Ministry of Finance and Ministry of Agriculture. The program was launched in 1985 with the objective of increasing farmland productivity and promoting the agricultural and animal husbandry sector development. Adoption of new technology and farmer's skill development were two important components in the

---

<sup>10</sup> Liu Yonggong, Wu Wei, et al, Report on Assessment of Guangxi Farmer's Training Program, 2011

program. Special training and innovation funds were allocated in the program budget.

### **Roles of Agricultural Universities in Rural Education and Capacity Building**

The higher agricultural education institutions also play important roles in farmer's skill development. Since 2004, China Agricultural University launched a special program of promoting young graduates to work in rural communities for 3 years. Providing technical training to village leaders and farmers is a major task for these young graduates. Since 2002, CIAD, as a development institution within China Agricultural University, launched a participatory curriculum development program "Community Based Natural Resource Management-CBNM" under the support of International Development Research Centre-IDRC, Canada. In developing the education program, a group PhD and development researchers regularly visited selected pilot communities for carrying out participatory case studies. A university-community partnership for enhancing the development skills and capacity of communities and farmers has been developed and tested.

### **Roles of Agricultural Enterprises in Farmers' Technical Training**

The establishment of the socialist market economy, the private sectors and farmer's economic cooperatives also play important roles in farmers' skill training. For reducing or avoiding the marketing risks, a marketing model called "Dragon head enterprises + small producers" was developed and quickly spread over the country. For producing the high quality products dragon head enterprises provide relevant production and cultivation technique training to farmers against payment. In Shandong Province, the "dragon head driven" training models have been adopted in highly specialized vegetable or fruit production areas. In Dongchuan County of Yunnan Province, the Vegetable Grower Association provides systematic technical training to its members for adopting environmental-friendly production techniques<sup>11</sup>. These institutional reform and successful cases in rural development and farmer's skill training also provided demonstration models for other developing countries facing the same challenges.

---

<sup>11</sup> Liu Yonggong and Li He, Developing skills for Rural Population in China, 2007, IIEP Newsletter

## **V. Conclusions and Recommendations**

### **Conclusions**

Cases in China indicated that in terms of investment effectiveness and efficiency, promoting rural education and farmer's skill training and capacity building, is an effective approach to inclusive development. Although Rural Education in China has been increasingly given priority by central and local government, gap between rural and urban education services is still large. Lower investment to rural education remains as an important restricting factor for efficiency of rural compulsory education.

Rural Education and farmer's skill training are important preconditions for Chinese Rural Development and poverty alleviation in the western China provinces. In a globalization and market oriented development context, rural development is facing multi challenges. Therefore, farmers' need for livelihood related education and skill training is also diversified. In the current Chinese institutional structure, the diversified training and capacity building demands cannot be systematically provided by an integrated training and education institution, many stakeholders and line agencies are providing training and education services to farmers. The efficiency of these training and education is dependent on many factors, such as the curriculum, teachers, training facilities and linking with the follow up production activities.

Capacity building and technical skill training have been well mainstreamed in on-going government supported rural development programs in China. Institutionalization of successful training modality will further enhance the efficiency and performance of these governmental programs. The Chinese model of incorporating farmer's training into the development program can also be considered by other developing countries.

### **Recommendations for Further Enhancing Rural Education and Training**

For further enhancing the farmer's training efficiency, following issues should be considered by the government and other relevant stakeholders:

- Unified farmer's education and training institution should be established at county level which will be in charge of organizing,

management and monitoring and evaluating all kind of farmers' training courses. Teachers and trainers can be recruited from different line agencies.

- To ensure that the training courses meet the demands of trainees, systematic farmer's training need assessment should be carried out before designing the training curriculum;
- Trainers and teachers for farmer's training should be further qualified through training on adult education and modern training methodology;
- A training quality control and impact assessment system should be developed and implemented for improving the training efficiency provided by different stakeholders;
- Cooperation and coordination mechanism among different stakeholders should be set up and implemented in order to effectively use training resources, such as sharing teaching personnel and facilities.
- Central government (MOA and MOE) should allocate training funds for farmer's training in western poor regions

## References

- Fu Yao. (2011). Regional Urban Education Investment Differences Analysis, *Journal of Beijing Normal University*.
- Liu Xiaofeng. (2010). Education investment disparity between rural and urban China, *Journal of Hubei Economic College*. No 6, Volume 8.
- Liu Yonggong and Li He. (2007). *Developing skills for Rural Population in China*. IIEP Newsletter
- Liu Yonggong, Wu Wei, et al. (2011). *Report on Assessment of Guangxi Farmer's Training Program*.
- Shen Baifu. (2004). Analysis of investment differences for compulsory education, *Education Science*. June, No. 3 Volume 20
- State Council. (2010). 12<sup>th</sup> Five Year National Development Planning State Statistic Administration, *China Education Statistic Year Book 2009*
- Xie Qianglian and Jiang Junyi. (2009). *Education Equality and Income Equality: Empirical Analysis of Data from 1994 to 2007*, Statistic Information Forum, March 2009.
- Zhong Xiaoling. (2007). Analysis of education investment differences in different regions. *Journal of Economic Analysis*. Volume 4.

## CHAPTER SIX

# INNOVATION IN MECHANISM AND DEVELOPMENT OF CONTENT IN EDUCATION

## PROMOTION OF BALANCED DEVELOPMENT IN EDUCATION OF THE REGION

*Yu Lei, Director of Bureau of Education, Pujiang County, China*

### I. Introduction

Equilibrium in education is the most reliable starting line for the cause of social equality, and balanced development in education is the important “cornerstone” depending on which equilibrium in education is achieved. We meet today in Dujiangyan City to review the momentous processes of the balanced development of compulsory education in Chengdu and share the experience and fruits generated thereof. I felt greatly honoured.

Lying on the southwest edge of Chengdu Plain, Pujiang County covers an area of 583 square km with a population of 263,000. 68 km away from downtown areas of Chengdu, the County is widely known as “the Garden of Chengdu, Green Pujiang” and is designated the national ecological pilot zone and the provincial ecological pilot county with plain, hills, and mountains traversing through the county. In the county, a total 22 schools for compulsory education admit 19,705 students and 16 of the schools are located in country.

In the remotest county of Chengdu Municipality, the balanced development of compulsory education in urban and rural areas draws the attention of most people. In 2003, our county started to monitor the equilibrium of inter-school distribution of resources and the balanced development of compulsory education. The results showed that there existed considerable differences in investment, distribution of education resources, and educational quality between rural and urban schools; leading to the predominance of dual-structural conflicts between education in urban and rural areas. The results of the

monitoring provided the County CCP Committee and Government with evidence and a base for decision making and demonstrated the direction for the reform of education in the whole county. Since 2004, the strategies of priority in the development of education and that of the coordinated and balanced development of education in rural and urban areas have been enforced. Upon the promulgation of *Suggestions on the Promotion of Equilibrium in Distribution of Resources and Balanced Development in Education* by Pujiang County CCP Committee and Government, a series of local policies and regulations were enacted to promote the balanced development of education. As a result, Pujiang County was ranked the first in Chengdu Municipality in the construction of rural primary and middle schools in compliance with uniform standards and in the execution of the “Full Coverage” Project for education technical equipment for compulsory education. The project for the education information network was launched and the education and teaching facilities for schools were continually improved and complemented. In our county, urban and rural schools became the most beautiful and safest public buildings with the most advanced facilities. In 2006, at the National On-Site Conference on Balanced Development in Education held in our County, Chen Xiaoya, Deputy Minister of Education, highly praised Pujiang as one of the top in the standardization of school facilities.

To remove the differences between urban and rural schools in the deployment of teachers, education management, level of content development, and educational quality, the County Government took innovative moves in education administration mechanisms targeting the building of the Modern Garden Education System. They accentuated the content of the balanced development of education and presented a new panorama soon after the adjustment of reform policies.

As recorded in *the Report on Monitoring of Equilibrium in Inter-school Distribution of Resources for Compulsory Education in Chengdu Municipality for the Year 2010*, rural schools in our county exceeded their urban counterparts in investment, deployment of education resources, and quality in education and the equilibrium in the ratio of elite teachers and the pass rate for all the subjects in graduation examinations were achieved. Pujiang was named as the first “Beacon County in Compulsory Education” in Chengdu Municipality and one among the first group of such in Sichuan Province, as “National Beacon County in the Reform of Compulsory

Education”, and as “National Advanced County in the Reform of Rural Education”. Pujiang was required to diffuse and promulgate experience learned in coordinated and balanced development of education and was recommended to Ministry of Education and Ministry of Finance for commendation as “Beacon County in the Management of Budgets for Compulsory Education in Rural Areas. Above all, the public is more and more satisfied with the development of educational quality.

In retrospect of the promotion of equilibrium in distribution of resources and coordinated and balanced development of education, I would like to share with you the following in innovation in administration mechanism and content development in education.

## **II. Development in Staff Management and Deployment of Resources**

Staff especially teachers are the key element in management of education resources. The most important target in the promotion of balanced development and equilibrium in compulsory education is to eradicate the differences between rural and urban areas in staff and inter-schools.

In the staff management mechanism, all teachers were centrally managed on the county level and teachers were posted to work at different individual schools. *The Scheme for the Setting of Posts for Primary and Middle School Teachers* was drafted and executed, which explicitly stipulated the posts and their levels for each staff. Internal recruitment was performed through the competition in the light of the hierarchical system of posts.

Uniform standards for the setting of posts, structure of teachers’ professional titles, and evaluation of teachers were applied to regulate all the schools, and the alteration of budgeted posts and deployment of posts are centrally managed to promote the reasonable and rational flow and deployment of teachers within the county. In recent years, 124 teachers from urban schools were dispatched to rural schools, 256 teachers were sent to downtown schools for training, 376 teachers of the same type of schools in the same region were exchanged, and the total number of the teachers exchanged covered 57% of the total.

The mechanism for career development of the teachers was being improved and the population of professionalized and highly qualified teachers multiplied. Upon the erection of workshops for

prestigious teachers of the county, workshops for prestigious teachers of different disciplines were established and specialized teachers associations and societies organized to give full play to the leading roles of the elite and prestigious teachers. Career development of the teachers of the county was promoted through multidimensional assistance and support, different forms of supervision and guidance, and multi-tier training courses. To increase the ratios of elite teachers, prestigious teachers and those with advanced degrees, individualized training plans for the teachers were made in accordance with the new requirements of the reform, realistic demands for the development in teaching, and pursuit of specialty of the schools. At present, 100% of the teachers in our county are qualified in academic credentials. 537 prestigious and elite teachers of different levels and disciplines accounted for 27% of the total and 256 were working at rural schools.

The platform for career development of managerial personnel and teachers was established. All the staff were required to take the training courses on modern education technologies, and were motivated to participate in different levels of research and training projects of the Municipality and the Province. Competitions in headmasters' managerial competence and in teaching skills were held to promote the practice and learning of professional skills among the teachers and managerial personnel. A series of themed activities were organized to encourage "the schools to compete for better achievements, CCP members for model roles, cadres for pioneering in devotion, and teachers for outstanding performance in the promotion of quality education".

With the theme of "treating the students as they were your own and help them become what they want to be", the Teacher's Forum, one of the series of activities "Display of Teachers' Charms and Splendors", was highly regarded by experts and leaders of the Municipality and the Province as the Forum drew the students closer to the teachers, helped the teachers understand the students better, offered support and assistance to the students, and helped them achieve their targets by the presentation of "moving stories, successful cases, typical experiences, profound reflections upon the lessons". In July this year, 10 Excellent CCP Model Members, dedicated and innovative, were elected through online polls by teachers, students, parents, and people from other social walks of life, and they played the leading roles in the recruitment and training of teachers.



### III. Optimization of Management System

The formulation of the management system integrating rural and urban areas shall serve as the basis for the achievement of equilibrium and balanced development in compulsory education. The County Government pursued breakthroughs in education management and improved education quality through the gradual optimization of the educational management mechanism and education quality monitoring mechanism integrating the rural and urban. The coordinated and balanced education service system was set up and content development promoted, which led to the healthy and happy growth of the children in rural and urban areas.

The first step taken in this regard was to improve the education management mechanism integrating urban and rural areas. The system for monitoring quality and evaluation was initiated to conduct annual evaluation of the educational levels and accumulation of resources in urban and rural schools. Focus was put on the promotion of quality to regularize and standardize the operation of schools and professional practice of the teachers. The school operations were required to follow “*Standard Routines of the Day*”, and the teachers supervised under “*8 Rules in Teaching Activities*”. Delicacy management was introduced and rules and regulations complied with to achieve desired outcomes. The activities of “Two-entry (Entry of Schools and that of Classrooms)” and “Two-close (Close to Teachers and Close to Students)” were held to maintain and accentuate the procedural supervision and guidance. Supervision and Support Teams were organized to help the schools identify problems with their teaching and management, and prestigious and elite teachers were dispatched to rural schools for the support in teaching activities.

The mechanism for the monitoring of education quality was being constantly improved. *Rules for the Practice in the Promotion of Calibre Education in Pujiang County* was promulgated, and *Regulations for Monitoring and Evaluation of Quality in Students’ Academic Achievements in Fundamental Education in Pujiang County* and *Criteria for Evaluation of Quality in Class Teaching in Primary and Middle Schools of Pujiang County* were reviewed and revised in accordance with the core requirements of calibre education. The mechanisms for the review and evaluation of students’ academic achievements at different stages were improved and quality in school education was promoted steadily following the upgrading of

effectiveness and efficiency in evaluation. Weak schools were eliminated while those of quality ones continued to rise.

Efforts were redoubled in the reform of classroom teaching. Classrooms being the focal point resulted in a series of theme activities held to enable the managerial personnel to concentrate on services for classroom teaching, teachers were to be highly motivated in classrooms, and researchers were to conduct a detailed analysis of the classroom teaching. Headmasters of primary and middle schools were organized to inspect and review classroom teaching periodically, trial small scale classes were opened, and reforms on classroom teaching was being explored to promote the self-motivated learning by the students. Advanced teaching modes like “121 Teaching” and “Modular Teaching” were introduced. Classroom teaching was regularized and standardized to improve the efficiency in teaching and to lift the overburden imposed on students so that the quality in education can be promoted in an all-round way.

#### **IV. Maximum Gains from Balanced Development with Innovation as the Breakthrough**

Innovation and reform perpetuated through the development of education. Our persistently pursued goal was to provide quality education to more and more children. We concentrated on calibre education, dedicated to the reform of education mechanism and systems, accentuated specialty in schooling, strived hard to create the Pujing Modern Garden Education Mode with regional characteristics, and raked maximum gains from the balanced development in education.

Alliance of schools contributed to the joint development and progress in education. With this in mission statement, prestigious schools like Pujiang Middle School, and Pujiang Experiment Middle School sponsored 8 prestigious school groups and expanded the scale of quality education resources. In the meantime, 8 school alliances in preschool education, compulsory education and senior school education were organized, and seamless connections of different stages of education from preschool to senior school were established. In the light of the “3-Joint and 3-Sharing” cooperation mode, 13 managerial personnel were sent to Qingyang District for long term on-site training, 3379 teachers and researchers participated in exchanges of teachers and research activities, and over 8000 students benefited

from the “Hand-in-hand” activities. With these endeavours, joint research, joint training, joint promotion, sharing of frontline information and yields of the development were popularized and spread over the County. In addition, prestigious schools like Chengdu Shude Experiment School and others were invited to restructure and operate 6 middle schools like Shouan Junior Middle School in our county and quality educations resources could be thus utilized to expand the room for and upgrade the level of future development of the schools.

Schools with specialties shall be promoted to create brand credibility of prestigious schools. The formulation of campus cultures should assimilate the heritages handed down from the time when Liao Weng first opened school in Pujiang 800 years ago and draw nourishment from historical cultural sediments. Differences and specialties shall be attached importance to and brand credibility of schools promoted by dislocation competition to shape the schools into the ones endowed with cultural heritage and specialties. Research and forums on the development of specialties were launched, and the expert team from Sichuan Provincial Education Association was invited to supervise these activities. A series of activities like Campus Cultural Shows were held to develop quality schools into the ones with specialties.

In the Pujiang Experiment Middle School, the “Chain of Happiness” was designed and built, which started and ended with the happiness of students, teachers and headmasters, and as part of the links in the Chain, “Happy Classrooms” were created and “Happy Education” experiences were accumulated. It was highly praised by world renowned experts and professors. Shou’an Middle School initiated the “Trust Education” in the school, stressing development with specialties and formulating multi-form education structures, which created the most beautiful scenario of diversity and prominence of students and teachers.

The capabilities to serve the society were promoted with the socialization of education. Reliant on the development of local specialty industries, the Modern Garden Education Mode was formulated with the quad of schools, families, enterprises, and communities. Through this quad the educational resources of the schools, family influence, demands of enterprises, and community education resources merged and propelled to develop together, and eventually promoted local economic development and the construction of a learning society.

The 9 Year Chengjia School of our county located in the “China Tea Country” assimilated the cultural heritage of the tea ceremony, cultivation of virtues, and the shaping of personalities into modern education; guiding the students to learn tea ceremony and techniques, cultivate virtues, and love their hometown. The doctrine of the “harmony between tea and human and the best nurtured by nature” benefited the students in the school, their families, the enterprises and the society, and the equilibrium in distribution of resources and coordinated and balanced development were achieved.

## **V. Conclusion**

As early as 1912, Mr. Yang Xianzhang, the headmaster of the 1<sup>st</sup> primary school of our county, proposed and perpetuated the educational thought of “developing the children’s bodies and souls, allowing them grow in virtue to be upright citizens, and teaching them knowledge and skills about life.”, and cultivated many famous and outstanding talents. Following his steps, we shall continue to monitor the equilibrium in distribution of resources and coordinated and balanced development, inherit and develop the excellent cultural heritages in education, assimilate the most advanced education concepts, formulate the “modern garden education” mode, and dedicate ourselves to the cultivation and education of more modern citizens with both international endowments and excellent ethical qualities.

## CHAPTER SEVEN

### TO ESTABLISH AN EDUCATION COMMUNITY FOR THE NEW RURAL CONSTRUCTION<sup>1</sup>

*Ling Ke, Chengdu University, China*

#### I. The Concept of a Rural Education Community

A rural education community is defined as a mode of cooperation and resource sharing among a variety of educational forces within a rural community. Specifically, the purpose of a rural education community is to fully mobilize various educational efforts and resources in the community to promote young people's overall development.

#### II. The Necessity to Build a Rural Education Community

##### **The Need of Overall Development of Young People in the Rural Areas for a Full Support from Community Education**

Since the reform and opening up 30 years ago, China has popularized the rural compulsory education, and with the implementation of the “Double Exemptions and One Subsidy”, differences between urban and rural schools in the hardware has been rapidly diminished. However, there is still a big gap between the urban and rural community educations (including family education), and the “5 + 2 < 5” phenomenon is common that the efforts of school education in the 5 school days of a week are largely offset by the adverse influence children get in the community during the two weekend days.

##### **Lack of Concern from the Rural Education Itself for the New Rural Construction**

In the urban-rural dual structure, the rural area is at a disadvantage, which is especially true in the rural education, where the “derivation

---

<sup>1</sup> This article is the research results of the national social science research project of the "Government-led Rural Education Community Construction"

of farming” and the “departure of the countryside” become the main tendencies in the teaching content, the value-orientation and the children’s future rather than the rural education concerns about the economic, social and cultural construction of rural communities.

### **III. The Feasibility of Building a Rural Education Community**

The economic and social development since the 30 years of reform and opening up has facilitated education for rural communities with a lot of resources, which makes it possible to build a community of rural education.

Our investigation and survey of the education status of outside-school children in 165 villages of Pixian County shows that new educational resources available for the development in rural communities include: the new village self-government organizations and the social and cultural activities they carry out; the new social structure of rural construction, such as township cultural centres, “One village, one-university student volunteer” system; the education capacity of enterprises and institutions such as universities, corporations, associations, and unions located in rural communities; the appropriate educational functions the public authorities such as fire control, police and environmental protection have begun to take; rich and valuable educational experience the Communist Youth League, the Committee of Concerning about the Younger Generation, and the Committee on Aging have gained in education of the minors.

### **IV. Practice of Rural Education Communities in Pixian County**

Since 2006, we have carried out more than 50 special events in 10 different townships in Pixian County of Sichuan Province, and some typical activities are enumerated as follows:

#### **"Reading & Love Passing Event"**

In the event, the Women’s Federation of Deyuan Township, Deyuan Primary School, parents, the Communist Youth League, the Associate of the Aged jointly launched an activity named "Reading on campus, in families and everywhere in the community". As a result, this

activity not only helped to form a "scholarly community", but also brought to the whole people a new atmosphere of lifelong learning.

### **Construction of Rural School Mass Organizations**

By making full use of local resources of higher educational institutions of Chengdu University of Science and Engineering, Sichuan Normal University, Mayflower Computer College, etc. in Tuanjie Township, we guided students to set up ten mass organizations, including the Green Campus Radio Station, Literary Society, Scientific Innovation Group, and dance teams, etc. Such a mode of student organization construction, based upon the diverse community efforts, finally overcame the difficulties for a single school to establish those student organizations, for instance, the conflicts of a teacher's multiple roles between school and community, and the contradictions between the "bureaucratic" school management and "active" student organizations.

### **Leisure Education for Rural Children**

The Culture Courtyard and the Committee of Zhanqi Village, the volunteers from the West China University, and Chongde Middle School in Pixian County co-organized school students to participate in science and technology contests, art performances, film shows and other activities in their spare time, and this arrangement, by entertaining, ensured children in rural areas would stay away from sources of adverse effects such as Internet cafes and others, so as to enhance their life quality in leisure and their overall quality and ability.

### **Little Sunshine Tour Guides Service**

School boys and girls go to the Community of the Agricultural Village during holidays, vacations or on weekends and work as "Little Sunshine Tour Guides" in the "farm tourism" guide practice organized by the Women's Federation and the Youth League of Youai Township, the Committee of the Agricultural Science Village, the Agricultural Village Scenic Area Administration, Ziyun School, and some of the farm resort owners (such as Xujia Courtyard, the Belvedere, the Chinese Bonsai Garden, Jingxiang Park). Through the event, these boys and girls not only understand the glorious achievements in the new rural construction, but also deepen their love of home and enhance their resolution to contribute to their home construction, and at the same time, their comprehensive practical ability and moral behaviours are also greatly improved.

## **V. The Significance of Educational Communities in the New Rural Construction**

Firstly, the rural education community has activated the vitality of school education. It is the involvement of community joint efforts that gives rise to new ways, new spaces, and new vitality in the quality education, which was difficult for schools alone to undertake.

Secondly, the rural education community has expanded the space of children's growth. As American Educator M. E. Sadler once said, "The things outside the schools matter even more than the things inside the schools...", we have structured in Pixian County the education space that takes the rural education community as the platform and combines "families, partners, neighbours, schools" into one, and as a result, have well handled "the things outside the schools".

Thirdly, the rural education community has promoted the rural community development. As the educational activities of a rural education community are rooted in the local community, its education goals are closely connected with the local community development; therefore, it helps to improve the rural children's awareness and ability to love and contribute to their hometown, thus successfully changing the "education for departure from the countryside" into "education of agricultural service". Such practice of ours is a successful example of education-promoted construction of the new countryside and the world modern garden city.

## **VI. The Basic Experience of a Rural Education Community Construction**

### **A Breakthrough of the School Centred Education Theory**

The primary condition of a rural education community construction is to support the self-improvement of school educational effects by giving up the school's hegemonic position in education but taking the community education responsibilities as one of "equal" runners of community education.

### **The Construction of a Reasonable Responsibility Sharing Mechanism**

The work includes two aspects: First, to publicize widely education of minors is the common responsibility of the society; second, it would



not the best educational responsibility-sharing way if only the specialized public educational institutions were established to fulfil the whole education responsibility on the basis of tax payment by the citizens; instead, a variety of social organizations and individuals should share responsibilities for education in an appropriate manner.

### **The Successful Transformation of Government Functions**

The government has turned into a partner and manager of education from the previous sole provider of public educational products, that is, from the previous "education runner" to the current "education pilot".



# CHAPTER EIGHT

## REACHING THE MARGINALIZED RURAL POOR

### A STUDY OF A MULTI-PURPOSE COMMUNITY LEARNING CENTRE IN YUNNAN PROVINCE

Wen Zhang, INRULED Beijing, China

#### I. Introduction

Education is always regarded as one key components in fostering rural development, especially since the publication *'Education for Rural Transformation: A Conceptual Framework'* (UNESCO-INRULED, 2001), which put education as the centre of rural transformation process. Poverty and deprivations in rural area result from lack of assets, limited economic opportunities and poor education, as well as disadvantages rooted in social and political inequalities. Education and skills are particularly important for strengthening the capacities of rural people to take advantage of their opportunities, to access good employment and to be able to start and run their own business.

The discourse on poverty articulated during the last two decades, including the concept of 'Human Development Index' (HDI) and 'capability deprivation' have brought the role of education into wider focus not just in alleviating poverty but also as a core constituent of development and human well-being (Khan, 2010). Education should no longer be seen as an objective in and of itself, but also as an important means to transfer relevant knowledge, to develop life-skills, and to bring about changes in peoples' behaviour and lifestyles. Educational inequalities should be re-examined from the point of view of the changing rural scenarios (UNESCO-INRULED, 2001).

Given the diverse rural contexts, educational activities for rural development have to be linked to the specific learning needs and economic-socio development of the rural communities. A multi-sectoral educational approach involving formal, non-formal and informal education is necessary (UNESCO-INRULED, 2001). An educational program that deals with the poor and powerless rural people cannot be seen as just top-down initiatives undertaken by the government. As argued by Bhola (2010), accountability should be

more than a fancy word but joined with clear incentives and disincentives. There is also a need for improving the efficiency and effectiveness of governance systems, institutions, and policy processes. It was generally felt that there remains a lack of genuine empowerment of the poor who are the intended beneficiaries of poverty alleviation programs since they are left dependent on a bureaucratic delivery mechanism over which they have no control (Aiyar, 2010).

Rural people and rural areas are not homogeneous, and so for education to be relevant, it needs to respond to the diversity of rural situations. It is clear that the centralized planning apparatus in most countries simply cannot develop effective programs for diverse rural population. Educational activities have to be linked to the specific needs of the rural community for skills and capacities to seize economic opportunities, improve livelihood and enhance the quality of life. Meanwhile, the strength and advantages of local community also need to be utilized for the sustainability and pertinence of the educational program. Community-based educational programs are not new to many countries. There have been many innovative programs launched by government and NGOs over the years around the world. The community learning centre (CLC) is a local educational institution outside the formal education system, usually set up and managed by local people to provide various learning opportunities (APPEAL, 1995). The purpose of a CLC is to provide equitable educational opportunities to the un-served marginalized rural poor through utilizing power of local community. Such form of education was created to generate grassroots-based interest and participation in literacy and continuing education, especially for the disadvantaged and poor such as out-of-school youth, women, illiterate people, etc.

In China, around 713 million people live in rural area. As a result, rural development has always been the first priority of the country. Particularly with economic and social development, changing industrial structure and rapid urbanization, rural China is experiencing dramatic changes. On one hand, agricultural industry needs productive workforce equipped with modern agro-technology, on the other hand, huge amounts of surplus labour force are migrating from rural to urban areas and seeking to work in non-agriculture industries. Also it is essential for reaching to the most disadvantaged groups in remote poverty-stricken rural areas for reducing disparities between urban and rural area. Thus, education and training for rural people stands out as the core for tackling comprehensive development of rural residence,

villages and agriculture industry. To provide basic education for all, the government has initiated many literacy campaigns in 1970s in order to illuminate illiteracy. The 2000 census of China showed that the literacy rate of Chinese adult (age 15 and over) is 90.9% (UNDP, 2010). In 1986, the nine year compulsory, tuition-free education was regulated. Favourable policies were continuously imposed in rural area for ensuring access to basic education. Beside this, in coping with the complex reality in rural areas, central government and NGOs have financed and launched various kinds of non-formal education programs to disseminate technologies, provide information, organize income generating activities and culture promotion activities, etc. Numbers of CLCs flourished in rural areas of China serving as catalyst of development. This paper, via exploring a successful case of CLC in Yunnan, intended to raise the awareness of the importance of different kinds of non-formal education as well as the strength of local community.

## **II. The Community Learning Centre**

### **The Concept**

Community Learning Centres refers to the local educational institutions outside of the formal education system. It is usually set up and managed by local people to provide various learning opportunities for community development and improvement of people quality of life in rural and urban areas (UNESCO, 1995). This training model emphasizes active participation of training recipients. They usually have the chance to be involved in the planning and amendment process of the training program. Under the principle of empowerment from the grassroots level, and with its easy access and flexibility in training content and delivering method, CLC becomes more and more influential in the time of contrasting lifelong learning system.

### **Main Objectives and Activities**

The objectives of CLCs may differ as they have to be consistent with local learning needs and local socio-economic conditions. However, CLCs are generally expected to improve quality of life, promote community development and economic development. The functions of CLCs can be commonly found as following:

- i. To eliminate illiteracy and provide continuing post-literacy education;
- ii. To disseminate agriculture-related science and technology so as to upgrade the quality of labour force and agricultural production;
- iii. To increase the income of local residence;
- iv. Empowering the most disadvantage groups as women, out-of-school youth, ethnic minority group, etc.;
- v. To serve as a permanent training institution so to provide life-long learning opportunities to rural people and enhance the farmers' ability in maintaining the sustainable development;
- vi. To preserve and promote local culture.

Correspondently, the activities of CLCs are usually literacy education and post-literacy continuing education; advocacy activities of law, policy, knowledge, such as introducing ideas of healthier life through publicity and training on health, sanitation, and disease prevention; social service; income generating activities and in a broader sense, activities aiming at improving living standards of rural people (UNESCO, 2004).

### **III. Rural Scenario of China**

In China, around 713 million people live in rural areas (Han, 2010). As a result, rural development has always been the first priority of the country. As pointed out by Han (2010), the Minister of Agriculture in the Central rural working conference, China has made considerable progress in rural transformation in the duration of 11th Five-Year Plan (2006-2010). These positive outcomes include 1) the fundamental position of agriculture has been strengthened, 2) agricultural productivity has been significantly improved, 3) the process of industry modernization progressing smoothly. However, accompanied with rapid economic, social, demographic, cultural and political changes domestically and internationally, there are still great challenges that need to be addressed in promoting balanced and sustainable development of rural China. Firstly, to continually provide adequate food for the large population and to assure food security. It is

estimated that, during the period of 12th Five-Year Plan (2011-2015), the urbanization rate will exceed 50%. In such rapid pace of urbanization, continuing provide adequate food and ensure food security is one of the most urgent challenges as less people working on agriculture while more demand from urban areas. Secondly, the growing income gap between urban and rural areas has increasingly widened, reflecting growing discontent. Although the income of rural people increased 9.5% in 2007, the urban-rural income ratio reached was 3.3:1, the largest urban-rural gap income in the world (Cui, 2010). Ge (2008) found that China was still on the ascending side of Kuznets' curve which implies the quicker the development, the higher the inequality will be. Thirdly, in China, land holdings per household are very small compared to other developing countries like India and other resources are extremely scarce. Efforts have to be made to establish a welfare system and to allocate more resources to rural areas to attain a more equitable society. Finally, continuing to modernize the agriculture industry, there will be a huge amount of surplus labour force. Provide proper training and create employment opportunities for them should be seen as an important part of the transformation equation (Huang, 2010). From 1983 to 2009, internal-migrants increased from two million to 152 million. For those internal-migrants, only 67% have basic education and 64.8% have no technical and vocational training.

### **Policies for Rural Transformation**

In 2006, the 11th 5-year Plan had specially designed a framework for rural development and the concept of "Building a new socialist countryside" was initiated. As a strategic guidance, the concept of "contracting new countryside" -incorporating development in infrastructure, health, and education, socio-economic status and a grassroots democratization process - leads all tasks (Guo, Yu, Todd, Henehan, & Li, 2009). Activities that aim to promote rural transformation and development were launched within this strategy. Over these years, China's rural development policies mainly focused on three aspects: 1) increase income of rural people; 2) building a new socialist countryside; 3) narrow gaps between urban and rural area. While in witnessing achievement and addressing new challenges, in the period of 12<sup>th</sup> Five-Year (2010-2015), industrialization, urbanization and agricultural modernization are perceived as one integrated and interacted process. Focus should be given to accelerate the transformation of agricultural, ensure national food security,

promotion of income increase of farmers and improving comprehensive productivity, anti-risk capability and market competitiveness of rural products (Han, 2010). This proposed strategy pursues not only economic growth, but comprehensive, balanced and sustainable development in political, cultural, social and ecological dimension (Han, 2010).

### **Rural Education**

In relation to the notion of “building a new socialist countryside”, researchers in the educational field initiated the concept of a “new rural education”, which composes of universalized compulsory education, technical and vocational education with high relevance, and high utility and efficiency adult education. Researchers have found that rural education in China has three different functions. First, education for further education: promote social mobility for rural youth. Second, education for urbanization: training surplus rural labour force for non-agriculture jobs. Third, education for agriculture advancement: cultivating human resources for local community. However, the education system has not been evenly developed in China for historical, geographical, economic and policy reasons. Also the curricula in rural schools lack relevance to local conditions, which leads to lack of interest of students. Poor quality of teachers and unqualified infrastructures still exist in some remote and ethnic residence. Obviously, the task of ensuring the access, quality and equity of education is a big challenge for the government.

### **The Way Forward: Education Reform Guideline (2010-2020)**

In 2010, the Chinese government released the “Outline of China’s National Plan for Medium and Long-term Education Reform and Development” (2010-2020). In this guideline, there are several new policies related to rural area which were highlighted. 1) Making equal access to education: give preference to rural impoverished and border area and ethnic autonomous areas. 2) Strengthening preschool education in rural areas: make sure that all the children left behind by parents working away from their home villages are sent to kindergartens. 3) Improving infrastructure and promoting quality of rural compulsory education. 4) Profoundly develop vocation education to meet rural learning needs. 5) Accelerating development in continuing education: form a system of lifelong learning. 6) Moving administrative power to provincial government, so the local government have more autonomous in arranging education



reflectively. 7) Improving quality of teaching staff. 8) More financial input for rural education. 9) Promoting use of ICT in rural education. This policy guidance shows the commitment of the Chinese government in promoting equity, equality and quality of rural education and also implies that there will be a lot of changes in rural education, both in formal and non-formal sectors.

## IV. Case Study

### Profile of Yunnan Province

Yunnan has the highest number of ethnic groups among all provinces and autonomous regions in China. 25 minority groups account for 1/3 of the population<sup>1</sup>. Meanwhile, it is also one of the poorest provinces of the country, behind only Tibet and Guizhou. In 2002, per capita GDP of Yunnan is US \$627, and rural per capita income is US \$195. Of the total population, 74% live in rural areas. 33% of rural people live below the national poverty line (around 0.31 US \$ per day). Yunnan's economic pillars include the industries of tobacco, biology, minerals and tourism. It is mainly an agriculture-based province.

As one of the poorest provinces with a high level of ethnic diversity, Yunnan has attracted a lot of foreign aid in establishing development projects, such as UNDP in western region of China. While in the national development plan, it is also a targeted province. As indicated in the 11<sup>th</sup> Five Year Plan of National Economy and Social Development (2006-2010), the government continues the policy of promoting development of western region and enhancing the northeast industrial base, taking into account the strengths and weaknesses of the regions to achieve equities in public services and to attain a more equitable society (UNDP China, 2008).

As an extremely poor and agriculture-based province, rural development is vital for Yunnan province. The rationale for selecting Yunnan province also lies in the high ethnic diversity which implies highly diverse learning needs. Besides, as a target province in development framework, there is abundant information for secondary analysis. As pointed out by UNDP China (2008) there are many reasons why the development in the Southwest Region is lagging, but the primary reasons, are the relative backwardness of capacities,

---

<sup>1</sup>Source: retrieved Sept. 4, 2010, from :  
<http://www.yn.gov.cn/yunnan,china/72057594037927936/index.html>

development and management of human resources and a lack of understanding of the role of government. Development in Yunnan largely depend on to what extent the human resources are cultivated through education and training. As for the education status, basic education has spread to most of population. Adult literacy is 85%. Primary school enrolment rate is 99.6% (equal m/f ratio) and 87.5% for junior secondary school (junior) enrolment<sup>2</sup>. Besides universal 9-year-comporsory education, various kinds of non-formal programs flourish in the area so as to increase income and empower the marginalized rural poor and ethnic minorities. The investigation of a bottom-up mode of CLC is intended to explore how community-based local imitative is planned and implemented in order to meet diverse learning needs of rural people.

### **The Case: Community Learning Centre in Yunnan<sup>3</sup>**

#### **Background**

In order to explore a way that fully utilizes the power of schools and local community as to promote socio-economic development and empowering rural people, a CLC is an exploratory program was found in 2001 in Liushao County and Lianhe County (both are minority group residences) of the Yunnan province. Through seven years of practice and investigation, the CLC which composes of four pillars in structure, namely, a training centre, a library, a development centre and a cultural activity centre is well functioning. The idea of participatory learning and closer link between schools, community and society seem to resulting in a clear comprehensive benefits and positive social response.

#### **Implementation**

The CLC is designed by a research group of Yunnan Normal University. According to education and social situation of Liushao County and Lianhe County, a specified local model was adopted. School is the core operator, local government provides support and higher education institutions provide research guidance in organizing different training activities. The CLC was directly established by local primary schools and community committees, aiming at fulfil learning

---

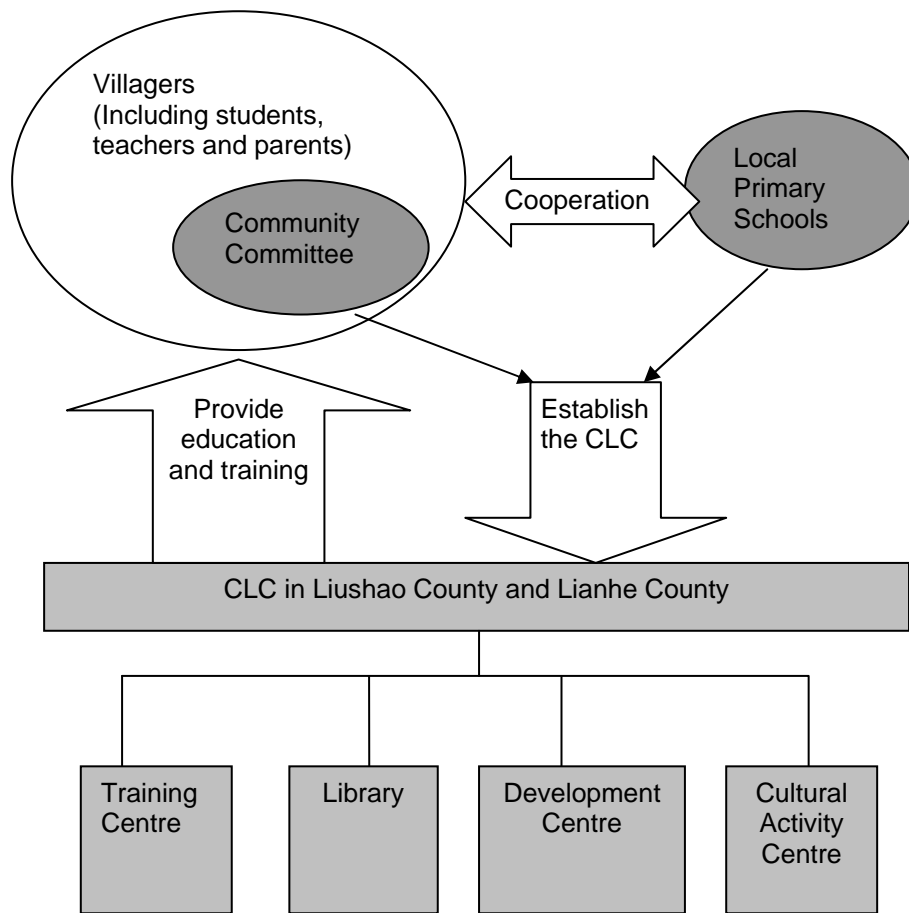
<sup>2</sup>Source: Yunnan Provincial Statistics Bureau, Census 2000.

<sup>3</sup>Source: Wang L. (2008) Practical Exploration on Constructing Community Learning Centers Based on Schools in Rural Ethnic Areas——A Case Study on Liushao and Lianhe Towns in Xundian County, Yunnan Province. *Educational Research*.No.12, pp.91-94.

needs of teachers, students, parents and villagers of the county. In this unique case, four different pillars a training centre, a library, a development centre and a cultural activity centre constitute the CLC.

The four parts on one hand has comparatively different and independent functions; on the other hand, however, serve a shared goal, which is to improve overall quality of human resource, facilitate economic growth as well as preserve and promote minority cultural heritage in the area. The training centre provides three kinds of training: firstly, training for rural teachers; secondly, training for the whole community member (includes literacy, numeracy, basic knowledge and etc.); and finally, training and promoting modern agro-technologies. The library was found in 2005 in order to enrich knowledge and spiritual world of local people. The development centre which serves as a platform, not only offers opportunity for trainees to apply knowledge learnt from the CLC in practice, but also generates incomes during study-work activities. New and advanced agro-technologies are also demonstrated and promoted by the development centre. The cultural activity centre of the CLC is a unique unit compares to other CLCs. As located in minority group residence, preserves and promotes culture of the ethnic group is one of the functions of the CLC. Via the addition of traditional cultural knowledge into textbooks as well as holding various kinds of traditional culture activities, trainees are supposed to confirm and be proud of their ethnic identity. To be more specific, the CLC in Liushao and Lianhe County operates like Figure 4-1 as follows:

Figure 8:1. Structure of CLC in Yunnan



The CLC is rather a bottom-up model, where trainees from local community establish the training centre by themselves and they can be involved in the implementing phase. The principle of CLC is empowering people which not only focus on income generating or skill development but the well-rounded development of human resources.

## **Quality control and supervision**

Since this CLC is a research program belongs to the National Education Science “eleventh five years” plan, a research report was generated by Yunnan Normal University. This report serves as assessment of the progress of CLC and was hand over to the National Office for Education Sciences Planning for evaluating the outcome of the research.

## **Outcomes**

Since setting up of the CLC, the training centre successively carried out a variety of training activities. Around 1500 people benefited from education and training provided by the centre. The training not only merely raises human capital of trainees, but also improves their understanding of the rural development process and institutional changes in education. The library enriches spiritual life of training recipients, and strengthens their connection with outside world. Moreover, the CLC also took advantage of geographic condition in Liushao and Lianhe County, as a potato growing laboratory was established, through four years of research and practice, growing potatoes have become a competitive industry for those two counties. Besides, numerous cultural promotion activities have also enhanced respect of ethnic group culture.

There are multiple purposes of the CLC, namely, to empowering rural people, to cultivate human resources and to promote ethnic culture, the CLC gradually established four paralleled pillars, a training centre, a library, a development centre and a cultural activity centre to fulfil its tasks. As a participatory approach program, the planning of the program was accomplished in cooperation between local community committees and local schools. As the CLC was founded to empower local community, training activities organized by the CLC includes basic knowledge, income generating activities as well as ethnic minority culture preservation and promotion. In the operation process, trainees can participate in the designing and implementing of the program. There is no obstacle between dialogue formation between training recipients and training providers. However, due to the rather decentralized structure, the assessment of the program is weaker. Although after completion of seven-year-research, the research team provided a progress report. It is only for evaluation of the research, no assessment mechanism was found in this CLC. This may due to the decentralized administration structure. In the

operation of CLC, cooperation is emphasized more than control. The CLC targets the local learning needs, not only focus on income generating or skill development but well-rounded development of human resource. Some have argued that what matters is at the micro level, for instance, local motivation, teaching-learning process, commitment and so on (Fullan, 1994). The Bottom-up model is usually resulting from grass-roots initiatives. This model operates by the 'insider' and cherishes opinions and involvement of participants. Trainees has chance to participate in different phases of the program. As the CLC have multiple goals to achieve, but no tangible indicator for assessment. The stress of rather vague concept of empowerment may take long time to realize.

## **V. Discussion**

Although a certain common base of knowledge is needed for the well-rounded development of human beings, it is rational to say that there is no-one-size-for-all program that can fulfil all the learning needs in rural areas. Since the declaration of EFA, providing basic education has been the top priority for rural education for many years, and it still should be. However, to cope with the changing process of rural development, it is necessary to pay more attention on what's beyond formal system. Non-formal education (NFE), with the advantages of flexibility in teaching content and delivering model seems more suitable for rural people. In order to make full use of non-formal education, the concept of NFE should be re-examined and broadened. Traditionally NFE has been viewed as a substitute for providing basic education to those who have failed to benefit from the formal schooling. Now, as appropriate, readily implementable initiatives of education and training institutions, it becomes institutionalized strategies of intervention in the rural development process without limitation of confined content and time.

There are various types of NFE programs, the CLCs play an active role in mobilizing local resources to establish and operate various kinds of education and technical training. It also serves as local organizations to carry out activities in developing the local intelligence in poverty alleviation so as to promote the local economic development and improve the living standard of the people in poverty-stricken areas. As presented by the case study, education and training can be flexible and responsive to different learning needs, be it short-

term technical training or long term empowerment, and only in this way can education be the vehicle of positive transformation of rural areas.

Social development is a complex process result from multiple factors. Education alone cannot achieve desirable results. Cooperation between every aspect of the society is essential for foster development in rural areas. As promoted by Chinese government, research and science concerning agriculture should be closely related to local conditions and needs; as well as cooperation between education institutions and labour market enterprises should be formed as to improve quality and relevance of education. Also, the need for more effective coordination of the work of the different government departments and non-governmental agencies should also be stressed for rural development. So the development strategy promoted by central government can be successfully installed in local level. Mechanism should be established in order to provide a basis for coordination and cooperation between the works of the various bodies directly involved in rural development. To be fully effective such cooperation must clearly exist at all levels and, in particular, at the community level (Velez, 2007).

Besides coordination between government and non-government agencies, “network should also be established so that technology, research, education, and organization can mutually reinforce each other during the developmental process”, stated by Han C. F (2010), the minister of agriculture, on the National Conference on Human resource of Agriculture and Rural Areas. There is a very important need for research and planning at the national level and within institutions to carefully study market needs in order to achieve a balanced and integrated system of agricultural education geared to meeting real life needs. Effectiveness of education and training is lowered if these efforts are not paralleled by a substantial research input. It is in this sense that the connection between higher educational institutions and field is so important: there is such variability in local geography conditions is unlikely to be successful unless it is backed up by agricultural research substantially geared to the needs of particular context. Higher education can then make important contributions by doing research in promoting local economy and through special support and help for teachers and trainees at all levels (Liu & Zhang, 2004). Like in the case of China, central government stresses the cooperation among research, education and the agriculture industry. And this strategy has already achieved good outcomes. Take

the case CLC as an example, the potato growing centre was found and after four years of research, it promoted potato growing industry in Liushao and Lianhe county, and benefits both trainees and the local community.

## **VI. Concluding Remarks**

If investment in education in general is so justified, investment in rural education is even more so. This is accentuated by the fact that countries have largely continued with the urban bias in the allocation of resources. While the most disadvantage group live in rural area which causes disparities between urban and rural and which lead to unsuccessful harmonious development of the country.

In the time of knowledge society, education can no longer be seen as a time- bonded endeavour but rather a continuous activity through one's life. The point of education for rural development is to provide opportunities for the underdeveloped group to understand and cope with the changing reality and so to have better choice to improve their lives. In the case of CLC, education becomes a continuing activity that can be transformed into skills and capacities rather than something that begins and ends in itself. The merits of such non-formal education should be profoundly explored and so to benefit rural people. Nevertheless, education is not a magical cure, to reach prosperity in rural areas cooperation and coordination among educational and non-educational components of the total development efforts should be enhanced as the case illustrates. Change in rural areas is inevitable, marked by movement of people, demographic transition, and new economic pressures and opportunities. It is crucial to turn the unpredictable consequences resulting from changes into positive developments and enhancement of people's capacities to cope with change.

## **References**

- Aiyar, M. (2010). Local Governance and Panchayati Raj. Paper presented in International Conference on '*Dynamics of Rural Transformation in Emerging Economies*', 14-16 April, 2010, New Delhi, India.
- Bhola, H.S. (2010) Systems Theory Perspective on Education for Rural Transformation: In *the Dialectic Between Global*



- Contexts and Local Condition.* – Draft Report of the International ERT Symposium, 8-10 November, 2010, Stockholm University, Stockholm.
- Cui, C. Y. (2010). *Rural Surplus Labour Transfer and Change in Urban-Rural Income Disparities-Analysis Based Upon the Situation Since China's Reform and Opening Up* (PDF document). Retrieved from: [http://www.rimisp.org/FCKeditor/UserFiles/File/documentos/docs/sitioindia/documentos/Paper\\_Chuanyi\\_Cui.pdf](http://www.rimisp.org/FCKeditor/UserFiles/File/documentos/docs/sitioindia/documentos/Paper_Chuanyi_Cui.pdf)
- Ge, X. L. (2008). *An Empirical Analysis of Rural and Urban Income Disparity.* Retrieved Nov. 11, from <http://www.zclw.net/article/sort015/sort020/info-7110.html>
- Guo, X.Y., Yu, Z., Todd, S., Henehan, B.M., & Li, D. (2009). *An Empirical Evaluation of New Socialist Countryside Development in China.* Cornell University.
- Han, J. (2010). *Rural reform and development in China: review and prospect. Dynamics of rural transformation in emerging economies.* New Delhi, India.
- Huang, J. K. (2010). *China's agriculture: drivers of change and implications to the rest of the world. Dynamics of rural transformation in emerging economies.* New Delhi, India.
- Khan, Q. (2010). *Non-Formal Education and Lifelong Learning in Rural Areas-Experience and Lessons from the Arab States.* Draft Report of the International ERT Symposium, 8-10 November, 2010, Stockholm University, Stockholm.
- Liu, Y. G. & Zhang, J.C. (2004). *The reform of higher agricultural education institutions in China.* Paris: IIEP-UNESCO.
- UNDP (2010). *China Human Development Report. 2009/2010: China and a Sustainable Future: Towards a Low Carbon Economy and Society.* Beijing: China Translation and Publishing Corporation.
- UNESCO (1995). *APPEAL Training Materials for Continuing Education Personnel (ATLP-CE), Volume VIII: A Manual for the Development of Learning Centre.* Bangkok: UNESCO PROAP.
- UNESCO (2004, March). *A Report on Rural Community Learning Centres in China.* Retrieved from: <http://www.unescobkk.org/education/literacy-and-continuing-education/activities/community-learning-centres-clcs/clc-country-profiles/china/>

- UNESCO - INRULED (International Research and Training Centre for Rural Education). (2001). *Education for Rural Transformation: Towards a Policy Framework*. Zhengzhou: UNESCO.
- Velez, E (2007). *Multi-grade Teaching: The Latin American Experience*. New Delhi, India.
- Zhang, L. (2002). *Country Report: China*. Paper presented in 20th Regional Workshop on the Capacity Building for Trainers of NFE Facilitators in Asia and the Pacific, 3-12 December, Yangon, Myanmar.

# CHAPTER NINE

## RURAL HUMAN RESOURCE DEVELOPMENT IN CHINA'S DUAL SOCIAL SETTINGS

### POLICIES, STRATEGIES AND EQUITY

*Qiang Wang, INRULED, College of Education Nanjing Normal  
University, China*

#### I. Introduction

For more than half a century rural-urban human resources division is a fundamental mechanism not only for labour power distribution but also for social control in China. Accordingly the human resource development and management in China has striking rural-urban, economic, political and educational dimensions and division. From the 1960s, central government set out to eliminate the Three Gaps between the rural and urban, between farmers and urban workers, and between intellectuals and blue-collar workers. The strategy was to separate industries between rural and urban areas, namely agriculture in rural areas, and manufacturing and service industries in urban areas. Unfortunately, the goal of eliminating the Three Gaps was not reached. During the strict rural-urban division period (1950-1985) under the planned economy, there was little rural-urban population mobility, and rural-urban gaps remain today.

Since the adoption of the policy of openness to the outside and the market economy in the late 1970s, responsibility-based land policies in rural areas have solved successfully the problem of starvation in rural areas. Along with the industrialization, urbanization and modernization in China, the economy is booming rapidly, and a large number of human resources driven by market forces have moved into urban areas and non-agricultural industries. However, while major economic, educational and cultural resources are concentrated in urban areas, rural migrants are excluded from the benefits.

## **II. Rural-Urban Human Resources Division and Mobility in Dual Social Settings**

### **Dual Social Structure**

China is a rural-urban dual-structured society marked by the strict division between rural and urban areas. This kind of division is not distinguished by whether people are doing farming or non-farming work, or by whether they are living in urban or rural areas, but by their officially registered residential status. If a person is registered officially as a rural resident, he or she is a farmer, no matter where he is or what she is doing.

From the 1950s to the 1970s, China adopted a typical highly centralized planned economy, and collective ownership was implemented in rural areas. The villages, termed "productive teams", were the basic units of production. All the land and property belonged to the productive teams. All villagers were members of the productive teams, and all economic and social activities were undertaken under the aegis of the productive teams. Under the public ownership system it was impossible for an individual to find a job in an urban area without government approval. Accordingly, there was no free mobility between rural and urban areas. The dual-structured society formed gradually.

There were 200 million surplus labourers in rural areas in the 1980s. If we take the agricultural productivity of the 5 % of agricultural workers in developed countries as an example, the surplus of labourers in rural areas was huge in China and tended to keep increasing. The transition of rural labourers to urban and non-agricultural industries was a long-term task for China's development and modernization.

### **Human Resource Mobility as a Rural-Urban Breakthrough**

In 1978, China started the transition from a planned economy to a market economy. Along with the changing of China's national strategic development plan, government policies changed gradually, encouraging the transfer of labourers from rural to urban areas. China's 800 million rural people finally found the pathway to breaking through the constraints to development, by breaking through the traditional division of industries: manufacturing and services in urban areas, and agriculture in rural areas. As channels were created for the

free and rational flow of the rural population into urban areas, rural surplus labourers began to be transferred from the farmland.

In the late 1970s, the national economic system was reformed completely, gradually moving from the highly centralized planned economy to the market economy. The reform started in the rural areas with land reform, with the adoption of a new system of responsibility. Each family was given a certain area of land. The farmers had their own right to decide what and how much to plant. The economy in the rural areas became more and more prosperous. The challenge of starvation in rural areas was gradually relieved and eliminated.

Since 1984, more and more of the rural population have moved into urban areas each year. 140 million had migrated to towns and urban areas by 2003, accounting for more than 10 per cent of China's total population and about 30 per cent of the rural labourers. The population aged 18-35 accounts for 75 % of the total migrants (Mao Lei, 2005). The migration patterns are: moving from rural to urban areas, from central and western China to eastern China, and from the economically underdeveloped areas to the developed areas. For a long time to come, migration will continue to be an increasing trend. Since the early 1980s, more and more migrants have tended to work for longer and longer periods in urban areas, and some have migrated with their entire families. Some younger migrants have no experience in farming, so that they identify much more with urban than rural life. However, many obstacles hinder the integration of migrants into urban communities.

China's modernization is based on industrialization and urbanization in rural areas. The percentage of primary industry is expected to decrease while manufacturing and service industries increase. With the enhancement in farming efficiency, more and more rural surplus labourers need to be transferred to towns or urban areas. Accordingly, the structure of the population needs to follow the changing process of modernization. Many rural people are motivated to migrate to urban areas. In the 1980s, migrants were mainly in pursuit of economic benefits, to make money to support their families. The purpose of migration from the 1990s was a blending of economic benefits and better living. That is, not only to increase their income, but also to pursue enriched cultural and material living conditions in urban areas.

### **III. National Strategies for Rural Human Resource Development**

China's rural and urban polarization has political, economic, cultural, legal and educational dimensions. Education could function as a primary cross-cutting intervention that could have a direct or indirect impact on all other facets. Adult education plays an important role and has been recognized and emphasized by government and civil societies in the promotion of social integration in and between rural and urban communities.

#### **National Strategic Plan**

##### ***1993-2010 National Plan for Training of Rural Workers***

It is China's national strategy to facilitate the transfer of rural labourers to non-agricultural industries and urban areas. In 1993 the National Strategic Plan was initiated by six ministries of the Chinese Government such as the Ministry of Agriculture, the Ministry of Education, the Ministry of Labour and Insurance, etc. According to the Plan, 5 million surplus rural labourers were trained during 2004-2005, and 30 million will be trained during 2006-2010. The Learning and Training Program will be officially integrated into China's National Education System after 2010 and would be an integral part of China's education system (State Council, 2004).

Human resource development, mainly adult education and training functions as a core approach for the transfer of rural labourers and the promotion of social integration. More financial resources from the central government will go to the underdeveloped regions, especially the ethnic and poverty-stricken areas. Local governments will take responsibility for allocating funds and coordinating training. With the help of their counterparts in developed coastal regions, the rural communities will send the trained young farmers to the manufacturing and service industries in towns and urban areas, especially in eastern China. With China's urbanization, modernization and social transformation, the population mobility will be a long-term process, and more and more of the rural population will live in urban areas permanently. The migrants not only needs the necessary skills for employment in urban areas, but also needs to improve the competencies required for integration into urban communities. Accordingly, social integration and equity are the aims of the National Strategic Plan.

### *The Sunshine Program Case*

The Sunshine Program provides pre-service training of surplus labour forces in rural areas to help them transfer to non-agricultural industries in towns and urban areas. It was initiated by the central government and is supported mainly by public finance within the framework of the National Strategic Plan - 1993-2010 National Plan for Training of Rural Workers. The project is focused on the core rural regions of China's grain production, with their large surplus of farmers living in poverty.

The primary principles are: coordination by government, organization of training activities by educational institutions, and farmers as beneficiaries. The implementation mechanism is that the program is coordinated by the Ministry of Agriculture and headed by a Vice Minister. Governors at provincial and community levels take direct responsibility. The training process is based on the market system, using bidding procedures and accountability. Monthly reporting and sharing of information on an Internet website are required. Training is closely linked to industries. Financial shortfalls are covered by government subsidies, reduced charges by trainers and sharing of costs by trainees.

The target groups of the Sunshine Program are the surplus labour force who have the motivation and aspiration to transfer to non-agricultural industries and urban areas. The contents are determined by the needs of the farmers and the market, with the focus on booming industries and jobs such as house-building, clothing, electronics, family nursing, security, etc.

Bidding procedures are adopted to select the training institutions and providers. Providers which have information and potential opportunities for placement of trainees are given priority. The associated training centres network is being established gradually, based on selection in accordance with their capacity and linkage with non-agricultural industries. The contracted training pattern has been adopted to enhance opportunities for transfer of workers and increase the efficiency and effectiveness of training. The government labour departments at provincial and county levels in underdeveloped regions are setting up more and more representative offices in the developed eastern regions to establish agreements with the authorities and industrial associations for the placement of trainees.

During 2004-2006, Government invested 2.75 billion RMB Yuan in the Sunshine Program, of which 1.25 billion came from central government and 1.5 billion from local governments. Each

trainee received 100 Yuan in 2004 and 171 Yuan in 2006 (Wei Chaoan, 2006). In some rural areas, the funds go to the farmers directly by means of training vouchers, and trainees have the right to choose the training institution and program to make the training more relevant.

According to the Vice Minister at the Ministry of Agriculture, 8.3 million rural labourers participated in training within the Sunshine Program between 2004 and 2006, and 7.2 million, namely 86.7 % of the trainees, successfully found jobs in towns and urban areas (Wei Chaoan, 2006). In addition, more than 10 million rural workers participated in the training programs organized by local government and the civil society. Effective learning and training patterns have been adopted, and rural labourers' work skills and competencies for urban community life have improved. Those trained under the Sunshine Program each have an income of 833 RMB Yuan monthly on average, 400 Yuan more than their income from farming at home, and 200 Yuan more than the income of those untrained. The remittance economy is providing economic resources for some areas with vulnerable natural environments.

### **Active Participation by Civil Society**

#### ***Market-driven non-governmental educational institutions***

Non-governmental educational institutions are those established by civil society organizations using their own resources. For more than two decades, they have been developing quickly, and they play an important role in the training of rural workers. These institutions normally offer paid training programs based on market principles. According to the law of the People's Republic of China on Promotion of Non-governmental Educational Institutions, all educational institutions in China are non-profit institutions. That means that social benefit is the main purpose, and is highlighted more than monetary gain. There are independent financial management and monitoring regulations for these institutions.

Now there are about 8700 institutions operated by civil society organizations. Adults in rural areas are one of their major target groups. Non-governmental educational institutions follow the needs of the education market generated by the boom in the manufacturing and service industries, and cover large areas of skills and industries. These include hairdressing, driving, computing, sewing, machine tools, handcrafts, cooking, repairing of TV sets and CD players, vehicle repair, etc.



*Extensive participation by international NGOs*

International NGOs are active in education and training in rural and urban communities, with rural workers as their main target group. About 210 international NGOs have established their offices in China, and many training programs focus on rural workers (International Development Brief, 2007). The gaps and need for integration between rural and urban areas draw much attention from these international NGOs.

The international NGOs recognize that migration and social integration reflect the poverty and social exclusion in China. In urban areas, migrants generally experience limited security, poor access to the labour market, poor legal protection of their rights, and extremely limited access to social services and welfare. The international NGOs operate at central, provincial, county and village levels in both rural and urban areas, aiming to work with migrants and poor people to mitigate the adverse and strengthen the positive effects of migration, and to press government at various levels for effective policy solutions that will ensure protection of rights and utilization of the potential that migration brings with it for the development of both rural and urban areas, so as to improve social integration.

Since 1999, with the support of the Levi Strauss Foundation, the Asia Foundation has developed outstanding activities that have provided services to more than 740,000 migrant women workers in more than 200 factories in 22 cities and districts in China's Pearl River Delta, the Lower Yangtze River, and Beijing Municipality. The major thrusts are: to engage local stakeholders in addressing community needs; to build social support networks for disadvantaged migrant women workers; to help integrate them socially in their communities; and to empower them economically with the skills to adapt to local communities. This direct-services program for migrant women workers provides a model for replication in other provinces. The Ford Foundation, the Cyrus Tang Foundation, World Vision International and other international NGOs have been actively involved in bridging gaps and improving integration in rural and urban communities (International Development Brief, 2011).

## **IV. Models of Rural Human Resource Development**

### **Models by Content Focuses**

At the national level, the framework of the National Strategic Plan has its focuses in models establishment. At the same time the human resource development practices at grassroots levels are vitalized, as a mechanism of implementation.

#### ***Model one: Process-focused Training***

This is composed of three knowledge kits. The first knowledge kit is to help farmers intending to transfer to urban areas to acquire the preliminary knowledge for working and living in urban communities. This knowledge kit includes the documents and certificates required, and information about how to get residential certificates in towns and urban areas, about travel by ship, what is the labour market, how to find a suitable job, qualifications and competences for specific jobs, etc. The second knowledge kit is General Knowledge on Daily Life, which includes the fact that rotten rice may result in cancer, how to keep vegetables fresh, how to prevent sunstroke and its first aid, how to prevent digestive disorders, everyday medicines, etc. The third knowledge kit gives the message that hard work benefits everyone, with examples of success, such as a rural worker who became a workshop director, a rural worker who won a world sports medal three times, and a rural worker who earned 30 million Yuan in three years through entrepreneurial efforts.

#### ***Model Two: Skills-focused Training***

This pillar focuses on the specific skills and technology related to various jobs and occupations. These include the use of electric sewing machines and the expansion of the sewing industry, motor vehicle repair to match the rapid development and popularity of cars and trucks, skills and technology in machine tools, etc.

#### ***Model Three: Rights-focused Training***

Migrant rural workers should be aware of their rights and obligations, and understand the policies and regulations concerned. They should be good citizens in accordance with the law. At the same time, they should know how to protect their own rights and interests through legal procedures. This category covers membership of a trade union, ways

to protect your rights through employment contracts, how to protect your rights if you have no employment contract, etc.

### **Models by Ways of Training and Learning**

#### ***On-the-job Training***

On-the-job training is today the main means of training among young rural workers. It is closely related to the situation of the labour market and the mechanisms for employing rural workers. Some rural workers may benefit from the contracted training programs organized by local authorities and get jobs in urban areas, but most of them search for jobs with the help of their relatives and friends, or go to the informal labour market for jobs. Once they find a new job, they will be tutored by skilled workers, the relatives and village friends who introduced them to the job in the urban area. As only a small percentage of rural workers have the chance to participate in organized or non-formal training in the present situation, the majority of them actually learn by on-the-job training, namely workplace learning and training in pairs, or learning by doing.

#### ***Learning for Self-development***

Some rural workers have a strong aspiration to be skilled and knowledgeable, and even want to set up their own business. They regard work experience in urban areas as preparation, learning and practice for future development, aiming at persistent personal progress until they can manage their own enterprise. They write diaries or journals to record their new ideas, events, knowledge and skills. They acquire and collect knowledge and information in accordance with their own needs, interests and plans for the future.

Everything about their self-initiated projects is kept in diaries and journals, which is an effective way of learning anywhere and anytime in their own way. They are the managers of their knowledge, and what they collect builds up into a body of knowledge that gives them real power in their field of interest. Productivity, expertise and information motivate them, and give them the confidence to be entrepreneurs and shape their own action plans.

In Yiyuan County, Shandong province, rural workers' diaries have become a knowledge kit. Many rural workers have taken down their findings and ideas gained during their job search, their negotiation and establishment of contracts with employers, their salary claims and protection of their rights, and their lives as rural workers in the urban community (Liu Wenning, 2007). During their writing of

the diaries and journals, they summarize and reflect on their experiences and expertise, which also relieves their psychological pressure. Some rural workers have accumulated their own body of knowledge and now work as managers and heads of various sections in their workplaces.

### ***Thematic Activities***

The issues of rural workers and social integration are often hot topics in the media, in legislation, transportation and the labour market. In 2003, a rural woman told the Prime Minister of the Chinese State Council that the difficulty her family confronted was that her husband had not been paid his salary long after the work had been finished. The Prime Minister helped the rural worker to obtain his salary, which started a campaign nationwide to help rural workers get their salaries. The woman was elected as one of the ten annual News Personalities of the Central TV Station. In 2007, ten building companies were expelled from Beijing because they did not pay the rural workers they employed.

On 28 September 2007, the People's Congress of Chongqing Municipality (the People's Congress is a legislative authority) came to an agreement to name the first Sunday of November every year "Rural Workers' Day" (Wei Wenbiao, 2007). The four million rural workers in Chongqing will have their own celebration day. The purpose is to create an environment that makes governments, business owners, the media and the whole of society aware of the rights of rural workers. Their rights and interests should be respected, cared for and protected. As November is close to the end of the year, violations of rural workers' rights will be widely exposed. Today, instances of delayed payment of salaries and more than eight hours' work a day still affect rural workers. In pursuit of local economic developmental indicators, some local government officers and legal officials are inclined to favour the interests of business owners. Some urban residents are also still prejudiced against rural workers. Accordingly, informal education and awareness fostered by the media will play an important role and have a great impact.

## **V. Social Exclusion of Rural Human Resources**

### **Lower Social Welfare**

In the dual-structured social setting, migrants, namely rural workers, suffer disadvantage and exclusion in urban communities. The social exclusion is institutional, especially because of the traditional policies and regulations made by government. Migrants from rural areas are not included in welfare packages for urban communities such as housing, children's education, medical insurance, employment, etc., because they are not registered urban residents. The policies exclude the rural population from sharing resources and opportunities in urban areas. According to investigations, there are 47 differences in welfare between the residential status of urban and rural people.

### **Lack of Social Representation**

The dual social structure functions as a social closure, which excludes the rural population from exercising their political, economic and social rights in urban communities. This leads to the separation of rural workers from the urban community. Because of their registered rural residential status, rural workers have no membership in urban communities, so they lack any opportunity and means to participate in the political elections, decision-making, and formulation of policies related to their own interests and rights, despite working in urban areas all year round. They have few organizations or trade unions of their own and no representatives in urban communities or the People's Congress. There is no mechanism for them to make existing policies and regulations more equal and just.

Most of the migrant farmers think that moving to urban areas is not their permanent intention or plan. Returning to the rural areas is the migrants' eventual rational choice, based on their registered residential status/identity. According to an investigation in Shanghai, most migrants give a negative response to questions about "permanently living in urban areas". It is not that they do not like life in urban areas, but they that cannot integrate into urban communities in terms of employment, housing, acceptance and life style. As the migrants are unable to get official urban residential status, they regard their homes in rural areas as their permanent households (Ren Yuan, 2006).

### **Informal Employment**

In urban areas, there are normally three types of labour market: for professionals, for urban workers, and for rural workers. The first two markets are formal. On many occasions, in some cities, the labour market for rural workers is not organized, but some rural workers are inclined to go to the informal labour market because there is no service charge and quick contact is made between employers and employees face to face. When employers and employees come to an oral agreement, employment is established. Informal employment has no requirements in terms of contract, minimum wage, insurance, job security, labour protection and monitoring, trade union, etc. Many migrants frequently change their jobs, or are out of work.

### **Discrimination in Payment**

Migrants normally do the hands-on hard work that urban workers decline to do. They usually get much lower payment than urban workers. Even though they do the same jobs and make the same contribution, rural workers receive a much lower salary. A research study in Shanghai shows that the productivity of migrants is 50 % higher than urban workers, but the ratio of the costs of employment between urban and rural is 5:1. An investigation in Nanjing shows the difference in costs of employment between contracted workers (officially employed) and migrants as 1.8:1 (China Economic Research Centre of Beijing University, 1998). According to surveys in 2002, among every four rural workers there was one who did not receive payment when it was due, or was even not paid at all. Most employers pay rural workers at the end of the year. This has been a serious social problem and is being forcefully combated by government now.

### **Higher Living Costs**

The dual social structure increases rural workers' living costs and enlarges the obstacles in the way of migrants' integration into urban communities. They have to pay high tuition fees to find a school for their children, while urban children have free tuition. Many rural workers have to rent housing, and they frequently have their meals in restaurants.

### **Prejudice**

Urban people have a sense of superiority, which imposes unjust attitudes and prejudice towards rural workers and lessens their desire

to live in urban communities. According to interviews with 90 rural workers in Beijing, they are unable to stand the discrimination, such as contempt in language and exclusion at work. This discrimination in daily life and social interactions harms their dignity. 18 % of migrants interviewed said that they experienced very serious discrimination, and 45% said they experienced some kind of discrimination at the work place, at bus stations, shops or in the homes of urban residents.

## **VI. Rural Migrants' Self Identity**

### **Identification with Rural Status and Communities**

Studies show that rural workers still have a strong identification with their status as farmers and with their communities. But the growing trend is that the younger the migrants, the less they regard themselves as farmers. This trend is related to educational background: the higher their educational level, the weaker their identification with the rural community. It is also related to their conception and expectation of quality of life.

When the researchers asked the rural workers, "Do you still regard yourselves as farmers?" 78.5 % replied "Yes", 10.9 % "No", 4 % were unsure, and the rest did not answer. The majority regard themselves as farmers because they are registered as permanent rural residents and are so treated. However, more and more younger migrants, aged 18-25, with little or no experience of farming and a better educational background, have less identification with rural status than their precursors. Among the rural workers refusing to recognise their status as farmers, 60 % think that the term "farmers" should be applied to those engaged in farming, while 20 % believe that it should mean those living in the countryside (Wang Chunguang, 2003).

The younger migrants are immensely attracted by the outside world. No matter whether there are income disparities between farming and working in urban areas, they opt to be in the city. The reasons they give are as follows: farming is hard (13.66 %); there is no future in it (12.94 %); they are already accustomed to urban life (37.77 %); a modern life is available in the city that the home village cannot offer even if one has money (18.71 %); and 16.92 % have some other reasons (Wang Chunguang, 2003). The majority feel that they would not readjust to village life in terms of sanitation and entertainment. In some rural areas, a job in city is regarded as an achievement.

### **Identification with Urban Communities**

Studies show that it is not easy for rural workers to integrate into urban communities, and there is still a long way to go to realize an integrated society. This is evident in migrants' interactions and feelings towards urban communities, and their relationship with urban governments.

Studies show that rural workers are outsiders, with little contact with the urban communities into which they migrate. During the survey,

21.6 % of rural workers said they had regular contact, 48.6 % seldom had contact, and few took part in local collective activities. Another study shows that 2.9 % regularly join local collective activities while

46.8 % do not, 28.1 % occasionally do so, and 22.3 % failed to answer. To a large extent, migrants still keep away from activities in urban communities. It often occurs that urban communities have a negative attitude towards rural workers, believing that rural workers are the cause of social insecurity, crowded traffic and a bad social environment. When the researcher asked, "What do you think of the attitude from the local urban community?", only 12.2 % of migrants said "Friendly" (Wang Chunguang, 2003), while the majority of the rural workers felt that local people were not so friendly. These attitudes directly influence rural workers' feelings towards urban communities.

As to relations with local government departments, 61 % of rural workers interviewed thought it impracticable to expect government departments in urban communities to help them or to offer the necessary services. The rest either failed to answer or were unsure. They thought they were treated as outsiders, and that some government departments functioned only as a protective umbrella for local residents. Rural workers' integration into urban communities still faces some obstacles in social and economic opportunities as well as policies and education.

## **VII. Recommendations**

Rural human resource development has its political, social, economic, cultural and educational facets in China's dual social structure setting. It could play a cross-cutting role in fostering personal progress and social development and integration. There is extensive evidence of the effects and impact of adult education and training as a core



mechanism for rural human resource development. These strategies and models increases awareness of human rights among government officials, communities and migrants themselves, and this can be seen in changing policies and the involvement of politicians and civil society. Human resource development strategies directly provides migrants with the knowledge and skills for better employment opportunities and improves their quality of life. It also enhances the understanding and cultural appreciation between the rural and urban population, which are primary factors in social integration and equity.

## References

- China Economic Research Center of Beijing University. 1998. *Legal Support to Rural Workers*. Beijing: Beijing University. Liu Wenning. Self-development Oriented Education of Rural workers. Workers Daily. 2007-09-27.
- International Development Brief. *Activities Implemented by International NGOs Registered in China*. <http://www.chinadevelopmentbrief.org.cn/nbcbw/nbcbw-2.jsp/2010-08-10/2011-3-29>.
- Mao Lei. Migrants Over 140 Million in China and Legal Protection of Human Rights Urgently Needed. Beijing: *People's Daily*. 2005-07-27. Ren Yuan. 2006. Integration of Farmer Workers in Urban Communities. In *Journal of Population Research*. 2006 (3).
- Shen Yuan. *Citizenship is Primary Basis for Harmonious Society*. Department of Social Science, Qinghua University. <http://rwxy.tsinghua.edu.cn/htmls/nav/jsmd.asp/2007-08-10/2007-09-20>.
- State Council. 2003-2010 *National Plan for Training of Rural Workers*. [http://www.nmpx.gov.cn/zhengcedaohang/t20040310\\_14883htm/2004-02-10/2011-03-22](http://www.nmpx.gov.cn/zhengcedaohang/t20040310_14883htm/2004-02-10/2011-03-22).
- Wang Chunguang. 2008. The Social Identities of New Generations of Migrants from China's Rural Areas. In *Social Science in China*. Beijing: Chinese Academy of Social Science.
- Wei Chaoan. *Speech on Sunshine Program for Transfer of Rural Laborers at National Conference*. [http://www.nmpx.gov.cn/zhengcedaohang/t20061111\\_48057.htm/2006-11-13/2007-09-20](http://www.nmpx.gov.cn/zhengcedaohang/t20061111_48057.htm/2006-11-13/2007-09-20).
- Wei Wenbiao. Rural Workers Day and Equal Exercise of Rights. Beijing: *Prosecuting Attorney Daily*. 2007-10-08.



**PART TWO**

**THE QUALITY CHALLENGE**

**THE NEED FOR SKILLS DEVELOPMENT,  
VOCATIONAL EDUCATION AND TRAINING**



# **CHAPTER TEN**

## **SKILL DEVELOPMENT FOR RURAL TRANSFORMATION**

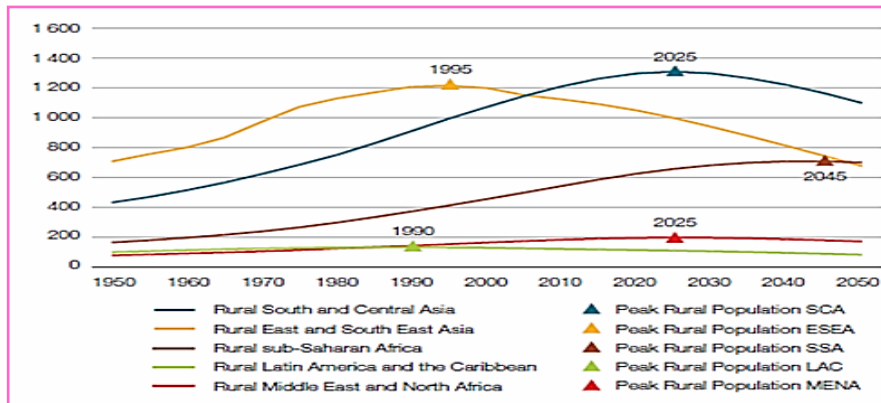
### **NATIONAL, INTERNATIONAL AND COMPARATIVE PERSPECTIVES**

*Vinayagum Chinapah, Institute of International Education, Stockholm  
University, Sweden*

#### **I. Background**

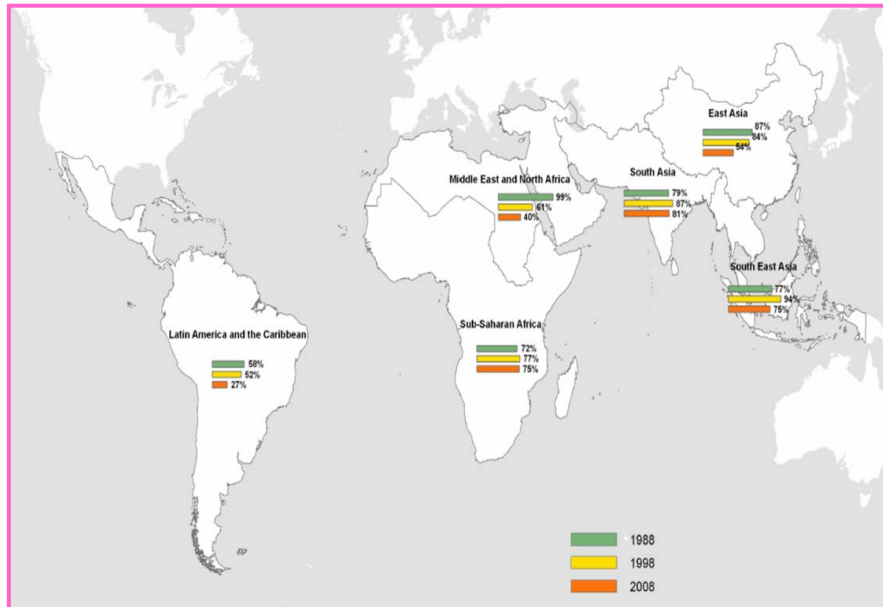
Any attempt to readdress our world's increasing inequity, poverty and widening human development gaps is possible through access to relevant, equitable and effective education of our rural people who makes our world's majority of illiterate, unhealthy, malnourished, marginalized, and oppressed population. Currently, up to 3.1 billion people or 55 percent of the total population of developing world live in rural areas and at least 70 percent of the world's very poor are rural. For the next two decades, it is also estimated that the majority of population living in developing countries will continue to be rural (IFAD, 2010) (See Figure 1 and Figure 2). Unfortunately, very little research is looking at the causes and roots of such deteriorating situations. Education for Rural Transformation (ERT) is the only way to reduce the widening human development gaps within and between nations. The dynamics of rural transformation in the 'globalized' world has created new educational imperatives that call for a re-evaluation of present educational policies and priorities, and the re-examination of the role of education and learning (formal, nonformal and informal) for rural people from rather new perspectives. Henceforth, education should be seen as a key instrument for fulfilling the goal of rural transformation. It should contribute to the wellbeing of the rural people including food security, health, employment, protection of the environment and the management of our natural resources. ERT should be inclusive and should meet effectively and equitably the basic learning needs of rural children, out-of-school youth and adults in the perspective of reducing rural poverty.

**Figure 10:1. Rural Population Trends (Millions of People)**



Source: IFAD (2010, p. 46)

**Figure 10:2. Rural Share of Total Poverty**  
(Rural people as percentage of those living on less than US\$ 1.25/day in 1988, 1998, and 2008)



Source: <http://www.ifad.org/rpr2011/images/maps/index.htm>, Accessed 19 April 2011

## **II. Theoretical Framework of ERT and Previous Research**

ERT is a concept that was used and further developed in a state-of-the-art review commissioned by UNESCO-INRULED in 2001 entitled 'Education for Rural Transformation – Towards a Policy Framework'. It does not deviate from the core idea of traditional 'Education for Rural Development' which concerning improving the well-being of rural people through education. However, the term rural transformation seeks to convey a vision of pro-active and positive process of change and sustainable development of rural communities in the context of national and global transformation (UNESCO-INRULED, 2001). It is also multidisciplinary in nature which overlaps with agricultural, social, behavioural, engineering and management sciences and with education in particular. The complex and multi-faced problems of rural transformation, requires an interdisciplinary approach, breaking down disciplinary boundaries between natural and social science and within social science (Knutson, 2005; Singh, 2009).

Given the diverse rural contexts, ERT activities have to be linked to the specific learning needs of the rural community for skills and capacities development. A multi-sectoral educational approach involving formal, non-formal and informal education is necessary. The macro-perspective on policies and priorities in education at international or national level needs to be adapted and translated into a local perspective informed by local knowledge and wisdom, strengthened by local participation, and enriched by an understanding of and commitment to rural transformation at different levels (UNESCO-INRULED, 2001). A program like ERT that deals with the poor and powerless cannot be seen as just one top-down initiatives undertaken by government. The powerful elite at the highest levels should set an example and work consistently at all levels to keep commitments alive. Accountability should be more than a fancy word but joined with clear incentives and disincentives (Bhola, 2010). Heavy investments are needed for inclusive, sustainable and diversified rural development to occur. There is also a need for improving the efficiency and effectiveness of governance systems, institutions and policy processes. It is generally felt that there remains a lack of genuine empowerment of the poor who are the intended beneficiaries of poverty alleviation programs. They are left dependent

on a bureaucratic delivery mechanism over which they have no control (Aiyar, 2010).

Meanwhile, as one of the key themes for sustainable development, education has to foster rural people's capability to be food secure, to manage natural resources in a sustainable way (Acker & Gasperini, 2009). The economic development goals and aspirations of the developing countries are premised on the consumption habits and patterns dependent on ravaging the non-renewable resources of the planet. This is simply unsustainable, because it leads to the collapse of the system of natural and biological balance of the planet. The world has to move towards a new way of economic growth and development that recognizes the fine natural balance. ERT, even if it is not fully recognized yet, is at the epicentre of this tectonic shift (Manzoor, 2010).

Research conducted by McClymont (1975), Khan (2006) and a series of studying on higher education for rural development and poverty alleviation by IIEP have focused on the influence of formal system for rural people. Research conducted by Reinhold (1993) and Amedzro (2005) etc. mainly concerned with single innovation or program. In general, there is still a lack of research on deeper and updated exploration of the concept and situation of rural transformation and the role of education in the changing process, and most importantly, little has been done for in-depth comparative investigations in the field of education for rural transformation.

### **III. An In-Depth Comparative Study of ERT in China and India**

#### **Overview of the Research Project**

With an attempt to address the above mentioned challenges, an ERT Expert Group has been established in 2008 and is led by Professor Vinayagum Chinapah, Institute of International Education (IIE), Stockholm University in joint collaboration with the team leaders of China and India, the two participating pilot countries; namely, Professor Zhou Nanzhao of INRULED and CNIER (China), and Dr. Pushpanadham Karanam of the Maharaja Sayajirao University of Baroda (India). With the support from the Swedish Research Council, a three-year comparative research study on '*Education for Rural Transformation – Cases of China and India*' has been carried out by this expert team since January 2010. Its overall aim is to



comparatively assess the current situations, problems, and trends of ERT and to raise awareness of the necessity of educational reform in these two largely populated countries. More specific objectives also seek to understand the roots and the causes of failure of existing educational structures, contents, and methods in rural areas as well as to identify good practices of educational empowerment and practical-needs-based ERT.

The design for this comparative research study is based on both quantitative analyses on survey data to be collected through questionnaires that are to be filled by students at grade 9, their teachers, school leaders, parents of students, and head of village as well as in-depth qualitative case studies (field visits, interviews and participant observations) in some selected rural areas. The study will be conducted in selected 20 sample villages and their schools in China and India respectively. The selection of villages and the selection of schools within selected villages will be done according to differential levels of development in both countries from developed regions to remote and less developed regions. In every sample school, some 30 students will be randomly selected as well as their school heads, teachers and parents for both quantitative and qualitative data collection processes.

At the end of the 3 years comparative research study, new empirical evidence will be found on the different impacts that education can have on the process of rural transformation. The relevance of educational system and sub-system in benefiting rural people will be thoroughly examined at the grass-rooted levels. For instance, how education is contributing towards training for rural youth through the school curriculum, civic education, revival of local craftwork and cultures and through non-formal and informal organizations.

The comparative study of China and India on education for rural transformation is of great importance for the world. The experiences and lessons learned will be of high-value added to other countries and their majority poor and rural population. The research outcomes may further provide insights for other similar large-populous (E-9) countries; namely, Bangladesh, Brazil, Egypt, Indonesia, Mexico, Nigeria, and Pakistan.

### **Why China and India?**

Both China and India, the two most populous (E-9) countries, have been chosen as our pioneer countries for this comparative research

project with a view to providing new insight on education for rural transformation. Both countries have designed their own strategies to achieve the Millennium Development Goals (MDGs) by implementing social inclusive policies and programs. All goals of the MDGs can be linked to some extent to the process of rural transformation if taken from a holistic perspective for human development. However, the scenario in China and India is still challenging.

In *China*, as of 2009 more than a half (56 percent) of the total population lives in rural areas (<http://data.worldbank.org/country/china>, Accessed 19 April 2011). Thus, rural development has always been the first priority of the country. China has made considerable progress in rural transformation in the duration of 11<sup>th</sup> Five-Year Plan (2006-2010). Although access to basic education is no longer a problem since the release of compulsory education law in 2005, there are still a lot of problems concerning equity, equality and quality in rural areas. The curricula in rural school lack of relevance to local conditions which lead to insufficient interests of students. Unqualified teachers and poor quality of infrastructures still exist in many remote and ethnic residences. There are also problems on training and employment for the increasing rural migrants because of rapid urbanization. Furthermore, empowering the community and forming a lifelong learning system in coping with changes brought by transformation process are needed to be emphasized. These are all highlighted in the newly issued policy document – ‘Outline of China’s National Plan for Medium and Long-Term Education Reform and Development (2010-2020)’. This document shows the commitment of the Chinese government in promoting equity, equality and quality of rural education and also implies that there will be a lot of changes in rural education, either the system or educational practice.

In the *Indian* contexts, as of 2009 there are up to 70 percent of total population live in rural areas (<http://data.worldbank.org/country/india>, Accessed 19 April 2011). Education plays a key role in rural transformation. The government of India through various policies and programs has already initiated the process of rural transformation through education. The Eleventh Five Year Plan (2007-2012) places the highest priority on education as a central instrument for achieving rapid and inclusive growth. It presents a comprehensive strategy for strengthening the education sector covering all segments of the education pyramid. The right to

Education Act passed by the Indian Government in April 2010 protects the rights of the socially disadvantaged groups as is enshrined in the Constitution and it directs the State that the Children belonging to weaker section are not discriminated against and prevented from pursuing and completing elementary education on any grounds. Sarva Shiksha Abhyan has been addressing the primary education. Regrettably, the national data on education in rural India are still far from the millennium development goals of education for all (Balakrishnan, 2010).

### **Primary Results of This On-Going Research**

Throughout the first year of research plan in 2010, the research focuses on: (i) organizing and coordinating partners from China and India; (ii) online workshops for planning with international research counterparts; (iii) field visit and pilot testing of all instrument in both countries; and (iv) creating manuals for national counterparts. Additionally, the ERT Expert Group invited internationally renowned educators, researchers, high-level policy-makers and practitioners from different parts of the world to join them in promoting further research, training, and capacity development in this field. The ERT expert group also organized an international symposium for such purpose.

The International symposium on Education for Rural Transformation (ERT) hosted by the Institute of International Education, Stockholm University, was held on 8-10 November, 2010 at Scandic Sergel Plaza Hotel in Stockholm. It was organized in cooperation with the UNESCO International Research and Training Centre for Rural Education (INRULED), Beijing Normal University, China; and the Maharaja Sayajirao University (MSU), Vadodara, India. More than 30 experts and researchers from Australia, Bangladesh, China, India, Italy, Nepal, Romania, Tanzania, and USA participated in the three day symposium.

The symposium marked a collaborative initiative to critically examine the concept, policy and practice in Education for Rural Transformation (ERT). The aim of this initiative was to undertake research, capacity building, sharing good practices, identifying policy choices, and determining workable programmes and priorities in varying contexts. The focus initially was on China and India but will gradually include other developing regions of the world, benefiting from the varied and rich experience and actions in the two countries. The papers presented at the symposium were about a wide spectrum

of issues, problems, practices, strategies and policy concerns related to educational programmes and provisions and how these affected lives and circumstances of rural people.

The research papers of the ERT 2010 Symposium from China dealt with the several interesting issues including: (i) potential of E-learning and ICT illustrated by specific initiatives for enriching learning experience of students and enhancing learning resources in the rural districts of Pinggu under Beijing Municipality and in Ningbo district in Zhejiang; (ii) the critical importance of teachers and support to teachers in 30 pilot countries in 10 provinces in the west of China; (iii) a research project of interschool collaboration between more advanced schools and weaker ones in Chinese rural areas; (iv) balanced and integrated development of educational services by local education authorities as in Lucheng district in Wenzhou City and in Chengdu, Sichuan Province; (v) turning institutions of higher education into the source of brain-grain for rural areas rather than brain-drain by redesigning academic programmes and incentives for graduates; and (v) exploring appropriate and relevant vocational and skill development as attempted through streaming of academic and vocational programmes in rural junior high schools of the country.

Several paramount concerns were also addressed by the research papers from India. They were on: (i) how education development initiatives including affirmative strategies in the national EFA efforts and the broader economic and poverty reduction strategies including infrastructure development, employment generation, basic health care and extension services attempt to support each other; (ii) the necessary to build the foundation for further learning for rural children; (iii) the national initiatives for bringing ICT resources to schools in India; as well as on the role of civil society and its participation in defining and guiding educational service improvement in Vizianagaram District in Andhra Pradesh.

In general, a vista of challenges and potentials has been unveiled in the symposium. The urgency for systematic research, academic studies and training, and policy dialogue and advocacy at the international, regional and national levels has been underscored. The ideas that are already afloat for collaborative initiatives now need to be pursued with determination and seriousness and the agenda for action set, mobilizing resources and capacities for this purpose. The key actions proposed are:

- The planned symposia in China in 2011 and India in 2012 should be used to deepen the conceptual clarification of ERT; identify and analyse experiences in policies, programmes and projects at national and local levels and with a comparative perspective; and contribute to informed policy dialogue and appropriate capacity building.
- Participation in the ERT initiative should be broadened to other regions and countries including holding symposia in other regions, especially in Africa.
- A collaborative research programme should be designed that will focus, inter alia, on: examining further the conceptual and operational issues regarding the definition of ‘rural’, ‘rural development’, ‘rural transformation’, and enhancement of capabilities of people and the role of educational systems;
- Reviewing the status and trends in education, training and capability enhancement opportunities for rural people and how key challenges of access, equity, quality and relevance in education and training are addressed, in the context of national development with equity and justice, the global economy, the knowledge society and the urban-rural dynamics;
- Considering policy options at national and international levels for ERT and how dialog can be promoted for this purpose;
- Indicating the focus of work and programmatic implications for the collaborating academic and research institutions including INRULED, IIE of Stockholm University, MSU in Baroda and others joining in the partnership, in the light of the above analyses.
- As a part of the research programme, a number of well-chosen case studies of experiences, particularly, but not exclusively, in India and China, that throw light on critical issues and lessons for ERT, should be undertaken, following a common analytical framework.
- An interdisciplinary consultative group should be set up, which can offer general guidance for the research agenda, representing education as well as broader development concerns, such as macro-economic policies, environment, regional planning, ICT and agriculture, with a mixture of people from government, academia and concerned international organizations (especially, UNESCO and FAO).

- An international post-graduate academic programme on Education and Rural Transformation (ERT) should be designed and introduced, in which IIE; Stockholm University may take the lead and implement it in collaboration with other partner institutions.
- Consideration should be given to publishing a journal on ERT to disseminate the research outputs and to create a forum for academic discourse; possibility of a special issue on ERT of one or more of the international educational journals such as *Prospects* or *IRE* may be considered as an immediate activity; similar special issues may be considered for national journals in China and India.

#### **IV. Dujiangyan International Forum 2011**

##### **Objectives and Expected Outcomes**

The Dujiangyan International Forum aims to develop a broader consensus on the role of education in promoting rural transformation and also for sharing and exchanging innovative experience and best practices in skills development for rural transformation, and establishing the network of skills development for rural people in Asia-Pacific region. It is expected that this International Forum will contribute to the valuable re-examination of educational practices in rural area and role of education for rural people in new perspectives in order to make education becomes the effective inter-medium for sustainable rural transformation.

##### **References**

- Acker, D & Gasperini, L (2009). *Education for Rural People: The Role of Education, Training and Capacity Development in Poverty Reduction and Food Security*. Rome: FAO.
- Aiyar, M. (2010). *Local Governance and Panchayati Raj*. Paper presented in International Conference on 'Dynamics of Rural Transformation in Emerging Economies', 14-16 April, 2010, New Delhi, India.
- Amedzro, A.D.K. (2005). *Globalisation: Non-formal Education & Rural Development*. Ghana: Ghana University Press.

- Balakrishnan, M. (2010). *Education for Rural Transformation: Policies and Programs for Rural India*. Draft Report of the International ERT Symposium, 8-10 November, 2010, Stockholm University, Stockholm.
- Bhola, H.S. (2010) *Systems Theory Perspective on Education for Rural Transformation: In the Dialectic Between Global Contexts and Local Condition*. – Draft Report of the International ERT Symposium, 8-10 November, 2010, Stockholm University, Stockholm.
- IFAD (2010). *Rural Poverty Report 2011: New Realities, New Challenges: New Opportunities for Tomorrow's Generation*. Rome: IFAD.
- Khan, S. R. (2006). *Basic Education in Rural Pakistan: A Comparative Institutional Analysis of Government, Private and NGO Schools*. Oxford: Oxford University Press.
- Knutsson, P. (2005). *Interdisciplinary knowledge Integration and the Sustainable Livelihoods Approach. Case studies on Rural Livelihoods in Kenya and China*. Göteborg: Göteborgs Universitet.
- Manzoor, A. (2010). *Draft Report of the International ERT Symposium*, 8-10 November 2010, Stockholm University, Stockholm.
- McClymont, G. L. (1975). *Formal Education and Rural Development*. Rome.
- Reinhold, A. J. (1993). *Working with rural communities in Nepal: Some Principles of Non-Formal Education Intervention*. Paris: UNESCO.
- Singh K. (2009). *Rural development: Principles, Policies and Management*. New Delhi: Sage Publications India PVT Ltd.
- UNESCO - INRULED (International Research and Training Centre for Rural Education). (2001). *Education for Rural Transformation: Towards a Policy Framework*. Zhengzhou: UNESCO.





## **CHAPTER ELEVEN**

### **SKILL DEVELOPMENT AND ECONOMIC SUSTAINABILITY AMONG RURAL PEOPLE**

#### **POLICIES, PROGRAMS, IMPACT AND FUTURE CHALLENGES IN INDIA**

*K.Pushpanadham and S.C.Panigrahi, The M.S.University of Baroda,  
India*

#### **I. Introduction**

There is considerable evidence for the marginalization of rural populations and the incidence of poverty within rural areas. Rural people in general are the most disadvantaged, especially in developing countries in terms of access to services, including education and training, and are the worst served by infrastructure of various kinds. Rural people are most likely in many settings to be amongst those who are not being reached in the drive towards the Millennium Development Goals (MDGs). In spite of the pro-poor orientation of much international and national development policy for more than a decade, the situation has remained more or less same. Specific investments in areas such as rural development and agricultural education and training were introduced with a view to empower people with the necessary skills for livelihood. All of these challenges have led a range of agencies to focus specific interventions towards the needs of the rural poor. In a number of these interventions, skills development has been given top priority. Investing in development, the need to build capacity has become a major element of current thinking in skill development among rural people.

The government of India has initiated in this direction a programme titled “Swarnjayanti Gram Swarozgar Yojana” for the rural poor to provide them sustainable livelihood and a special project for developing job-oriented skills among rural youth from Below the Poverty Line (BPL) families. The project was recently launched by the Rural Development Ministry on the recommendation of an Inter-

Ministerial Group constituted to address the issue of capacity building and training. The project is designed to equip unemployed rural youths of BPL households with marketable skills, which would enable them to either secure placement in the industry or pursue sustainable self-employment opportunities through micro enterprise. The project seeks to ensure that 75 per cent of youth, who undergo training under the programme, get suitable placements in the field of their expertise. Skill development programs are basically to ensure a time-bound training and capacity building programme for bringing a specific number of BPL families above the poverty line through job placement ensuring regular wage employment, The programme aims to impart skills which help the trainees get a regular employment and ensure that their initial wages are not less than the prescribed minimum wages.

With this background, in this paper, the authors have focused on the rationale for skill development for rural population, the innovative programs initiated by the government of India for skills development for rural population, the importance of lifelong learning, and their impact on the economic sustainability. The paper also highlights the emerging challenges in this regard in the Indian context.

## **II. Rationale for Skill Development**

Every society can be described as comprising of four dimensions: the economic, social, environmental and institutional. Each of them is a complex, dynamic, self-organizing and evolving entity in its own right, thus making the system more complex to understand and more so to advance the system. For the system to advance and make it sustainable, each of the four subsystems has to maintain its capacity to survive and evolve, while the inter-linkages of the subsystems must enable a permanent co-evolution. In order to happen this, it is necessary to use proper analytical tools to understand the level of complexity and find appropriate prognosis. India is basically an agrarian society. Nearly 85 percent of people survive on agriculture. Because of lack of agricultural development and other infrastructural development most of these people live in rural areas. The level of development of rural people is highly uneven. According to a recent national survey, it has been observed that nearly 40 percent of states have BPL households above the national figures (see Figure 1).

**Table 11:1. Percentage of Rural Population below Poverty Line- Current Levels and After Enhancement**

| State          | Present Figure | After the Increase | State          | Present Figure | After the Increase |
|----------------|----------------|--------------------|----------------|----------------|--------------------|
| Andhra Pradesh | 10.83          | 19.13              | Madhya Pradesh | 37.67          | 66.35              |
| Assam          | 21.79          | 38.50              | Chattisgarh    | 41.41          | 73.16              |
| Bihar          | 42.53          | 75.14              | Maharashtra    | 30.08          | 53.14              |
| Jharkhand      | 46.46          | 82.08              | Orissa         | 47.81          | 84.47              |
| Gujarat        | 19.46          | 34.38              | Punjab         | 10.04          | 17.74              |
| Haryana        | 13.63          | 24.08              | Rajasthan      | 18.76          | 33.14              |
| HP             | 10.87          | 19.20              | Tamil Nadu     | 22.62          | 39.96              |
| J & K          | 4.51           | 7.97               | UP             | 32.88          | 58.09              |
| Karnataka      | 20.05          | 35.42              | Uttarakhand    | 39.87          | 70.44              |
| Kerala         | 13.37          | 23.62              | West Bengal    | 28.87          | 51.01              |
| <b>India</b>   |                |                    |                | <b>28.3</b>    | <b>50.0</b>        |

Source: Report of Expert Group for BPL Census-2009, MHRD, Govt. of India.

While such figures vary from time to time, it is a fact that poverty is a major problem for rural poor in India and prolonged existence of the widening gap between rural and urban poor in general and rural poor in particular has posed serious challenges for development planners. Thus the development debate in the last few decades has thrown up several new formulations regarding alternative designs for living, and brought into sharp focus a number of new concerns. The accent now is on human-centred development, not as growth rooted indicators of GDP and national income. This concept of development emphasis the quality of life not the pursuit of wealth; it takes in to account the deeply held cultural values, and seeks to promote indigenous creativity. The new concerns, among others, are focused on environment energy and food security, all three being interconnected and interdependent.

Besides recognizing the nature of development it seems important to underline the current transformation of development thinking and its implications for education in rural areas. To a large extent, for about two decades, development policies at the international level have been shaped by two contradictory approaches

to development. On the one side, the specialized agencies of the UN put emphasis on social justice and human rights. On the other hand, the Washington consensus promoted a development model based on liberalization, deregulation, and privatization and decreasing role of the state generally to increased inequalities. Although the associated prescriptions are much more complex, a significant result of this policy mix has been a reduced role for the state in development (Kydd and Dorward, 2001). It is perhaps this encouraging result that has paved the way for Rural Transformation rather than Rural Development.

Poverty eradication and ameliorating the conditions of rural people have been the major concern of many national and international agencies. Although these activities are not of recent origin but the initial nomenclature was different. Initially, in post-independent India – it began as rural development with an emphasis on social and economic welfare. Over the years many programmes of rural development were initiated but the success rate was very modest. More and more rural people became dependent upon governmental programmes and thus the burden started increasing. Between the 70's and 80's many programmes of rural developments were initiated but the failure of the goods reaching the poverty stricken people still remained. The gap between practice and pronouncement widened because of the faulty implementation strategies. Notwithstanding the official ideologies and defence to uphold the success of the programmes, it was implicitly realized by the government officials that a rethinking was required towards rural development; and thus the idea of rural transformation surfaced. An argument may be forwarded to support this idea i.e., rather than making people dependent on the governmental policies, it would be better to make them self-reliant and hence the concept of rural transformation. This idea has an implicit assumption i.e., it is possible to create a situation through some means (in this case education), which will give rise to some generic skills in the individuals that will enable them to lead a full and productive life as an individual, as a member in the family and society. Thus this assumption has necessitated the idea of education for rural transformation.

Realizing the fact that poverty eradication through rural transformation is the single most prioritized agenda before the nation, the accent is placed now on skill development and economic sustainability. Skill development is a process where the human potential is given a new shape and sharpen it to the extent that the skill

stays functional and productive, thus making the individual sustainable. Sustainability is a concept used to identify various strategies that make it possible to utilize available resources to best advantage. The idea is to promote usage of those resources that is both efficient and responsible, and likely to provide long term benefits. Accordingly, in India, the national policy on skill development by the Ministry of Labour has envisioned to create 500 million skilled workers by 2022. The policy further states to enhance the capacity of creating 3.1 million skilled persons per year to 15 million annually, to achieve the target. The Economic Survey of 2007-08 indicated that 64.8% of India's population would be within the working age of 15-64 in 2026, an increase from 62.9% in 2006. This means the emergence of a young India with 800 million in the productive age group by 2015 compared to 600 million in China. In this context a study conducted by the Confederation of Indian Industry and the Boston Consulting Group (CII & BCG) has revealed that India has a large population base of 1.14 billion with demographic shift in favour of working age group (15-59 years), while the overall population is projected to grow at 1.4% over the next five years the working age is expected to grow at 2.15%.

**Table 11:2. Requirement of Skilled Workers at Different Levels by 2015**

| S. No | Sector                                       | Demand (in Mn) |
|-------|--|----------------|
| 1     | Auto   | 2-2.5          |
| 2     | Construction                                 | 15             |
| 3     | Retail                                       | 4-5            |
| 4     | Healthcare                                   | 4- 4.5         |
| 5     | Banking & Financial services                 | 4.5- 5         |
| 6     | Creative Industry                            | 0.5- 0.8       |
| 7     | Logistics ( Drivers, Warehouse Managers etc. | 51             |

Source: Government of India. *National Policy on Skills Development 2008*.

CII has further projected the Incremental Human Resource Requirement till 2022 in various sectors of economy.

**Table 11:3. Incremental Human Resource Requirement till: 2022**

| Sectors                   | Incremental Human Resources |
|---------------------------|-----------------------------|
| Mines and Minerals        | 1,754,881                   |
| Construction              | 55,199,568                  |
| Engineering               | 1,813,790                   |
| Banking and Insurance     | 3,947,139                   |
| Drugs and Pharmacy        | 1,383,721                   |
| Biotech                   | 1,209,489                   |
| Healthcare                | 20,684,530                  |
| Textiles                  | 86,545,390                  |
| IT and ITeS               | 14,806,299                  |
| Tourism                   | 12,478,386                  |
| Agro and Food Processing  | 169,782                     |
| Paper                     | 57,976                      |
| Chemicals and Fertilizers | 1,391,948                   |
| Total                     | 201,442,899                 |

Source: USAID. *Jobs for the 21st Century: India Assessment*. November 2005

If the present trend continues, 109 million persons will attain working age during the period of 2007-2012. The net addition to workforce is, therefore, expected to grow to 89 million of which around 13 million are likely to be graduates/post graduates and about 57 million are likely to be school drop outs or illiterates. A significant share of incremental demand is likely to be for skilled labour – graduates and vocationally trained people are expected to account for 23% of incremental demand by 2012. The study further estimates that India is likely to increase a deficit of 5.25 million employable graduates and vocationally trained workforce by 2012. Another study by Boston Consulting Group for PHD Chamber of Commerce & Industry has estimated that by 2020 the world will have shortage of 47 million working people but India will have a surplus of 56 million people. In order to reap the benefits of demographic dividend India will have to, therefore, equip this manpower to meet the requirement of skill talent across geographies. The Consortium of Indian Industries (CII) conducted a study and projected the following requirement of skilled workers at different levels by 2015. From the above data, it is clear that India, as emerging economic giant, requires large number of

skilled personnel for handling the tasks of various sectors of economy. Uneducated rural population can be trained in the required skills to bring them into the main stream and to enable them to be economically independent.

Education has been recognized as a potential agent for social change and development and therefore several interventions in this direction at the national and international levels have been planned and executed. For the past several decades, the dominant "education and development" paradigm has assumed a more or less direct and linear link between identifying overall rural development goals, selecting appropriate educational and training modalities, extending these to the rural sector through some planned mechanism through formal and non-formal institutions. Educational institutions in the central places are seen as essential and primary elements to begin to bring knowledge and skill development to the periphery. This bringing of knowledge to less central regions has typically been attempted through some form of "extension". During the 60's and 70's in India, several centres of Extension Education were established in the universities and other institutions of higher learning in order to address the educational needs of rural people (Pushpanadham and Panigrahi, 2010).

### **III. Innovative Programs for skill development of Rural People:**

Keeping in view the development of the rural people who are the backbone of the nation, Government of India has planned and executed several programs as follows:

#### **Bharat Nirman (2005)**

It was a time bound business plan for rural infrastructure within four years action in the areas like (I) Rural Housing (II) Rural Roads (III) Rural Water Supply (IV) vision 2020 argues (I) Economic Connectivity (II) Physical Connectivity (III) Knowledge Connectivity (IV) Societal Connectivity and (v) Electronic Connectivity for the cluster of villages.

#### **Rural Development Plans by Panchayats**

##### *i) Economic Aspects*

(a) Agricultural Productivity (b) Land Improvement (c) Minor Irrigation (d) Animal Husbandry (e) Fisheries (f) Minor Forest Product

ii) *Social Aspects*

(a) Rural Housing, Drinking Water (b) Rural Electrification (c) Education (d) Technical and Vocational Education (e) Adult and Non-formal Education (f) Family Welfare (g) Women and Child Development

iii) *Spatial Aspects*

(a) Transport and Communication (b) Small Scale Industries (c) Village and Cotton Industries etc.

Rural Building Centres and Industrial Extension Services (1988) established in Rural Areas with the goals and objectives of Technology Transfer from Lab to Land by Cost Effective and Environment Friendly (CEEFF) Construction work force and Building Activities.

Moreover, various schemes and programs like Minimum Needs Program (MNP), Integrated Rural Development program (IRDP), National Rural Program (NREF), Rural Landless Employment Generation Program (RLEGP), Jawahar Rojgar Yojana (JRY), Drought Prone Area Development (DPAP) etc., were introduced to alleviate rural poverty, ignorance, diseases and inequality of opportunities and providing better and higher quality of life for the rural population.

In order to actualize these programs, the important requirement is to have a holistic framework of education that could cater to the needs of rural people in terms of skill development is lifelong learning.

### **Lifelong Learning**

Lifelong learning is an essential condition not only for individual development but also for a sustainable society. UNESCO has always stressed the role of lifelong learning in addressing developmental issues globally and encourages all countries to work together with optimism, creativity and commitment to make lifelong learning a reality for people everywhere. Lifelong learning covers a full range of learning opportunities, from early childhood through school to further and higher education. However, it extends beyond formal education to non-formal and informal learning for out-of-school youth and adults.

In providing appropriate education and relevant skills to rural youth in India, it is necessary to provide basic education that



motivates them to study, training to give them skills for the labour market and opportunities for some to pursue higher education. India is striving hard to provide compatible education and training for rural people to enable them to be economically self-sustainable. One of the major inequalities affecting the rural poor is their unequal access to quality education, which is very important for social and economic development. Any attempt to readdress the challenges of increasing inequity, poverty and widening human development gaps is possible through access to relevant, equitable and effective education of our rural people. In order to achieve the Millennium Development Goals, specifically the first two goals, reducing hunger and poverty by half and ensuring universal primary education by 2015, there is a need to change the traditional working modalities and address the needs of the rural India. This can be achieved through new multi-sectarian and interdisciplinary alliances and partnerships in education (Pushpanadham and Panigrahi, 2010). The rural world is changing rapidly, and young people need to be prepared to rise to the new opportunities. Agriculture is also changing, with new technologies, products, markets, and business environments. To seize these opportunities, the education and training systems India have also geared to face these challenges.

#### **IV. Improving the Quality of Basic Education**

Improving basic education in rural areas in India is an act of energizing the process of rural development. Constitutional provision of 'Right to Education for all' has enabled rural people to pursue education and training as it is free and compulsory. National initiatives for the universalization of elementary education have significantly improved the accessibility of schooling facilities in rural areas and also quality education to great extent. This resulted in generating aspirations among rural people towards education and training. Now the Rastriya Madhyamik Shiksha Abhiyan (RMSA), focusing on universalization of secondary education has provided opportunities for students to acquire technical and vocational skills for livelihood development.

##### **Skills for Employment**

Finding and maintaining employment requires broad-based occupational skills or specific job-related skills, acquired in training

institutions or on the job. Institutes of Industrial Training (ITIs) and Polytechnic Institutions are established as centres for skill development in each district across the country. Students, immediately after their formal secondary schooling, can opt for such industrial training and get into job market. Rural Vocational schools are also aiming to prepare students for entry into the labour market.

### **Entrepreneurship Development**

Entrepreneurship quality is important for rural people to operate in open and demanding markets. As rural economy is basically agro based, advanced agronomic techniques, better market information, greater understanding of their costs and revenues, the required investments, and the value chain they operate in are essential for rural development. To help students get a foothold in the new agriculture, agricultural Universities and Institute for Rural Management Anand (IRMA) offer practical Entrepreneurial programs. The National Institute of Rural Development (NIRD) also focuses on training in the field of policies and programmes that benefit the rural poor, energize the democratic decentralisation process, improve the operational efficiency of rural development personnel, promote transfer of technology through its social laboratories and Technology Park and create inclusive environmental awareness. As a 'think-tank' for the Ministry, NIRD assists the Ministry in policy formulation and choice of options in rural development to usher in changes. The Mission of the Institute is twofold. First, to examine and analyse the factors contributing to the improvement of economic and social well-being of people in rural areas on a sustainable basis with focus on the rural poor and other disadvantaged groups through research, action research and consultancy efforts. Second, the institute aims to facilitate the rural development efforts with particular emphasis and focus on the rural poor by improving the knowledge, skill and attitudes of rural development officials and non-officials through organizing trainings, workshops and seminars.

## **V. Issues and Challenges**

Fast economically growing India requires multi-skilled personnel to meet the developmental challenges. Though the Government of India is strategically building the capacity of the people especially rural

people, there are pressing issues and challenges in this regard, which needs to be addressed.

### **Emerging Knowledge Economy and Rural Skill Development**

Due to the knowledge economy and global trade markets, several skills have been identified as essential requirements for industry and other sectors. Occupational patterns are changing; new jobs and job titles, job enlargement, job enrichment, and new flexible work arrangements are emerging. Employment demands are shifting towards higher skill categories. Therefore, there is a need to constantly create opportunities for skill development by interacting with the industry and collaborate with them on public private partnership. Such models can only help in a country like India not only to meet the current requirements but also future challenges.

### **Skill Development for the Unorganized Sector**

It is noted through research in India that a large number of workforce is in the unorganized sector and they significantly contribute (approximately 60%) to the Gross Domestic Product (GDP). Therefore, it is imperative to create separate institutional mechanism which will plan and monitor skill development in this sector. The major challenge is to properly identify the unorganized sectors and building capacity. Such efforts will lead to the rationalization of wages and minimize several work related exploitations.

### **Regional Imbalances and Equal Opportunities**

The demographic and geographic profile of the country in terms of habitations of different social subgroups and the terrain they live are diverse. Therefore, providing equal opportunities for skill development becomes a challenging task. Furthermore, removing social and geographical barriers to access and addressing their specific needs are so complex that it mounts a far more pressing problem on the part of the government.

### **Women Empowerment**

Women empowerment is a major issue considering the multitude of barriers in accessing skills and productive employment. The literacy rate of women, especially in rural areas, is very low and bringing them

to mainstream of education is itself a challenge. Gender stereotyping in vocational courses discourages women participation in non-traditional occupations and emerging technological fields.

### **Integrating Traditional Education with Vocational skills**

In the context of globalization, there is a need to rethink and restructure about the current system of education to effectively integrate with vocational skills. The dropout rates in school education indicate a challenge on the part of the system to address their capacity to become economically sustainable. Tapping into unskilled labour and building their capacity in later stages becomes difficult. It is also observed that the products of the secondary school system with almost no vocational skill depend heavily on government to earn for their livelihood. The only alternative therefore, is the effective integration of vocational skills in school education programs.

## **VI. Conclusion**

The concerted efforts of national governments and international agencies for rural transformation in reducing rural poverty have clearly indicated that the Millennium Development Goals (MDGs) are very much within the reach for many countries. The various strategies in operation internationally in general and India in particular to cater to environmental concerns and the food security and global economic crises is, pushing to unleash rural potential for sustainable growth, employment, wealth creation and resilience to crisis improved local processing, storage, transportation, and access to global markets, as well as better-enabled human resources. Special attention is paid to youth and women who are real “boosters” of rural development yet their contribution is largely undervalued. Comprehensive approaches that encourage the active participation of youth and women are indispensable to build their capacities, give them a voice and increase their contribution to productive agriculture, agro-business and related occupations. The challenges posed in this paper need to be addressed adequately in order to actualize the mission of skill development among rural people.

## References

- Chaudhuri, S., & Ravallion, M. (2006). *Partially Awakened Giants: Uneven Growth in China and India* World Bank, Development Research Group, Poverty Team.
- Cohen, A. (1985). *The Symbolic Construction of Community*. Tavistock, London.
- Desai, A. (2005). *Rural India in Transition* Popular Prakashan.
- Epstein, T. S., Suryanarayana, A., & Thimmegowda, T. (1998). *Village Voices: Forty Years of Rural Transformation in South India*. Sage Publications.
- Flysand, A. & Jakobsen, S.-E. (2007) *Journal of Rural Studies* 23 (2007) 206-221 207.
- Gulati, A., Fan, S., & Dalafi, S. (2005). The Dragon and the Elephant: Agricultural and Rural Reforms in China and India. *Markets, Trade, and Institutions Division Discussion Paper*, p. 87.
- Harper, S. (1989). The British rural &community': an overview of perspectives. *Journal of Rural Studies*, 5, pp.161-184.
- Hawkins, J. N. (1988). The Transformation of Education for Rural Development in China. *Comparative Education Review*, 32(3), pp.266-281.
- INRULED (International Research and Training Centre for Rural Education). (2001). *Education For Rural Transformation: Toward A Policy Framework*. UNESCO, Baoding, Zhengzhou, China.
- INRULED (International Research and Training Centre for Rural Education). (2007). *Comparative Study on Diversified Learning Needs and Lifelong Learning in Rural Settings in Asia-Pacific Region*. UNESCO, Baoding, Zhengzhou, China. <http://www.inruled.org/Templates/PDF/Comparative%20Report%20on%20Diversified%20Learning%20Needs.pdf>
- Liepins, R. (2000). New energies for an old idea: reworking approaches to 'community' in contemporary rural studies. *Journal of Rural Studies*, 16(1), pp.23-35.
- Manniche, P., & Kjær, J. (1978). *Rural development in Denmark and the changing countries of the world: a study of Danish rural conditions and the folk high school with special relevance to the developing countries* (2. rev. and abbr. ed.). Copenhagen.
- Marsden, T. (1995). Beyond agriculture: regulating the new rural spaces. *Journal of Rural Studies*, 11, pp.285-297.

- Ministry of Rural Development (2009), National Policy on Rural Skill Development, Government of India, New Delhi.
- Government of India, *11th Five Year Plan (2007-2012)*.
- Government of India. *National Employment Policy 2008*.
- Government of India. *National Policy on Skills Development 2008*.
- Inclusion. *Aligning Jobs with Skills*. January-March 2009 Retrieved from:  
[http://inclusion.skoch.in/index.php?option=com\\_content&view=article&id=61](http://inclusion.skoch.in/index.php?option=com_content&view=article&id=61)
- Ministry of Labour, Government of India. *Report of the Working Group on Skill Development and Training set up for preparation of 11th Five Year Plan*. 2007
- National Knowledge Commission of India. *Vocational Education Recommendations*. Open Letter to Prime Minister, December 1, 2006.
- Planning Commission (Labour, Employment & Manpower Division), Government of India. *Report of the Steering Committee on Labour & Employment constituted for the Eleventh Five Year Plan*. 2007.
- Nyberg, A., & Rozelle, S. (1999). *Accelerating China's Rural Transformation* World Bank Publications.
- Oliver, L. P. (1992). Study Circles: Individual Growth through Collaborative Learning. *New Directions for Adult and Continuing Education*, 53, pp.85-97.
- Pushpanadham and Panigrahi (2010) *Education for Rural Transformation: Realities and Challenges in India*, Compendium published by IIE, Stockholm, Sweden.
- Suparman, M. R. (1983). *The rural co-operational education - a folk high school idea for Indonesia*. Linköping: FBA, Univ. of Linköping.
- Taylor, J. E., Rozelle, S., & de Brauw, A. (2003). Migration and Incomes in Source Communities: A New Economics of Migration Perspective from China. *Economic Development and Cultural Change*, 52(1), pp.75-101.

## CHAPTER TWELVE

### EDUCATION FOR RURAL TRANSFORMATION

#### THROUGH PRINCIPALS' PROFESSIONAL DEVELOPMENT IN INDONESIA

*Greg Shaw, Senior Educational Specialist, Charles Darwin University,  
Australia*

##### **I. Introduction**

In almost all education systems school principals have pivotal and critical roles in the effective provision of education (Crow, et.al, 2002). Formal education is typically provided in communities through institutions that we call schools. Every school has some common characteristics. Typically, they consist of buildings and spaces that we call classrooms, where children are organised in groups to make up classes. Such classes vary in number from less than 22 in some cases more than 80, although typically in developing countries class sizes of 30 to 50 students exist. Normally, each class has a teacher, who may be the teacher of the class across the broad curriculum being taught that year, which is often the case in elementary or primary schools. Alternatively the teacher may be a specialist and move from class to class. In some cases, these class teachers report to a senior teacher, who provides supervision and mentoring, and may manage departmental administrative processes. However, it is the school principal who is in most cases, the person responsible for the activities of a school. Such activities involve non-academic as well as academic areas.

Generally, the principal is responsible for leadership of the school and in this is responsible for the creation and communication of a vision and strategies for learning and development of the school in order to create an environment that maximises student development. Central to a principal's role is the establishment of a conducive learning environment and in this the principal will have responsibility for facilitating good teaching and learning processes. In this the

principal may have in place processes to facilitate good teaching and learning through policies and practices, and through processes of supervision, support, mentoring and training. Often too, the principal will make known the academic standards that are required of teachers.

A school principal is also responsible for resource management at the school. This involves the effective access deployment of physical, financial and other resources for the school. Human resource management is also a key role of the principal. So therefore, many principals will have in place processes of supervision and staff development of all staff, including non-teaching and administrative staff. The principal is the key person at the school for policy implementation and school policy development. Policies will come to the school from the district education authorities, from state authorities and from national authorities and it is the principal's responsibility to ensure that external policies are accessed, interpreted and applied. Additionally, the principal will have responsibility for the development of school policy such as administrative arrangements, particular academic requirements, disciplinary processes, etc. Finally, very often the principal is the link person between the school and the community, and between the school and other agencies. This may also involve significant community engagement with parents and other stakeholders in terms of academic activity, but typically also in terms of gaining support from parents and the community for the activities at the school, in particular for fundraising. Clearly a school principal is a very demanding and important role (Grubb & Flessa, 2006).

## **II. Indonesia**

Indonesia is an archipelago state made up of over 17,000 islands. It is the 4th most populous country in the world with approximately 250,000,000 people and it is the most populous Muslim country. The estimated per capita GDP in 2010 is \$4300<sup>1</sup>. Poverty is significant and widespread, in both rural and urban areas. In 2007 37.17 million people were under the poverty line representing 16.6% of the entire population<sup>2</sup>. Indonesia is divided into 33 provinces, with each province having an elected governor and elected legislative body. Provinces are further divided up into 395 cities and regencies (districts) and these also have elected representatives. The cities and regencies

---

<sup>1</sup> [http://www.theodora.com/wfbcurent/indonesia/indonesia\\_economy.html](http://www.theodora.com/wfbcurent/indonesia/indonesia_economy.html)

<sup>2</sup> Tingkat Kemiskinan Sumatera Utara Tahun 2007; [http://sumut.bps.go.id/f\\_brs/Miskin-010807.pdf](http://sumut.bps.go.id/f_brs/Miskin-010807.pdf)



implement national and provincial policy, and are the important management and operational location of education. The development of education in Indonesia followed the development of the Nation. As a Dutch colony, initially education was limited to community-based activity driven by Buddhist, Muslim, Hindu, Christian and ethnic Chinese groups. It was not until the Japanese occupation of Indonesia in the Second World War that attempts at mass education were begun (Hull, 1996). Post-independence in 1949 the Government focused on developing universal primary education. In response to growing demand for education, and because of a lack of ability for government institutions to meet universal primary education that charitable foundations providing education began to proliferate.

Until recently, the appointment of school principals in Indonesia was by direct appointment by senior officials working in district education offices. Appointments were often on the basis of seniority, with little consideration being taken of appointees' qualifications and experience base as appropriate for a potential principal. In some cases, principals have been appointed who lack experience as a teacher; indeed, some appointed principals were never teachers nor had experience working in educational institutions. Clearly, while such people may have had administrative and management experience; they potentially lacked understanding and experience in the processes of teaching and learning, something that is recognised as an important requirement for providing educational management and leadership.

In 2010, the Indonesian Government introduced Regulation 28 and in 2007 Regulation 13. Regulation 28 provides guidance on the process of recruitment for principals including their selection and professional development. Regulation 13 provides a set of competency standards against which principals' work is defined. Both these regulations were pivotal documents in the development of the process of selection of appropriate appointees as principals, and the professional development programs put in place for the development of principal's competency.

The other significant change that is taking place in Indonesian education system is a decentralisation of responsibility of educational provision and supervision (Bjork, 2004). Since 2001, Indonesia has embarked on a radical programme of decentralisation of education and other public service delivery (Yeom, Acedo, & Utomo, 2002). This is despite the fact that under the Constitution, education is a national responsibility. In part, the process of decentraliation is a response to 30 years of economic centralism and authoritarian nepotistic

governments (Bangay, 2005). But, it is also an effort to bring about a better and more efficient education system and better learning outcomes for children. This is coupled with quite a significant paradigm shift in processes of education slowly being implemented in Indonesia. This paradigm shift includes moving from transmission and content dominated processes centred on the teacher to, constructivist and understanding processes centred on the learner. However, just as processes of decentralisation have been difficult to put in place, and have taken nearly a decade to implement, so has bringing about significant changes to educational practice in Indonesia where cultural impacts on education are well entrenched.

### **III. Principals' Professional Development**

In 2006 The Australian Government entered into a collaborative agreement with the Indonesian Government to support Indonesia in achieving the aim of providing nine years of quality, basic education to all Indonesian children. Both governments supported the program; however the Australian government provided substantial financial aid to this activity (\$A387 million). This funded program finished in July 2011, although, the Australian Government and Indonesian Government have just concluded negotiations for a second stage of activity beginning in late 2011 and running for approximately 5 years.

The initial Basic Education Program (BEP, 2006 - 2011) targeted immediate and pressing needs, particularly as a result of the destruction of infrastructure experienced by the 2004 tsunami. Approximately 2,000 new schools were constructed involving enrolment of approximately 130,000 children. The BEP also addressed quality of schools, of teachers and learning materials through better training and resourcing. In particular, it was recognized that in order to achieve better quality outcomes and better educational results, a focus on the development of school principals was necessary. This was timely because the introduction of Regulations 13 and 28 (2007) provided a policy framework around which a substantial focus on principals' appointment and professional development could be done. However, for various reasons including restructures within the Ministry of education, no substantial effort was made on this within the BEP until late 2010.

## IV. The Project

It was decided that Principals Professional Development Programmes would consist of the following components:

1. A process for the selection of potential principals
2. A Principals Preparation Program (PPP)
3. Principals Continuing Professional Development at 3 levels - Level I, Level II, and Level III

During late 2010 work was done on the development of course structures for the PPP, and principals' Continuing Professional Development (CPD), Levels I, II and III. This was in the form of a table outlining the base competency (drawn from regulation 13), and then draft learning outcome descriptors of the learning and activity expected at the various levels. This was a useful start to the process in respect to planning appropriate focus and content relating to each of the proposed programs. It was planned to have developed by early 2011 the selection process, procedures and materials, the Principals Preparation Program materials including a program and materials to train the trainers of this, and the Continuing Professional Development program Level I and Level II. All of these elements would be conducted under the BEP with funding and technical resources from AusAID and personal provided by the National Ministry of Education (MoNE).

However, MoNE undertook a significant restructure early in 2011, which split the responsibility for the oversight of Principals Professional Development across a number of divisions and institutions of the Ministry. Initially, the newly formed Institute for Principals Professional Development (LPPKS), located in Solo, Java, was to have a lead role in the development and support of selection process for principals and, their initial training (PPP), and the development and implementation of the various CPD programmes. The initial plan was for BEP advisors to work closely with LPPKS in the development of these programs. However, as a result of the restructure, it was decided that LPPKS would develop the PPP programme, and they choose to do this with limited support and input from the BEP technical team. In addition, a small number of LPPKS staff were involved in activities related to the development of Level I and Level II programs. The MoNE internal division for staff

development, Pusbangtendik, took on the role of overseeing the development of Principals Continuing Professional Development programs (Level I, II and III), and this was where the major focus of Technical Advisers of the BEP was applied.

The CPD Programme Development approach was to prepare a set of materials and approaches that could also act as a model for other programme development. In this development a collaborative approach was undertaken involving a group of approximately 25 key personnel drawn from a range of locations. As a result of the process this group, and others involved, had opportunity to build capacity over a number of workshops and other activities in developing a set of contemporary learning materials. Seven draft core curriculum Units of Learning were identified and developed beginning in February 2011. These materials cover the following areas:

1. School Planning (RKJM-RKAS)
2. Teacher & Staff Management
3. Facilities & Equipment Management
4. Student Management
5. Curriculum Management
6. Finance Management
7. Academic Supervision

These seven “core” units were selected on the basis of essential skills required by a principal. Other competency areas were identified as optional units, both in terms of principals’ skills development, and because of the intensity of the process of development, and the limited time available, so some selection was required.

An attempt at the development of optional units (for Level 1) was commenced in early April by the best writers working remotely and supported by project advisers. However, this was not successful as it was not possible to provide the level of support required on site with the writers and this experience further demonstrated a lack of expertise in writers and the need for substantial support in the process. In order to begin Level II units, at Pusbangtedik’s request, priority was shifted to beginning development of Level II units in May. Consequently, the entire suite of Level I units are yet to be completed

A trial program for the identification and selection of candidates to receive training and appointment as a school principal was conducted. The development of this program was by LPPKS in collaboration with a number of districts involved in the trial, and with

some support from technical advisers of the BEP project. The process involved the identification of potential applicants in schools including advertising of the program and inviting applications. The selection process occurred in two stages. In stage one; applicants were invited to write an academic paper indicating aspects of what they understand about a principal's role and what makes them suitable for appointment. The second stage then involved a round of interviews of people who completed a successful written academic assignment. However, the approach ran into difficulties right from the start in that many of the potential applicants did not know how to write an academic paper of the kind that would provide advice and information to potential selecting panels. Selection panels consequently had difficulty in selecting suitable candidates for interviews. Despite this, the process went ahead as a trial, although at this stage further development and revision of the process has not been undertaken.

Progress in the development of the PPP programme has been slow. Draft trial materials of the PPP programme have been developed and there have been some field evaluations of these. However, a final product has not been published and significant further development is required. The materials that have been developed to date lack rigour in pedagogical design, learning outcomes development and linking assessments, but more significantly have not been developed in concert with the rest of the programme and so therefore there is an inconsistency at times in content and approaches.

## **V. Research Methodology**

The activity described in this paper reflects a range of approaches taken to develop Principals Professional Development programmes in line with Government regulations 13 and 28, as a component of the Australian-Indonesian Basic Education Program. The empirical data gathered includes observational data of participants involved in the process of program development; written feedback by participants involved in materials development workshops; observations of materials trials by technical staff leading the development process; critical reflection by lead researcher (author); and critical reflections and comments from Technical Team members. The research uses a mixed methodology (Johnson, & Onwuegbuzie, 2004) drawing on both qualitative and quantitative approaches.

## **VI. Principals' CPD Programme Approach**

A number of contemporary adult education principles underpinned the principals' Continuing Professional Development programme approach. From the start, it was made clear by senior members of the National Ministry of Education that the CPD approach must be effective, and must lead to educational improvement. The advisers in the BEP decided to take a significantly different approach to professional development that has been taken in the past. Past Indonesian professional development activity has emphasised face-to-face teaching sessions which predominantly involve presentation of information (lectures). There has been a focus on content and theory, and assessment is generally by attendance and examination.

The major philosophical supporting position for the development of these programs is located within two education/training paradigms. The first of these is provided by the very strongly focused descriptions of principals competencies provided in Ministerial Regulation 13. These are clear competency statements, about work skills, and what principals need to be able to do. Thus, the first reference point for the programme development was Competency-Based Training (CBT).

Competency Based training is a training philosophy that engages the learner in activities that lead towards competency attainment and demonstration of competency achievement (Hodge, 2007). As such, CBT has a strong focus on workplace training and workplace skills. Theoretical content and knowledge acquisition is minimised in a CBT environment except where these things are explicitly required in order to demonstrate competency achievement. Training that is contextualised in terms of content, process and even location in the workplace has a significant advantage in terms of learning under a continuing professional development program (Shaw, 2000).

The second reference point was again provided by senior Indonesian Ministerial staff, who wanted a program that was flexible, that could be offered in a variety of modes, that was independent of the trainer and that was self-contained in terms of information resources materials etc. Thus, a fundamental design philosophy of the programmes is that they are Resource Based Training, and while a trainer or mentor support is beneficial, learning is not dependent upon them. Therefore in the development of these programs a strong focus

is on development of materials in which the learner needs to be actively engage (i.e. active learning).

An overarching initial parameter that was used as a guiding structure for these programs is that Regulation 28 explicitly indicates that new principals are to undertake a preparation program (PPP) of 100 hours minimum and made up of a sandwich structure comprising an initial face-to-face session of 5 days followed by a minimum of 3 months on the job training, followed by a further 2 to 3 days of face-to-face activity. This model became known as the ‘in-on-in’ model, referring to “in-service” sessions, which are typically a face-to-face program in Indonesian training activities, as contrasted with the “on the job” component.

## **VII. The Level I Programme Development**

In an attempt to speed up the process, and also keeping in mind the very tight timelines that were in place, it was decided that the development of level I Principals Continuing Professional Development materials would be done at the same time as the development of the PPP materials. This provided a four-month period in which to undertake this activity. However, given the scope of work required and the methodology employed this was an ambitious timeline.

In order to maximise capacity building in staff who may have on-going roles to play in materials development, a workshop approach was decided as the most effective. The use of a workshop approach for materials development is sensible in that it allowed for the involvement of a range of people, drawing on skills and expertise as required. However, the most significant benefit of this is the opportunity to provide professional development in materials writing to a range of people through an actual process of materials development. The trade-off in this process, of combining professional development with materials development, is that it requires more time for the materials development process, and the process of materials development is not all that efficient. In any case, and in hindsight, the amount of time available for the material development, and for capacity building was not sufficient to develop a comprehensive quality product. Additionally, the time was not adequate in terms of capacity building of those involved to be able to continue the process, nor for the development of other programs in the future. The

approach used was trying to achieve 2 things. First, there is the need to develop the programs and their associated materials. Second, using workshops for the process builds capacity in the various people involved. It was important in order to ensure some on-going continuity of the process (post the Basic Education Project) to increase the capacity of a number of key staff drawn from LPPKS and Pusbangtendik. Other key people involved came from district offices or were experienced school principals.

Initial materials production workshops were held between the 16 and 20 February 2011 (WS1) and the 23 and 26 of February 2011 (WS2). Subsequent to these workshops technical staff of the BEP continued with the process, drawing on people that had been involved in these workshops as required. The process worked towards development of a set of materials for trialling between 27 and 30 April 2011. Subsequent to this trialling and evaluation, a further review and rewriting workshop were held between 5 and 8 May (WS3) and an additional editing workshop between 11 and 15 of May 2011 (WS4). Finally, a review workshop was held between 27 and 28 May 2011 (WS5).

In addition to these workshops and activities in development of the programme materials, a master trainer workshop was held in order to orientate trainers to the materials, the philosophy and approach used. This workshop also provided some opportunity for re-editing some material, and also developing some supplementary material to be used by the trainers in the trial. Trainers were selected from the districts in which the materials trials were to operate. Trials operated in 6 districts and 7 trainers were needed for each trial location, so therefore 42 trainers were involved.

## **VIII. Results of the Materials Trial**

A field trial of the seven core modules for the Level I programme was conducted between 27 and 30 May 2011 in 6 locations across Indonesia. The trial consisted of 7 trainers in each location, each facilitating learning based on the draft materials for one of the 7 core modules. That is, there were 7 groups in each trial location with each group having a trainer. The number of participants in each group ranged from 8 to 12, and all the participants were either senior or experienced teachers or newly appointed principals. Approximately 420 participants took part in the trial. The trainer for each group had



copies of the module materials for each of the participants in their group. In facilitating learning, they followed the instructions and directions in the materials, and supported the participants learning as required. Some trainers had developed some additional resources and in their interpretation and presentation had made some variations on the core materials. This was to be expected, and indeed encouraged, as the materials were not viewed as being fixed but adaptable by trainers and participants to suit their needs. As the materials contained interactive and collaborative activities, much time was spent with participants going through these, recording results of discussion etc., collecting information as required, and answering questions, all based on the learning materials. At the completion of the three-day trial, participants completed a questionnaire to provide feedback on their experience, and the materials. In addition, all of the trainers were gathered together to provide feedback via a focus group interview process. A project consultant was an observer in each of the 6 trial locations, and also facilitated the trainers' focus group interviews session. Observations in the form of audio recordings, and photographs of activities were collected.

Participants completed a questionnaire of 24 questions in relation to the learning experience that they undertook and the materials (see Appendix 1). The results of these questionnaires are presented in Appendix 2. The information provided by this qualitative data provides clear confirmation to program developers that the approach presented in the trial materials is generally successful. Of the 24 areas dealt with in the questions, only the results of two questions indicated areas of concern. Both these questions dealt with the issue of time.

Question 17 asked if "the allocated time for the activities was adequate". Responses for all of the modules in all of the trial areas were consistent in their slightly negative response, compared to other questions, with a mean response of 2.75 out of a five-point Likert Scale. Question 7 asked if they were able to complete all the activities during the trial. Again, this returned a slightly lower response with a mean response of 3.42. The results do not indicate a significant problem in the materials and their underlying philosophies. However, when coupled with comments made by participants, and comments made by the trainers, there was some indication that adjustment of some of the activities was necessary in order to better reflect the time made available for them.

The qualitative data gathered from the trial participants, the trial trainers, and from observations made by the Technical Advisers provide deeper insight into the success of these materials and the issues that are highlighted.

Language was one area that received some attention. Quite a number of respondents indicated that they prefer not to see “foreign terms” used but rather use Indonesian equipment words. At times, this is difficult to achieve because the technical nature of some of the topics. Quite a few respondents however did indicate that they found the conversational style used in the text to be useful and encouraging. The materials presented a “friendly face”.

As was the case with the quantitative data the respondents also indicated that time was an issue. Overwhelmingly, the respondents thought that the materials were appropriate and very useful for a beginning principal. However, they felt that they needed more time in order to do some of the exercises and to adequately cover the material.

Encouragingly, many participants indicated that they felt the materials in terms of content, and in terms of the learning processes embedded in them, were extremely useful. In particular, there were common comments that the pedagogic processes embedded in the materials is a significant improvement on the kinds of approaches so often used in other professional development activities.

Finally, there was wide felt support of the assessment activities used within the materials. Some participants made comments that they were surprised not to see an examination as part of the training programme, which is the common practice for assessment of professional development programs in Indonesia. The fact that assessment tasks closely reflected principals' work was highlighted by a number of respondents as a positive characteristic.

Feedback from the six Technical Advisers, who supervised the trial process were also encouraging. All agreed that the approach taken in terms of the training philosophies used and the way in which content was presented and the embedded pedagogical activities were very successful. This coupled with the brief training that the mentor trainers received meant that the implementation of the trial ensured a dynamic process of teaching and learning. Although, as indicated above, a number of areas of improvement were identified, which was subsequently addressed in review and editing workshops.

## **IX. Discussion of Materials Development Process**

As has been mentioned, the materials development process took more time than what was anticipated. This was mainly because a workshop approach was used which was useful in developing capacity in people involved in the process, but was not the most efficient process in terms of materials production. The materials development approach was new to the majority of the workshop participants, and the training philosophy and approaches to be embedded in the materials was quite new to everyone involved. Therefore, it took significant time to bring about an understanding of the materials development process, and of the philosophical and pedagogical approaches to be embedded in the materials. For example, many workshop participants had difficulty understanding the materials development sequence, which was:

1. Identification of learning outcomes
2. Development of assessment tasks
3. Development of learning activities and content

Most teachers think about the content first and then determine the assessment. However when developing a competency-based training programme, it is critical that the assessment tasks be tightly linked to the learning outcome, and then the trainer needs to determine what content and skills is necessary in order to achieve the learning outcome, determined by the assessment task.

Workshop participants also found it difficult to develop materials in the form that was required. That is, interactive learning guides, as compared to traditional approaches, which are instructional information-based resources. Interactive dependent learning guides the learner through activities and requires the learner to be proactive. These activities typically required the learners to engage in processes and in which they generate content, solve problems, engage in discussions, as well as draw on content and information. The kinds of resources that are developed under this model are such that the resources themselves become the teacher. This approach is not new in distance education, and even in Indonesia at the Open University of Indonesia it is the approach that is essentially used. However, it is an approach in terms of curriculum development, and in terms of professional development activity, that is new in Indonesia Public Sector staff PD. The participants in the workshops, having been drawn

from various areas of the Ministry of Education, have experience and culture in the development of Professional Development programs and as participants in Professional Development programmes which impacted on their work in developing these seven modules. Developing a new way of working proved to be extremely difficult, and added significantly to the time required for the materials development.

So far, in the development of the suite of programs and activities relating to Principals Professional Development, only a limited number of programmes have been completed. In order to achieve success in the full development and deployment of these programs, and drawing on the lessons learned so far, a new approach to program development is required. It will be necessary to develop up a core of qualified and experienced program developers (sometimes called education developers), who give overall direction to the development of programs, and their component modules, and who can provide expertise in processes of materials development and editing. However, the significant changes being introduced in terms of embedded pedagogies, philosophies of training, the specialist and different approaches to program, and materials development will take several years to implement and bed down.

## **X. Future Directions**

Materials development to date has been focused on text-based material. There are some good reasons for this; one being that it is relatively easy to distribute and to reproduce the materials. However, there are plans for the redevelopment of materials to take advantage of the significant growth and availability of the Internet across Indonesia. In anticipation of the future provision of Principles Continuing Professional Development programs online, Pusbangtendik has established a trial Moodle site. Moodle is a web based learning management system and online learning environment.

Before the conclusion of the first phase of the BEP, some guidelines and structure were put in place for the development of the Principals CPD Level II programs. These modules were to have an overarching focus on the principals' role of leadership in a school and community. In particular, it is recognised that under a changing education system, with increasing decentralisation, and significant changes to curriculum and pedagogy, that principals need to have and

engage in transformational leadership (Leithwood & Jantzi, 2006). Success in approaches to improve the quality of education at the community level, in order to better respond to changing community needs, and to provide better educational outcomes for individual students will require significant proactive leadership from school principals. In order to achieve this, a strengthened and significantly supported on-going professional development program for principals is required. Such a program will be integrated into the performance management process that principals undertake, and these mechanisms are already built into government regulations (Regulation 28).

However, there are other impediments to bringing about transformational changes in education at the school level in Indonesia. Some of these include a lack of professional development of existing teachers in tune with the new paradigms that are being promoted; low wages and poor conditions of teachers (including school principals) which are disincentives to improving educational outcomes, particularly in rural and remote areas; and entrenched practices and beliefs, particularly focused on content acquisition and examinations.

One issue that needs to be addressed is that of sustainability. The developments of these programs so far have been with the funding and technical support of the Australian Government through an AusAID program. This has allowed for the provision of expertise, and resources that may not normally be available. Given the difficulties that were experienced in the development of materials and the development of a conducive environment for materials development, it is quite conceivable and realistic that on-going support will be required for a number of years. Some provision for this is already in place in the second stage of Australian government funding. However, issues of sustainability will need to be addressed for Indonesia to take full responsibility for on-going programme development and maintenance (Shaw, 2005).

## **XI. Conclusion**

There is an education revolution taking place in Indonesia. New schools, new curriculum, new approaches to training teachers, are impacting education outcomes for millions of Indonesian students. However, significant further progress is necessary. The school principal is a key position in education provision, and can have significant impact on the educational outcomes of the children in his

or her school. Also, when change is being introduced in education, the principal is the key person in ensuring that change actually occurs at the school level. However to play these roles, principals themselves need to be appropriately selected and trained, and receive on-going professional development and support.

The focused on principals' professional development in Indonesia, is critical in dealing with poverty alleviation. Education is the most significant factor for poverty reduction (Robeyns, 2006). When education results in skilled graduates who are able to live in and make a contribution to their society and be employed either self-employed or by others, it directly links to poverty reduction. This is well documented; however, the process of ensuring good education is complex and problematic. The position of a school principal is pivotal to quality improvement in education. Policy at the national level can provide direction and establish effective learning environments. However, it is the work of the principal in leading and managing a school that will have the most direct and quickest impact. When teachers work in supportive, well-managed and appropriately resourced environments, they are in a much better position to facilitate optimum educational outcomes for individual children in their classes. Within Indonesian the position of school principal has particular importance, because of the historical and structural features of the role. This paper is focused on providing appropriate relevant and well-designed professional development programs, focused on skills development against established competency standards for principals. It is focused on principals' work, and improving principals' work, set against established competency standards. The outputs of this program will be applied nationally, therefore, it is expected that over the coming years a significant increase in the quality of school principals (including leadership and management) will result, which will in turn have a direct impact on the quality of education, which will in turn have a direct impact on poverty reduction, and the transformation of schools and communities.

## **References**

- Bangay, C. 2005, Private education: relevant or redundant? Private education, decentralisation and national provision in Indonesia, *Compare* Vol. 35, No. 2, May 2005, pp. 167–179.

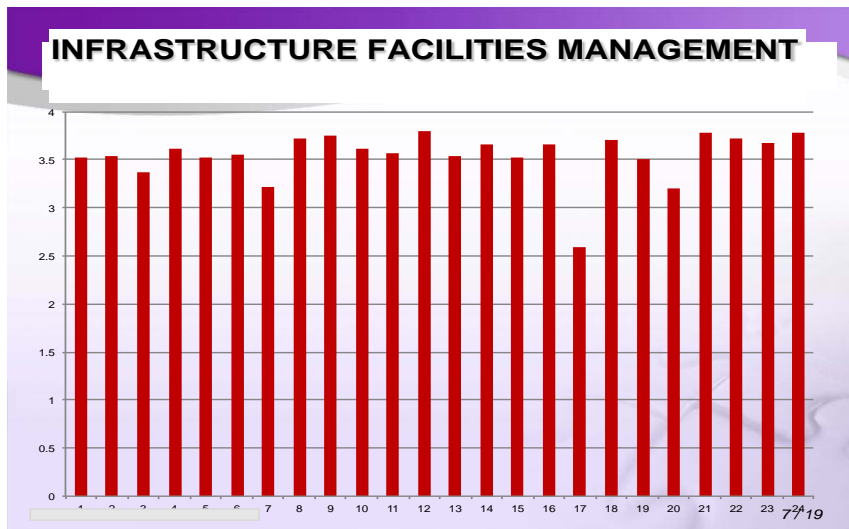
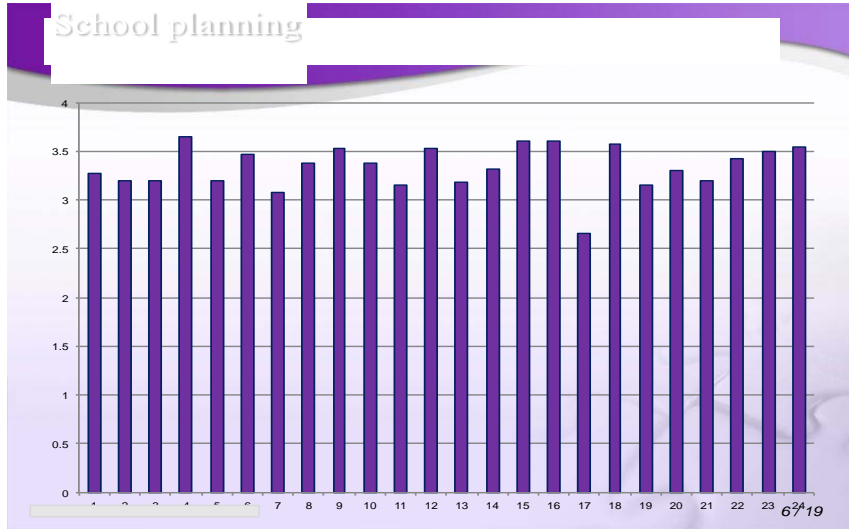
- Bjork, C., 2004, Decentralisation in Education, Institutional Culture and Teacher Autonomy in Indonesia, *International Review of Education*; 50: pp.245–262, Netherlands.
- Crow, M., Hausman, C.S., & Scribner, J. 2002, Reshaping the Role of the School Principal, Chapter 9, In the *Yearbook of the National Society for the Study of Education* Volume 101, Issue 1, pages 189–210.
- Grubb, N & Flessa J., 2006, “A Job Too Big for One”: Multiple Principals and Other Non-traditional Approaches to School Leadership, in the *Journal for Leadership for Effective and Equitable Organisations*, 42: pp. 518-550.
- Hodge, S. 2007, The Origins of Competency-Based Training, *Australian Journal of Adult Learning* Volume 47, Number 2, July 2007.
- Hull, T. (1996) Educating a population, in: J. Rigg (Ed) *Indonesian heritage: the human environment* (Singapore, Archipelago Press), pp.132–133
- Johnson, B & Onwuegbuzie, A., 2004, Mixed Methods Research: a research paradigm whose time has come, *Educational Researcher*, October 2004, vol. 33 no. 7 pp.14-26.
- Leithwood, K., & Jantzi, D., 2006, Transformational school leadership for large-scale reform: Effects on students, teachers, and their classroom practice, *School Effectiveness and School Improvement*, Volume 17, Number 2, June 2006 , pp. 201-227(27), Routledge.
- Robeyns, I., 2006, Three models of education: Rights, capabilities and human capital, *Theory and Research in Education*; March 2006; vol. 4 no. 1 pp.69-84.
- Shaw, G. 2005, Collaboration in Aid—ICT in *Teacher Education: But What About Sustainability? Open and Distance Education in Global Environment: Opportunities for collaboration*. S. Grag et al (Eds.). New Delhi, Viva Books Inc.
- Shaw, G. 2000, *The Adult Learning Experience: Learning in mixed-mode forms of professional development in the Northern Territory of Australia*. Graduate School. Geelong, Deakin
- Yeom, M.-H., Acedo, C., & Utomo, E. 2002, The reform of secondary education in Indonesia during the 1990s: Basic education expansion and quality improvement through curriculum decentralisation. *Asia Pacific Education Review*, 3(1), 56-68

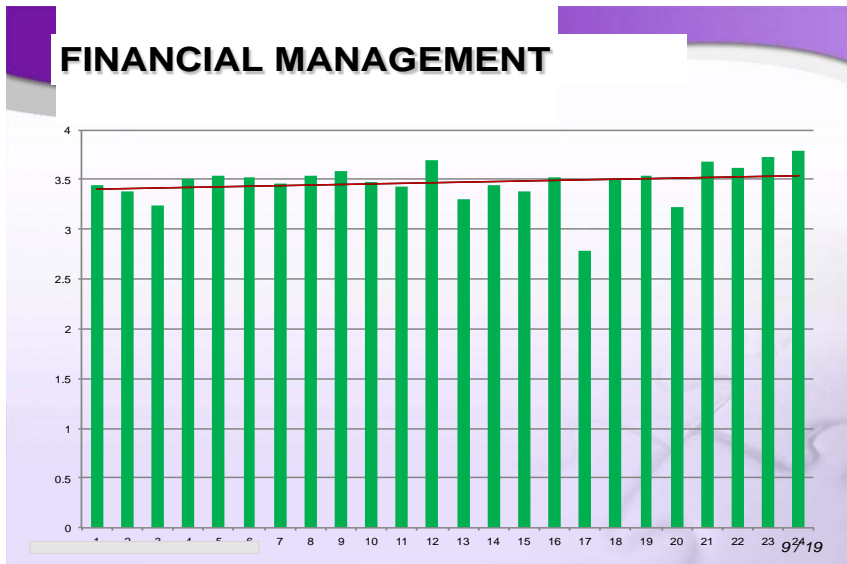
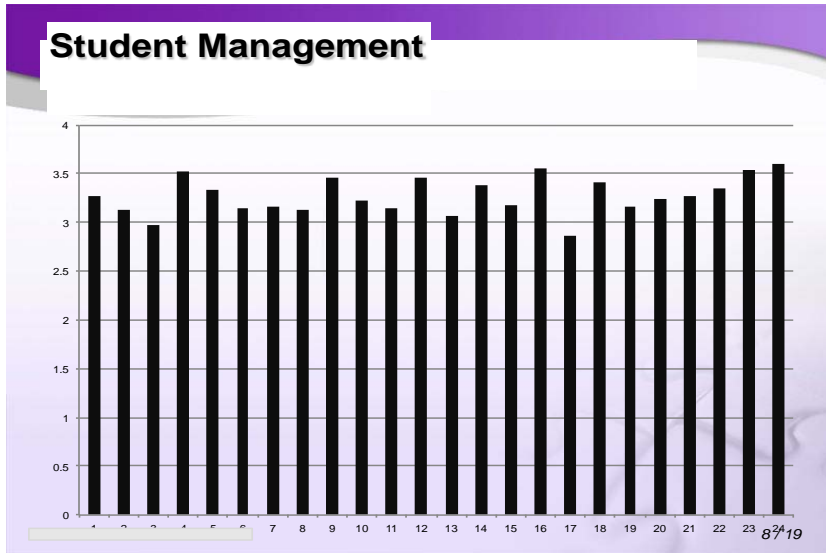
**Appendix 1: Trial Participants' Questionnaire (Translation)**

1. The write material is easily understood
2. Illustrations are easily understood in OPM
3. The context of the material is appropriate to your school
4. The use of language in the module is easy to follow and appropriate.
5. The learning activities of the task are complete and clear
6. The module material covers all the principal dimensions of competence
7. All of the activities in Materials were completed
8. Tasks are applicable to learning
9. The module is easy to use
10. The tasks in the OPM is appropriate to principals' work
11. The materials are well laid out and attractive
12. Learning strategies used in the OPM helped me master the skills needed as a school principal
13. The balance between text and illustrations is appropriate
14. Learning strategy are interesting and not boring
15. The task in the learning materials are challenging
16. Tasks and learning materials are creative and help me be creative
17. Allocation of time for activities is adequate
18. It was important to have the facilitator to help me do the learning
19. Requirements for participants in this module is realistic enough
20. The self-assessment is easy to implement
21. The Reading materials are appropriate
22. I am using the worksheet provided
23. Worksheets are an essential part of learning
24. Reflection activities can I do and very useful for me



**Appendix 2: Responses to questionnaires for each of the 7 core modules**

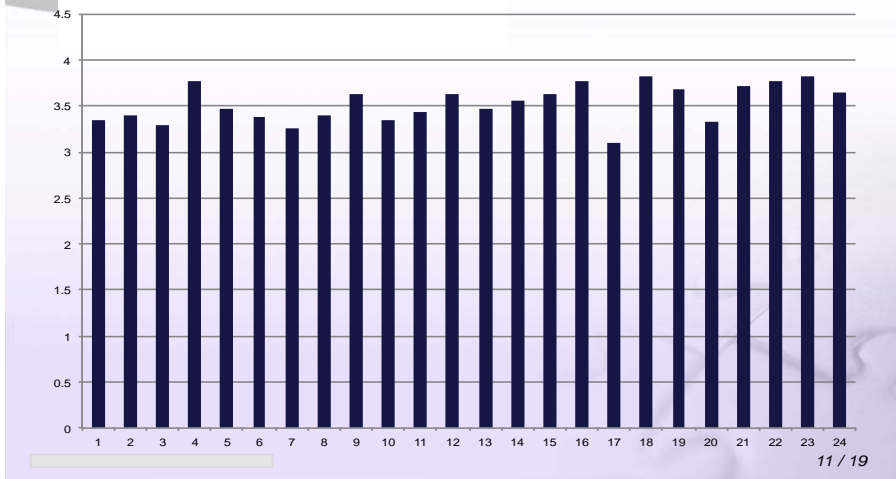


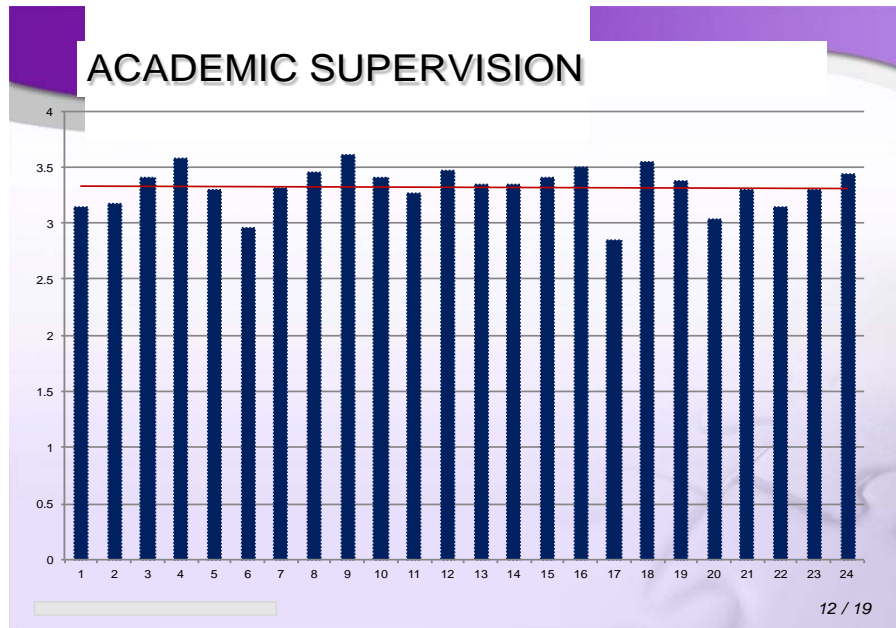


## MANAGEMENT CURRICULUM



## personal management)





# **CHAPTER THIRTEEN**

## **IMPROVING THE LEARNING ACHIEVEMENT OF DISADVANTAGED STUDENTS**

### **EVIDENCE FROM BEWAP**

*Yuhong Du, Yongmei Hu and Ke Lu, Institute for Economics of  
Education, Beijing Normal University, Beijing, China*

#### **I. Introduction**

The ‘Basic Education in Western Areas Project’ (BEWAP) aimed at improving access to and completion of affordable and good-quality basic education for poor boys and girls in the Sichuan, Gansu and Yunnan provinces and the Ningxia Hui and Guangxi Zhuang autonomous regions. The specific project activities involved: improvement of school facilities (construction works, teaching equipment, school furniture and books), teacher training (in particular Participatory Teacher Training – PTT) and investments in new school management methods (School Development Planning – SDP). The Beijing Normal University provided an independent assessment of the project with two main objectives:

- (1) To monitor key indicators of inputs and outputs related to aspects of project implementation (school facilities, PTT and SDP) and of outcomes and impact like enrolment and learning. These key indicators were monitored:
  - to understand to what extent project inputs have been delivered;
  - to determine whether inputs targeted the intended beneficiaries; and
  - to measure outputs and outcomes
- (2) To assess the specific project contribution in achieving certain outputs and outcomes.

This paper is part of the impact assessment of BEWAP and is mainly concerned with the impact of project intervention on student learning achievements in primary school.

## **II. Methodology and Research Tools**

In order to reach the impact assessment objectives the team designed a quantitative survey. The survey (called Basic Education in Western Areas Monitoring Survey - BEWAMS) included 180 primary schools and 90 junior secondary schools and took place in two rounds (November 2006 and November 2008). Its main characteristics are the following:

- Interviews conducted with school principals, teachers, students and community representatives
- The survey is representative of primary schools at the project township level and of junior secondary schools at the project county level
- The design of the quantitative survey is one of the repeated observations. In fact in November 2008 we re-visited the same schools and re-interviewed some of the same students
- The sample included both schools that received project inputs and some 'control schools', which were not covered by the project. The definition of project and non-project schools requires some clarification. When selecting schools within project areas it was difficult to identify in advance which schools received or will receive project inputs. However, there was more certainty about schools that received or should receive construction works. These schools were originally identified as project schools, while all other schools were selected as potential non-project schools. When the selected schools were visited it was then determined whether other project components (facilities, PTT or SDP) had been received. One advantage of this design is that it determines to what extent project resources have been delivered to project areas and whether such resources have been targeted to the intended population sub-groups: relatively poorer areas, ethnic minorities, and female and daike teachers.

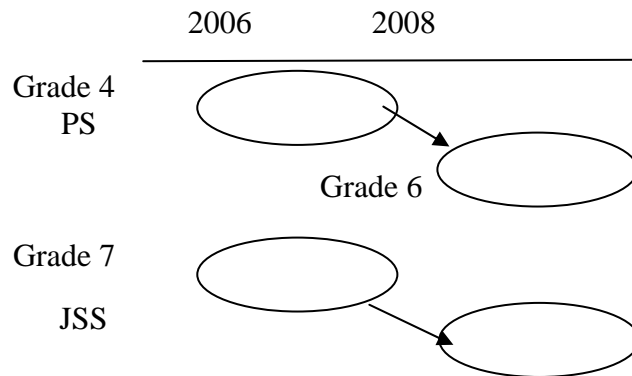
The quantitative survey is the main source of information for the assessment and its design was chosen because it can:

- determine to what extent output and outcome indicators have changed over time (repeated observations);

- assess the project contribution to output and outcome achievements by comparing changes between the intervention and control groups.

For instance, student learning achievement was measured through mathematics and Chinese tests in 2006 and 2008. While a higher average score cannot be attributed to the project just by observing a positive difference between 2008 and 2006, the specific project contribution can be assessed by comparing changes in intervention and control schools.

Figure 13:1. *Research Design and Grades at Which Students were tested*



Students' learning achievement is analysed using two indicators: students' scores in mathematics and Chinese. As part of the BEWAMS, students in grade four and six of primary schools and grade seven and nine of junior secondary schools took a test of mathematics and Chinese ability both in 2006 and 2008. These tests were conducted in the same schools, and students in grade 4 in 2006 were tested again in grade 6 in 2008. Similarly, students in grade 7 in 2006 were re-tested in 2008 when they were in grade 9. Analysis was conducted both for the cross-section of students attending each grade and for the panel of students who were observed in both 2006 and 2008. Figure 1 represents the study design and shows the groups of students tested in the two years. At the primary school level, the same mathematics and Chinese test was administered each year to both Grade 4 and 6 students. Mathematics and Chinese ability tests were designed by teaching specialists and development psychologists, and then piloted to determine their reliability and validity considering the specific circumstances of project areas. The mathematics test follows the style and content of TIMSS (The Trends in International Mathematics and Science Study) and is composed of twenty

standardized multiple-choice exercises. The resulting test scores aim at understanding students' ability of putting mathematics knowledge into practice, making use of mathematics knowledge to solve problems in daily life. The Chinese ability test examines students' ability of comprehending, utilizing, and reflecting on the contents of short texts. The Chinese test for primary schools includes selecting appropriate words and sentences and determining the correctness of a sentence to understand degree of comprehension of the provided text. In junior secondary school the Chinese test uses almost exclusively questions to determine comprehension of the selected reading.

One problem is that the first round of the BEWAMS took place well after the project started to be implemented. Therefore in some cases the project impact is more difficult to observe in a simple comparison of 2006 and 2008 estimates. Furthermore, as we will discuss later, identifying a robust control group was not straightforward.

### **III. Project Inputs and Control Group**

Construction works was the most important component of BEWAP in terms of budget expenditure. The definition of project school adopted for this assessment is a school that received, or should have received, construction works funded by the BEWAP. These schools were clearly identified and each county had a list of such schools. At the time of the assessment design it was unclear which schools would benefit from the other components (books, school furniture, computers, teacher training and SDP). We supposed that schools receiving construction works would have been also primary recipients of other project inputs. Moreover, we assumed that a substantial share of primary schools in project townships would not have been covered by the project, and also that junior secondary schools in non-project townships would have largely been untouched. Therefore, our control group for primary schools was selected among project townships and for junior secondary schools among the project counties.

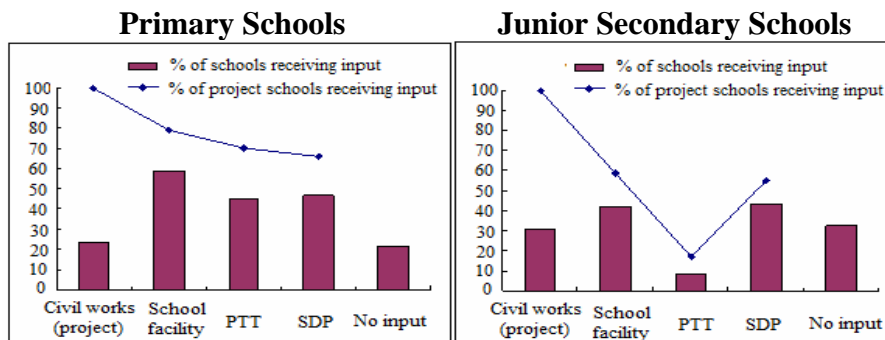
Figure 2, based on the findings of the BEWAMS, shows that indeed schools receiving construction works were also recipients of other project inputs and they can be considered as receiving proportionally more than other schools (for each input the percentage of recipients among project schools is higher than across all schools). On the other hand, both in primary and junior secondary schools, the



percentage of schools that did not receive project inputs are relatively low. Therefore, while project activities were successful in covering almost all schools in project areas, we do not have a very distinctive control group.

Moreover, about 60% in primary and 85% in junior secondary schools received inputs similar to those provided by the BEWAP under other Government and international projects between 2001 and 2008, thus complicating further the identification of a ‘pure’ and ‘specific’ BEWAP contribution. However, on the positive side, schools that received BEWAP funded construction works are not different from other schools in relation to inputs received under these other projects.

**Figure 13:2. Coverage of Schools with Different Project Inputs**

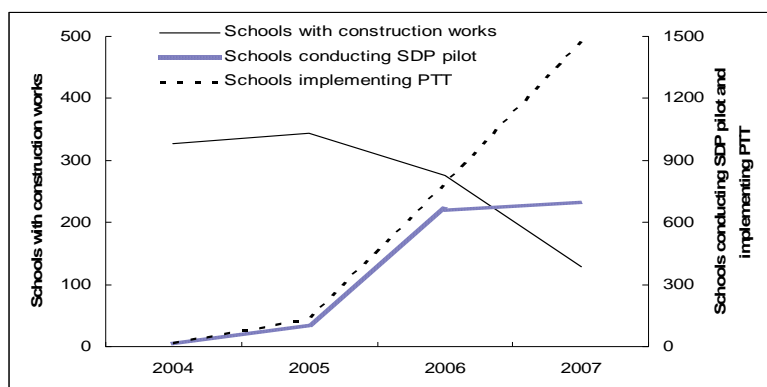


Source: BEWAMS (2008).

It is also important to note that project inputs were delivered at different times. While construction works were delivered at an early stage of the project, both PTT and SDP were scaled up at later stages. The figure below reports the delivery of these main inputs in primary schools between 2004 and 2008. A similar trend is observed in junior secondary schools, with the significant exception that construction work of secondary schools was also undertaken in the final years of the project.

Furthermore, survey data estimates on the delivery of inputs are broadly consistent with those provided by province reports in inputs such as books, computers, and square meters of new buildings.

**Figure 13:3. Project Implementation and Delivery of Inputs in Primary Schools, 2004-2007**



Source: Province annual reports (2004-2007), 2008 figures were not yet available at the time of writing.

#### **IV. Differences in Learning Achievements within Targeted Population**

In this section we want to understand whether there are differences in learning achievements between population sub-groups, focusing on changes between project and non-project schools. Attention is given both to the ‘starting level’ and to changes between 2006 and 2008. It is important to remember that project schools are those where construction work supported by BEWAP took place, but the non-project schools were not a pure control group, since they often received some other project inputs or support from other projects.

Here the presentation makes use of graphs and concentrates on the main results. In general it is important to say that very few differences are statistically significant (excluding differences observed for panel students), and this is due to the combination of a relatively short period of time of period between the two assessments (only two years) for large changes to be observed on an outcome like learning, which only changes slowly and the sample size of the study. Nevertheless, the fact that some of the changes occur consistently in the positive direction between project and non-project schools shows that the project had some positive effect on students’ learning achievement.

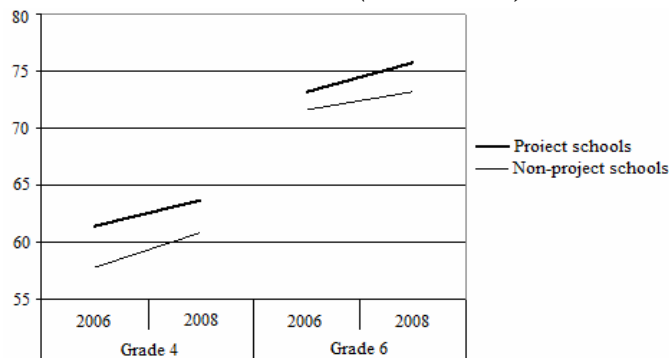
## Overall Difference between Project and Non-project School

### Mathematics

Figures 4 and 5 report the average math scores at different grades and for project and non-project schools showing the change between 2006 and 2008. Three main observations can be made on this figure:

- As expected higher grades in primary (grade 6) achieves a better score than lower grades;
- Especially in primary schools, scores among project school students started from a higher level than in non-project schools;
- Although improvements occur both in project and non-project schools, in project schools the rate of improvement is marginally better (higher positive slope of lines connecting 2006 and 2008 average scores).

**Figure 13:4. Average Math Scores by Grade and Project/non-project Schools (2006- 2008)**



**Figure 13:5. Changes of Panel Students' Math Score (2006- 2008)**

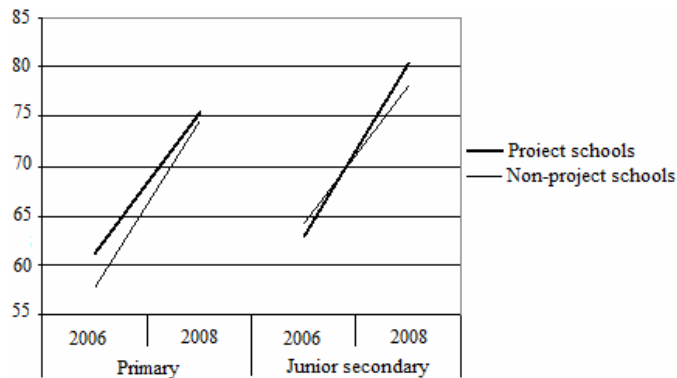


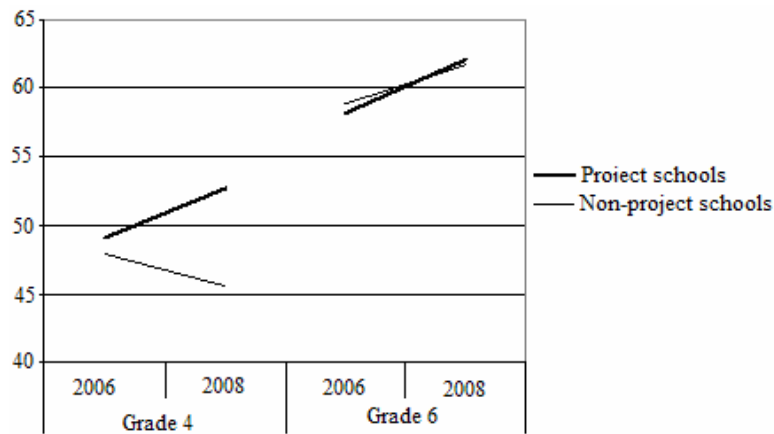
Figure 5 reports average scores for panel students. As expected considerable improvement occurs in the two years as the same test is administered in the two years.

**Chinese**

In the Chinese test, project schools do not appear to be performing consistently better than non-project schools and from the graphs below (Figure 6 and 7) we can summarize the following main points:

- In non-project schools students' Chinese scores are worsening between the two years for students in grade 4;
- Overall there are no consistent significant differences between project and non-project schools in the average scores of 2006 across the different grades;
- Student achievement in project schools improved faster than in non-project schools (higher positive slope of lines connecting 2006 and 2008 average scores).

**Figure 13:6. Average Chinese Scores by Grade and Project/non-project Schools, (2006- 2008) in Primary School**



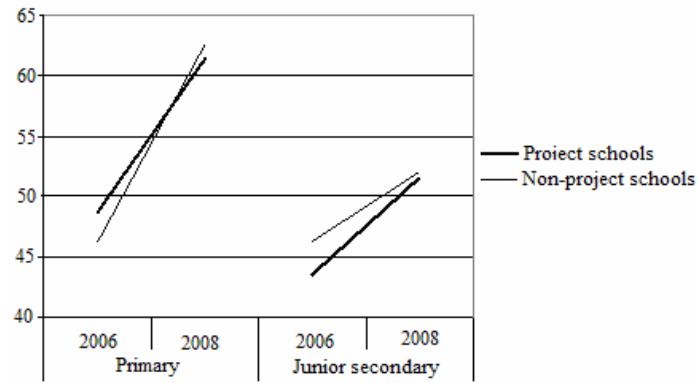
**Figure 13:7. Changes of Panel Students' Chinese Score (2006- 2008)**

Figure 7 reports the average Chinese scores for panel students. As observed for the math score, there is a much bigger improvement because children progressed in their grades. It appears that while in primary schools non-project students improve more than project students, the opposite is observed in junior secondary schools.

### Differences by Student Characteristics

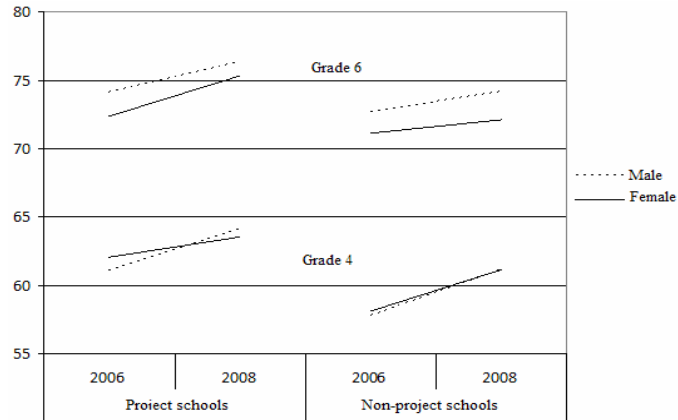
The student characteristics analysed include: gender, ethnicity, language spoken at home, socio-economic status (SES), whether boarding in school, and whether the student came from a teaching point (only for primary school students). The SES is estimated using a score index that considers the ownership of different durable assets, access to utilities and students household characteristics. Such score is used to divide students in three groups of equal size: low, middle and high SES (the index was determined using principal component analysis).

#### Gender

Figure eight and nine presents the math and Chinese score by gender in grade four and grade six between 2006 and 2008. Some main observations can be made from this figure:

- Boys do better than girls in math, but girls do better than boys in Chinese;
- In general both boys' and girls' learning achievement improved, but boys improved more than girls and girls in project schools improved more than girls in non-project schools.

**Figure 13:8. Changes of Math Score by Gender in Grade 4 and Grade 6 (2006- 2008)**



**Figure 13:9. Changes of Chinese Score by Gender in Grade 4 and Grade 6 (2006- 2008)**

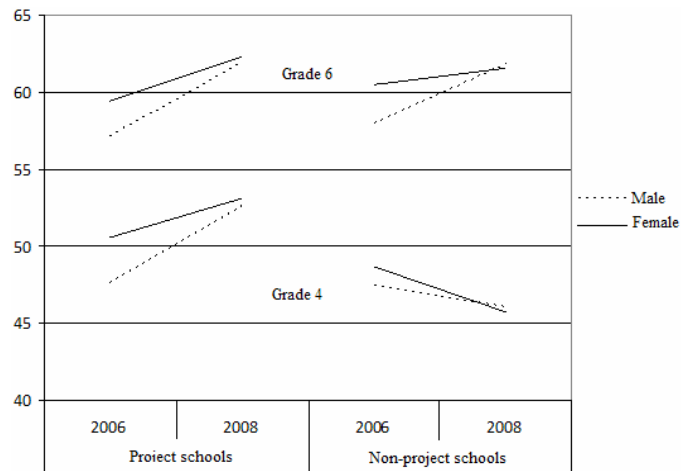
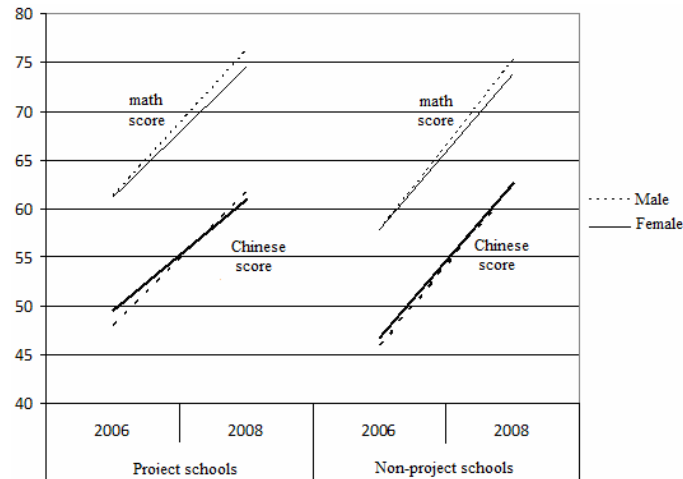


Figure 10 reports average math and Chinese scores for panel students. The figure shows that there was improvement both for boys and girls, but changes were marginally higher for boys.

**Figure 13:10. Changes of Panel Students' Math and Chinese Score by Gender between (2006- 2008)**

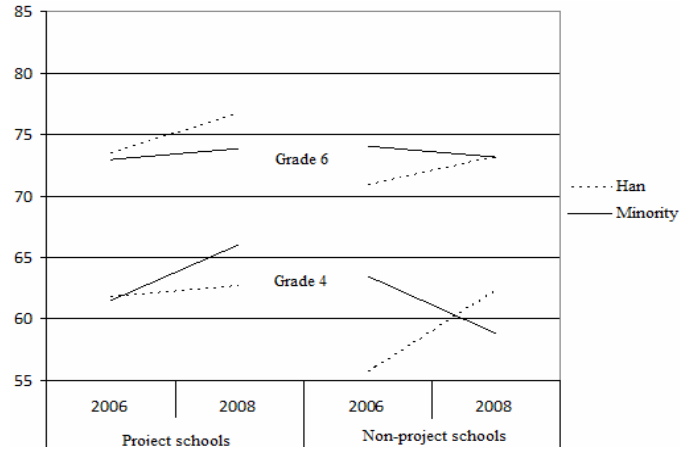


***Ethnicity and Language Spoken at Home***

From Figure 11 and 12 we can see that:

- Han students in project schools had a higher initial score in mathematics, but they had a lower initial score in Chinese (this could be partly explained by the fact that only some minority students actually speak minority languages at home), students from ethnic minorities scored higher in non-project than in project schools in 2006;
- The achievement of Han students improved both in project and non-project schools, but ethnic minorities improved in project schools and worsened in non-project school. However, for some reason, ethnic minority students started from an unusually higher level.

**Figure 13:11. Changes of Math Score by Ethnicity in Grade 4 & Grade 6 (2006- 2008)**



**Figure 13:12. Changes of Chinese Score by Ethnicity in Grade 4 and Grade 6 between 2006 and 2008**

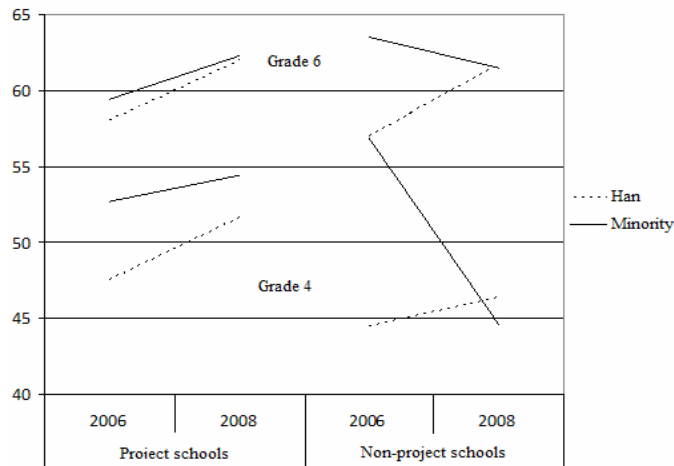
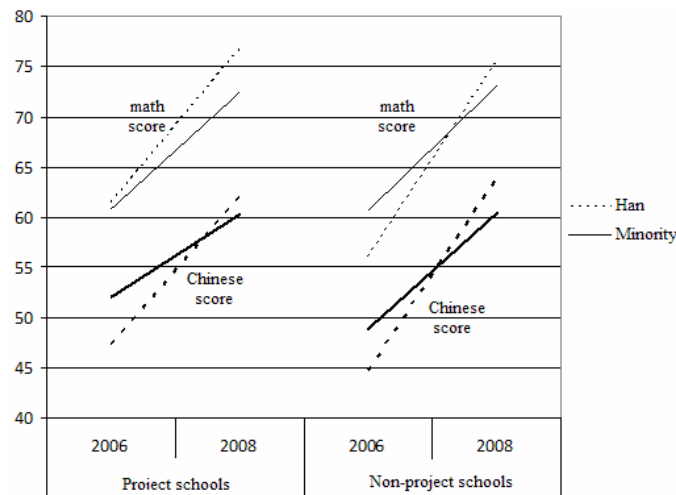


Figure 13 reports scores by ethnicity for panel students. We can see from the graph that: improvement occurs both between Han and minority among panel students, but clearly improvement for Han occurs at a higher rate. This is true both in project and non-project schools; and project school students have higher starting level (2006 scores).



To further study the impact of ethnicity on learning achievement, we singled out students that speak a minority language at home as opposed to those speaking Mandarin or the local Chinese dialect. We found that the latter group had consistently higher scores than those students speaking minority language at home. Furthermore, minority language students improved at a lower rate. It is significant to note that in project schools students speaking a minority language at home score higher in 2008 than in 2006, whereas there is no improvement or a negative trend within non-project school students.

**Figure 13:13. Changes of Panel Students' Math and Chinese Score by Ethnicity between 2006 and 2008**



### Other Characteristics

The data also displays the students learning achievement difference by other characteristics, including SES, whether boarding in school, whether came from a teaching point (only for primary school students).

- Although results are not always consistent, students with a higher SES tend to do better; this is true for Chinese scores. However, it is important to say that in primary schools we lose a relatively high number of observations when analysing SES, and in general it has proved difficult to differentiate between students characteristics within project townships, conditions being relatively similar;
- In general non-boarding students have higher learning achievement;

- Those who never studied in a teaching point tend to get higher scores than those who came from a teaching point.

## **V. BEWAP Input and Learning Achievement**

The previous analysis looked at average scores and their differences between various population sub-groups, whereas the aim of this section is to do a step further and simultaneously consider the various elements that influence learning achievements. This is achieved through multiple linear regression models with the objective of controlling for certain variables and identifying the importance of BEWAP inputs on students' achievement improvement. In general the results of these econometric models are still preliminary and more work is required to fully make use and analyse the data. Nevertheless, results provided below already offer very useful insights.

### **Model Specification**

We estimated various econometrics models to understand in more detail the relationships between learning achievement and school and teacher characteristics after controlling for students characteristics. In particular the study design aimed at comparing changes over time between project and non-project schools among the same students (difference in difference model). However, the results of such models were not satisfactory. This seems to be due mainly to the fact that both the distribution of scores in grade six is truncated. On the contrary the analysis of the models that try to explain score results in the two different years (2006 and 2008) for students in grade four offer the most useful insights. The model used is an education production function, trying to explore the relationship between school inputs and learning. The usual form is as follows (H.M. Levin, 2000):

$$A_t = f(F_t, T_t, OS_t)$$

Where A is the students' achievement, F refers to all the family factors related to learning achievement, such as parents' education, income, student motivation, etc. T refers to the teacher input factors, such as qualification, professional title, education, teaching experience, and motivation. OS refers to school input factors, including class size, books, equipment, curriculum, etc. Although we are specifically

interested in understanding specific BEWAP inputs in school and teacher inputs, we must control also for all other potential factors.

The specific education production function estimated both in primary and junior secondary schools uses dependent variables math and Chinese scores for grade four students, four models estimated both with 2006 and 2008 data.

### **Explanatory variables belong to three groups**

- Individual student and family variables: gender (1 for boys and 0 for girls), SES (two dummy variables), language spoken at home (this variable takes value 1 if student speaks a minority language at home and 0 otherwise), boarding students (1 for boarding students and 0 otherwise), students who studied in teaching points (1 for those who moved to the current school from a teaching point), independence in doing homework at home (1 for those who can finish homework independently at home), students' aspirations (1 for those who want to go to senior secondary schools or higher education).
- Teacher characteristics: when estimating the math score we considered the characteristics of the mathematics teacher in that class, and similarly for the Chinese score we considered the characteristics of the Chinese teacher. Variables included are teacher's education (this is the current education level, for primary school teachers and takes the value of 1 for normal school graduates or higher and 0 otherwise, for junior secondary school teachers 1 refers to 4-year college education and more, 0 otherwise), whether the teacher is qualified, whether it is a key teacher, and years of teaching experience;
- Variables of school characteristics: class size, number of books per student, and computers per student.

### **The main anticipated relationships are the following**

- Smaller class sizes should help students learning, we therefore expect a negative relationship between class size and test scores (this variable is indirectly related to BEWAP intervention on school building);
- A larger variety of books and students access to them as well as access and use of computers should help students' learning,

provided these facilities are properly used (this is another area where BEWAP is intervening);

- Teachers qualification, higher educational background and experience should have a positive effect upon students' learning (this is another area where BEWAP sponsored teacher training could have an impact).

Two other variables are of policy relevance: whether students are boarding and whether they ever studied in teaching points. Indeed it is useful to understand to what extent there is evidence of lower educational quality in teaching points and whether boarding affects students' learning.

All other variables represent control variables: we expect that SES should have a positive relationship with learning and so students' aspirations. Motivated teachers should also influence positively student achievement, and we hope to capture and control for such factor considering whether a teacher is a key teacher.

## **VI. Results**

Because of data missing and other reasons, some variables are not included in our model. Table 1 shows the results of the model for mathematics and Chinese for Grade 4 in year 2006 and 2008. Statistically significant coefficients are reported with a star. All significant coefficients have a sign in the expected direction. Class size has a negative correlation with test scores, books per student has a positive impact, but only in 2006 and although computer have a positive sign their impact is not statistically significant.

The variable book per student in 2006 might have captured a spurious correlation with other school characteristics or the fact that in 2008 the relationship is no longer significant might be the consequence of changes in enrolment rather than simply on variety of books. Furthermore, it is not clear to what extent books have actually been used for teaching and by the students.

Whether the student is boarding or not does not seem to influence students learning, while students coming from teaching points appear to be clearly disadvantaged, especially in 2008.

**Table 13:1. Model Results for Math and Chinese Scores, Grade 4 in 2006 and 2008**

| Explanatory variables                       | Math model |         | Chinese model |         |
|---|------------|---------|---------------|---------|
|   | 2008       | 2006    | 2008          | 2006    |
| Whether student is a boy                    | 0,52       | 0,24    | -0,57         | -1,14 * |
| Whether boarding                            | 0,18       | -1,93   | 2,51          | -2,98   |
| Whether speak minority language at home     | -5,37      | -3,50   | -4,13         | -1,30   |
| Whether studied in teaching point           | -3,62 *    | -1,06   | -1,09         | -1,50   |
| Whether student aim to reach high education | 11,49 *    | 5,71 *  | 9,07 *        | 4,93 *  |
| Class size                                  | -0,19 *    | -0,19 * | -0,15         | -0,20 * |
| No. of books per student                    | -0,07      | 0,94 *  | -0,09         | 0,98 *  |
| No. of computers per student                | 51,05      |         | 67,19         |         |
| Whether teacher is qualified                | 10,51 *    | 12,32 * | 16,47 *       | 2,77    |
| Teacher with low education                  | 0,15       | 0,32    | 2,87          | -7,08 * |
| Whether key teacher                         | 3,61       | 4,03    | 2,86          | 4,06    |

Note:\* identifies variables significantly different from zero at 5% level.

By examining the achievement difference between different group and studying the relationship between BEWAP input and students' learning achievement, we find that the improvement rate of student learning achievement in project schools in two years is larger than non-project schools, especially for girls, ethnic minority students (or students who speak a minority language at home) and students came from a teaching point.

In a word, these results show that BEWAP interventions on teachers training and school facilities (provision of books and larger classrooms if accompanied with smaller class size) are conducive to better learning, especially for disadvantaged students.

## References

Coleman, J.S., Campbell, E.Q., Hobson, C.J., McPartland, J., Mood, A.M., Weinfield, F.D., York, R.L. (1966). *Equality of Opportunity*. US Government Printing Office: Washington.

- Hanushek, E. A. (1997). Assessing the Effects of School Resources on Student Performance: An Update. *Educational Evaluation and Policy Analysis*. 19 (2): p.148.
- Monk, D.H. (1992). Education Productivity Research: An Update and Assessment of Its Role in Education Finance Reform. *Educational Evaluation and Policy Analysis*. (4).
- Hedges L.V., Laine R D, Greenwald, R. (1994). Does Money Matter? A Meta-analysis of Studies of the Effects of Differential School Inputs on Student Outcomes. *Educational Research*. (4).
- Hu Yongmei, Du Yuhong. Zhongguo Xibu Nongcun Chuji Zhongxue Jiaoyu Shengchan Hanshu De Shizheng Yanjiu. Jiaoyu Yu Jingji (2008). *Education and Economy*. (3): pp.1-7.
- Hu Yongmei, Du Yuhong. Zhongguo Xibu Nongcun Xiaoxue Jiaoyu Shengchan Hanshu De Shizheng Yanjiu. Jiaoyu Yanjiu (2009). *Education Research*. (7): pp.58-67.
- H.M. Levin. Tigao Jiaoyu Shengchanlv. Martin Carnoy. Jiaoyu Jingjixue Guoji Baike Quanshu (Dierban). Beijing: Gaodeng Jiaoyu Chubanshe. (2002) *Higher Education Press*. p.359.

## CHAPTER FOURTEEN

# METICULOUS MONITORING AND MACRO COORDINATION TO PROMOTE EQUILIBRIUM IN THE DEVELOPMENT OF EDUCATION

## REPORT ON INTER-SCHOOL EQUILIBRIUM OF COMPULSORY EDUCATION IN SHUANGLIU COUNTY

*Zhaoyu Jia, Secretary of CCP Committee and Director of  
Bureau of Education of Shuangliu County, Chengdu  
Municipality, China*

### I. Introduction

Located in the southern suburb of Chengdu Municipality, Shuangliu County covers an area of 1,032 square km and has a population of 903,000. With 21 towns and 3 communities under its administration, the County has been continuously ranked the 1<sup>st</sup> among the “Top Ten Counties” of Sichuan Province in comprehensive economic strength for the past 15 years and the 27<sup>th</sup> among the “Top 100 of the State” in basic competitive power and continued to be the 1<sup>st</sup> in central and western China.

There are 316 kindergartens, primary and middle schools in Shuangliu County and 106 of them are privately funded and 210 public schools. The 7 colleges and universities operating in Shuangliu include Sichuan University, Southwest University for Nationalities, Chengdu University of Information Technology, Sichuan Modern Vocational College, Chengdu Sport University, Command College of Armed Police Force, and Sichuan Vocational College of Cultural Industries. Basic education in the County covers over 170,000 students and more than 120,000 are admitted in public schools and 50,000 private schools. The total staff of the schools exceeds 13,000 and 10,000 of them work in public schools and 3000 private ones.

The targets of the Bureau of Education of Shuangliu County are to manage every school in an appropriate way, serve the two groups (the group of teachers and the group of students) wholeheartedly, and to develop the calibres of the educated. The mission statement is to establish a well-balanced education system with specialty and vitality.

In the light of such, the Bureau of Education, under the supervision and guidance of CCP Committee and Government of Shuangliu County and with the support from our counterpart of the Municipality, worked hard to develop the content of education, and accentuate the locality and specialty of each school, deploy human resources fairly, improve calibre education, promote the overall modernization of education, and to facilitate the formulation of education system with integrated and balanced development in rural and urban areas. The County was consecutively nominated as the “National Advanced County in Preschool Education”, “National Advanced County in Continuing Education in Rural Areas”, “Advanced County in Development of Education of Sichuan Province”, and “Beacon County for Compulsory Education of Sichuan Province” etc.

## **II. Meticulous Monitoring and Macro Coordination**

The monitoring system was established to safeguard the basic rights in compulsory education, to explore and advance the achievements made in the National Campaign of “Two National Substantials” -- Substantial Popularization of Compulsory Education and Substantial Elimination of Illiteracy among Young and Middle-aged Groups, and to promote the overall, balanced, and sustainable development of compulsory education of the county. We paid great attention to the monitoring of the equilibrium in distribution of education resources and balanced development of education, and conscientiously accomplished the tasks assigned.

We made full use of the Shuangliu Education Information Network as the medium to connect all the parties related to the monitoring work, through the net the rules, decrees, and instructions and specific requirements of monitoring were published and issued, and overall arrangement of the monitoring work was performed. Before the commencement of monitoring, all the relevant staff were organized to take training courses on the monitoring and the meanings attached to each index were made clear to them, who must file their



reports at the time nodes specified according to the standards of filing and the procedures stipulated to provide accurate, effective, and reliable information.

Mechanisms and systems were implemented to ensure the smooth performance of the work. Firstly, in the *Responsibility System for Monitoring Targets and Indexes* the assignments and indexes were broken down into specific items with each assigned to the responsible school and individuals; Secondly, the channels and procedures for the collection of data were stipulated in the *Mechanism for Collection of Monitoring Data and Statistics*, according to which no one was in the position to change any data obtained and the data should be accurate and reliable; Thirdly, in the light of *System for Organization of Monitoring Files*, monitoring supervisors were designated at each school to monitor compulsory education, who should be responsible for the establishment and organization of monitoring files and the maintenance of the completeness and continuity of the data.

### III. Improvement of the System

Results of the monitoring indicated that in our County great achievements had been made in the overall and coordinated development of rural and urban education with preference to rural areas. The differences between urban and rural schools had been reduced, and in general the investment in Education Expenditure per person and educational resources distributed to rural primary schools were superior to those of the urban ones. However, in aspects like educational quality and construction of education information network, the rural primary schools were inferior.

Based on the careful analysis of the data obtained and in accordance with the Education Plans of the State, Province and Municipality, we detected the weak links in the balanced development of education, identified the causes hindering the development, and decided on the measures to be taken to remove the inter-school differences. In due course, we will increase the investment in education technical equipment, especially in the ones for junior middle schools, establish mechanism for equilibrium in distribution and deployment of education technical equipment, and dedicate more to the construction of education information network with preference to the rural schools. Above all, the education quality in rural schools should be promoted and the dropout rates shall be reduced to

minimum so that the solid foundation for coordinated and balanced development of education in both rural and urban areas of our county can be laid.

#### **IV. Focus on the Key Points (The Projects)**

In accordance with the results of monitoring and based on the analysis of the Sub Report of Shuangliu County in the Monitoring of Equilibrium in Inter-school Distribution of Resources for Compulsory Education of Chengdu Municipality, we adapted our decision-making and took immediate managerial moves, and implemented six projects to promote the balanced and coordinated development of education to achieve equilibrium in distribution of education resources. These six projects were employed in the optimization of the layout of schools in rural and urban areas, improvement of office facilities for the urban and rural schools, appropriate deployment of education talents in both areas, promotion of education quality, organization of quality education groups, and provision of educational services to the public respectively to remove the differences between the urban and rural areas, details of which are given as follows.

##### **Project No. 1: Optimization of the Layout of Schools in Rural and Urban Areas to Coordinate the Distribution of Education Resources**

Schools in our county were dispersed widely and the development of education in rural and urban areas was imbalanced. To cope with the situation, the County Government increased investment in education expenditures and executed the Plan for Overall Upgrading of Campuses of Primary Schools. In this move, 14 primary school campuses were revoked, County Vocational Middle School, Tanghu Primary Schools moved to and reconstructed at the new locations, and new ones like Jinjiang, Yingchun, Shuanghua primary schools and Experiment School of Tanghu Middle School built.

In compliance with the uniform standards for the construction of rural schools, 34 schools with total construction area of 86,825 square meters had been built and 10 standard township and community kindergartens were erected. School Engineering Safety Project was executed in all the schools, reconstruction of 14 schools after the Earthquake were completed, 20,742 square meters of dangerous buildings demolished, 38,694 square meters of new buildings

constructed, and 2 Earthquake Assistance Projects were successfully implemented with reconstruction area of 38,953 square meters and 61,000 square meters of C Grade dangerous buildings being renovated and consolidated. The new setup and distribution of schools in the county were formulated and adequate scale and equilibrium in both rural and urban areas achieved.

### **Project No. 2: Improvement of the Office Facilities of the Schools in Urban and Rural Areas to Optimize the Schooling Conditions**

The long-term mechanism for the maintenance and renewal of education technical equipment was established. Education information networks were constructed throughout the county and the ones for all the centre schools and primary schools were completed and put into use. All the campuses of the primary schools in the county were equipped with receiving equipment for the National Modern Distance Education Programs for Rural Middle and Primary Schools, and educational database with local specialties was built and put into operation, which provided access to quality education resources on internet.

The year 2010 also witnessed the completion of students' psychological consultation rooms for all the schools and the libraries for the disabled and retarded students attached to normal classes in all the primary schools and 14 junior schools such as Pengzheng Junior School. Multi-media Video Interactive Teaching System of Shuangliu County was developed and completed, and metropolitan area network of the County was renovated and improved. The construction of modern information technological platform and campus network accessible to each class was facilitated and the rates for access to internet and campus network both reached 100%. 59 schools in the county were nominated as National or Provincial or Municipal Beacon Schools for Modern Education Technologies, for Experimental Teaching, and County Beacon Schools for Education Technologies, which promoted the level of popularization of information network and realized substantial modernization of education in the district.

Up to date, the average Gini coefficient for the value of education technical equipment per student for primary, junior, and 9 year schools dropped in comparison to that of the previous year.

### **Project No. 3: Appropriate Deployment of Education Talents to Promote the Equilibrium in Distribution of Human Resources**

In the monitoring report, there were indexes like the average rate of

teachers with intermediate professional titles or above, average rate of elite teachers, and the ratio of students to teachers etc., which served as the basis for our research and analysis. In the light of these indexes, we stipulated that personnel management rested with the county government bodies and teachers working at different primary and middle schools should be centrally deployed. Rules for the Exchange of Teachers in Shuangliu County and Rules for the Establishment of Alliance between Schools for Support and Development were issued, which stipulated that male elite teachers aged below 50 or female ones aged below 45, who were healthy, competent, and endowed with abundant teaching experiences, can rotate in the schools of the county upon completion of 12 years of primary school teaching or 6 years of junior school teaching in the same schools. In addition, those newly promoted headmasters or the ones having worked at their respective posts in the same primary school for 12 years or in the same junior middle school for 6 years shall be shifted to other schools for exchanges. Subsidies will be granted to the headmasters exchanged to different schools and rank system would be implemented to encourage the headmasters to work in suburban and rural schools.

Altogether 360 elite teachers and headmasters had rotated in all the urban and rural schools for compulsory education in Shuangliu County, with the term of 3 years for exchange of the teachers. Schools in rural and urban areas were made partners, 10 workshops for prestigious teachers were established, over 200 Super Teachers were dispatched to rural schools for supervision in teaching, all of which contributed to the promotion of professional levels of the teachers and eradicated the differences between rural and urban schools. There were 10 National Elite Teachers, 2 National Model Workers, 17 Super Teachers of the Provincial Level or Municipal Level, over 20 Provincial Model Workers, Elite Teachers, Elite Head Teachers, and over 2100 Leading Experts, Education Experts, and Young Elite Teachers of the Municipal Level or County Level.

#### **Project No. 4: Promotion of Education Quality and Development of Calibre Education**

Theme activities aiming at efficiency, quality, and specialty of classes were held and the Three Year Plan for the Promotion of Calibre Education and Educational Quality was implemented to reduce the inter-school differences and promote equilibrium in the region. Moreover, the ranges for addition of scores for senior school entrance examination were expanded and the entrance examination organized

and controlled by the County on its own so the candidates had more to display to the judges and the judges in return had more flexibility in choosing the better ones. The “2+1” Project, which required the junior school students to command at least two sport skills and 1 artistic skill, was launched, students started to participate into a wide range of social practices, and the system for evaluation and examination of students qualities was improved, all of which contributed to the overall promotion of student’s comprehensive qualities.

As a result, every student enjoyed physical exercises at least one hour a day and constantly improved their artistic skills. Performances, shows, and art programs of the county such as the instrumental performance *Shu Drums Beating the Spring* won many prizes in domestic and international competitions, and the County was nominated as the National Beacon Zone for Sport and Art Activities for Middle and Primary Schools and National Advanced Art Education Unit etc.

Supervision and guidance were stressed in the development process of education, and objectivity, justice, and equality were the principle to be followed. In this regard, mechanism for “6+4” Supervision and Evaluation (process evaluation accounting for 60% and final evaluation 40%) was initiated to evaluate the education quality of the schools and regulate the management of schools to promote the overall development of the students. The enrolment rate for school age children reached 100% and primary school graduation rate 100%; the rate for students’ completion of junior school studies was 99.91% and enrolment rate for senior schools 97.11%.

#### **Project No. 5: Organization of Quality Education Groups to Relay and Extend the Quality Educational Resources.**

The strategy for the development of quality education groups was fully expressed and embodied in the *Scheme for the Development of Fundamental Education Groups Sponsored by Prestigious Schools* designed and implemented. In the implementation of the Scheme, the infrastructures and facilities for information network of the weak schools in the groups were improved, the educational concepts changed, human resources accumulated and appropriately distributed, and management and development systems for each individual school improved and complemented. Schools in the same groups shared the same unified education operation mechanism, mission statement, regulations and procedures.

Sponsored by prestigious schools like Shuangliu Middle School

and Tanghu Middle School etc., 8 education groups were organized and included 22 member schools in the county. The Management of the Groups first of all established long term interactive mechanism for exchange of teachers within the group and preferential treatment in appraisal of professional titles and election of the elite was offered to those participating in the exchanges. Ever since then, 248 managerial personnel and teachers had been exchanged between the leading schools and other member schools, which greatly promoted the cooperation in teaching and research and set up the alliance between the urban and rural schools for joint development. At present, quality preschool educational resources covered 86% of the county, and those for compulsory education 87%.

**Project No. 6: Provision of Educational Services to the Public to Honour the Promise Made by the Government**

“Three Increases in Education Expenditures” shall be ensured and preference shall be given to rural schools. “Three Increases” means the increase in the allocation of local budgets to education shall exceeds the increase in regular local financial income, the gradual increase in the average education expenditure per student, and the gradual increase in remuneration of the teachers and the average non-personnel expenditure. Remuneration related to performance shall be fully paid to the teachers for compulsory education, and 10% of the total fundamental remuneration related to performance shall be distributed as a preference to teachers working in rural schools. Government played the leading role in the implementation of the long term education assistance mechanism designed with the participation of all the social members. All the poverty stricken students in the preschool, compulsory, senior middle school, and college education were fully covered under the scheme.

In 2010 RMB 6.54 million of assistance funds was granted to 11,574 students from poverty stricken families in preschool education, 9 year compulsory education, and two types of senior school education stages, student-origin-based loans were processed and granted to 79 college students and freshmen from poverty stricken families, and not a single student failed to enter schools or colleges for reason of financial deprivation. Long term mechanism for the care of unattended rural children was established with the joint efforts of schools, families, and the society. Garden for unattended rural students was setup and built to make sure that the children left behind by the migrant rural workers are taken good care of. In the meantime,

relevant policies were drafted and enacted to ensure the kids of migrant rural workers can have their legitimate compulsory education in cities and towns.

## **V. Summary**

The feedbacks of the monitoring and the monitoring itself played important parts in the supervision and administration of education development. Through the implementation of the six projects, the differences between rural and urban areas and the inter-school ones were further reduced, and the balanced and coordinated development of education in the county was promoted. Incorporating the target of balance and equilibrium in education in the Shuangliu County's Twelfth Five Year Plan for Economic and Social Development, we shall further promote equilibrium of education in both rural and urban areas, provide education services satisfactory to the general public, and make the balanced and coordinated development in Shuangliu the brightest spot in Chengdu Municipality.





## **CHAPTER FIFTEEN**

### **REGULATE THE GOVERNMENTAL ACT BASED ON MONITORING RESULTS**

#### **TO PROMOTE HIGH-QUALITY AND BALANCED DEVELOPMENT OF REGIONAL EDUCATION**

*Fuming Lei, Chief of Education Bureau of Wuhou District*

#### **I. Imbalanced Development Impacts Livelihood and Social Justice**

Chengdu is a typical large city with large rural areas. Before 2003, the regional rural and urban development differed a lot. The dual structure of urban and rural education contradicted each other so seriously that people's demand for high-quality educational resources could not be met, which became a serious problem for regional development which must be solved urgently.

In 2003, the government of Wuhou district embarked on data monitoring for the balanced development of schools within the region. Some major problems stood out according to the data in 2003. Firstly, the educational input was not balanced and a large gap arose between rural and urban schools. For instance, the per capita utility cost of education in urban areas was as high as 7757.9 Yuan, while that of 6 schools in the suburban areas was below 1500 Yuan. In addition, authorized staff posts were seriously lacking. The student-staff ratio in a village primary school was 50 to 1 while the smallest in urban schools was 14 to 1. Furthermore, rural teachers' competence was significantly lower than urban teachers.' The proportion of prominent teachers was far higher in urban schools; there were no "special-grade teachers" in rural schools. The rate of professional titles also contrasted a lot. Those teachers with an intermediate title or above in urban schools was 70.5% while the lowest rate was merely 13% in two rural schools.

Since educational equity is the fundamental stones of social equality, based on the situation above, Wuhou district was faced with serious challenges in promoting the balanced development in education. To be summed up in one sentence, is “rapid development in urban schools while precarious state in rural schools”. On one hand, public input favours urban schools that possess relatively high quality and abundant educational resources. Those schools are in the lead in central and western China in areas such as management level and innovation in education, which are comparable with those in the educationally developed eastern China. On the other hand, gross deficiencies are apparent in rural schools and more disadvantaged schools are in rural areas. Particularly after the central improvement of the management system for rural compulsory education was published by the State Department in 2002, under which county authorities assume main responsibilities and township governments objectively pay less attention to rural schools. Schoolhouse and educational conditions cannot be improved fundamentally. Authorized staff posts for teachers cannot be increased and half of the teachers are substitute teachers. Serious problems are common among rural schools, such as low management level and institutional efficiency, as well as inability to operate and develop.

## **II. Basis for Formulating Policy and Conduct Annual Monitoring**

Since 2003, we have attempted to conduct annual monitoring and with that data to help formulate policy, influence and intervene administrative behaviour, to find a practical approach to promoting the balanced development of compulsory education. Our monitoring can be roughly divided into three stages.

The first stage is a data-collecting stage. We directly presented statistics data to decision-makers to draw their attention to the difference between urban and rural education and to give an important reference for research and make a regional education development strategy.

The second stage is a regional monitoring testing stage. Joining in the research on balanced education conducted by the Central Educational Science Institute, with experts’ guidance, we monitored all the schools, completed a monitoring report, and adjusted administrative behaviour according to those results.

The third stage is a balanced inter-school monitoring stage. Since 2008, the board of educational supervisor in the government of Chengdu City has stood on a higher platform, using professional and scientific method for monitoring, to monitor the balanced inter-school development of schools of compulsory education. With the guidance and help of the board of the educational supervisor, we applied the monitoring results to educational decision making and management, adjusting administrative behaviour, allocating balanced educational resources; thus narrowing the gap between rural and urban areas as well as among different schools promoting a more balanced educational development in our district.

### **III. Scientific Decision Making and Management**

With the perfection of the Chengdu balanced development of compulsory education monitoring system, in decision-making and management, both district governments and schools greatly improved their administrative behaviour, school management and teaching behaviour based on the monitoring results.

#### **To Adjust Educational Development Strategy, Taking Equity as Value Orientation**

Wuhou district adjusted their educational development strategy based on the monitoring results, strengthening balanced management process and allocating educational resources fairly and reasonably, to realize the equalization of basic educational public service. In 2003, the imbalanced development between rural and urban schools in Wuhou district drew so much attention of the district committee and government that they immediately established *The Second Five-year Plan of Educational Modernization of Wuhou District*. Consequently, urbanization of rural education, modernization of urban education and equalization of both rural and urban education were formulated as the goals for the coming 5 years. Meanwhile, Enforcement Measures of Enhancing the Level of Running School in Wuhou District was issued, making "Bundling" development of urban and rural schools possible, which demands rural and urban teachers to mingle, narrowing the gap between them.

Over the next couple of years, we have been carrying on education reform according to the monitoring data of compulsory

education. In 2006, on the basis of achieving the balanced development of rural and urban schools, we put forward another goal for high-quality and balanced development, to aggressively reinforce balanced regional development. From 2008 on, the balanced development index was much higher than the national standard and Wuhou District was established as national balanced education demonstration district. In the third five-year plan of education development, the district committee and government further revised education development goals of taking the lead in achieving educational modernization in central and western China.

### **To Achieve Equitable Division of Financial Input for Education and Education Resources**

Taking high-quality and balanced education as orientation, the government of Wuhou District sticks to the principle of “financial budget favouring education enterprise, especially rural schools”, to improve highest priority of guaranteeing mechanisms for educational input and strongly guaranteed education development. In 2003, the district government invested more than 1 billion Yuan for the layout adjustment and construction of infrastructure of schools, with 30 schools newly-built, renovated or enlarged and an area of land for schools increased into 358 mu (about 238,666 square kilometres) and floorage of 190 thousand square kilometres, which made 12840 vacant posts for students. At the same time, using equality as a reference point, we have been making unified arrangements to intensify technological renovation. Over the past few years, the investment in technological equipment for education in Wuhou District has increased sharply, altogether up to 40 million Yuan in 4 years. An education broadband network was completed with a 2420-thousand-yuan investment, connecting all 8000 computers in the district’s primary and middle schools. Our district also took the lead to cover all the schools of compulsory education with standard configurations of technical equipment and became the only district exempted from inspection in the work of “aiding the weak” in Chengdu.

This year, according to the monitoring results of balanced education development in Wuhou District by the board of educational supervisor in municipal government, the financial input for compulsory education and the balanced development of allocation of technical equipment in Wuhou District is very good. The Gini coefficient of educational appropriations and education technical

equipment per primary and junior middle school student are both below 0.3.

### **To Collocate Education Human Resources Fairly**

The government of Wuhou District appointed 16 principals, more than 70 vice-principals and assistant principals, as well as 15 special-class teachers, 60 academic leaders in their respective fields and many excellent young teachers to work in rural schools. In recent years, 655 authorized staff posts were appropriated for rural schools, and 370 principals and teachers were hired. To solve the problem of rural school teacher shortage, we hired 270 extra teachers, 1.5 teachers per a class, and gave schools an allowance of 12 thousand Yuan per year for one teacher.

As for teachers' quality, professionalism and teaching ability of rural school teachers compared to those of urban school teachers. The rate of higher academic qualifications among rural school teachers went up to 97.6%; the rate of intermediate title or above among rural school teachers increased to 73% in 2011 from 12.7% in 2003; and the number of teachers who achieved the title of "special-class teacher" in rural schools became 16 when it was zero in 2003. In 2003, the number of teachers in rural schools who won teaching competitions at the provincial level or above was zero, while it was 25 in 2011.

### **To Improve Education and Teaching Management, Pursuing High-quality and Balanced Development**

To promote the equality of education results within the district, the administrative department of education strengthened schools' autonomy, conducted quality-oriented education projects, and narrowed the gap of education quality between schools. Sticking to the principle of "school serving as the main character with the government's guidance", schools' cultural construction was strengthened by education supervision planning, advancing "one school one distinguishing feature" and "one school one brand". The government of Wuhou District enhanced education quality with the association between urban and rural schools. In recent years, more than 20 patterns of distinguishing quality-oriented school education. The practice of regional "mass education", Wuhou Experimental Middle School as its leader, was authorized and fully affirmed by Premier Wenjiabao. The concept of "exquisite education" by Chengdu

JinGuan New City Primary School was authorized and affirmed Vice-President Xij Jinping.

Secondly, the reform of curriculum and teaching was promoted by the creation of the modernized teaching-implementing plan, which emphasizes both scientific research and practice. Based on teachers' specialization, it closely concentrates on the future of education and teaching as well as the physical and mental characteristics of growing students. Scientific teaching curriculum and pattern was designed, educational 'informationization' approaches were extensively introduced, and teaching and learning interaction through extensive knowledge and efficient teaching was achieved. The gap of education quality between rural and urban areas was significantly narrowed. In the Chengdu research examination of 2005, the gap in Wuhou District was the narrowest. In the Chengdu research examination of rural schools in 2006, the Wuhou District won first place and kept on top in the years 2007 and 2008. In the Chengdu research examination for rural schools in 2009, the average scores of Math and English were higher than those of the city. At present, 12 rural primary schools appreciated an increase in teaching quality, whose graduation rate obtained 100%. Finally, the schools implemented a quality-oriented project. According to the quality-oriented project implementing plan of "Happy Learning, Excellent Education in Wuhou", schools paid close attention to students' physical and mental health and overall qualities to advance the students to their fullest ability. Students in our district, especially students in rural areas, won prizes in all kinds of competitions and activities, the number of which was increased to 13651 in 2010 from 768 in 2003.

#### **IV. The Pursuit of High-Quality and Balanced Development.**

During the next stage, the government of Wuhou District will summarize and purify the earlier experience in monitoring, with the institutionalization, standardization and scientificization of monitoring, and consolidate research and practice achievements. Meanwhile, we will continue to invest in education programs, allocate resources equally, and remain attentive to each school's development in order to enhance the level of school administration, educational quality and ultimately strive for the provision of individualized education which corresponds to each student's personal development.

## CHAPTER SIXTEEN

### VOCATIONAL EDUCATION AND TRAINING POLICY REFORM ANALYSIS

#### THE CURRENT STATE OF SKILLS DEVELOPMENT IN NAMIBIA

*Martha Mweneni Kashea, East China Normal University, China*

##### **I. Abstract**

Skills development requires an enabling environment. For China, it is clear that skills training or education alone is not sufficient; other measures need to be taken like attracting industries. However, Namibia is caught in the dilemma of preparing for a knowledge-based economy, which needs improved and increased output from secondary, tertiary and vocational education and training. The paper explores skills development by looking at the debates, the state of skills in Namibia as well as lessons that can be learned from the experience of China.

##### **II. Background**

At independence in 1990, Namibia inherited an education system that was one sided and unbalanced mainly favouring the white minority that it created a section of the population that was unskilled and illiterate thus, resulting in high unemployment rate. In this regard, a new education system was introduced. The theme of the new education system was “Towards education for all”. Along with other educational policy reforms, vocational education and training (VET) was reformed with mixed feelings. Politicians viewed it as a solution to combat the high unemployment rate while parents and the community saw it as the same education that was offered by the colonialists, only training them for labour. Oketch (2007) observed that in Africa, VET is primarily regarded as occupational education, terminal in nature and initially associated with colonial educational administration and therefore undesirable in post-independence African.

Despite the reforms, the unemployment rate is high; school-leavers are finding it difficult to be employed. Employees are complaining that they cannot find suitable skills from the job seekers. Reforming the educational policy is a process that was undertaken to bring about the desired mix of skills. Fullan (1993) noticed that when it comes to education reform, the secret of growth and development is learning how to contend with the forces of change, adding “turning positive forces to our advantage while blunting the negative ones. It seems the government of Namibia intends to follow this route, ‘blunting the negatives’. However, the current VET system is not adequately geared to meet the labour demand for skills, nor is it ready to meet the social demand for training (Grossman & Naanda, 2006; Brunette, 2006 and Marope, 2005).

The rationale behind the VET reform in Namibia is captured in the next paragraph by Tiongso (2010):

*In an environment characterized by low education attainment and inequitable access to education, developing countries have typically implemented education policy reform to improve access to education, in general, and also to expand coverage among poorer households. Such is the rationale for significant additions to budgets for primary education, construction programs, and many compensatory programs targeted at the poor. Efficiency considerations are also important.*

Other reasons for reforming the VET sector are the changing objectives that the government wants to address, such as the case that the VET system is perceived as not effectively addressing the needs it is expected to fulfil. Continuous influences from outside or inside are important drivers of change to which the VET system needs to adapt accordingly. For example, one increasingly important driver of change is the external pressure of globalization, which increases the need of governments to upgrade the skills of the workforce if the country wants to maintain or achieve international competitiveness (Grossman & Naanda, 2006).

Parallel to these external changes, there are a number of internal factors leading to VET reform. These factors might be linked to the external changes that take place; they might also be the consequence of specific historical and political circumstances that shape a country’s economy (Ryan, 2011). This shows an important point when looking at factors that influence the outcome of VET reforms: it does not seem



to be sufficient to only focus on the VET sector as such. Instead, it is necessary to take into account the broader socio-economic context, which needs to be addressed through policies and interventions as well. The reason is that the VET sector is not an independent entity, but it stands at the intersection of the general education system and the labour market. These points to the problems in the Namibian VET system: the fact that it is expected to remedy the insufficiencies of the basic and secondary education sector, which cannot and should not be its task (Grossman & Naanda, 2006).

Current levels of expenditure on education may not be sustainable in the long run due to low economic growth and increasing government budget deficits (Dennis, 2006). This situation is not unique to Namibia only, other developing countries face similar challenges. This highlights a great need for the developing countries to refocus and strategize on how to develop skills necessary to cater for the needs of the society, move towards obtaining the right mix of skills as well as maintain global competitiveness.

The case of China provides a good example to developing countries in this respect. As one of the fastest growing economy in the world, China has managed to take millions of people out of poverty through the provision of low skills, while at the same time producing highly skilled citizens. The paper contains a discussion on debates surrounding skills development as well as the current state of skills development in Namibia by looking at the reforms that have taken place since 1990. In addition, the paper draws from the experiences of China as an example of how other countries develop.

### **III. Debates on Skills Development**

The cornerstones of a policy framework for developing a suitably skilled workforce are: broad availability of good-quality education as a foundation for future training; a close matching of skills supply to the needs of enterprises and labour markets; enabling workers and enterprises to adjust to changes in technology and markets; and anticipating and preparing for the skills needs of the future (ILO, 2010). The importance of developing a skilled workforce is an important issue that needs to be addressed by both developed and developing countries. However, there are debates that support skills development, while other academics are of an opinion that less attention needs to be paid to skills development.

The general arguments for and against more attention to skills development are different according to which levels are examined (King, 2006). It was noted earlier that countries need to have a balanced skills mix. All levels of skills development have a role to play in the right context, and the challenge is to find the right balance for a given country context. Many positive developmental outcomes are associated with education: e.g. increased health, income and productivity benefits. The literature presents various arguments on skills development from different angles such as the level of education whether skills development is at primary, secondary, tertiary, informal or formal education. The debates are being centred by the expected outcomes as skills development is yielding different results in different levels and states.

VET is important as it enriches a person for life and it provides the competences which are necessary in a democratic society. Societal and economic development depends on the strength of VET as it provides access to skills and entry routes into the labour market. For under-privileged and marginalized groups in particular, it can be an important route towards a better life.

There is evidence that even the weak vocational orientation is still appreciated by students, and does affect their aspirations for different kinds of future work (King & Palmer, 2007). Some of the vocational subjects, e.g. commerce, computing, accounting, business studies, entrepreneurship, are no more costly than the regular academic curriculum; this light orientation to TVSD is very different from the strong orientation, in full technical and vocational schools; arguably, the former also has good links to the knowledge economy (King & Palmer, 2007). Supporters of vocational education and training have gone at length to match such arguments with their own by asserting that VET produces 'specific human capital' which embody the advantage of imbibing specific job-relevant skills that can make the worker more readily suitable for a given job and would make him or her thus more productive (Oketch, 2007). However, some scholars are of an opinion that less attention need to be paid to skills development, the following portion looks at the critics of skills development.

The debates among scholars indicate that there is a need to strengthen an enabling environment otherwise education and skills acquired cannot be fully, or even partially, utilized. The debates for less attention to skills development maintains that it is not simply a case of increasing the supply of educated and skilled workers through

investing heavily in expanding the provision of education and training. The general opinion is that education and training alone does not result in increased productive capacity in the form of employment. King and Palmer supported this line of argument by adding that skills development does not equal skills utilization. If the skills cannot be put to use, potential capacity may be increased, but actual productive capacity will not be. Education and skills policies are more effective when well-coordinated with employment, social protection, industrial, investment and trade policies (ILO, 2010).

Meanwhile the arguments in support of general education have been and continue to be advanced on the basis that it creates 'general human capital' seem to carry the advantage of flexibility and portability over one's life and from one job to another and to some extent from one country to another (Oketch, 2007). Thus, many view general education as more suitable type of education that is capable of responding to economic and labour force changes in society.

Another debate against paying more attention to skills development is that it is more expensive than general education. This line of argument is reflected by the donor aids to developing countries especially in the Sub Saharan Africa, targeting to expand access to primary education and fewer funds are provided for other parts of the education and training system. A study by (Brunette, 2006) provides evidence on the decisions taken to remove the trade subjects from the National curriculum was based on the fact that this type of education was more expensive and have to be replaced with less expensive subjects such as entrepreneurship. The study calls it watershed to the technical education in Namibia. The effectiveness of diversified secondary schooling has been questioned by the World Bank for over twenty years. The World Bank paper: *To vocationalize or not?* questions whether the African state should invest in vocational education; advising that more attention should be paid to primary education. This sparked other debates, other critics, against increased attention to skills development, questioning the need to deal with the Education-For-All (EFA) particularly in developing countries. What is the point in spending more on primary education and getting increasing numbers of people through this level, when there are very little opportunities for primary graduates to utilize their skills acquired? Rapid expansion of the primary level will lead to dilution of quality and capacity constraints' as there are insufficient teachers to educate the children. Most importantly, skills by themselves do not automatically lead to more and better jobs. Foster's 'vocational school

fallacy' argued that vocational curriculum change couldn't fix unemployment; this was an economic not an educational problem (King & Palmer, 2007). Skills policies must be part of a broad set of policies that are conducive to high rates of growth and investment, including investment in basic education, health care and physical infrastructure, strong growth in good-quality employment, and respect for workers' rights" (ILO, 2010).

Vocational and technical skills are best imparted in the workplace, following general education (Bennel & Segerstrom, 1998). Although skill development is clearly a crucial policy issue for developing countries, remarkably little is known about what countries can do to increase national skills quickly. The economic literature correctly stresses the importance of investments in education (at all levels), but skill development also takes place outside the formal educational system, particularly in vocational and professional training institutions and within corporations (Kuruvilla, 2007). A well-skilled workforce is one of the main supports for prosperity and growth (OECD, 2010). Some skills come from general education, but specific occupational skills are also needed.

#### **IV. The Current State of Skills Development in Namibia**

The status of skills in Namibia presented is adopted from different literatures, documents, research studies and reports, the researcher tried to get the latest data reflecting the reforms between 1990-2010 as much as possible. The challenge encountered was that there is limited research conducted with regard to VET in Namibia and specifically to skills development and skills formation. The paper focuses on skills development with regard to skill and education as well as skills and the labour market. Lessons to Namibia were drawn from the experiences of China.

##### **Skills and Education**

Good, quality basic education is closely correlated to economic growth, although it cannot definitively be stated to follow from it. Such education is a foundation for further skills development in productive employment. Moreover, a wide distribution of educational attainment across society is a better indicator of likely future economic growth than a high average level. A country's capacity to

pick up new technologies and turn them to economic advantage is greater if its education and training system creates a broad base of adequately educated individuals able to continue learning throughout their careers.

A low literacy rate shows an education system that is not preparing society as a whole for further learning and productive work. It is increasingly acknowledged that training and skills development, whether in schools or elsewhere, is an essential complement to general education in equipping people to grasp opportunities in the world of work (ILO, 2010). In countries like Namibia, training and skills development is not complementing the general education but is used as an alternative route for the low performers. The VET system is expected to remedy the weaknesses of the general education.

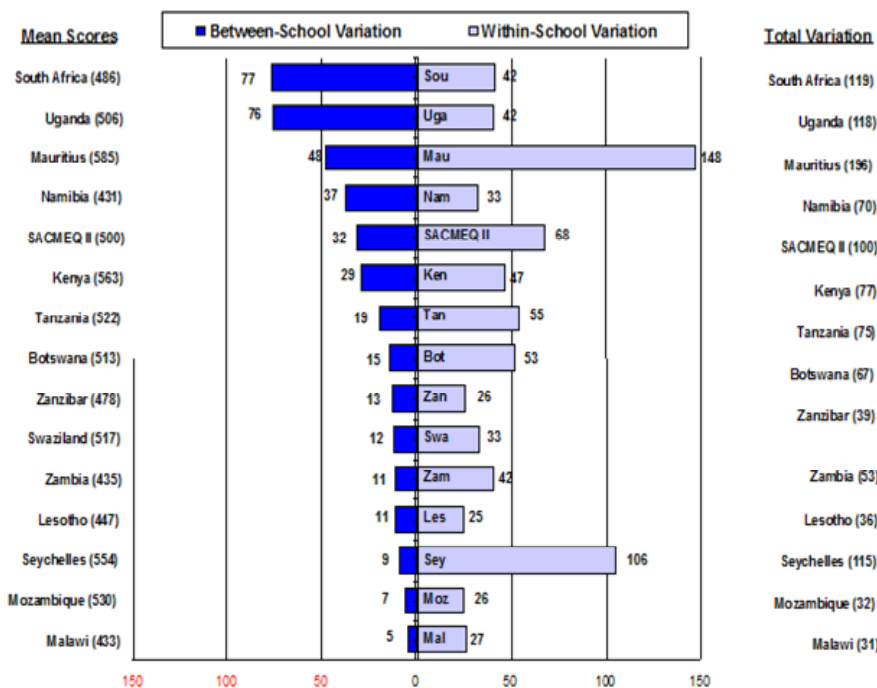
Developing countries that wish to invest in vocational education must come to see the full range of purposes of the subject. Across the vocational curriculum they must see opportunities for the teaching of language, and for the use of technology (Lewis, 2010). General education builds the foundation skills such as literacy, numeracy, computer literacy, language(s), study skills, life skills, self-management skills and other skills required for the effectiveness of all other levels of education and training (Marope, 2005). It develops a cadre of a trainable, adaptable, and flexible labour force required for the economy. Through its broad coverage, general education also meets the social equity goal more than any other level of the education and training system. The redistributive effects of education and training therefore start with general education. As Namibia strives to eradicate its current social and income inequalities, more attention needs to be focused on ensuring equity of general education and it is not just equity of access, but also equity of quality and of learning outcomes (Marope, 2005). It is also important to recognize that skills build upon one another, and that acquiring foundation skills in literacy and numeracy, as well as “learning to learn”, are absolutely essential for acquiring further skills and competencies (ILO, 2010).

One of the factors to be examined is the generic skills at school level. These skills are used as an indicator for the education quality. On the international platform the PISA and TIMSS tests are used as important indicators for comparing the literacy and numeracy skills of different countries. SACMEQ studies indicate that learners and teachers in Namibia have low literacy and numeracy skills compared to other African countries. The two studies were aimed to investigate the condition of schooling in Namibia. The studies indicate that

although Namibia has made strides in the provision of basic education and much has been achieved in terms of access to schooling, the quality of education, efficiency and equity issues are alarming. Looking at the mathematics scores of both the teachers and learners a lot can be said about the education system.

There has been increasing concern about the quality of the education that is being provided, in relation to the increasing expenditure on education. The low scores for the Namibian teachers compared with other countries is an indication that the quality of the teachers training programs is also low. There is a need to raise the standard. With the low score of the teachers it is not surprising that the learners also scored low. This indicates that when they go to the next level of education and remedial work have to be done if they are to succeed. There are growing demands about efficiency in the administration and management of education at the various levels of the educational system and the need for a more equitable distribution of educational resources. Figure 1 below shows the variations between and within schools for different countries in Africa. Namibia shows the fourth highest levels of variations. This shows that the differences between schools are very high as well as those within schools. The marginalized rural schools are the most affected as the resource distribution tend to concentrate on the urban areas.

Figure 16:1. Variation Between and Within Schools



Source: SACMEQ II

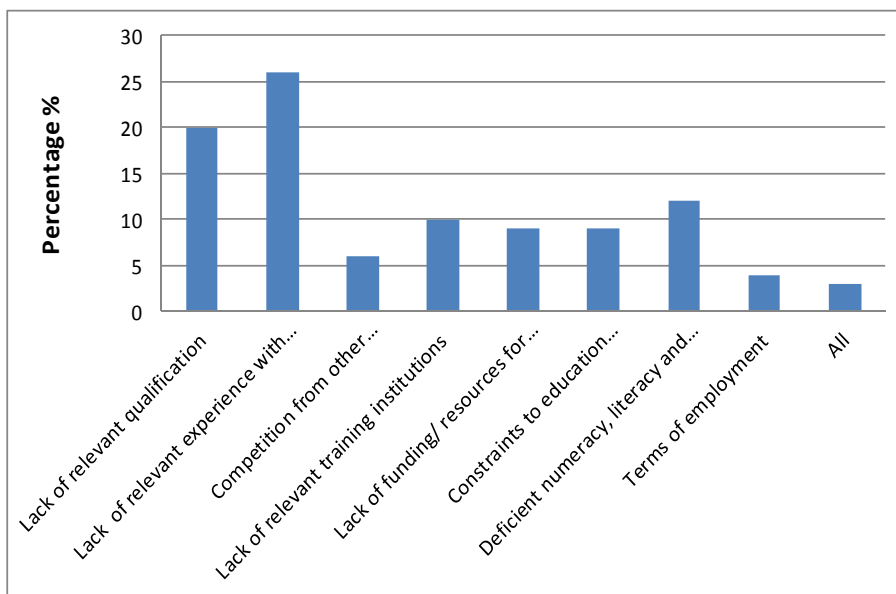
### Skills and the Labour Market

Education and appropriate technical skills play a significant role in empowering people to engage in economic activities. There is a disparity in unemployment rates between those with and without higher education. In addition there is a mismatch between the type of skills imparted by the skills training colleges and the skills that are demanded by industry and commerce in the economy.

Employers play an important role in the development of the vocational education and training system of a country, and as such the VET system should take into consideration the needs of employers. It was therefore necessary to establish from respondents whether their needs were taken into consideration by the VET system. According to a study Naanda (2010), employers in Namibia are sceptical of employing VTC graduates. The two main reasons provided were that the qualifications were not relevant and training provided in-house respectively. There is evidence that the employers prefer to train the employees and at times send them to be trained outside the country. These problems can be solved by involving all the stakeholders.

Bringing together business and labour, government and training providers, at the local, industry and national levels, is an effective means of securing the relevance of training to the changing needs of enterprises and labour markets (ILO, 2010). It is obvious that without proper coordination among the educators and the labour market, a mismatch of skills and skills deficit will be noticed. In Namibia the shortage of skills is highly documented. Among the reasons provided, lack of relevant qualification, lack of relevant experience with qualification and deficient literacy, numeracy and language skills tops the list. Figure 2 shows the reasons for skills shortages in Namibia

**Figure 16:2. Reasons for Skill Shortage/ Scarcity**



Source: IPPR, 2010

Namibia can draw lessons from China in this regard. Namibia can learn some lessons from these successes of China to help improve the education system especially the skills provision. One of the lessons Namibia can adopt is to establish good quality workplace training in VET programs and underlines the need for workplace training needs to be supported by effective relationship with employers. It is important that this relationship caters for the needs of the employers and student preferences. Workplace training will also have to be supported with quality standards and possible incentives for employers to provide training. In China, as elsewhere, when industry has confidence in the quality of technical and vocational education, it



will become more active in VET. This is because it has defined the outcomes required of VET and helped to set the quality framework for VET providers (Comyn, 2007).

One notable factor that is making a positive contribution to skills development is that the system is well aligned to produce skills at all levels, starting with pre-schools. The system caters for low skills, intermediate and high level skills and the institutions to offer these skills are proportionally expanded. It is also worth noting that there is an indication that after primary school, there are short term-courses and skilled worker schools aimed to cater for the low-skills. According to OECD (2010), China has a strong and simple model for upper secondary vocational education involving a range of specializations, a good percentage of general academic skills underpinning all the programs, and a commitment to workplace training and close relationships with employers.

## **V. Conclusion**

It is evident that skills development in Namibia is in crisis and immediate intervention is needed. The reforms that have been taking place since independence are treating the symptoms while the root cause of the problem remains unattended. 21 years of independence is a long time and Namibians need to prove that they can really develop the country and its people to reach a state of a knowledge based economy. The faith put in education as well as the monetary investment if not properly handled as indicated will bring the country to ruin.

It was indicated that investment in human capital alone can lead to reduced returns in the absence of economic opening. Education is both a right and a route out of poverty. People who have been to school are most likely to find work, look after their health and demand that governments act in their interests (King, McGrath, & Rose, 2007). Getting the macroeconomic context right remains the essential first step in focusing on skills development. Training does not create jobs. Economic development must be supported by a high quality, flexible and fast-reacting training system and industry and enterprises should be directly involved in leading the system and developing specifications for training and assessment outcomes (Comyn, 2007).

On debates of whether more or less attention should be paid to skills development, Oketch (2007) maintains both are important, and

education systems in Africa where economic development is highly sought include both general and vocational streams of education in varying proportions. The important point is that the low skills strategy can be very positive if it is associated with a subsequent move into higher value-added activities. Adopting such a strategy does not mean that you abandon the pursuit of high skilled jobs. All societies have a combination of the two; it is only the balance between them that differs. The study recommends the skills development measure to be taken at all levels of education especially early childhood development and basic education to ensure effective development of skills and avoid doing costly remedial work.

## References

- Bennel, P., & Segerstrom, J. (1998). Vocational Education and Training in Developing Countries: Has The World Bank Got It Right? *International Journal of Educational Development*, Vol. 18, No. 4, pp.271-287.
- Brunette, H. C. (2006). *Technical education in Namibia: Past trends, present circumstances and future prospects*. Comparative Education and Education Management, University of Free State, South Africa.
- Comyn, P. (2007). *Industry links with vocational education and training in China*. New South Wales: Charles Stuart University: Wagga Wagga.
- Dennis, F. (2006). *Decentralization & Education outcomes in Namibia*. Andrew Young School of policy studies, Georgia State University.
- Fullan, M. (1993). *Change forces: Probing the Depths of Educational Reform*. Bristol: Falmer press.
- Grossman, M., & Naanda, R. (2006). *Back to the future? The challenges of reforming Vocational Education and Training systems (VET): A critical analysis of Namibia's current VET reform*. Skope Publications, University of Warwick.
- Hollander, A., & Mar, N. Y. (2009). Towards Achieving TVET for All: The Role of the UNESCO-UNEVOC International Centre for Technical and Vocational Education and Training. In D. W. R. Maclean, *International Handbook of Education for the Changing World of Work*, DOI 10.1007/978-1-4020-5281-1 3, UNESCO-UNEVOC: Springer Science Business Media B.V.

- ILO. (2010). *A Skilled Workforce for Strong, Sustainable and Balanced Growth: A G20 Training Strategy*. International Labour Office.
- IPPR. (2010). *Namibia's skills deficits: cross-sectoral perceptions and experiences*. Namibia. Institute for public policy research (IPPR).
- King, K., & Palmer, R. (2007). *Technical and Vocational Skills Development : A DFID practice paper*. Department for International Development Briefing.
- King, K., McGrath, S., & Rose, P. (2007). Beyond the basics: Educating and training out of poverty. *International Journal of Educational Development* 27 (2007) pp.349–357 & pp.349-357.
- Mabizela, M. (2005). *Namibia: repositioning vocational education and training*. Retrieved 11 20, 2010, from HSRC Research Monograph: [www.hsrcpress.ac.za](http://www.hsrcpress.ac.za)
- Marope, M. T. (2005). *Namibia Human Capital and Knowledge Development for Economic Growth with Equity*. Human Development Sector; Africa Region; The World Bank.
- Naanda, R. N. (2010). *Integration of Identified Employability Skills into the Namibia Vocational Education and Training Curriculum*: PHD dissertation. South Africa: University of Stellenbosch.
- OECD. (2010). *Learning for Jobs*. Paris: OECD.
- Oketch, M. O. (2007). To vocationalise or not to vocationalise? Perspectives on current trends and issues in technical and vocational education and training (TVET) in Africa. *International Journal of Educational Development* 27 (2007) pp.220–234 & pp.220-234.
- Ryan, R. (2011). *How VET responds: a historical policy perspective*. Retrieved 05 09, 2011, from National Centre for Vocational Education Research (NCVER: <http://www.ncver.edu.au/publications/2338.html>)
- Tiongso, E. R. (2010). *Analyzing the Distributional Impact of Reforms: Education Policy Reforms*. World Bank.



## CHAPTER SEVENTEEN

# THE ROLE OF HIGHER AGRICULTURE VOCATIONAL EDUCATION FOR RURAL TRANSFORMATION THE SIGNIFICANCE OF SKILL DEVELOPMENT IN CHINA

*Jiaying Zhang, Institute of International Education (IIE), Department  
of Education, Stockholm University, Sweden*

### I. Introduction

*Making education the inter-medium for rural transformation demands re-examining policies and priorities for education and role of education for rural people in new perspectives. All forms of education at different levels, including tertiary, professional and advanced education as well as basic education, literacy and continuing education to vocational and technical skill development have to be made relevant and responsive or to be assessed and reoriented to serve the needs of rural transformation*

*--INRULED (2001)*

China has captured the attention of world for its rapid economic growth as well as wider and deeper involvement of international affairs. The rural transformation, paralleled with urbanization resulted in the shift of more people towards urban areas. According to *Urban Blue Book* (China Social Science Academy, 2009), at the end of 2008, the rural population fraction in China declined from 74 percent in 1990 and 64 percent in 2001 to 54 percent, with 723 million residing in the rural (excluding Hong Kong, Macau and Taiwan). Nevertheless, the UN has forecast that China's population will keep a balance with about equal number of people staying in the rural and urban areas by 2015 (State of World Population, 2007). China, the world's most populous country, has also the world's majority of rural population. It

is estimated that by 2020, when China reaches 55 percent of urbanization, there will still be over 0.4 billion rural employment population (Lv, 2005).

As China “opened the door” from the late 1970s, by creating “Special Economic Zones” and “Open Cities” in the provinces of the coastal south-east, preferential policies such as fiscal advantages were attributed to the enterprises of these areas. The new development strategy favouring coastal provinces is leading to increasing regional inequality (Bhalla, 1990; Chen and Fleisher, 1996). The most salient regional inequality appeared between coastal south-east and west provinces. Paralleled with regional inequality, rural income and consumption inequality in China have increased, as shown in EFA Global Monitoring Report (2009), the population living on less than \$1 and \$2 per day are 10 percent and 35 percent of the whole nation’s population in years 1990-2005, and the poorest 20 percent holds four percent while the richest 20 percent holds 50 percent of the share of income or expenditure, with the Gini index 47 in years 1992-2005. Majority of poverty population live in the western rural areas of China. Despite substantial progress on poverty reduction over the last decade, it is estimated that almost 150 million people still live below international poverty lines. In 2005, China still ranked 85th globally on the Human Development Index.

One of the six EFA goals, “ensuring that the learning needs of all young people and adults are met through equitable access to appropriate learning and life skills programs” has not yet been paid sufficient attention as most developing countries tend to give priority to literacy and universalization of basic education.

The recent China’s National Plan for Medium and Long-term Education Reform and Development (2010-2020) has singled out how education for rural transformation is determinant for the country’s human resource development strategy; and how vocational education for rural transformation is the major channel for the country’s economic growth, employment promotion, improvement of people’s livelihood and solutions to the “Issue of *Three Nongs*”, namely, *NongCun*, rural area, *NongYe*, agriculture and *NongMin*, peasants, as well as the determinant for mitigating structural conflicts between labour supply and demand.

Based on a literature review over relevant documents produced by National Bureau of Statistics of China, the paper does a secondary data analysis over national as well as international data sources and annual reports, namely, China Statistical Yearbooks 2000-2010,

Educational Statistics Yearbook in China, China Rural Statistical Yearbooks 2000-2010 and China Population and Employment Statistical Yearbooks 2000-2010; Other related qualitative study is based on conclusion of relevant studies on equity issues of access to higher education made by Chinese as well as other international researchers.

## II. Defining Concepts

### Rural and Rural Education

There remain controversies in defining “rural”. Rural areas can be defined by “settlement size, population density, distance to metropolitan areas, administrative division, and importance of the agricultural sector” (World Bank, 2008, p. 58). Population and geographical areas are the most commonly-used criteria. China, instead of using population number, uses other characteristics such as metropolitan faculties leading to a declared legal status of urban or rural. This paper adopts the common features that characterize “rural communities” including:

*People and economic activities are much more dispersed than in urban areas; Livelihood is largely dependent on growing and extracting primary products; and access to basic and services is rudimentary or limited because of the absence of a concentration of service recipients and policies that favour urban areas (INRULED, 2001, pp. 6-7).*

The concept of rural education experienced being refreshed and updated gradually. Rural education was defined as “[the] education provided the school-age children residing in rural areas.” The confusion caused by the definition resulted in debates, which remained until the first International Rural Education Forum held in Tai’an, Shangdong Province in 1992, when rural education was firstly raised and defined as “[an] integrated system composed of literary education, basic education, vocational and technical education and adult continuing education”. Higher education was excluded from this system. Until 11 years later, in 2003, higher education was finally added to the system. In addition, in today’s information society and

knowledge economy, educational systems, embracing lifelong, formal, non-formal and informal learning opportunities for all have to become a vital influence in shaping and fulfilling the vision of rural transformation (INRULED, 2001). All education, in spite of its forms or levels, is considered rural education if it serves for rural transformation, development and rural people.

### **Rural Transformation**

The concept, “transformation” in social science studies, is usually explained by two other concepts, stock concept, i.e. from lower level of equilibrium to a higher level of equilibrium and flow concept, i.e. from a higher level of equilibrium to a lower level of equilibrium (Lingappa, 1997). Koppel and Zurik (1988), defines “rural transformation” as “...fundamental changes in the composition of rural economic life and social organization-changes that are associated with greater complexity and more pervasive linkage with non-rural economic and social life”. Economic diversification is a hallmark of rural transformation. The changes can be marked by movement of people, demographic transition, and new economic pressure and opportunities. “[T]he term rural transformation seeks to convey a vision of pro-active and positive process of change and development of rural communities in the context of national and global change in which education is a key instrument for shaping and fulfilling the goal of rural transformation” (INRULED, 2001, p.12; Chinapah, Zhao, et.al., 2009). The concept of “rural transformation” according to Chinapah, Zhao et.al (2009) “[should] be defined in the context of [country], which needs further clarification for fitting the developmental and situational context”. According to World Development Report (2008) *Agriculture for Development*, China is a typical transforming country in “Agriculture Three Worlds”, with the criterion adopted in the classification, i.e. “agriculture is no longer a major source of economic growth, contributing on average only 7 percent of GDP growth, but poverty remains overwhelming rural (82 percent of all poor)”. In addition, due to its huge regional disparities as well as large population, the country itself was categorized into three levels, urbanized, transforming and rural under the framework of “Agriculture Three Worlds”. Wang (2007, p. 97), in a journal article, entitled, *Chinese Rural Transformation: Analysis on Modes, Characteristics and Trends*, gives a definition to rural social transformation, “a process where economic and social structures have



taken fundamental changes in rural sectors.” He also states that the intension of the concept “rural transformation” in Chinese rural sectors is “a transforming process shifting from a traditional economic, political and cultural rural society with surplus rural off-farm labours, which smallholder production mode dominates to a modern agricultural production mode and modern rural society” (Wang, 2007, p. 97).

Wang (2007) also analyses the transformation mode in Chinese rural society. According to the same paper, there are four types of modes, 1) mode of utilization of rural collective land resources, some southeast coastal regions of China have adopted the means of land renting and selling to attract investment in establishing local township enterprises, which brought the rural industry into the old traditional economic structure, with planting as their dominants. The development of the rural industrialization has resulted in the reconstruction of the rural economic structure, promoting the transformation of self-sufficient economic structure to market economy; 2) mode of utilization of rural labours, which applies to the medium and western rural regions of China. From year 1979-2005, there are about 0.2 billion migrant labours have been transformed to non-agriculture employment labours. In addition to the remittance return to the rural sector, the new lifestyle, way of communication and ideology have experiencing great changes while they have been brought by the migrant labours to the rural sectors; 3) mode of utilization of human historical and natural environment resources, i.e., many rural villages have established new industry such as, ecological village, farm tourism etc.; 4) mode of utilization of agriculture industry, i.e., by introducing modern administrative and agriculture technology and uniting rural households, some rural sectors have developed their featured agriculture products (Wang, 2007, pp. 97-98).

Liu (2007, p. 4) also characterizes Chinese rural transformation into five areas, 1) changes in social production structure, i.e., major labours in rural sectors as non-agricultural population, agriculture as side-line production, diversification of income of peasants, non-agricultural income as the main source of income for peasants; 2) changes in basic social unit--individual and family as the basic unit of the society, which is one of the greatest characteristics of social transformation--such as, the increase of total population, decrease of labour-age population supply and rapid population aging, miniaturization of family scale, etc.; 3) changes in social mobility mechanism, i.e., internal migration due to the development of

openness and freedom of rural society; 4) changes in social class structure, i.e., the changes of production and distribution modes resulted from the market economy, have gradually changed the Chinese rural society from a politically layered to an economically layered society; and 5) changes in organizational structure, according to Liu (2007, p.5), the Chinese rural organizational system has been witnessing transformation in adjustment and development in reconstruction as the result of the re-emergence of non-regular organizations, and degradation of regulation of the basic organizations.

Wen (2008) historically reviews the process of rural transformation development in China from 1949 to 2008. Drawing the conclusion of the characteristics and previous studies, Wen categorizes the past fifty years into three major phases, 1949-1978: rural transformation development with focus on productive forces in the context of transformation of political system; 1979-1993: rural fluctuation development with economy as focus in the context of transformation of economic structure; 1994-now: rural transformation development in the context of evolution of development ideas under various economic environments. The rural transformation in China has two characteristics, i.e., the first one is that efficient, specialized and organic agriculture will receive a full-grown development; the second is the urbanization of rural areas, which leads to an emergence of two types of peasants, professional peasants, and part-time peasants, and the latter occupy higher portions as the rural transformation (ibid.). Part-time peasants move from rural areas to cities or towns to find jobs but do not have urban “Household Registration” (Hukou), thus they become the “floating population”. It usually refers to those who migrate from rural areas or less developed places to big or medium-sized cities or towns but stay and work in a certain place on a temporary basis.

### **III. Rural Transformation: Influence to the Rural**

The rural transformation in China has two characteristics. The first one is that efficient, specialized and organic agriculture will receive a full-grown development (Zheng, 2007). The second is the urbanization of rural areas, which leads to an emergence of two types of peasants, professional farmers, and off-farm farmers. The latter occupy higher portions as the result of rural transformation (Ma, 1999). Off-farm farmers do not only refer to internal migrant farmers

who move from rural areas to cities or towns to find jobs but do not have urban Household Registration (Hukou), thus they become the “floating population”. It usually refers to those who migrate from rural areas or less developed places to big or medium-sized cities or towns, but stay in a certain place on a temporary basis. Some off-farm farmers work in agriculture-related areas, even in the second and tertiary industries. In many villages in China, many farmers developed their own township enterprises, such as, Nongjiale, i.e., “tourism for people from urban areas to have a trip in rural areas” etc.

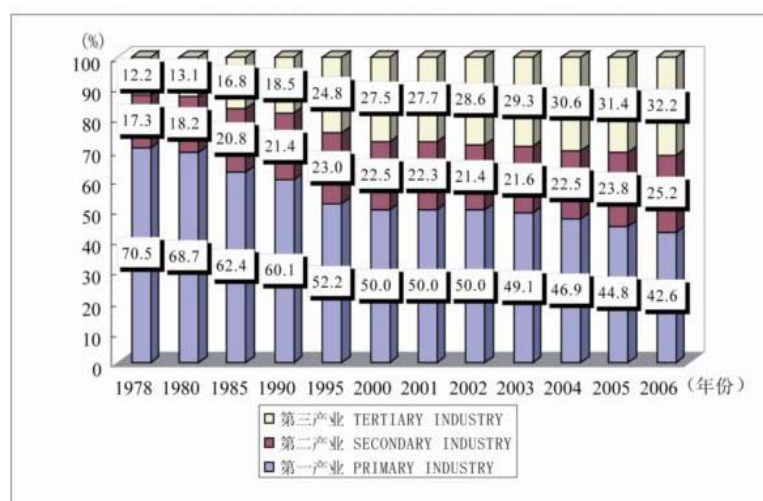
### **Off-Farm Farmers**

It is generally agreed that “education is a determining factor in access to off-farm employment and for the type of non-farm employment accessible” (FAO and UNESCO-IIEP, 2003). While persons with low levels of education are found in low qualified jobs, those with higher educational levels can access better-paid and more qualified positions (ibid.).

One great change resulted from rural transformation in China is that less and less percent of the population is employed or working in the first industries. According to China Statistics Yearbook 2010, in 2009, the number of employed persons at year-end by three strata of Industry, about 38.1 percent, 27.8 percent and 34.1 percent of employed persons working in the first, secondary and the third industries respectively. The first industry is the primary or extractive industries, which collects and produces raw materials for manufacture. It may involve agriculture, horticulture, agri-business, fishing, aquaculture, forestry and all mining and quarrying industries. The second industry manufacturing industries, are commonly divided into light and heavy industries, which are dominated by the manufacture of finished products. The tertiary industry, the service industry, involves the provision of services to the general population and to businesses as well as to final consumers.

The figure below presents the composition of employment by forms of occupations, which indicates that at the national level, the proportion of people who are employed in the primary industry is decreasing rapidly during year 1978-2006, while the secondary and tertiary industries are increasing sharply. The percentage of people who are employed in tertiary industries in 2006 nearly tripled compared with the percent in 1978, increased to 32.2 percent from 12.2 percent.

Figure 17:1 Composition of Employment by Industry



Source: China Social Statistical Yearbook, 2007

In addition, according to the conclusion made from China Population and Employment Statistical Yearbooks 2001-2010, in the past nine years, from 2001 to 2009, it is clearly presented that the non-agriculture population is climbing gradually and sharply. However, the average annual increasing rate of non-agriculture population is around 0.735 percent. During the nine years, before 2003, the lowest ratio of non-agriculture population is in Tibet, however from 2004 till 2009, is in Guizhou, with the annual increasing rate of non-agriculture population 0.155 percent, which is much lower than the national total. Shanghai steadily ranks among the highest the proportion of non-agriculture population in the past nine years, with annual increasing rate, 1.621 percent, and until 2009, only 11.75 percent of the total population is employed in agriculture in Shanghai (See Appendix I).

Table 4:1 presents that the proportion of non-agricultural population is 33.77 percent. In Shanghai it is 88.25 percent, however, in Guizhou, with the majority of the population, nearly 84 percent is working in agricultural sectors. When compared internationally, the percentage of employed persons in primary sectors is still very high compared with other developed countries. However, the number of people who are working in the primary industry does not correspond to the agro-production or manufacturing, for example the Netherlands

a country with a highly productive and competitive agro-farm products.

Both “Farming, Forestry, Animal Husbandry and Fishery” and “Manufacturing” occupy the highest percentage in all occupations in China, around 27.22 and 22.13 percentages respectively. However, when comparing between these two by levels of education attainment that labours obtained, there are significant differences. As shown in the table below, around 75.68 percent of those people who do not receive any education or those who receive less than six years, i.e., primary education, work in the agriculture in China, however, only 7.85 percent for those who are working in manufacturing, nearly one tenth of the percentage of the former. The gaps become much larger in levels of higher education; only around 1.41, 0.75 and 0.39 percent of labours who have completed college, university and post-graduate education respectively are working in agriculture in 2006.

**Table 17:1 Non-Agricultural and Agricultural Population by National Total and Selected Regions (Highest and Lowest) (2007-2009)**

| Year | Region         | Total Pop. (10, 000 person) | Non-agricultural      |              | Agricultural          |              |
|------|----------------|-----------------------------|-----------------------|--------------|-----------------------|--------------|
|      |                |                             | Pop. (10, 000 person) | Proportion % | Pop. (10, 000 person) | Proportion % |
| 2009 | National Total | 133322.97                   | 45028.83              | 33.77        | 88294.14              | <b>66.23</b> |
|      | Shanghai       | 1400.70                     | 1236.16               | 88.25        | 164.54                | <b>11.75</b> |
|      | Guizhou        | 4090.78                     | 661.43                | 16.17        | 3429.36               | <b>83.83</b> |
| 2008 | National Total | 132130.76                   | 43971.41              | 33.28        | 88159.35              | <b>66.72</b> |
|      | Shanghai       | 1391.04                     | 1216.56               | 87.46        | 174.88                | <b>12.54</b> |
|      | Guizhou        | 4036.75                     | 651.09                | 16.13        | 3385.66               | <b>83.87</b> |
| 2007 | National Total | 130832.13                   | 43076.71              | 32.93        | 87755.41              | <b>67.07</b> |
|      | Shanghai       | 1378.86                     | 1196.94               | 86.81        | 181.92                | <b>13.19</b> |
|      | Guizhou        | 3985.04                     | 638.94                | 16.03        | 3346.09               | 83.97        |

Source: Conclusion from China Population and Employment Statistics Yearbooks 2008-2011

**Table 17:2 *Employments by Type of Industry in 2007, Comparing China with Other Selected Countries or Regions***

| <b>Country of region</b> | <b>Primary industry</b> | <b>Secondary industry</b> | <b>Tertiary industry</b> |
|--------------------------|-------------------------|---------------------------|--------------------------|
| <b>China</b>             | 40.8                    | 26.8                      | 32.4                     |
| <b>Indonesia</b>         | 41.2                    | 18.8                      | 39.9                     |
| <b>The United States</b> | 1.4                     | 20.6                      | 78.0                     |
| <b>Netherlands</b>       | 3.0                     | 19.1                      | 73.2                     |
| <b>France</b>            | 3.4                     | 23.2                      | 73.1                     |

Source: China Statistical Yearbook, 2010

**Table 17:3 *Percentage of Labourers in Comparison to Manufacturing in all Occupations by Levels of Educational Attainment (%; total=100)***

| <b>Educational Attainment</b>        | <b>Farming, Forestry, Animal Husbandry and Fishery</b> | <b>Manufacturing</b> |
|--------------------------------------|--|----------------------|
| <b>Percentage in all occupations</b> | 27.22142601  | 22.13177774          |
| <b>Illiterate</b>                    | 75.68172836  | 7.851402977          |
| <b>Primary School</b>                | 57.8691316   | 15.2495522           |
| <b>Junior School</b>                 | 30.76624586  | 26.37537942          |
| <b>Senior School</b>                 | 8.543685905  | 26.30829038          |
| <b>College</b>                       | 1.408131677  | 15.96134244          |
| <b>University</b>                    | 0.750350631  | 13.31697055          |
| <b>Graduate</b>                      | 0.385356455  | 8.798972383          |

Source: China Labour Statistical Yearbook 2006

#### **IV. Rural Transformation and Skill Development in China**

##### **Economic Growth and Increase of Farmers' Income**

Education has been recognized to be a long-term investment in

development, which yields both social and individual benefits. In particular, investment in vocational education yields even more individual returns.

Chen (2008) studies the relationships among China's financial education expenditures and GDP, fiscal revenues, and urban & rural incomes during 1978-2008 by adopting econometric models, and the research findings show that China's financial education expenditures has positive economic effect, and there is positive correlation between GDP, a positive correlation between fiscal revenues, but no significant correlation between individual's income, however, presented her finding that the development of rural education has positive influence on peasants' income, and the average per capita income of peasants increase by 10.37 percent, if peasants receive one more average education year (Xie, 2007). Chen, Zhang and Yang in their research projects aim at exploring the determinants of China's urban-rural inequality by using the Oaxaca-Blinder decomposition method based on data of household survey of 2002. It reveals that 1) education inequality is the most important contributor to urban-rural inequality in China, and it accounts for 34.69 percent of China's urban-rural inequality; 2) the government's rural-biased educational investment is the key factor of urban-rural education inequality and income disparity. In addition, based on the counterfactual analysis, the study also finds out that if the government's educational expenditure in the rural sector were the same as that in the urban sector, the rural residents' income would have increased 50 percent, and the urban-rural inequality would have decreased 50 percent. The results are robust to different parameter specification (2010).

Higher Education Institute of Beijing University (1999) has gained the figure of the higher education return of urban China at 5.23 percent. Ting (1999) also got the ratios of 26.49 percent, 1.33 percent and 11.59 percent respectively for education return in completing primary, secondary and tertiary education. It also shows in this finding is that those who completed higher education can earn 40 percent more than those who are enrolled in higher education but have not yet completed due to various reasons. Interestingly, those who graduated from key HEIs can earn at least 28 percent more than those from non-key or ordinary HEIs (Liu, 2007).

### **Intergenerational Mobility**

According to the study done on the role of education on Chinese intergenerational mobility, the highest intergenerational mobility in occupation and profession takes place with the children of people who have received higher education, while the weakest intergenerational mobility takes place among children of people who only received

primary education (Guo and Yan, 2007). Another study also presents the regional disparity in intergeneration income among west, middle and east of China, by indicating that the rural residences of east and middle regions of China have significantly higher intergenerational mobility than those of west regions (Fang and Ying, 2010).

### **Modes of Higher Vocational Institutes serving the *Three Nong***

Take Chengdu Vocational College of Agricultural Science & Technology for example, there are two modes implementing currently

#### ***Mode of “HEI + Local Municipality + Rural Household”***

Since 2005, Chengdu Vocational College of Agricultural Science & Technology, in corporation with Municipality of Shuangliu County, the number one county of the Ten Key Counties in Sichuan province has established the science and technology experts' courtyard in Huanglongxi. With the financial supports provided by Scientific and Technological Bureau of Shuangliu County in apparatuses and equipment of the courtyard, Chengdu Vocational College of Agricultural Science & Technology send experts and teachers to promote the scientific and technological products in Huanglongxi in instructing the rural households to establish the demonstration sites specializing in crop cultivation and animal husbandry. Among many successful cases, “Red wine yeast breeding phoenix chicken” and “Two metal bar chili purification rejuvenation” have achieved substantive results.

#### ***Mode of “HEI + Association + Rural Household”***

This mode is similar to the “One village one product movement (OVOP)” a Japanese regional development program. It began in Oita Prefecture in 1979 when the then-governor Morihiko Hiramatsu advocated the program. Implementation started in the 1980s. Communities selectively produced goods with a higher added value. One village produced one competitive and staple product as a business to gain sales revenue to improve the standard of living for the residents of that village.

Chengdu Vocational College of Agricultural Science & Technology has established the Base of *Prunus armeniaca* L. at Jiefang Village, Hongfu Countryside, Qingbaijiang District of Chengdu to promote the new quality product *Prunus armeniaca* L. An association, titled Quality *Prunus armeniaca* L. Industry Association has been established involving 142 households and covering over 2000 acres of planting areas. Each acre can help rural households to create income



of over 10 000 RMB Yuan. The local municipality has built a village road and developed the tourism project “Rural Home Inn” -- “Happy Farmhouse” an exhibition and tasting of *Prunus armeniaca* L. Jiefang Village. The village has experienced great transformation in various ways because of one product, *Prunus armeniaca* L., introduced by the Chengdu Vocational College of Agricultural Science & Technology.

### **Improved Education of the Rural Population**

One Village One College Student is a program formulated by Chinese government training high quality personnel from the rural sectors and to the rural sectors. Cultivating educated and skilled farmers and farmers with new business management also provides higher education a good channel to better serve the rural sector.

The Agricultural University of Heibei (AUH), is the first and pioneer HEI which initiated and launched the two-year "One Village One College Student Program" in 2003. Aiming at improving the scientific and cultural quality of the farmers and enhancing rural grassroots of the quality of care management, to improve the quality of labour skills and education of other farmers; expanding the new model of rural vocational education. The Chinese Central Committee Document No. 2006 states,

*...to improve the overall quality of farmers, cultivating new educated and skilled farmers and farmers with new business management, is one of urgent needs in building a new socialist countryside. Despite the rapid reform in rural development in China, the pace of development is still relatively slow compared to urban counterpart. Lacking of quality rural talent is one of the main factors. Low quality of rural talent has become an obstacle or “bottleneck” to economic and social development of rural sector, as well as the whole society.*

AUH implemented the "One Village One Student Program" to speed up personnel training in rural areas is a useful exploration for higher education for the new socialist countryside. The two-year program is dedicated to providing Information Technology applications in rural areas, planting techniques, practical technology and promotion, agricultural processing with combination of other modular courses such as, marketing, management, farming technology, laws and regulations. In order to adapt to different regions, the implementation of the diverse needs of different people has been taken into

consideration in education and training.

Likewise, "Green Certificate Training Project", a training project for young farmers, provided farmers with practical technical training, consultation and demonstrations. By the end of 2006, over 20 million people had taken part in the training; and over 10 million people had obtained certificates (AICESI). It had become the typical enrichment example via technology and effectively improved farmers' scientific and technological quality. According to the "Training Plan for National Rural Migrant Workers from 2003 to 2010" the vocational and adult schools had provided a large amount of labour transfer training in rural areas. There were 151,000 national farmers' training schools in 2006, which had given farmers 45,205,800 times technical trainings (ibid.). From 2001 to 2006, 366,205,600 trainings had been held nationwide. The successful extension of vocational education has significantly changed the backward educational status of rural areas (ibid.).

## **V. Summary**

This paper explores the statuses and challenges in the labour transition for the large labour force leaving the agriculture sector, the training delivery pattern for agriculture, and the role of higher agriculture vocational education for rural transformation. Many studies have proven that education has become one of the most sustainable poverty reduction strategies.

## **References**

- (AICESIS) *International Association of Economic and Social Councils and Similar Institutions*, Retrieved from [http://www.aicesis.org/IMG/pdf/110601\\_RAPPORT\\_final\\_SUR\\_EDUCATION\\_EN-.pdf](http://www.aicesis.org/IMG/pdf/110601_RAPPORT_final_SUR_EDUCATION_EN-.pdf)
- Becker, Gary S. (1991). *A Treatise on the Family*. Cambridge, Mass: Harvard University Press.
- (2002). The Age of Human Capital. In H. Lauder, P. Brown, J.-A. Dillabough, A. H. Halsey (Eds.), *Education, Globalization & Social Change* (pp. 292-294). New York: Oxford University Press.

- Blanden, Jo, Paul Gregg, and Stephen Machin. (2005). *Intergenerational Mobility in Europe and North America*. Department of Economics, University College London, Centre for Economic Performance, London School of Economics, University of Bistol, London School of Economics. London, pp.1-20.
- Bryman, Alan (2008). *Social Research Methods*. New York: Oxford University Press.
- Chinapah, V. Zhao, SW, et.al. (2009) *Education for Rural Transformation in China and India-a comparative research study of role of education in rural China and India*. A Research Proposal submitted to the Swedish Research Council.
- Dearing, R. (1997) *Higher Education in the Learning Society: Report of the National Committee of Inquiry into HE*. London: The Stationary Office.
- EFA Global Monitoring Report-Reaching the Marginalized? (2010). UNESCO Publishing & Oxford University Press.
- Fang, M and Ying, RY. (2010). *Research on intergenerational income mobility of Chinese Rural Residence*. Journal of Nanjing Agricultural University (Social Sciences Edition) 10:2
- Guo, CB. and Yan, WF. (2007). *Correlation of education and income intergenerational mobility on Chinese urban residence*. Education Research. 28: 5
- Hurst, Charles E. (2007). *Social Inequality Forms, Causes, and Consequences Sixth Edition*. Allyn and Bacon Boston, MA. ISBN 0-205-48436-0
- INRULED. (2001) *Education for Rural Transformation: towards a policy framework*. UNESCO, Baoding, Zhengzhou, China
- Koppel, B. and Zurick, D. (1988) Rural Transformation and the Future of agricultural development policy in Asia. *Agriculture Administration and Extension*, (4):28, pp.283-301
- Lingappa, C. (1997) *Rural transformation and Drought Prone Region: A Case of Bijapur District in Karnataka*.
- Lv, M. (2005) “Three-nong” and Higher Agriculture Education-the reform and development under the guidance of scope of scientific development. In *Higher Agriculture Education*. (3): 86
- Löfstedt, J.I. and Zhao, S. (2002) China Transition Patterns. In H. Daun. (Ed.) *Educational restructuring in the context of Globalization and National Policy*. New York: Garlands, 2002.
- Maguire, Charles and Atchoarena, David (2003). *Higher Education and Rural Development: A New Perspective*. Education for

- Rural Development towards New Policy Responses*. In Atchoarena and Gasperini (eds.), FAO/UNESCO-IIEP.
- Michael Apple (1982). Reproduction, Contestation, and Curriculum," in *Education and Power*.
- Ministry of Education, PRC (1999) *Action scheme for Invigorating Education Towards the 21<sup>st</sup> Century*. Beijing: Ministry of Education.
- Ministry of Education, PRC (2000) *Higher Education in China*. Beijing: Ministry of Education.
- Ministry of Education, PRC (2001) *Education Statistic Year Book of China 2001*. Beijing: Ministry of Education.
- Ministry of Education, PRC (2002) *Education Statistic Year Book of China 2002*. Beijing: Ministry of Education.
- Myrdal, G. (1957) *Economic Theory and Underdeveloped Regions*. New York: Harper & Row.
- National Bureau of Statistic (2000-2010) *China Statistical Yearbooks 2000-2010*. Beijing: Educational Science Publishing House.
- National Centre for Education Development Research (2002) *2002 Green Page on Education in China*. Beijing: Educational Science Publishing House.
- Newman, J. H. (1907) *The Idea of a University*. London: Longmans Green and Co.
- Nmgnews,(2009) Retrieved February 7, 2010, from <http://ztpd.nmgnews.com.cn/system/2009/02/18/010181247.shtml>
- Outline of China's National Plan for Medium and Long-term Education Reform and Development (2010). Beijing pp. 9-10 [http://www.aei.gov.au/AEI/China\\_Education\\_Reform\\_pdf.pdf](http://www.aei.gov.au/AEI/China_Education_Reform_pdf.pdf)
- Qu SW Yang YC Tian HZ (2006). Education in perspective of economy Chinese Ocean University Press.
- Shapiro, Thomas M. *The Hidden Cost of Being African American*. New York: Oxford University Press, 2004, 60-71.
- Shen, JJ and Gong, HP (2008), study in the non-adaptability of Chinese higher education to new rural construction, *Journal Of Anhui Agriculture*. 2008, 36 (27).
- State of World Population (2007) *United Nations Population Fund*. Retrieved March 7, 2011, from <http://www.iiep.unesco.org/focus-on-higher-education/higher-education-rural-development-and-poverty-alleviation.html>
- Sun, Z. H. (2003). Retrieved March 1, 2010, from the World Wide Web: <http://www.avedu.org/page/nzjlt/NZJLT155.HTM>

UNESCO EFA Global monitoring report 2010-Reaching the Marginalized. Oxford University Press pp.374-378

Wang, B. (2007). *Chinese Rural Transformation: Analysis on Modes, Characteristics and Trends*. Economists. 4. Pp. 97-102.

Weber, Max. (1964). *The Theory of Social and Economic Organization*. (ed. by Talcott Parsons). New York: The Free Press

Wen, Q. (2008). *Recent Progress of Research in Rural Transformation Development and Its Trends in China*. China Population, Resources and Environment. 19(1): pp. 20-24

Wilson and Tyrczniewicz. *Agriculture and sustainable development: policy analysis on the Great Plains*. 1995

World Development Report. (2008). *Agriculture for Development*. Washington DC: The International Bank for Reconstruction and Development / The World Bank.

Xie LX. (2007). *Development of Rural Education and Its Influence on Peasants Income*. *Market Modernization* 2007:504 pp.

Yue Changun. (2009), *Expansion and Equality in Chinese Higher Education*, unpublished conference paper, p.3

### Appendix I. Non-agricultural and Agricultural Population by Region

| Year | Region         | Total Population (10,000 person) | Non-agricultural           |              | Agricultural               |              |
|------|----------------|----------------------------------|----------------------------|--------------|----------------------------|--------------|
|      |                |                                  | Population (10,000 person) | Proportion % | Population (10,000 person) | Proportion % |
| 2009 | National Total | 133322.97                        | 45028.83                   | 33.77        | 88294.14                   | 66.23        |
|      | Shanghai       | 1400.70                          | 1236.16                    | 88.25        | 164.54                     | 11.75        |
|      | Guizhou        | 4090.78                          | 661.43                     | 16.17        | 3429.36                    | 83.83        |
| 2008 | National Total | 132130.76                        | 43971.41                   | 33.28        | 88159.35                   | 66.72        |
|      | Shanghai       | 1391.04                          | 1216.56                    | 87.46        | 174.88                     | 12.54        |
|      | Guizhou        | 4036.75                          | 651.09                     | 16.13        | 3385.66                    | 83.87        |
| 2007 | National Total | 130832.13                        | 43076.71                   | 32.93        | 87755.41                   | 67.07        |
|      | Shanghai       | 1378.86                          | 1196.94                    | 86.81        | 181.92                     | 13.19        |
|      | Guizhou        | 3985.04                          | 638.94                     | 16.03        | 3346.09                    | 83.97        |
| 2006 | National Total | 129315.31                        | 42071.07                   | 32.53        | 87244.24                   | 67.47        |
|      | Shanghai       | 1368.08                          | 1173.30                    | 85.76        | 194.78                     | 14.24        |
|      | Guizhou        | 3921.91                          | 626.83                     | 15.98        | 3295.08                    | 84.02        |
| 2005 | National Total | 127833.35                        | 40898.01                   | 31.99        | 86935.34                   | 68.01        |
|      | Shanghai       | 1360.26                          | 1148.94                    | 84.46        | 211.32                     | 15.54        |
|      | Guizhou        | 3867.74                          | 609.69                     | 15.76        | 3258.05                    | 84.24        |

**Appendix I. Non-agricultural and Agricultural Population by Region (Continued)**

|      |                |           |          |       |          |       |
|------|----------------|-----------|----------|-------|----------|-------|
| 2004 | National Total | 127038.42 | 39140.16 | 30.81 | 87898.26 | 69.19 |
|      | Shanghai       | 1352.39   | 1097.60  | 81.16 | 254.79   | 18.84 |
|      | Guizhou        | 3831.19   | 606.57   | 15.83 | 3224.62  | 84.17 |
| 2003 | National Total | 126035.32 | 37427.29 | 29.70 | 88608.03 | 70.30 |
|      | Shanghai       | 1341.77   | 1041.39  | 77.61 | 300.38   | 22.39 |
|      | Guizhou        | 3786.84   | 590.15   | 15.58 | 3196.70  | 84.42 |
|      | Tibet          | 259.21    | 39.43    | 15.21 | 219.79   | 84.79 |
| 2002 | National Total | 125235.55 | 34934.39 | 27.89 | 90301.16 | 72.11 |
|      | Shanghai       | 1334.23   | 1018.81  | 76.36 | 315.42   | 23.64 |
|      | Guizhou        | 3747.68   | 572.50   | 15.28 | 3175.17  | 84.72 |
|      | Tibet          | 255.44    | 36.99    | 14.48 | 218.45   | 85.52 |
| 2001 | National Total | 124430.42 | 33201.79 | 26.68 | 91228.63 | 73.32 |
|      | Shanghai       | 1327.14   | 999.07   | 75.28 | 328.06   | 24.72 |
|      | Guizhou        | 3710.20   | 553.87   | 14.93 | 3156.33  | 85.07 |
|      | Tibet          | 253.70    | 36.26    | 14.29 | 217.44   | 85.71 |

Conclusion from China Population and Employment Statistics Yearbooks 2000-2011

## CHAPTER EIGHTEEN

# EXPLORATION AND CONSTRUCTION OF LIFELONG LEARNING MECHANISM AT GRASS-ROOT IN RURAL AREAS

## PRACTICE AND EXPERIENCE OF RURAL COMMUNITY LEARNING CENTRES IN CHINA

*Zhiyong Qi, Gansu Institute for Educational Research, China*

### I. Background

It has been widely recognized that education should be practiced as a provision to empower all the people with basic abilities for quality life and sustainable development. Education development in rural areas is facing a demanding question: How to make people in rural areas have a clear understanding of the phenomena of the changing world and thus empower them through education with the necessary knowledge, life skills and new ideas of value? It is of great importance to connected educational reform with the practical needs of social economic development in rural areas.

Carrying out poverty alleviation is the common responsibility of the international community. Based on the UNESCO guiding ideas of education for poverty alleviation and connected with the practical situations of social economic development in different countries, the project of Community Learning Centres (CLC) has been carried out in Asia and the Pacific Region. The main theme of this project focuses on the practical assumption that the education development should be reviewed as an important dynamic power to promote the social and economic development in rural areas while non-formal education should serve all the people of the community through various activities empowering the rural population.

Starting in 1997, the project of "Rural Community Learning Centres for Poverty Alleviation" has been carried out in three provinces of China, namely Gansu Province, Yunnan Province and Guangxi Zhuang Autonomous Region. With support from local

governments, the educational institutions and schools, Community Learning Centres were established at township or village levels according to the ideology of serving the local social economic development. An important task for CLCs in rural areas is to promote the development of reaching the educationally un-reached and less-reached so as to improve the quality of productive forces as well as the quality of local population and their living standards. The ultimate aim of CLC is to improve the social development, achieve the success of sustainable development and make every community a better place for the people to live in together. As an effective measure to achieve education for all and the ideas of learn to live together in the new century of knowledge economy, CLCs in project provinces will become the foundation for the establishment of life-long learning mechanism in rural communities.

## **II. Objectives and Functions of CLC in China**

In China, the main aim of CLC project is to mobilize all the local educational resources to facilitate local population with various kinds of learning opportunities so as to promote the social and economic development of rural community and improve the living standards and life quality in rural communities.

### **The Specific Objectives:**

- Promote the development of literacy education;
- Upgrade the quality of the rural labouring force;
- Promote the scientific content in local agricultural production;
- Improve the capacity of the local farmers for sustainable development
- Improve the life quality of the rural population;

To achieve the objectives above, the rural community learning centres, as a non-formal education organization, are playing active roles in promoting the development of local human resources, especially in the poverty stricken rural areas. They are not only centres for literacy education, but also functioning as information and training centres for the development of local social economy.

- 1) Making full use of the educational resources, the CLCs can have literacy education integrated with technical training for

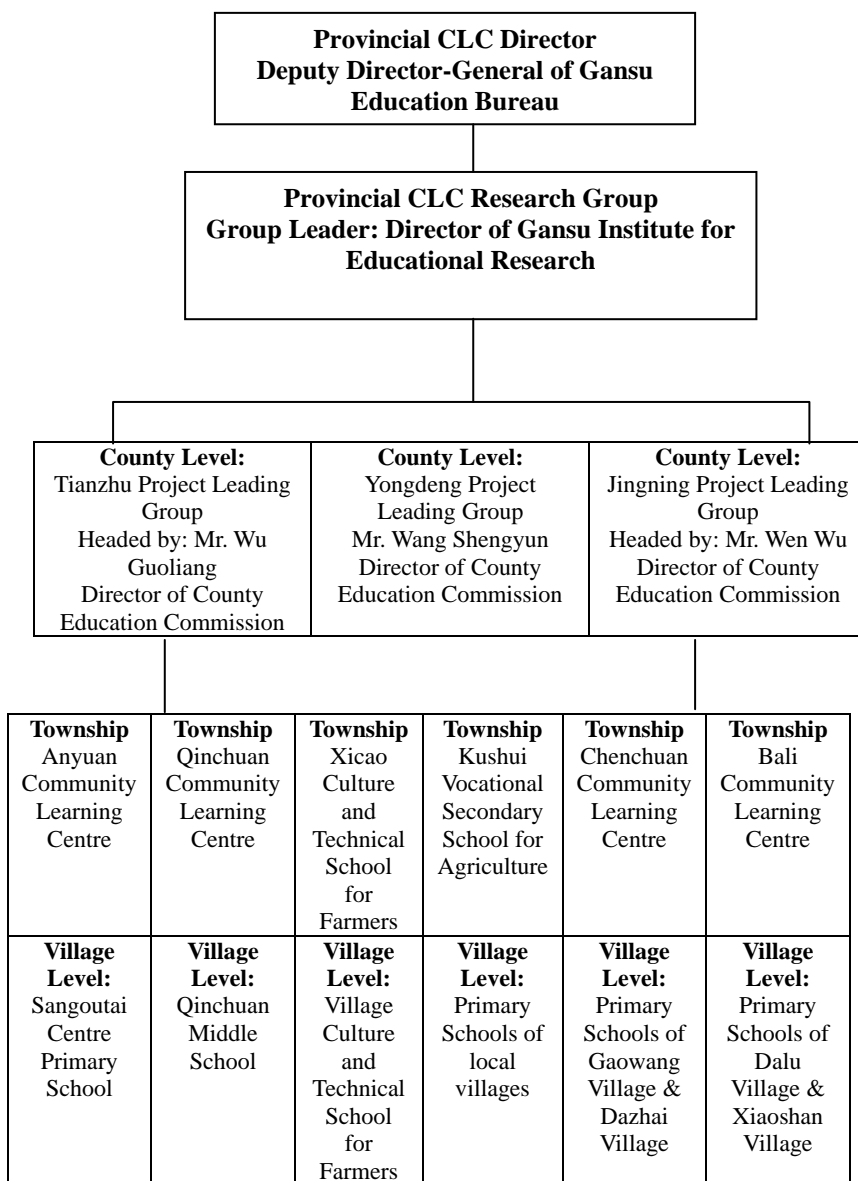


- community members so as to upgrade the overall quality of local population.
- 2) Through coordination with local governments and educational institutions, the CLCs provide useful information and practical training to local farmers so as to help them solve the problems in poverty alleviation.
  - 3) With quick response to the development of modern science and technology, the CLCs are the pioneer organization in piloting and disseminating new ways of agriculture production.
  - 4) Adopting the participatory way in teaching and learning activities, the CLCs can foster the ideas of democratic community management and improve the social advancement in the changing world.
  - 5) Functioning as the cultural centres of local community, the CLCs are also the education base for the construction of rural civilization and modernization.
  - 6) With wide variety of learning contents and flexible ways of training, the CLCs are able to conduct various activities for community members in life-long learning.

The community learning centres in China are mainly depending on the resources of the local government, institutions, schools and community people. In the development of CLC project, two major interventions have been playing very effective roles in the project implementation. One is the active intervention of local governments. For the implementation of community learning centres, the local governments at various levels are the strongest advocators and the most active supporters as well. The other is the involvement of local schools and educational institutions. As the supporting and participating institutions, all the educational equipment and facilities can be used for activities and training classes of local community learning centres.

### III. Organization and Management of CLCs in China

#### Early CLC Management Network in Gansu Province, China



At present, the CLC management networks are under construction with leading groups at various levels. Under the leadership of Chinese National Commission for UNESCO and with support from local governments at various levels, the main responsible body of CLC is the educational sectors from provincial education bureau down to the grass-root of a village school. The chart above is an example of the CLC management network in Gansu Province, Northwest China.

Compared with CLCs in other countries, the most striking characteristic of CLCs in China is that most of CLCs are established with facilities and technical support of schools or educational institutions at various levels. In rural villages, for example, primary schools with the most of the educated personnel are the centres of basic education as well as the centres for literacy learning and technical training. The CLC leading group is usually made up of village heads, school headmasters or teachers and village celebrities. Aiming at promoting the development of local social economy, the establishment of rural community centres, with primary schools as the cores, forms a new rural community education system. Through the interaction between the school and the community, beneficial results have been achieved for the development of the whole society.

#### **IV. Implementation of CLC Activities**

During the project implementation, various types of rural CLCs were set up to conduct activities on literacy education and technical training according to practical learning needs of local people and the real situations of rural communities. By the year 2001, more than 80 community learning centres of various types have been established in three project provinces. Every Rural Community Learning Centre has its own characteristics and strong individuality. Based on the varied situations in the poor rural areas, the centres in different areas have different organizations. Some are relying on the government support attached to the local vocation school or central primary schools. Activities of the learning centre vary from training workshops, setting up model families to community literacy learning. Through the establishment of CLCs at various levels, all the local social forces, particularly the educational resources, were mobilized to provide various learning opportunities to the different learners in rural communities. There are the following main kinds of CLCs activities in China.

### **The Village CLCs Based on Local Primary Schools**

In rural community, the school is the centre of rural basic education, and also the centre for culture and technology learning in the village. It should also be the centre for rural universal education, anti-illiteracy education, scientific and technical training and cultural exchanges.

#### **Case Study 1**

In Gansu Province of Northwest China, there is a small village named Sangoutai in Anyuan Township of Tianzhu Tibetan Autonomous County. To make good use of the local educational resources, a village community learning centre was established in Sangoutai Central Primary School. As a local CLC, the School had a parents-school and a cultural technical school organized within the school campus. So the school began to play three educational functions in the village development, which is called "Three-schools-in-one". The Primary School is now not only a place for primary education for school age children, but also used to provide family education for parents, as well as cultural education and technical training to the local youth and adults. The door of the school is open to the community and the limited formal education becomes big open community education for local people.

As a result, the community leaders and local people become active in supporting the development of the school. The teaching and learning conditions in the school are greatly improved and the quality of primary education was upgraded enormously. At the same time, the local people were empowered with scientific knowledge and practical skills of modern agricultural technology, which accelerates the development of local economy. Three-school-in-one is an effective way to establish the life-long learning mechanism in rural areas.

### **Township CLCs Based on Local Vocational and Technical Schools**

This type of learning centre is established within the scope of a township, based on the local vocation school or the farmers' school of technology. All the institutions of the township were organized to coordinate and manage the CLC practice of literacy education and technical training. Through various kinds of income generating activities organized by township CLCs, the local schools and the farmers have established a relationship on mutual benefit through technical training.

## **Case Study 2**

In the process of CLC dissemination, a learning centre of this type was established at Silong Middle School of Vocation in Baiying District, which is an integrated school for both compulsory education and vocational education. The school has an animal farm, a processing plant, an aquatic pond, meat processing plant and a technical service station for dissemination of farming science and technology. The aims of their service are to serve the development of rural economy and increase the farmers' income. The service takes the form of "school + experiment base (or an enterprise) + farmers). Making full use of the technology, place and equipment to serve the farmers, the vocational school follows the service mechanism of "training -> production -> marketing". The establishment of the community learning centre has all local people engaged in using the scientific ways of production and in practical marketing. Through practical training activities of community education, a close relationship has been set up between the schools and the local people.

### **Demonstrative Villages and Model Families**

To select and set up model families is another outstanding characteristic of the CLC project in China. It is also one of the main forms of community learning centre activity for upgrading the production level through training activities and finally leading the farmers on the way to better life through learning science and technology, improving their life quality. In the process of project implementation, various kinds of demonstrative villages, townships and model families were established in project provinces. Their successful experience was summarized and disseminated as models to mobilize more farmers getting on the way to prosperous.

In Piaoli Township, Longsheng County of Guangxi Zhuang Autonomous Region, six demonstration villages and 84 model families were set up on application of technology in orange growing, animal farming, mushroom growing, rice growing and strawberry planting. Encouraged by these models, the local farmers became active in learning and using modern advanced technology in their agricultural production. During the project implementation in Guangxi, They also have CLC activities integrated with the national drive of "Green Certificates". Experts and technicians from stations of agriculture, science and technology, forestry, health and sanitation were invited as teachers to provide technical training on new ways of agriculture production.

## **V. Outcomes and Achievements**

The CLC practice of literacy education integrated with poverty alleviation diminishes the influence and restraint of out-dated ideas and superstitious tradition. The farmers experienced the good result of using modern science and technology, which brings them with new hope, commercial awareness of market economy and new ideas of value. The out-dated ways of production and conventional ideas in agriculture were thrown away, while the learning of culture and scientific technology will become the action out of their own willingness.

### **1) Illiteracy Rate Decreased and Poverty Population Shrunk**

According to a survey made by Statistic Bureau, the annual income per capita in illiterate families is 43% lower than that of literate families. In a given conditions, if a certain number of farmers are literate and trained with science and technology, 70% of them may have opportunity to get rid of poverty and 20 or 30% of them may become prosperous. So literacy education is still a demanding task for activities of CLCs. The innovative characteristic of literacy education in CLCs is to make literacy education more practically useful and connected with their daily life and work.

### **2) Empowering Farmers' Initiatives For Prosperity**

Through conducting literacy education together with poverty alleviation in CLCs, the farmers obtained the ability to learn science and technology for their own practical productive activities. This accelerates the speed for science and technology to be transferred into productive force, which upgrades the production level and increases the economic benefits. This process also makes farmers feel the great potential force of science and technology reinforces their interests in education and initiates their confidence for further learning. In such way, a good cycle result was formed and it accelerates the farmers' steps to prosperous.

### **3) Women's Participation and Improvement of Social Status**

Among all the illiterates, 70% of them are women. Through literacy and post-literacy education in CLCs, they learned one or two practical skills for income generating, which not only increased their economic income, but also upgraded their social status in rural areas. Some of

them became excellent hands on growing crops, planting fruit trees or other home economic activities. Some women opened their own business, such as tailoring shops, weaving factories or drugstores. Women educated in cultural and scientific-technology are good at educating their children, getting along well with neighbours and living civilized life. As the development of economically well off and culturally upgraded, women are becoming more active in social activities, which will produce significance to the community civilization. At the same time, they have their social status upgraded.

#### **4) Comprehensive Capability for Program Implementation Reinforced**

Through years of practice of CLC project, the researching capacities in educational project research have been improved dramatically. At the beginning, the projects used to be a unified piloting on single topic in one county. As the project implementation goes further, the competence of project workers gets well improved. The research areas have been gradually extended to all the fields of basic education, adult education, vocational education, ethnic minority education, functional literacy, continuing education etc. The capacity of project implementation has been strengthened. In recent years, especially the CLC project implementation, the project studies have become comprehensive actions with many social factors concerned in several provinces.

#### **5) International Project Cooperation Broadened**

Making full use of the achievements and experience accumulated through the CLC project, the network for project implementing and administrating has established in Gansu, Guangxi and Yunnan. Project implementation teams have been formed, which includes local specialists, educational experts, excellent teachers and translating staff. At the same time, more new educational information and theories/ideas have been obtained and practiced in the field of rural education.

Based on the approaches and methodologies learned from the UNESCO projects, efficient networks for project implementation were established with local research institutions and experiment bases. Using the experience obtained from UNESCO projects implementation, Gansu, Guanxi and Yunnan Province have successfully undertaken many international cooperative programs in various fields of education with other international organizations in

recent years. A solid foundation has been established for the development of international education researches in China.

## **VI. Enlightenment**

Through more than three years of CLC practice in China, it has been recognized that the establishment of community learning centres as non-formal education forms should be based on the philosophy: "Of the local people, by the local people and for the local people". No matter it is in rural communities or urban areas. "Of the local people" means that the ideas of CLC should first be advocated to local people to initiate their awareness and full understanding about the functions of CLC in a community. "By the local people" refers to the establishment and management of CLCs mainly depends on the local people with support from local authorities, organizations and educational institutions. "For the local people" is to firmly determine that the main task and objectives of a CLC is to provide the local people with cultural, educational and technical services according to the practical needs in promoting the social and economic development of the local community.

### **Important Role of Poverty Alleviation in Rural Areas**

- Through activities conducted at rural community learning centres, the local people recognized the importance of education in their struggle against poverty.
- Great efforts should be made to eliminate illiteracy so as to establish a solid foundation of culture background and life skills for realizing the goal of poverty alleviation. Cultural learning and technical training should be developed simultaneously. Training on practical techniques should be conducted to disseminate advanced scientific technology timely in order to have the farmers' production and income increased.
- Through education on the State policies and laws at CLCs, the farmers are able to understand the State policies on the development of agriculture and make full use of the preferential policies in getting on the correct road to prosperous through industrious work.



- Education on population, health and sanitation should be carried out in CLC activities so as to upgrade the quality of farmers' life.
- Elements of vocational education should be taught at primary and lower secondary levels in order to utilize the scientific knowledge learned in schools and help their illiterate or semi-illiterate parents in productive development.
- Higher education institutions should be invited in CLC activities to provide instructional technical assistance. The scientific research outcomes of higher education institutions should be utilized to provide new techniques, new products and new project for the economic development in poverty stricken-areas.
- Schools at various levels should play their direct or indirect functions in CLC training activities. The facilities and teachers in school should be fully used for literacy education and technical training to help farmers getting on the road to prosperous.

**The Practice of Literacy Education Together With Poverty Alleviation is Suitable for the Practical Situation in Poor Areas.**

- Carrying out literacy education and poverty alleviation simultaneously is an effective way to promote the economic development in a county or in a province. It tackles on the most important factor of labourer quality and put great emphasis on empowering farmers' ability of absorbing science and technology for agriculture production. It is the fundamental construction to achieve the economic growth from natural rough management to intensive economic management.
- In poverty stricken areas, the most difficult thing for anti-illiteracy is how to mobilize the illiterates willingly to undertake literacy learning. It is logical to carry out the strategy of illiteracy eradication before poverty alleviation in economically underdeveloped areas. On the other hand, however, the most urgent thing for farmers in these areas is how to meet the needs of food and clothing. If this problem can't be solved, how could they be mobilized for literacy learning? Even if they were ordered to participate in literacy classes, the result would be disappointing. So the most effective way is to link eradication of illiteracy closely with

alleviation of poverty, that is, to connect cultural learning and technical training with ways to get out of poverty and become prosperous. In this way, illiteracy education is conducted with poverty alleviation in an inter-reactive way. Thus a sound cycle process is formed, which can bring positive impact on the development of literacy and post literacy work in poverty-stricken areas.

### **Dealing Properly With the Relation between Cultural Learning and Technical Training**

- Through our practice, we realized that cultural education should be closely combined with science and technical training, no matter in literacy education or post-literacy education. There contains productive skills and attitude to life in cultural knowledge. On the other hand, the learners will gradually change their attitude to life during the process of knowledge learning and technical training and obtain the motivation for further learning.
- It is an effective way to combine cultural education and technical training. It is effective to raise people's awareness about the importance of literacy education and make farmers become willingly active in literacy education. The ultimate aim of literacy learning is to master scientific technology for becoming prosperous and to improve the quality of life. If you want to learn new technology, you must be literate, which encourages the farmers to become literate so as to learn cultural knowledge. Meanwhile, through learning technology, farmers can reinforce the cultural knowledge they have learned. In this way, the quality of anti-illiterate education is improved.

### **Careful Selection of Content and Materials for Literacy Education to Improve the Organization Forms and Teaching Methods**

- Through practice, we further recognized the literacy education for poverty alleviation has its own characteristics in teaching and learning. It is very important to have the right choice of teaching materials and methods. Since literacy education is quite different from formal education, the teaching and learning should be very flexible. The teaching materials should be practical, effective in accordance with local reality. Since most of the learners of literacy education are youth and adults, they all have practical experiences in productive work and life

with certain educational background and self-learning ability. Comparing with students in schools, they are more independent and anxious in learning and hope to learn some practical knowledge and skills that can bring back beneficial returned quickly. They have much higher expectation of the teachers. They want learn knowledge and techniques and also want to be respected as well. The teaching forms and methods should be suitable to the characteristics of their work and life as well as their location and seasoning. The way of teaching and learning must be flexible, in short time and with fast beneficial results. Only in this way, can literacy and post-literacy education achieve real beneficial results.

## **VII. Further Development of CLC**

The community learning centres are mainly depending on the resources of the local government, institutions, schools and community people. In the development of CLC project in China, the cooperation between local CLC and local government should be further strengthened. The other important factor is the involvement of local schools and educational institutions. As the supporting and participating institutions, all the educational equipment and facilities can be used for activities and training classes of local community learning centres.

Concerning the functions of CLC, there is still more space for improvement. As we are living in a changing world with fast development of information technology, the CLC should play an even more active role in dissemination the application of modern technology, such as using of computers, application of ecological agriculture. As an effective way to achieve education for all and the ideas of learning to live together in the new century of knowledge economy, CLC strategies should be made for the establishment of life-long learning system and for the development of individuals in a learning society.

### **To Further Promote the Development of CLC Project in China, the Following Work Will Be Strengthened:**

- 1) Conduct project personnel training at various levels for CLC personnel. The project working personnel need to improve their professional ability through specific training

- 2) The successful experiences of CLC project implementation will be reviewed and summarized. A handbook on collection CLC project activities will be compiled and published.
- 3) The level of theoretical research on project activities should be re-enforced and upgraded so as to improve the quality of project implementation.
- 4) To provide education equipment and learning material to established community learning centres to meet the urgent needs in practical learning and training activities.
- 5) To disseminate the project experiences and outcomes to a much larger scale.

# **CHAPTER NINETEEN**

## **THE FOUNDATION PROJECT TO IMPROVE THE QUALITY AND FAIRNESS OF OUR COMPULSORY EDUCATION**

### **PROJECT OF SURVEY OF CHINESE CHILDREN AND TEENAGERS' PSYCHOLOGICAL DEVELOPMENT CHARACTERISTICS**

*Qi Dong, Executive Vice President, Beijing Normal University, China*

#### **I. Introduction**

China has a large number of children and teenagers. According to the sixth census data in 2010, China has a population of 0.22 billion aged between 0 and 14. How to nurture them through high quality and fair compulsory education has great value for the improvement of future citizen quality and comprehensive national strength. Due to its vast territory, China has an imbalanced economic, social, cultural and educational development thus the implementation of quality education is not thorough and comprehensive enough. There is big individual development gap among different teenagers and different sub groups. The current overall education level is far behind the goal of high quality and balanced compulsory education. Therefore the CPC Central Committee and the State Council promulgated the “Outline of national medium and long term educational reform and development (2010-2020)” in which it clearly states that the quality improvement is the key task for education reform and development and the balanced development is the strategic task for compulsory education. This not only shows that the country attached great importance to high quality and balanced education but also expresses that the people have very high expectations for high quality and balanced education.

How to materialize the strategic goal of high quality and balanced education is not only an urgent issue for the educators but also an important task for the researchers in any field related to education. In order to achieve the high quality and balanced

development of compulsory education, firstly a comprehensive understanding of present level and characteristics of our national education development, monitoring the quality of basic education on a national and regional scale, grasping the regional difference and urban and rural difference of the quality status of basic education and providing practical basis for relevant educational policy formulation are needed. The research for teenagers' psychological development indicators and the corresponding database construction is one of the key fundamental tasks for establishing a national basic education system to ensure education quality. Therefore Professor Lin Chong De and I undertook the "Survey of Chinese children and teenagers' psychological development characteristics" project from Chinese ministry of science and technology. This project aims at a comprehensive understanding of the psychological and educational development level of Chinese children and teenagers to support the reform of China basic education with scientific data. This article elaborated the background, characteristics, main research results of the project and the role of the research result in monitoring the quality of basic education and improving education quality and balanced development.

## **II. The Background of the Survey**

After more than 30 years of reform and opening up, China's compulsory education has achieved a large success. The basic education of China has completed the task of "nine year compulsory education" with an above 99% of compulsory education rate. However, some outstanding problems also coexist with compulsory education in terms of the implementation of quality education, the unbalanced development of compulsory education, the uneven educational resources in different regions and between rural and urban areas and the difference of development in varied groups. To ensure a successful transition from "available access to schooling" to "a better education", there are still many aspects which need to be strengthened. The core of these aspects is the quality and balance of compulsory education.

The psychological quality of the students is a key aspect of comprehensive development. The indicators provided by the psychology and related fields of research for the evaluation of students' psychological development, scientific tool, national and

regional module and a national database reflecting the status of the students' psychological development and other various factors are needed to promote the healthy psychological development. Since the seventies and eighties, the USA, UK, Canada and other developed western countries have developed many national levelled, continuous and large scale researches on children and teenagers psychological development through government investment, setting up special organizations and integrating multidisciplinary forces etc. They have constructed a series of tools, modules and national databases for children and teenagers psychological development of their countries and also used these tools, modules and databases in promoting the children' comprehensive development, various evaluation on educational quality and national educational policy making etc.

China, with the largest number of children and teenagers in the world, is in sharp contrast with the above mentioned countries. The systematic and comprehensive basic research on the psychological development of the children and teenagers has not yet been carried out and we lack the standard tools, representative modules and databases which are used for the scientific evaluation of the students' psychological development and are fit for China's situations. These problems have seriously hindered our understanding of our children and teenagers' psychological development, thus it is difficult to provide strong support for educational development, educational policy making and the construction of monitoring system for education quality.

Since entering the new century, the Chinese government has attached more importance to the research on children and teenagers psychological development for building a country with strong human resources. In this background, the Ministry of science and technology set the focus of the project on Chinese children and teenagers' psychological development characteristics in 2006 with the cognitive neuroscience and learning laboratory of Beijing Normal University taking the led to organize 52 universities and research institutions to carry out the project. So far it is China's first national level research on children and teenagers psychological development. It aims at constructing a scientific and comprehensive index system for Chinese children and teenagers' psychological development, developing a standard tool for evaluating the important psychological characters of Chinese children and teenagers, building up the first national representative module for Chinese children and teenagers' psychological development and setting up the first national basic

database for the important psychological characters of Chinese children and teenagers.

### **III. The Characters and Important Achievements of the Survey**

To ensure the scientific, authoritative and representative characters of the project design and implementation, the project team is consist of the highest level of interdisciplinary researchers for children and teenagers' psychological development and selects important psychological development phrase for children and teenagers viz. cognitive ability, academic achievement, social adjustment and growing environment to do the first national level sampling in which the information of 95,765 children, teenagers and their caregivers were gathered from 100 counties and districts of 31 provinces and autonomous regions and also got the data of 1080 clinical samples. Following the standards and norms of international large scale database construction, the data were cleaned, synthesized, analysed and mined with high quality.

After four years, under the joint effort of nearly 300 experts and 1600 postgraduates, the project has obtained the following achievements. First, it established the first Chinese multilevel index system which reflects the key characters of Chinese children and teenagers' psychological development and has its independent intellectual property rights with good reliability and validity. This standard test tool also fits for China's condition. The index system includes 53 dimensions of 13 aspects of 4 areas viz. cognitive ability, academic achievement, social adjustments and growth environment. The standard tool consists of 5 kits viz. "Chinese children and teenagers' cognitive ability test", "Chinese children and teenagers' Chinese language achievement test", "Chinese children and teenagers' mathematics achievement test", "Chinese children and teenagers' social adjustment questionnaire" and "Chinese children and teenagers' growth environment questionnaire". The index system and tool are closely combined with China's social development needs, the evaluation of Chinese compulsory education and the construction demand of future population quality. The comprehensive survey on the ability and psychological quality which play an important role in Chinese children and teenagers' future study and life has provided a



scientific framework and effective method for evaluation of Chinese children and teenagers' psychological development, education and monitoring of education quality.

Second, it built up the first national, regional, urban and rural level of representative module of children and teenagers' (aged from 6 to 15) psychological development character. This module includes "the module of Chinese children and teenagers' cognitive development", "the module of academic achievement of Chinese children and teenagers" and "module of Chinese children and teenagers' social adjustment". Each module has set up detailed sub-modules of age/class, sex, region, urban and rural. This set of module involves rich development variables of children and teenagers. The construction procedure and the method used fully embodies the newest domestic and international module development through a variety types of fractions and performance form to meet the needs of different fields and people. As China's first national, regional, urban and rural level of representative module of children and teenagers' psychological development character, it can provide a scientific standard for understanding overall trend of Chinese children and teenagers' psychological development, group difference and evaluation of national and regional development level of children and teenagers' cognitive ability, academic achievements and social adjustment. The country can gradually materialize a balanced allocation of education resources and better monitor the education quality by comparing the advantages and disadvantages of children and teenagers' psychological and academic development of different regions. Through comparison between local education quality monitoring results and the national, regional, urban and rural module, the local education departments can better reveal the relative local development status and level thus providing direct proof for educational policy making and educational reforms.

Third, it built up China's first national, regional, urban and rural level of representative large scale database and a sharing platform of Chinese children and teenagers' psychological development. The build-up and open use of the database and platform can provide the researchers from relevant fields with scientific, systematic and authoritative data and it can serve as scientific evidence for relevant educational departments to make important policies. For example, it accurately reflected the status of cognitive ability, academic achievement and social adjustment of Chinese children and teenagers of compulsory education by using the scientific and authoritative tool

for the first time. At the same time, it also accurately described the urban and rural compulsory education quality difference and the status of different regions. The data analysis indicates that the development level of cognitive ability of the children at the age of 15 in rural areas is equivalent to the 12 years old children in the city. The development level of cognitive ability of the 15 years old children in the 4th level region has not yet reached the level of 11 years old children of the 1st level region. Similarly, in academic achievements of Chinese and mathematics, the children from the cities score higher than the children from counties and villages. The score of the children from the first level region is higher than that of the children from the fourth level region. With the advancement of higher grades, the effect of the regional factors on academic achievement gradually becomes less and less. This suggests that we should continue to enhance the policy and resources in favour of less developed regions to improve their educational situation especially the education resources of lower grades to promote learning quality and psychological quality development so as to further promote balanced educational development. The above mentioned research findings and the difference can provide basis and direct reference for national education evaluation and quality monitoring, targeted education policies of the local government and the specific education practice of schools and educators. It also supports the enhancement of education quality and promotion of balanced education development with scientific and objective basis.

#### **IV. The Application of the Survey Results**

The tools and module of the project on the characteristic of Chinese children and teenagers' psychological development has been applied in monitoring the quality of education and it has got very good results. The index system of academic achievement, social adjustment, growth environment etc. and the tools & modules for the behaviour of depression, anxiety and pro-social activity and the relationship of peers, teachers and students have been directly applied in monitoring the quality of basic education in 2008, 2009 and 2010. It has been used for the evaluation of 130,000 students, nearly 20,000 teachers and about 3000 headmasters in 185 pilot counties (districts) in 18 provinces (municipality directly under the Central Government). The evaluation results have provided quantitative indicators for accurate

description of urban and rural difference, regional difference and gender difference of the compulsory education in China. It has also provided data support for policy making and research on upgrading education quality and promoting a balanced development of compulsory education.

At the same time, the tools and modules of academic achievement, social adjustment and growth environment from the survey on Chinese children and teenagers' psychological development have also provided important support for the evaluations on monitoring the education quality and evaluating students' development on a regional level. At present, the project tool has been used in Chongqing City for monitoring the quality of basic education of 23,000 middle and primary school students from 40 counties/districts, which has provided important scientific data for promoting a balanced development of compulsory education in Chongqing and its targeted policies. The project tool has been used in Miyun County of Beijing for evaluation of the newly enrolled students of the entire county. It has provided the 16,000 students and their teachers and principals who participated in the evaluation targeted feedbacks and guidance. Shangcheng district of Hangzhou city has applied the tool to monitor the education quality of nearly 50,000 students in 3<sup>rd</sup>, 6<sup>th</sup>, 7<sup>th</sup> and 8<sup>th</sup> grade. Through comparison with national module, regional module, urban and rural module, the above mentioned results have revealed the position on national level, regional level, urban or rural level and their advantages and gaps with other places of the same level. It has made the policy making more targeted and region oriented.

More importantly, the survey on the characteristic of Chinese children and teenagers' psychological development has also provided scientific framework and method for improving the quality of compulsory education. To improve the students' development and education, the starting point of students' development, acknowledgement of students' difference and also the causes, and the grasp of students' development status are the foundation of education. Through comparison and analysis by using the project provided tool and module, Shangcheng district of Hangzhou city has found the differences and problems in education and teaching. It has provided solutions and proof for the teachers, school management and regional policy making. It further guides them to set reasonable targets and come up with the actions for further improvement of the region, school, teachers and students. At the same time, it further evaluates

the improvement result.

The results of the survey on the characteristic of Chinese children and teenagers' psychological development has exerted positive international influence and it was evaluated as "world class events for understanding education equality and fairness" (Anders Hingel, the former director of European culture and education department), "National treasure for development and mental health of Chinese children" (Mark Schneider, Vice president of American studies association) and the "important contribution for Chinese children's development and mental health" (Seamus Hegarty, President of the association of international education evaluation).

The quality of basic education determines the quality of future citizens and the sustainable development of the country. The development of students' ability, their knowledge acquisition, a better mental development and their levels are the basic standard for measuring education quality and result. Our basic education is entering a new phase of quality oriented education. In the future, we will focus on the application of the result to the quality monitoring system of our basic education thus making more contribution in improving the quality of compulsory education and citizen in China.

## **CHAPTER TWENTY**

### **VOCATIONAL EDUCATION AND TRAINING SYSTEM IN INDIA**

#### **POLICIES, STATUS AND BEST PRACTICES FOR RURAL TRANSFORMATION**

*K. Sujatha, Department of Comparative Education and International  
Cooperation, National University of Educational Planning and  
Administration, India*

#### **I. Introduction**

Skills and knowledge are the basic requirements for sustained economic growth and inclusive development of any country. In the era of globalization and increased pace of technological changes, skills and knowledge become more important than ever before. While India is progressively moving towards a “Knowledge Economy”, invariably it becomes necessary for vocational education and training to create an appropriate skill development system. Given the demographic structure and a 25-year window opportunity called the demographic dividend, skill enhancement of the younger generation is important for reaping the benefits of economic development in India. In this context vocational education and training assumes special role in rural areas. The increasing literacy and basic education levels particularly in rural areas of India facilitates the need and scope for vocational education and training. The increasing demand for skilled manpower, dwindling employment in agriculture sector in rural areas (NSSO, 2007-08) further augment the call for imparting diverse vocational education and training.

Vocational education and training are the major source of skill development in India. India has a very small segmented and complex vocational education and training system with a capacity of training about 3.1 million persons per year as against 12.8 million people enter in to the workforce annually. India has a very low proportion of trained people in the world (World Bank, 2006).

Vocational education is a concurrent subject in the Indian Constitution; the Central Government and the State Governments share responsibilities. The National Government is responsible for formulating policies, laying down standards, conducting trade testing and certification, providing the bulk financing and sponsoring schemes etc. The State Government departments are responsible for planning, administration and implementation of vocational education programmes

In India, vocational education and training takes place through two basic structural streams: a small formal one and large informal way. The structure of the vocational education and training system is complex and fragmented, with 17 different ministries and several organizations contributing to development, planning and overall management. A number of agencies impart vocational training at various levels. Among all, the Ministry of Human Resource Development and Ministry of Labour play an important role in imparting vocational education and training at school education level. The Ministries of Health and Family Welfare, Agriculture and Rural Development play important role in vocational training though most training comes under informal sector.

The formal structure that provides vocational education and training cover (i) vocationalization of higher secondary education in general schools (ii) technical training in specialized institutions such as Industrial Training Institute (ITI) and Industrial Training Centres (ITC) for those completed grade 8-12 and (iii) apprenticeship training. While vocational education at the higher secondary stage is under auspices of Ministry of Human Resource Development (MHRD), the Industrial Training Institutions and Industrial Training Centres<sup>1</sup> are operated under Craftsman Training Scheme by Director General Employment Training (DGE&T) of Ministry of Labour.

The present paper limits its scope to deal with formal vocational education and training provided by the Ministry of Human Resource Development (MHRD) and the Directorate General of Employment & Training (DGE&T, Ministry of Labour). The first part of the paper presents a brief overview of school education in India size and coverage, and extent of drop-outs. The second section examines vocational education policies in the context of school education and

---

<sup>1</sup> Industrial Training Institutes providers of vocational training are establishes by the government. Industrial Training centres (ITC) are training providers established by private players on self-financing mode. The ITCs are sanctioned and regulated through the Craftsmanship Training by Directorate General of Employment& Training, Ministry of Labour.

skill development. The third section presents extent of vocational education in general higher secondary schools and size of participation. The third part examines facilities for vocational training (ITSs/ITCs) in the formal sector and their capacity. The final section presents a brief note on two innovative best practices for imparting Vocational Education and Training in rural areas under MHRD and in private sector.

## **II. Educational Institutions and Participation in India**

India has a large network of educational institutions at school level. In the last few decades rightly the emphasis was on improving access to schooling and quality of education to achieve the goal of Education for All. Consequently access and participation in elementary education has increased. Currently, India is striving towards the universalization of secondary education. In 2007-08 there were 788 thousand primary schools enrolling 135.4 million students, 325 thousand Middle Schools having 57.2 million students, 113 thousand Secondary and 59 thousand Higher Secondary (HS) schools enrolling 28.2 and 16.2 million students respectively.

While the gross enrolment ratio was 114 at primary level 78, 58 at middle level 58 and 33, 48 at lower and higher secondary levels respectively. The gross enrolment ration in rural areas is not only lower than national average but decline steeply with the increased level of school education.

### **Net Attendance Ratio**

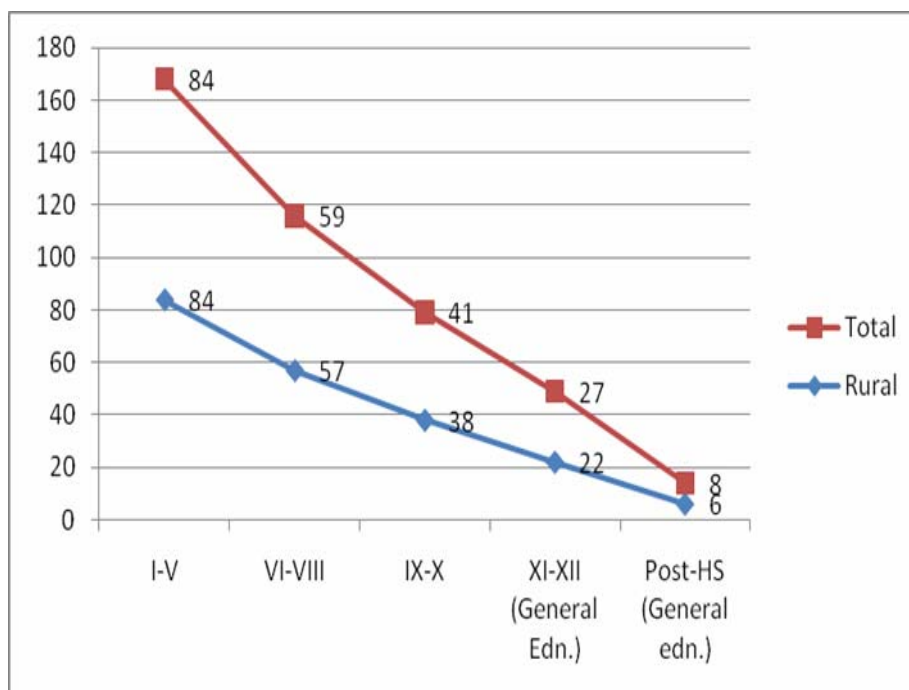
The net attendance ratio of different age group populations in corresponding grades shows that with increased age there is steep decline in participation rate. The net enrolment ratio falls significantly from primary onwards. Though at primary level there is no rural–urban difference with the increased age and levels of education the net enrolment ratio in rural areas declines steadily. However, at post higher secondary level there is very low attendance both at the all India level and in rural areas.

**Table 20:1. Facilities and Enrolment at School Level (2007-2008)**

| Levels                        | Schools (in 000s) | Enrolment (million) | Gross Enrolment ratio All | Gross Enrolment Ratio in Rural Areas |
|-------------------------------|-------------------|---------------------|---------------------------|--------------------------------------|
| Primary Schools (I-V)         | 788               | 135.4               | 114                       | 111.81                               |
| Middle Schools(VI-VIII)       | 325               | 57.2                | 78.10                     | 70.00                                |
| Secondary Schools(IX-X)       | 113               | 28.2                | 58.15                     | 50.87                                |
| Hr. Secondary Schools(XI-XII) | 59                | 16.2                | 33.48                     | 19.22                                |

Source: Statistics of School Education (2007-08), MHRD, GOI

**Figure 20:1. Net Attendance Ratio by broad class group (Rural and Total)**



Source: NSS Report No. 532: Education in India, Participation and Expenditure 2007-08



**Drop-Outs**

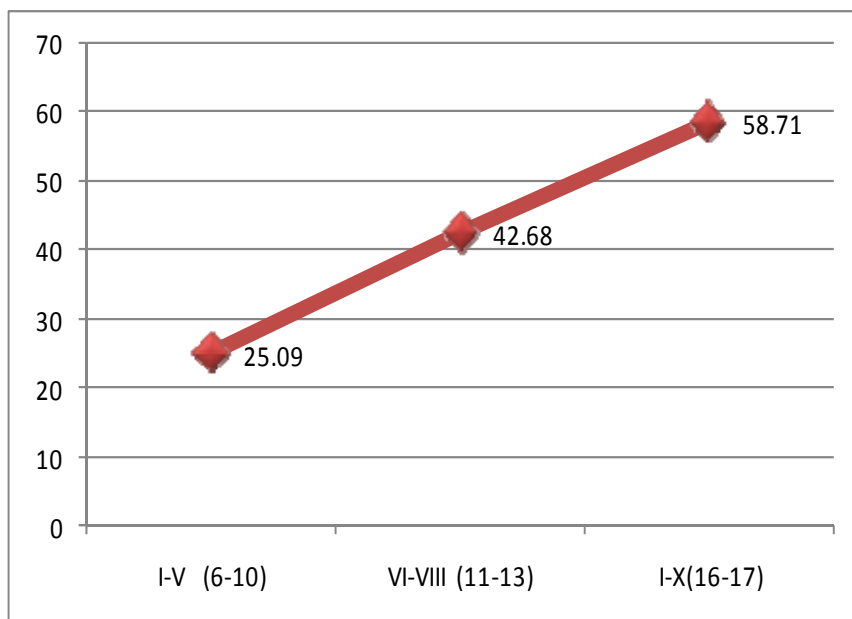
The drop-out rate is a serious concern in school education as 25.09% of students enrolled in grade one drop-out without completing grade V, 42% before completing middle school or grade VIII and 56.7 % before completion of lower secondary level (2007-2008). Again the dropout rates is higher among disadvantaged groups, girls and in rural areas. Further at lower and higher secondary school levels a considerable proportion of students fail to qualify in the public examinations. About 30 percent at lower secondary and one fourth in higher secondary schools failed in public examinations (2008). The extent of drop-out rate and failure in public examination varied very widely in different states and among different types of schools and social groups. The extent of drop-outs, low transition rate and failure in public examinations indicate the magnitude of 14-17 years population stay outside the school system that consequently enters the workforce.

**Literacy and Educational Attainment**

Out of total population (of all ages) less than two thirds 64.5% were literates during 2007-08. There is considerable gap between male and female literacy levels. Juxtaposed to the 72% literacy rate among males, the literacy rate among females was only 56 per cent. The literacy rate among adult population (age 15 & above) was 66%. The literacy rate among females in rural areas is considerably lower at all age groups.

The literate population of age 15 & above has differential levels of education (Fig.1). 1% had no formal education and 7.8% had not completed primary level. The highest level of successfully completed level was primary for 15%, middle level for 16.5%, secondary for 11.9%, higher secondary (HS) for 6.5, diploma for 0.9%, graduation for 4.8 % and post-graduation and above for the remaining 1.4% of the adult (15+) population. The rural urban and male female disparities accentuate moving to higher levels of education. Among rural adult literates only about 10% completed secondary, 4.7% HS, 0.6% diploma, 2% graduation and 0.5% post-graduation and above.

**Figure 20:2. Drop-Out Rate at Different Levels of School Education and by Age Group (2007-2008)**



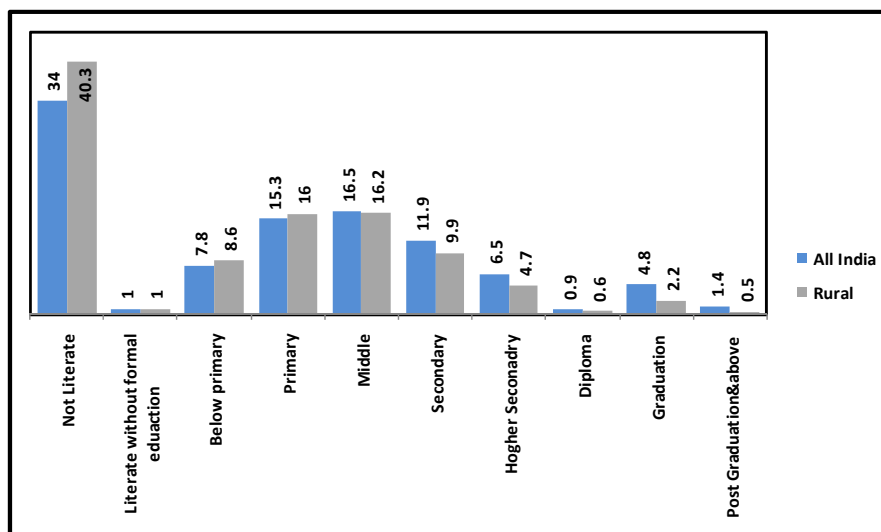
Source: Statistics of School Education 2007-08, MHRD, GOI

**Table 20:2. Literacy Rate among Different Age Group Population**

| Age group          | Rural |      |       | Urban |      |       | Total |      |       |
|--------------------|-------|------|-------|-------|------|-------|-------|------|-------|
|                    | F     | M    | Total | F     | M    | Total | F     | M    | Total |
| All ages (0&above) | 51.1  | 68.4 | 60.0  | 71.6  | 82.2 | 77.1  | 56.3  | 72.1 | 64.5  |
| Age 7 &above       | 56.7  | 77.0 | 67.0  | 78.1  | 89.9 | 84.3  | 62.3  | 80.5 | 71.7  |
| Age 15&above       | 47.5  | 71.8 | 59.7  | 74.6  | 88.7 | 82.0  | 54.9  | 76.7 | 66.0  |

Source: NSS Report No. 532: Education in India, Participation and Expenditure 2007-08

**Figure 20:3. Completed Educational Levels of Age 15 & above Years Literate Population (All India & Rural)**



Source: NSS Report No. 532: Education in India, Participation and Expenditure 2007-08

**Table 20:3. Completed Educational Levels of Age 15 & Above Years Literate Population**

| Educational level                  | Rural | Urban | Rural +Urban |
|------------------------------------|-------|-------|--------------|
| Literates without formal education | 1.0   | 0.9   | 1.0          |
| Below primary                      | 8.6   | 5.7   | 7.8          |
| Primary                            | 16.0  | 13.2  | 15.3         |
| Middle                             | 16.2  | 17.4  | 16.5         |
| Secondary                          | 9.9   | 17.0  | 11.9         |
| Higher secondary                   | 4.7   | 11.1  | 6.5          |
| Diploma/Certificate                | 0.6   | 1.7   | 0.9          |
| Graduation                         | 2.2   | 11.4  | 4.8          |
| Post-graduation & above            | 0.5   | 3.5   | 1.4          |

Source: NSS Report No. 532: Education in India, Participation and Expenditure 2007-08

The completed education level of 15 & above age group (literate) population shows that a large proportion of them had only primary and middle school level education while very few persons had some secondary education. While a majority of rural adult literates had

completed lower educational levels and the proportion of secondary educated is lower than at all India level. A small fraction of rural persons had completed post higher secondary education. The rural–urban differences widen after middle school level education. Half a percent of adults in rural areas and about 1 percent in urban areas had Diploma level education that includes vocational education and training.

### **III. Vocational Education Policies**

For a long time educationalists and experts have consistently recommended that education at lower and higher secondary stages should be given a vocational bias to link it with the world of work. India took three decades after independence to make efforts to introduce vocational education at secondary level.

While recommending reforms in secondary education, the need and importance of vocational education has been emphasized time and again by successive education Commissions and Committees (University Education Commission 1948-49; Secondary Education Commission 1952-53; School Education Commission, 1964-66 and National Policy on Education, 1968). The Vocational Education programme (VEP) was started in 1976-77 under the programme of Vocationalisation of Higher Secondary Education. However, only a few states implemented this scheme with varied degrees of success.

#### **The National Working Group on Vocational Education**

The Kulaindaiswamy Committee (1985), after closely reviewing the vocational education in the country, recommended guidelines for the expansion and revitalization of vocational education as a Central Government Sponsored Scheme. The National Policy on Education, 1986 (NPE) accorded high importance to vocationalisation of higher secondary education with an objective to enhance individual employability, reduce the mismatch between demand and supply of skilled manpower and to provide an alternative for those pursuing higher education without particular interest or purpose. The NPE (1989) recommended generic vocational courses. The policy also emphasized vocational education in areas of health, agriculture, marketing, social services and development of soft skills, involvement of public and private employers, while the government takes special steps to cater to the needs of women, rural and disadvantaged groups.

The policy advocated providing opportunities for professional growth, lateral entry into general and professional courses for vocational education graduates. Non-formal flexible vocational programmes for neo-literates, school drop-outs and unemployed particularly for women have been suggested. The policy also proposed a target of covering 10 % of higher secondary students by 1995 and 25 % by the year 2000. Consequently, the Centrally Sponsored scheme of Vocationalization of Secondary Education in grades 11-12 has been implemented from 1988.

The Revised National Policy on Education and Programme of Action (1992) have also envisaged a separate vocational stream at the higher secondary level and vocational education programmes as work experience at the primary level, pre-vocational education at the lower secondary stage. Even after more than two decades after the revised NPE the centrally sponsored scheme of vocationalisation of higher secondary education is far from satisfactory implementation in terms of targets.

The Central Advisory Board for Education Committee Report (2005) on the universalization of secondary education recommended private sector participation in management of vocational education institutions including designing curriculum to ensure direct link with labour market for graduates, strengthening general education component of vocational education stream, cost sharing (private) and ensuring that the vocational education is not a dead-end. It also recommended a strong participation of private industries in management bodies in Vocational Education and Training institutions.

Besides MHRD, the Ministry of Labour since 1956 has evolved a policy for a Craftsmen Training Scheme to rise quantitatively and qualitatively the industrial production by systematic training and to reduce employment among educated youth and to cultivate industrial attitude among younger generation. The policy of DGET has been to provide skill development in different trades through Industrial Training Institutions for those who completed minimum eight years of schooling. The scheme, the most important in the field of Vocational training, has been shaping craftsmen to meet existing and future manpower need. The DGET has a policy to allow private initiatives to run this scheme by establishing Industrial Craft Centres synonymous. The DGET adopted a policy of funding, prescribing curriculum, conduct of examinations, certification while state governments are responsible for planning, establishing and operation of it is.

At the request of the Government of India (the Ministry of Labour and the Ministry of Human Resource Development) in 2006 the World Bank (South Asia Region) has made a comprehensive review on “Skill Development in India: Vocational Education and Training in India”. While examining different sources of vocational education and training in India, the paper identified several gap areas and discussed the relevance, efficiency, adequacy of vocational education and training in India. Identifying several issues, the World Bank paper suggested reforms in vocational education and training by presenting advantages and challenges in implementation. One of the important recommendations was public private partnership in meeting the demand for skill development besides emphasis on vocational training in modular approach.

### **Eleventh Five Year Plan**

Realizing the importance of the growing economy needs for appropriately trained manpower, the Eleventh Five Year Plan (2007-2012) besides envisaging expansion and coverage of vocational education at higher secondary stage, has envisioned strategies and measures for Skill Development which will bring a paradigm shift in vocational education system. The 11th Five Year Plan laid emphasis on demand driven vocational education and training in partnership with employers by restructuring the current programmes. The plan laid out an Action Plan for Vocational Education to be implemented by the MHRD; bringing about a phased mannered shift, from the unviable 2-year stream commencing after class X, to a stream that captures class IX drop-outs. Later on, the same course can bring into its fold class VIII drop-outs. The Plan has proposed expansion of vocational secondary education programme in 20 000 schools with an intake capacity of 2.5 million students at secondary level by 2011-12 ensuring mobility between vocations, general and technical education with multiple entry and exit. The plan suggested developing a National Vocational Qualification system in which public private systems of vocational education collaboratively meet needs of industry and individuals. In addition, focus will be given on last mile employability related soft skills.

Responding to the challenges of the Indian labour force facing the unorganized sector, the Government of India has launched a major “National Skill Development Mission” and a National Policy for Skill Development was adopted for evolving a comprehensive skill

development system that would enable the country to reap the scientific and demographic dividends and inclusive growth.

### **National Policy on Skill Development-2009 (NPSD)**

The National Mission for Skill Development was launched during 2008 encompassing efforts of several ministries of Central Government and State Governments and activity of the private arm. A National Policy on Skill Development (SD) was adopted during 2009. The objectives of National Policy on Skill Development including: (a) Create opportunities for all to acquire skills throughout life and especially for youth, women and disadvantaged groups; (b) Promote commitment by all stakeholders to own skill development initiatives; (c) Develop a high-quality skilled workforce/entrepreneur relevant to current and emerging employment needs; (d) Enable the establishment of flexible delivery mechanism that respond to the characteristics of a wide range of needs of stakeholders and (e) Enable effective coordination between different ministries, the Centre and the State and public-private providers.

The scope of the National Policy on SD includes (a) Institutions based on skill development including: ITI, ITCs, Vocational Schools, technical schools, polytechnics, professional colleges etc. (b) Learning initiatives of sectoral skill development organized by different ministries/departments; (c) Formal and informal apprenticeships and other types of training by enterprises; (d) Training for self-employment or entrepreneurial development;(e) Adult learning, retraining of retiring employees and lifelong learning; (f) Non-Formal training including training by civil society organization and (g) E-learning, web-based and distance learning.

The NPSD recommended short term market oriented, demand driven programmes with flexible delivery framework suited to the characteristics and circumstances of target group. Multi-skilling, multi-entry and exit, and linkages with to skill up-gradation would characterize such programmes. The formal educational requirement in accessing training would be reviewed in order to facilitate easy access.

### **The Vision for the NPSD**

The scale of ambition of the NPSD set a target of creating 500 million skilled workers by 2022 by increasing the capacity and capability of skill development programmes. The NPSD foresee the skill development initiatives would harness high inclusivity and reduce disparities such as gender, rural-urban organized / unorganized

employment and traditional/contemporary workplace. The NPSD proposed a dynamic and demand based system planning so that workforce are adjustable to changing demands and technologies leading to excellence and meeting demands of knowledge economy. The policy strongly supports non-discrimination of public or private delivery placing importance on outcome, user's choice and competition among training providers. Towards policy coordination and coherence the skill development initiatives will support employment generation, economic growth and social development through integration of economic, labour and social policies. The policy rightly proposed to establish a frame work for better coordination among various ministries, states, industry and other stakeholders.

The operational strategies envisaged by the NPSD include creation of National Vocational Qualification Framework (NVQF) to ensure a system of equivalency, quality assurance, open and flexible system. Accepting India as very asymmetric, the NPSD recommended partnership between Government, industry, local government, civil society institutions and all potential skill providers by ensuring sustainability. The NPSD suggested innovative delivery mechanism and using educational institutions after class hours for skill development by the private sector.

The NPSD contemplated that government financial support must compliment private investment and useful public-private partnership. Central Ministries must focus on areas where private investment for skill development is unlikely to be available. Besides government funding for government delivery, the National Skill Development Corporations will support private initiatives in skill development. However, financing would be linked with placement ratios and outcomes by focusing funding the candidate through scholarship, skill voucher, and outcome based reimbursement etc.

#### **IV. Expansion of Our Reach, Equity and Access**

For the first time in India the NSDP addressed the issue of equity in skill development and realized importance equity issue for fulfil the set target of skill development. Towards this NPSD proposed different strategies for expansion of outreach, equity and access. Innovative approaches to raise the capacity of the system extensively over a



limited time, incentive mechanism to encourage private sector for improving access and outreach.

The NSDP paid special attention to the rural sector and supported the expansion of public training institutions particularly at rural borders, hilly and difficult areas where private sector could not reach out. To ensure access decentralized delivery mechanism, mobile training, skill development centres at village and block level as one-stop kiosks and support schemes would be initiated. The elected local bodies would be involved in skill development and employment generation at local level in collaboration with self-help groups, cooperatives and NGOs.

Equal access to skill development for all social groups particularly women and disadvantaged sections of the society is considered important to help them in securing decent employment and moving out of poverty. The policy suggested different strategies to address entry barriers besides making efforts to raise the awareness and channelize people in to appropriate skills. Provision of soft/life skills including literacy, innumeracy, health & hygiene, team-work, confidence building etc. would be integrated with vocational training for empowering the vulnerable groups.

The NPSD considered importance of skill development in rural areas both to improve agricultural productivity and also to enable rural workers to access emerging employment opportunities beyond the agriculture sector. In view of the limited training infrastructure in rural areas, a range of infrastructure facilities including schools, community centres and local government buildings, would be utilized as training venues. Institutes for entrepreneurship training such as Rural Development & Self Employment Training Institutes (RUDSETI) would be promoted. The Government would set up public institutions and will also promote private sector training institutions through a package of suitable designed incentives.

The NPSD paid due attention to quality related aspects, it has envisaged validation of training and qualification, accreditation of training providers, quality of infrastructure, quality of trainers and suggested to establish National Vocational Qualification Framework.

For effective implantation of the NPSD Prime Minister's National Council on Skill Development for policy direction, National Skill Development Co-ordination Board and National Skill Development Corporation were established. The National Skill Development Corporation is non-profit company under the companies act with an appropriate governance structure was set up under the

Ministry of Finance. It has an equity base of INR 100 million of which 49% is contributed by the Government and 51% by the private sector. The Corporation has a two tier structure viz a 15 member Board and a national Skill Development Fund (NSDF) as 100% government owned trust to facilitate private sector initiatives. The NSDF, operating arm of NSDC, is created with a corpus of INR 9960 million as a Government owned trust to receive financial contributions from donors, private entities, central and state government, statutory bodies, financial institutions etc. and lend to private bodies to engage in providing skill development programmes.

## **V. Vocational Educations and Training: Status**

India has a small but fragmented and complex formal vocational education and training. 17 Ministries at national level provide different kinds of training programmes which can be broadly classified as vocational education and training (see Annexure). The situation in the states is also similar. MHRD and Ministry of Labour play crucial role in imparting vocational education and training in formal sector<sup>2</sup>.

The formal vocational education and training includes vocational education in higher secondary stage, Industrial Training Institutions/Industrial Training Centres<sup>3</sup> (ITI/.ITCs) for those completed minimum 8th grade and polytechnics of post lower secondary level with a total seating capacity of about 2.5 million.

Industrial Training Institutions (ITI/ITC) and Polytechnics provide the largest volume of technical training. While ITIs have certificate course with duration of 6 months to 2 years with the minimum educational level of 8 to 12 grade depending on courses. The polytechnics provide diploma courses at post lower secondary level. ITI/ITCs offer more than 120 different skills. Polytechnics offer three year generalized diploma courses in conventional subjects such as civil, electrical, and mechanical engineering. The courses are now diversified to include electronics, computer science, medical lab technology, hospital engineering, etc. Women's polytechnics offer courses in garment technology, beauty culture, textile design, secretarial etc.

---

<sup>2</sup> This paper deals only Vocational Education and training provided by MHRD and DGE&T (Ministry of Labour).

<sup>3</sup> Under CTS Public Industrial training Institutions are called as Industrial Training Institutions and the private Industrial Training Institutions scheme are called as Indus training Centre.

**Table 20:4. Formal Vocational Educational and Training Institutions and Seating Capacity (2007-08)**

| Source                                 | Institution                            | No. of Inst. | Seating Capacity/ Coverage (millions) | Qualification required | Duration          |
|--|--|--------------|---------------------------------------|------------------------|-------------------|
| DGE&T(Ministry of Labour)              | ITI/ITCs                               | 8687*        | 1.2                                   | 8grade-12grade         | 6 Months -2 years |
| Ministry of Human Resource Development | Polytechnics                           | 1675         | 0.35                                  | 10 grade               | 3 years           |
|  | Secondary Schools Vocational Education | 9619         | 1.0                                   | 10 grade               | 2 years           |
|  | <b>Total</b>                           | <b>19981</b> | <b>2.5</b>                            |                        |                   |

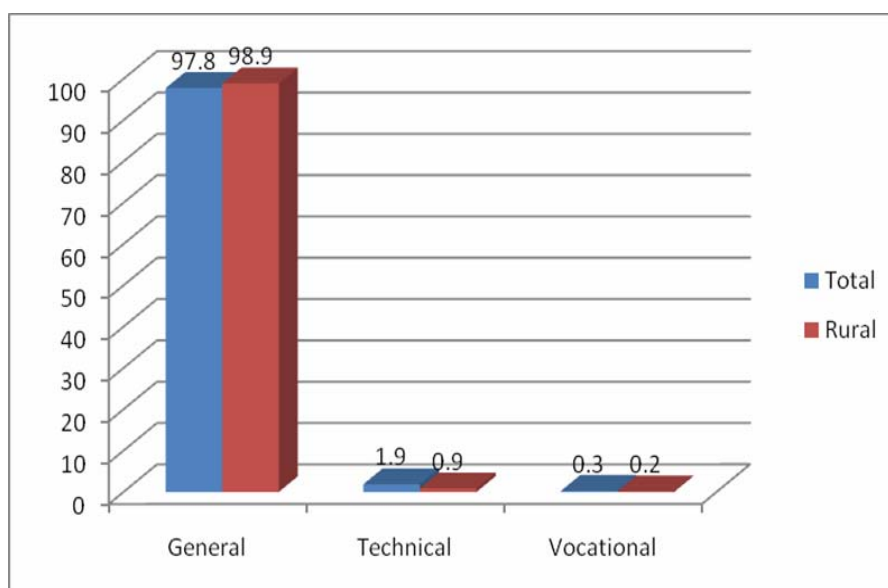
Source: Ministry of Labour Annual Report (2010-11), National Policy on Skill Development (2009), GOI \*Refers to period of 2010

MHRD and DGE&T the major providers of formal vocational education and training together cover 2.5 million people out total 3.1 million people per year trained in the country. In addition to above formal courses MHRD operates Community Polytechnics, Janshikshan Sansthans and Mahila Samykhaya that play an important role in skill development and technology transfer to rural areas and empowerment of rural women .

#### **Participation 15-29 Year Age Group Students by Type of Education**

The educational participation of age 5-29 years students shows that 97.8% of them were attending general education while 1.9% were in technical education( Engineering & Medicine) only 0.3 percent were pursuing vocation education.

**Figure 20:4. Percentage distribution of students of Age 5-29 years by type of education received through major course attended(All India)**



Source: NSS Report No 532: Education in India, 2007-08

Of all the 15-29 years students' majority were in general educations, and small proportion covered by technical education. Participation in vocational education was very trivial. This trend exists both in rural urban and among male females. However, in rural areas coverage of vocational education is very insignificant compared to urban areas. Females particularly in rural areas have lesser rate of participation in vocational education.

In rural areas 98.9% of age 5-29 years students were studying in general education as a very small fraction being in technical education and negligible percentage was undergoing vocational education

### **Source of Vocational Education & Training**

Among 15-29 year old youths who either received or receiving vocational education & training only a little above one fifth (21.87%) were covered under the formal system in rural areas. 44% undergone hereditary vocational training and one third could get it through other non-formal sources. However in urban areas a little more than half of the youth who had vocational training could get it through formal and one third in non-formal source while a small percentage had hereditary training. Though non-formal vocational training

particularly the hereditary system helps, yet in view of changing employment pattern and technological changes especially in rural areas the family oriented vocational training would not be effective for improving earnings and better employment opportunities.

**Table 20:5. Percentage Distributions of Students of Age 5-29 Years by Type of Education Received Through the Major Course Attended**

| Sector        |        | Percentage distribution of students in type of education |           |            |     |
|---------------|--------|--|-----------|------------|-----|
|               |        | General  | Technical | Vocational | All |
| Rural         | Female | 99.3   | 0.6       | 0.1        | 100 |
|               | Male   | 98.5   | 1.2       | 0.3        | 100 |
|               | Person | 98.9   | 0.9       | 0.2        | 100 |
| Urban         | Female | 95.3   | 4.4       | 0.3        | 100 |
|               | Male   | 94.6   | 5         | 0.4        | 100 |
|               | Person | 95   | 4.7       | 0.3        | 100 |
| Rural + Urban | Female | 98.2   | 1.6       | 0.2        | 100 |
|               | Male   | 97.5   | 2.2       | 0.3        | 100 |
|               | Person | 97.8   | 1.9       | 0.3        | 100 |

Source: NSS Report No. 532: Education in India, Participation and Expenditure 2007-08

**Table 20:6. Percentages of Persons in the Age Group of 15-29 Years by Status of Vocational Training Received or Being Received in India**

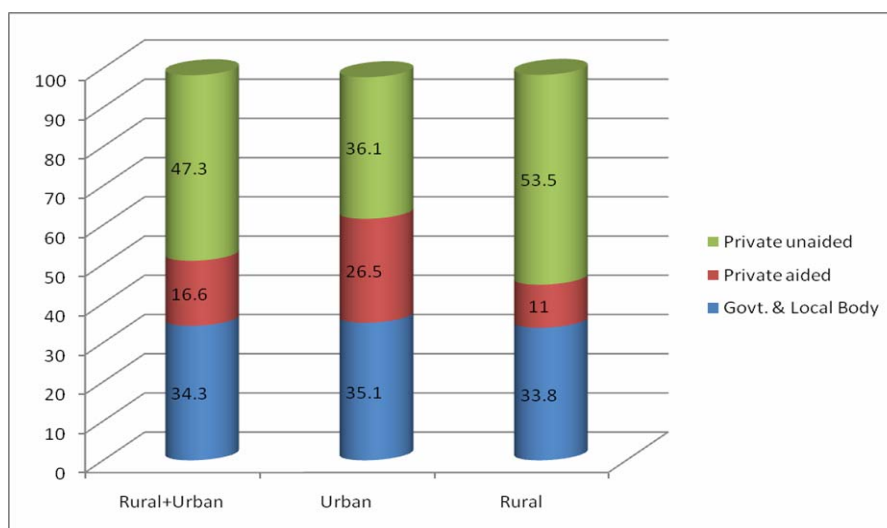
|       | Receiving formal vocational training | Received Vocational Education & Training |            |        |
|-------|--------------------------------------|--|------------|--------|
|       |                                      | Formal                                   | Hereditary | Others |
| Rural | 8.01                                 | 13.86                                    | 44.55      | 33.66  |
| Urban | 18.13                                | 32.88                                    | 16.77      | 32.22  |

Source: NSS 61st Round, 2004-05

### Role of Public and Private Sectors in Vocational Education & Training

A higher percentage (47.3%) of youth (15-29 years) received or receiving vocational education was attending private unaided institutions. Interestingly the proportion of youth attending private unaided vocational institutions constitute higher in rural areas (53.5%) compared to urban areas (36.1%). In urban areas government and private aided (government funded) sector cover majority of vocational education students.

**Figure 20:5. Percentage Distribution of Currently Attending Students Aged 5-29 Years Pursuing Vocational Education by Types of Institution**



## **VI. Field of Formal Vocational Education & Training:**

There is variation among male-female and rural urban population of 15-29 years age group in choosing different vocational training trades (see Annexure.1). However, in both rural and urban areas the highest percentage had undergone vocational training in computer trades. There was no gender difference in choosing computer trade both in rural and urban areas although higher percentage of urban persons (38.8%) underwent computer trade training than rural persons (21.2%).

For rural males, next to computers the most demandable field of training was found to be Electrical and Electronic Engineering (18.8 percent: code.02) followed by Driving & Motor Mechanic (16.6 percent code.15), Mechanical Engineering (12.8 percent Code. 01). Among Urban males after computers, Electrical and Electronic Engineering (17.1 per cent) followed by Mechanical Engineering (10.1 percent) and driving& motor mechanic (8 per cent) were found to be in demand.

The demand among the rural females was a bit different as highest proportion of them (30.5 percent) preferred textile related trade followed by computers (21 percent), health and paramedical (10 percent ) and office and business related (6.3 percent). Among the urban females youths, the choices were computer trades (39 percent), textile related work (18 per cent), health and paramedical (8.7 per cent), office and business related (5.7 per cent) and beautician and hairdressing related (5.5 per cent). Quite, interestingly less than one percent of persons in rural areas chosen agriculture and other related activities for training. The source of training is closely related with nature of trade (see Annexure.2). The Industrial training Institutes (ITIs), Industrial Training Centres (ITCs), recognized motor driving schools, HS schools offering vocational courses, institutes run by companies/corporations, hospitals and medical training institutions played important roles in training.

### **Private Expenditure on Vocational Education**

The annual average private expenditure on vocation education costs about fifteen thousand Indian Rupees. This amount is more than double spent on higher education and a little less than four times higher than expenditure on secondary education. The private expenditure on vocational education in rural areas is less than in urban areas. However, the private expenditure on vocational education is

four times higher than for general education at secondary level and double the higher education in rural areas.

**Table 20:7. Average Annual Private Expenditure on Vocational Education General Education (in Indian Rupees)**

| Type and Level of Education | Rural | Urban | Rural +Urban |
|-----------------------------|-------|-------|--------------|
| Middle School               | 1370  | 4264  | 2088         |
| Secondary/Higher Secondary  | 3019  | 7212  | 4351         |
| Above Higher secondary      | 6327  | 8466  | 7360         |
| Vocational Education        | 13699 | 17016 | 14881        |

Source: NSS, Report No.532 Education in India, 2007-08

The private expenditure on vocational education sharply higher in private unaided institutions compared to government and private aided organization with variation in rural urban areas (see Table 7 and 8). In rural areas the private expenditure is more than double in private unaided sector compared government institutions. The higher proportion of rural youth depend on private unaided sector for vocational education despite they need to bear large private expenditure shows that lack of vocational educational facilities in rural areas.

#### **Status of Vocational Education& Training and Broad Activity**

National Sample Survey data (2007-08) shows that only 12 % of persons with vocational education and training were employed in rural areas as against 26% in urban areas. About 80 per cent persons with vocational training were unemployed in rural areas.

NSS Report No. 532: Education in India, 2007-08: Participation and Expenditure

As such very small proportion of people had vocational education and training particularly in rural areas, even among them unemployment is very high. This shows that the slow progress of vocational education in rural areas can also be attributed low employment opportunities.

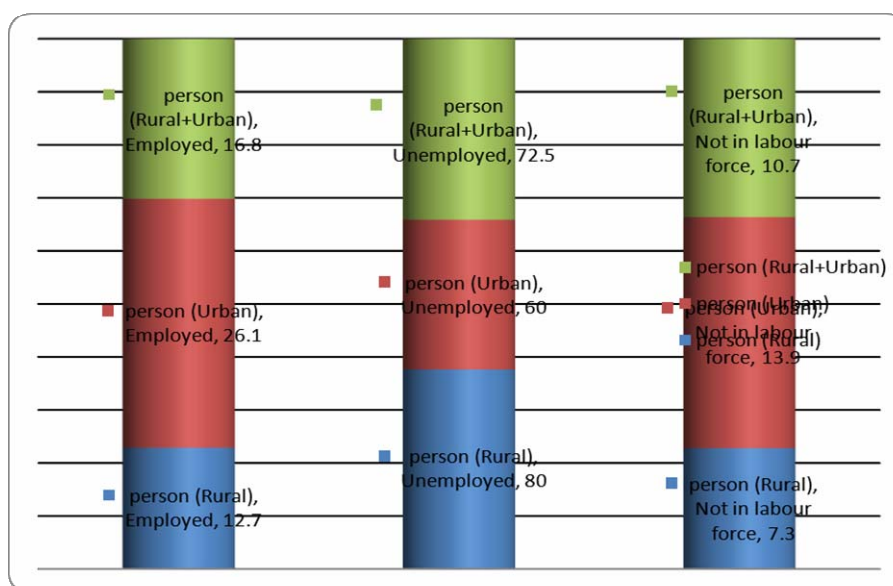


**Table 20:8. Private Expenditure on Vocational Education in Different Types of Institutions (In Indian Rupees)**

| Location | Government | Private Aided | Private Unaided | All India |
|----------|------------|---------------|-----------------|-----------|
| Rural    | 8030       | 11198         | 17713           | 13699     |
| Urban    | 8192       | 16253         | 26348           | 17016     |

Source: NSS, Report No.532 Education in India, 2007-08

**Figure 19:6. Formal vocational training and broad activity status**

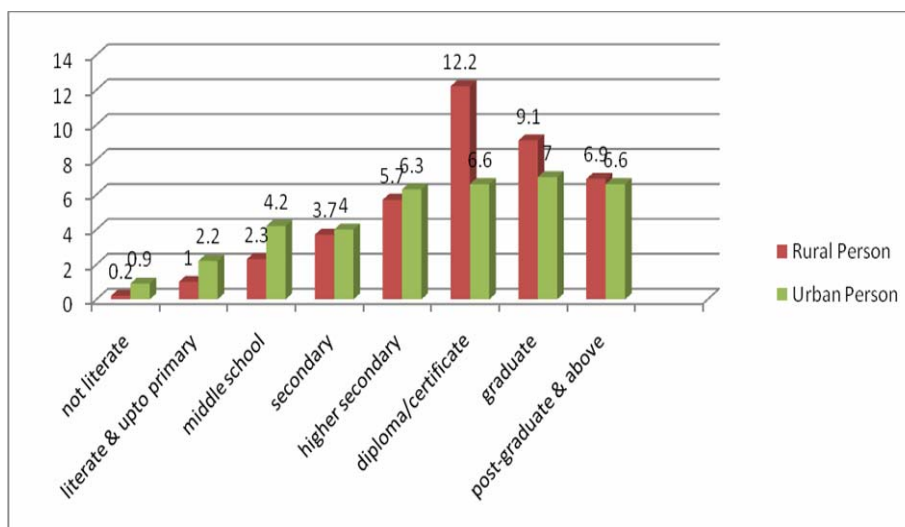


When compared unemployment position of persons with different levels of education shows that illiterate persons and with people with lower levels of education had less unemployment rate in rural areas. The highest percentage of unemployment was found among persons with vocational training more so in rural areas. This raises issues related to employability, relevance of vocational courses imparted etc.

### Vocational Education System

Vocational education in India referees specifically vocational courses offered in school grade 11 and 12 in general educational institutions under Centrally Sponsored Scheme of Vocationalization of Secondary Education. The vocational education programme was started in 1976-77 under the programme of Vocationalisation of Higher Secondary Education in general educational institutions in few states with slow progress.

**Figure 20:7. Education-Level Specific Usual Status Unemployment Rate (UR) for Persons of Age 15 Years and Above**



Source: NSS report No. 531: Employment and Unemployment Situation in India: July, 2007- June 2008.

Based on the recommendations of National Working Group on Vocational Education (1985) further endorsed by the National Policy on Education (1986) the Centrally Sponsored Scheme (CSS) on vocationalization of higher secondary education being implemented from 1988 with an objective to enhance individual employability, reduce the mismatch between demand and supply of skilled manpower and provide an alternative for those pursuing higher education without particular interest or purpose. Vocational Education falls under the administration of the Ministry of Human Resource Development (MHRD). The All India Council for Vocational education under the MHRD, is responsible for planning, guiding and

coordinating the program at the national level, State Councils for Vocational Education (SCVE) perform similar functions at the state level.

### **Courses and Disciplines of VEP**

Pandit Sunderlal Sharma Central Institute of Vocational Education (PSSCIVE) is responsible for developing courses. Courses are offered in six disciplines including agriculture, business and commerce, humanities, engineering & technology, home science and health & paramedical. PSSCIV has listed 104 courses but it has hardly developed course materials for one fourth of them. Some of the courses offered under vocational education are also covered by vocational training programmes though the content and duration and mode of delivery may be different.

### **Size and Capacity of Vocational Education**

The NPE (1986) and the revised the Educational Policy (1992) and its Programme of Action set the target of covering 25% of grade 11 and 12 under vocational education by the year 2000. The Eleventh Five Year Plan (2007-2012) has recommended expanding vocational education in 2000 to higher secondary schools covering 2 million students. However, the targets are elusive as currently about 9870 HS schools are implementing vocational education covering about one million students of grade 11 and 12 (Annual Report, MHRD 2010-2011)<sup>4</sup> This shows the little capacity in vocational education and even that is under-utilized as the figure quoted above is more of capacity rather actual enrolment. The original intention of the MHRD was of streaming 25% of all grades 11-12 students into vocational courses by the year of 2000 remained unfulfilled targets.

### **Rural-Urban Differences**

The extent of access to vocational education and its coverage varies between rural urban areas as only 9 % HS schools in rural areas impart vocational education covering a little over 5 percent of students at this level as against 16% of schools and 7% of students in urban areas. The extent of girls opted for vocational education is lower than boys both in rural and urban areas. Considering the magnitude of

---

<sup>4</sup> VEP at HS level is not covered under school education statistics brought out annually by MHRD. For analysis in this part 7<sup>th</sup> All Education Survey data (2005) is used.

students at HS level, the size of coverage under vocational education is very insignificant in rural and urban areas. This clearly evinces both inadequate facilities and underutilization of vocational education.

**Table 20:9. Size of Vocational Education and Coverage (All India)**

|           | Number of HS Schools | % HS Schools with Vocational Education | Total Students in grade 11&12 Millions | % students in Vocational Education | % Girls in Vocational Education | % of Boys in Vocational Education |
|-----------|----------------------|--|--|------------------------------------|---------------------------------|-----------------------------------|
| Rural     | 22380                | 9.34                                   | 4.53                                   | 5.43                               | 4.65                            | 5.91                              |
| Urban     | 20579                | 16.25                                  | 6.90                                   | 7.01                               | 6.28                            | 7.56                              |
| All India | 42959                | 12.65                                  | 11.43                                  | 6.39                               | 5.68                            | 6.87                              |

Source: 7<sup>th</sup> All India Educational Survey, NCERT, 2005.

**Table 20:10. Vocational Education among Different Management Type Schools**

|       | Government  | Local Body | Private aided | Private unaided |
|-------|-------------|------------|---------------|-----------------|
| Rural | 1033 (49.4) | 24 (1.1)   | 913 (43.6)    | 122 (5.8)       |
| Urban | 1523 (45.5) | 112 (3.3)  | 1361 (40.7)   | 349 (10.4)      |
| Total | 2556 (47.0) | 136 (2.5)  | 2274 (41.8)   | 471 (8.7)       |

Source: 7<sup>th</sup> All India Educational Survey, NCERT (2005)

The HS schools are managed by different agencies like the government, Local Body, Private Aided, Private Unaided. Largely the schools that impart VE fall under government and privately managed but funded by government category. The proportion of private unaided schools providing VE constitutes a very small section particularly in rural areas. Private aided schools have to impart vocational education as they receive grants from government and including vocational education sections provides additional funding from central government.

### **Inter-state Variation**

In India the states vary in socio-economic and political context which, reflects in their response to implement Centrally Sponsored Schemes. There has been wide variation among different states the extent of implementation of VEP (see Fig.8). While few had keenness in implementing VE many states have adopted nominally. In other words the status of vocational education varies widely among different states both in terms of the number of schools imparting vocational education and coverage of students. Among 17 major states the percentage of HS schools having VE varies between 38 percent in Tamil Nadu to 0.44 percent in Rajasthan. While seven states had above the national average in terms of percentage of schools with VE and nine states fall below national average. In terms of coverage of students in grades 11 and 12 in VE the states range between 12% to 0.19% in Kerala and Rajasthan respectively. Some states have a higher percentage of schools with VE but they have very small enrolment. This shows under-utilization of capacity of VEP.

Some of the educationally developed states had higher percentages of schools with vocational education and also better coverage of students. Some of the educationally and economically poorer states have small size vocational education both in terms of schools and students' coverage. The state Tamil Nadu which is educationally industrially developed state present a unique picture as it has 38 % HS schools with VE covering only 3 percent of Grade 11 and 12 students.

### **Rural Scenario**

At the all India level about 9 % of HS schools have VEP in rural areas. The proportion of HS schools with VEP in rural areas varies very widely among states as it ranges between 34 % to 0.10 % in Tamil Nadu and Rajasthan (Fig.9) respectively. Of course these are the two states that had highest and lowest percent VEP in HS schools. Ten states among 17 major states have lower percentage of schools with VE compared to the national average. Both educationally and economically backward and educationally industrially developed states present similar patterns in terms low proportion facilities for VEP.

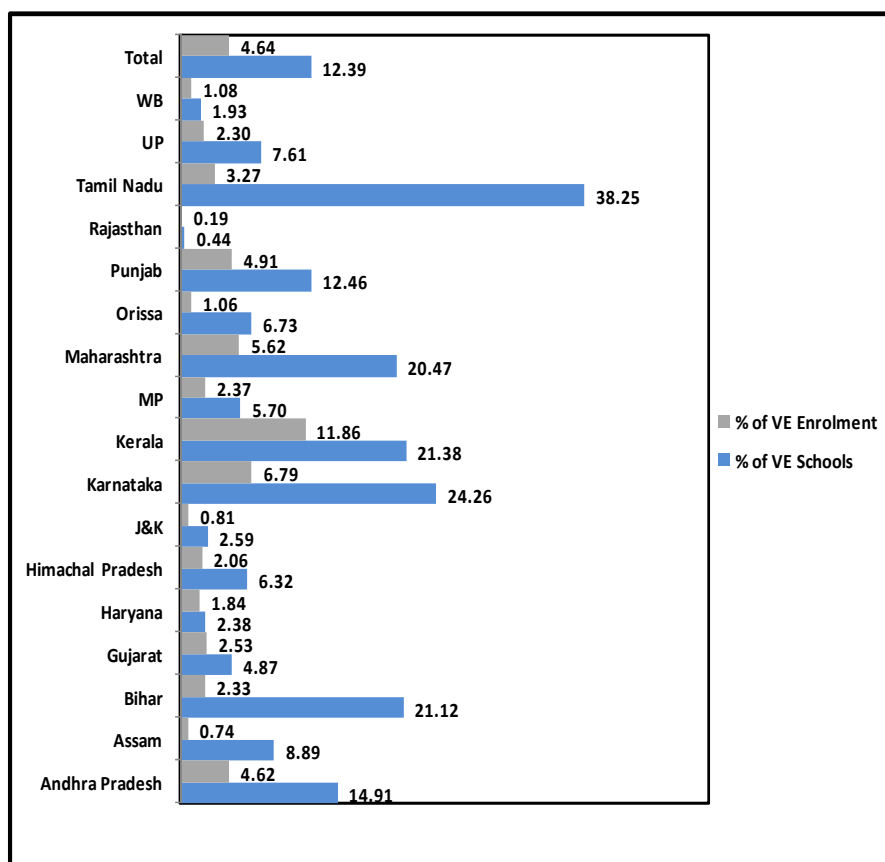
At the all India level 4.25 percent of higher secondary students are enrolled in VEP in rural areas. There was no difference between rural urban areas. The percentage of students covered by VE in rural

areas varies 13% to 0.08 percent as the highest and lowest. Rural areas in some of the states showed higher percentage of enrolment in VEP compared urban areas particularly in educationally and economically developed states. Some of the states though have small percentage of schools with VEP; they have higher proportion of enrolment.

### Percentage Share of VE in Different States

There is very uneven spread of VE among different states (Fig.10). Six states hold more than 60% of schools which impart VE. Two states account for more than one fourth of total schools that have Vocational Education programme.

**Figure 20:8. Percentage of Vocational Schools and Enrolment at HS Level in Different States (All India)**



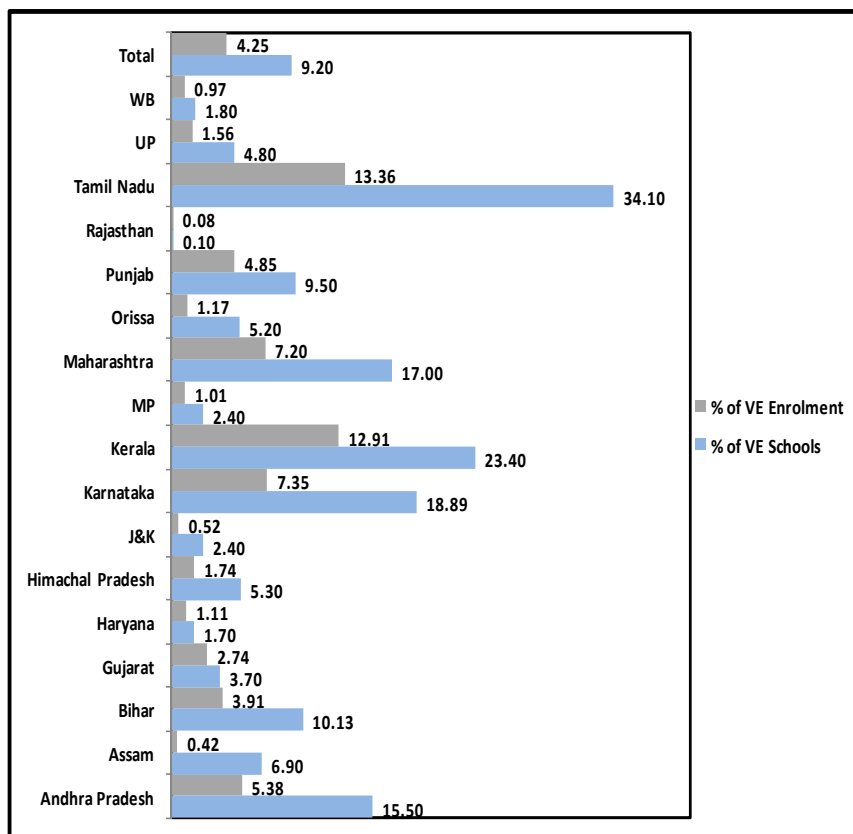
Source: 7<sup>th</sup> All India Educational Survey, NCERT (2005)

The state Maharashtra is the foremost having about 17% of total schools having VE followed by Uttar Pradesh. Around three fourths of total enrolment in VE is covered in five states. Tamil Nadu state has the highest percentage share of 27.5 % of total VE enrolment in the country followed by Maharashtra. These two states belong to educationally and industrially developed states. Many states have insignificant percentage share of schools and enrolment.

Among 17 major states Kerala tops with a high majority of schools with VE (71%) and VE enrolment (71%) in rural areas closely followed by two other states. While eleven states had a higher percentage share of schools imparting vocational education, in rural areas compared to national average, only nine states had better percentage share of enrolment in rural areas compared to its national average. Some of the states which are educationally and economically not developed had a very small percentage share of VE in rural areas. While four states had a higher percentage share of schools in rural areas, only four states showed a higher percentage share of enrolment in rural areas compared to urban areas.

The analysis indicates that the spread of vocational education is very slow in view of targets that MHRD intended to reach. There are wide differences among states both in terms of number of schools imparting VE and their enrolment which indicate inadequate facilities and underutilization of seating capacity. The weighted average capacity utilization of the schools receiving grants is 42 percent (World Bank, 2006) The latest figures given MHRD annual report (2010-11) 1 million places for VE constitutes approximately 5% students in grades 11 and 12 This would also imply that less than one percent of students who had entered grade one over the last decade or so would have eventually participated in vocational education at higher secondary level. Except some states a large number of states fall behind in extent of VE facilities and enrolment. Further in many states rural areas have inadequate facilities as well participation rate particularly in educationally and economically not developed states.

**Figure 20:9. Percentage of Vocational Schools and Enrolment at HS Level in Rural Areas**



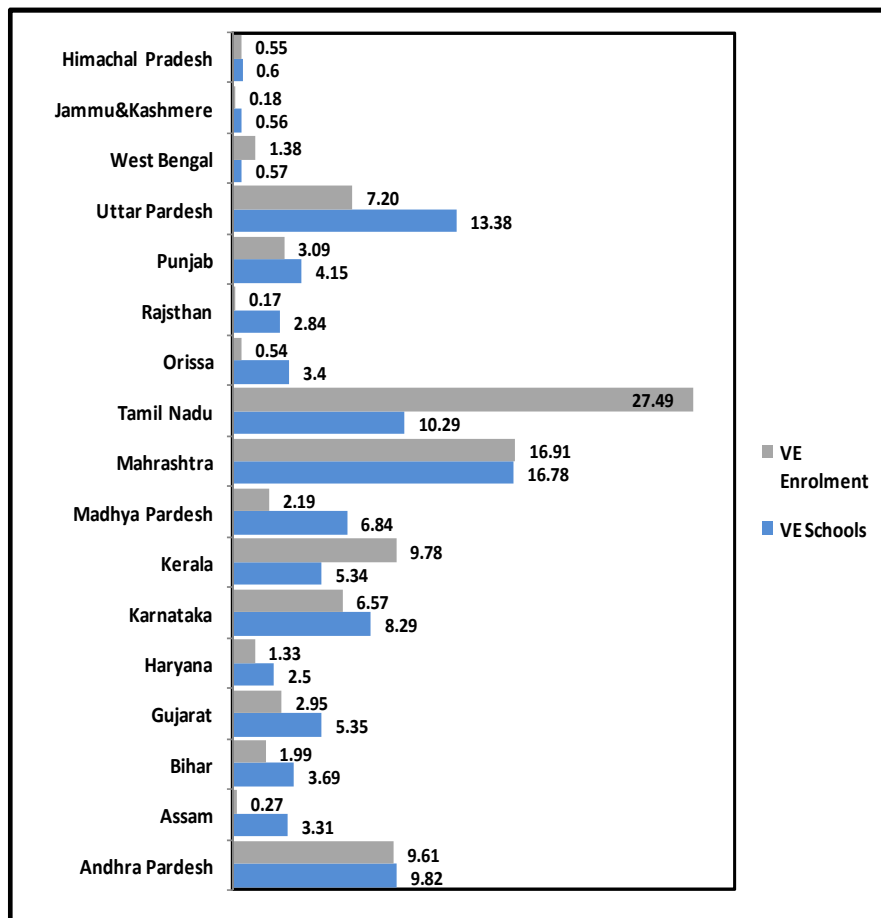
Source: 7<sup>th</sup> All India Educational Survey, NCERT, New Delhi, 2005.

### Students Selection

Students to vocational stream are selected on the basis of performance in grade 10 public examinations. In all the states students are streamed in to vocational education on the basis of the marks obtained in the public examination. The generally preference for general and higher education by parents and students make to believe that students joining vocational education are those who perform poorly in grade 10 examinations and sometimes this corresponds with low socio-economic status of students.



**Figure 20:10. Percentage Share of Vocational Schools & Enrolment in Major States**



### Content of Vocational Education and Outcomes

The range of courses offered in vocational education is limited. The narrowness of courses in rapidly diversifying economy leads to mismatch between the courses taught and required skills; focusing on information and ignoring theoretical background, poorly produced textbooks absence of apprenticeship lead to poor employment opportunities.

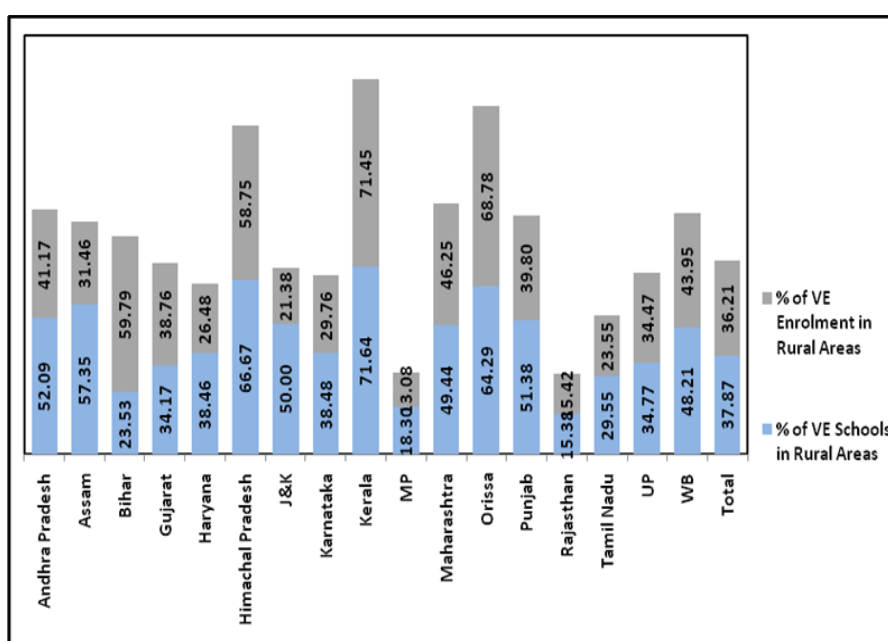
There is limited understanding about employment status of vocational education graduates, although anecdotes indicate limited job opportunities. A study by the Operation Research Group in 1988 reported only 28% graduates of vocational education were gainfully

employed. It is difficult to draw any conclusions in the absence of empirical evidence about employment pattern of vocational graduates.

### Forward Mobility

Most of the vocational students appear intend to pursue higher education rather employment. As there is very small segment of vocational education at higher education level, chances are highly restricted for vertical mobility of vocational education. In some of the states the vocational students were required to take some additional courses like English and general education courses to preserve the possibility of joining general higher education. In these states an overwhelming vocational students preferred taking additional courses despite considerable additional work. And in these states vocational education could get considerable enrolment.

**Figure 20:11. Percentage Share of VE Schools and Enrolment in Rural Areas in Major States and All India**



The objectives of vocationalisation of secondary education seem to be misplaced. Even two decades after introducing the Centrally Sponsored Scheme of Vocational Education, the proportion of students going in to vocational education remained at much lower level. Compared to many countries, in India vocational education at

secondary level is very small both in terms of facilities and student numbers.

### **Vocational Training in the Public Sector**

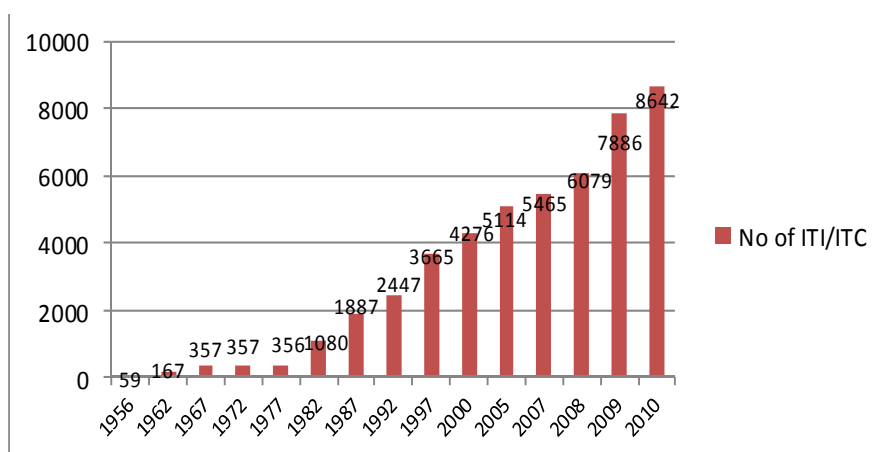
Unlike the vocational education, Vocational training programmes in India fall outside the formal schooling. Vocational training is institution based with varying entry requirements as well as the course duration. The proportion of practical to theoretical instruction in vocational training programme is also higher than in vocational education. The Craftsmen Training Scheme (CTS), most important in the field of vocational training, was introduced by the Government of India in 1955 under the Directorate General of Employment & Training (DGE & T), the Ministry of Labour, to ensure steady supply of skilled workers in different trades for industry.

### **Size and Coverage of ITI/ITCs (Vocational Training)**

The CTS comes under both National and State governments. While Central Government is formulates policy, procedures, standards, duration etc. in consultation with NCVT and also conducts final trade tests on behalf of NCVT. The state governments look after day to day administration of institutions including planning, expansion and financing. Industry plays an advisory role at national. State and institutional levels and assist with final trade tests. In recent years role of local industries became important through involvement in management committee of institutions, designing curriculum and apprenticeship etc.

Starting with 54 institutions under the CTS in 1956, the number of ITI/ITCs has grown to 8687 consisting of both public and private institutions with seating capacity of 1.2 million students. Most of the growth of ITI/ITCs took place after 1986 but the pace of growth was significant during last four years (see Figure.12). Enrolment numbers have also increased from less than 10000 in sixties to 1.21 million at present. This growth has been possible mainly due to the large growth of ITCs.

**Figure 20:12. Growth of ITI / ITCs**



Source: Annual Report MOL, 2010-11, GOI

**Table 20:11. Number of ITI/ITCs and Seating Capacity**

|            | ITI/ITCs | Seating capacity(000’) |
|------------|----------|------------------------|
| Government | 2189     | 453                    |
| Private    | 6498     | 760                    |
| Total      | 8687     | 1213                   |

Source: Annual Report, MOL 2010-11 GOI

The ITIs are financed and managed by state labour ministries with a seating capacity of 45 3000 students in 2189 institutions. The ITCs are owned, financed and managed by private organizations or NGOs and providing places for 76 0000 students in 6498 institutions. While state governments have no direct control over functioning of these institutions, they are accredited to either the National Council for Vocational Training (NCVT) or a State Council for Vocational Training (SCVT).

### **Public–Private Role and Capacity**

The role of private sector has a significant mark on the seating capacity of vocational training. Like in Vocational Education in higher secondary schools, the ITI/ITCs are also more predominant in some states and regions (see Table.12). Majority (58%) of private ITCs are located in seven states (Rajasthan, Uttar Pradesh, Karnataka, Kerala,

Tamil Nadu Andhra Pradesh and Orissa) accrediting about three quarters of total ITC seating capacity.

**Table 20:12. Number of ITI/ITCs and Seating Capacity in Major States**

| Name of State/UTs | Gov. ITIs | Seating Capacity (Gov.) | Private ITCs | Seating Capacity (Pvt) | Total ITI/ITC | Total Seating Capacity |
|-------------------|-----------|-------------------------|--------------|------------------------|---------------|------------------------|
| Haryana           | 82        | 21400                   | 89           | 9880                   | 171           | 31280                  |
| Himachal Pradesh  | 71        | 9524                    | 103          | 8748                   | 174           | 18272                  |
| J&K               | 37        | 40-87                   | 1            | 110                    | 38            | 4197                   |
| Punjab            | 95        | 19524                   | 182          | 19920                  | 277           | 39444                  |
| Rajasthan         | 114       | 13696                   | 680          | 79647                  | 794           | 93343                  |
| Andhra Pradesh    | 134       | 24558                   | 508          | 998636                 | 642           | 124191                 |
| Karnataka         | 154       | 26034                   | 1164         | 89006                  | 1318          | 115040                 |
| Kerala            | 37        | 16236                   | 484          | 53018                  | 521           | 69254                  |
| Tamil Nadu        | 60        | 22120                   | 637          | 63902                  | 697           | 86022                  |
| A&N Island        | 1         | 273                     | 0            | 0                      | 1             | 273                    |
| Assam             | 30        | 5744                    | 4            | 208                    | 34            | 5952                   |
| Orissa            | 26        | 9872                    | 562          | 94580                  | 588           | 104452                 |
| West Bengal       | 51        | 12716                   | 24           | 1800                   | 75            | 14516                  |
| Gujarat           | 153       | 56876                   | 371          | 21992                  | 524           | 78868                  |
| Madhya Pradesh    | 173       | 25454                   | 85           | 10738                  | 258           | 36192                  |
| All India         | 2189      | 453346                  | 6498         | 760702                 | 8687          | 1214048                |

Source: Annual Report DGE&T, MOL, 2010-11

### Selection of Students

Students are selected on the basis of grades in examinations with age limit between 14-40 years. Depending on the trade, the individual should have passed at least Grade 8. Admission is based only on marks secured in grade level examinations and public examinations. Like in

case of vocational education at HS level the students who perform relatively low scoring in general education stream join the vocational training.

### **Course Duration**

The duration of the courses vary depending on trade from 6 months to 2 years. However, except six of the 49 engineering trades are one or mostly two year duration. Mostly the non-engineering trades are of one year duration and enrol less than one fifth of total students. In recent years there has been major change in duration and type of trades imparted as large number of short duration non-engineering courses was introduced to provide opportunities for youth in geographical locations where there are no other providers in such courses.

### **Outcomes and Efficiency**

Although ITI graduates may do relatively better in the labour market compared to grade 10 and grade 12 completers, their labour market outcomes are still poor (World Bank, 2002). The reasons for the same are mismatch between demand and supply, students trained in jobs that do not exist and lack of quality training. Internal efficiency has been an issue in public institutions while private ITCs had better internal efficiency. However, in terms of external efficiency neither ITI nor ITC perform well. Opportunity in the organized sector for ITI/ITC graduates is very low. Unemployment rates were extremely high in some states. However, the labour market success rate is higher for ITI graduates even though internal efficiency is very low (ILO, 2003). Lack of appropriate technical skills and associated soft skills has been the major bottleneck that hinders employment opportunities of vocational graduates.

### **Centre for Excellence (CFE)**

As a part of improving vocational training programme, the new vocational training model called the Centre of Excellence programme was adopted since 2007 in 500 ITIs in different states. The main thrust of the CFE is producing multi-skilled workforce of improved standard by adopting multi-skill modules as per the needs of industry, adopting new technology with close involvement of industry and other stakeholders in planning and implementing training programmes and building partnership with nearby industries and setting up of Institute Management Committees to make training demand driven. Under this

scheme the training course structure comprises a broad based training for one year followed by advanced and specialized modules in the second year with multi entry and multi exit approach. A recent evaluation of CFE shows that this model has been effective in improving both internal and external efficiency (DGE & T, 2011).

### **Vocational Training for Informal Sector under MHRD**

About 93% of employment in India is in the unorganized/informal sector with employees working in relatively low productivity jobs. Though there are no formal programmes of training for the informal sector, a number of institutions are involved in providing training to meet the needs of informal sector employees. Besides the MHRD several other ministries are involved in providing different smaller programmes.

The MHRD plays a very important role in providing training for informal sector. These programmes include Community Polytechnics<sup>5</sup>, Jana Shikshan Sansthan, Mahila Samakhya and National Institute of Open Learning. A number of agencies provide smaller programmes for the informal sector (Annexure I).

The Community polytechnics, Mahila Samakhya Programme and Rural Development and Self Employment Training (RUDSET) are among some of the best practices in vocational education and training that have impact on rural transformation. These three programmes initiated in small way and expanded considerably with significant impact in rural transformation. These programmes had grown in larger scale without losing the basic objectives. The Jana Shikshan Sansthan had notable impact on improving and sustaining adult literacy particularly among women in rural areas.

The RUDSETI which is a private non-profit initiative was expanded in different states on demand and Central Government has adopted this model to establish in 650 districts in the country.

## **VII. Best Practices for Rural Development**

### **Community Polytechnics (CP)**

Realizing the potential and resources that polytechnics have the scheme of CP was started in 1978 under Central assistance. Currently there are about 1000 Community polytechnics covering about 400 thousand people a year in rural areas. Each CP is provided a non-

---

<sup>5</sup> Not similar to the term Community Colleges in USA and Canada

recurring grant of 2 million and a recurring grant of 1.7 million rupees annually. They are in fact the wings of existing polytechnics and can be considered a part of the formal system. However they provide training within communities. The major activities of CP are:

1. To Carry out Need Assessment Surveys to assess the technology and training needs;
2. To Impart Skill Development Training to the intended target groups;
3. To disseminate Appropriate Technologies for productivity enhancement;
4. To provide Technical and Support Services to rural masses and slums dwellers;
5. To create Awareness among the target groups about technological advancement and contemporary issues of importance.

In order to impart skill training and accomplish ground level physical delivery of New technologies at the doorsteps of the rural people, each I Community Polytechnic shall establish 5 to 10 Extension Centres in the nodal villages so that each centre serve a cluster of 10-15 villages.

Skill development training programs relevant to community needs shall be imparted through Community Development Extension Centres. All facilities existing in the institutions available in the rural areas such as ITIs, Vocational Schools, Industries, etc. shall be used to the maximum possible extent. NGOs, Voluntary Agencies, Pantheist, professionals and experts etc. are to be involved in the establishing of Extension Centres and their full cooperation is to be ensured in running the Extension Centres through community participation.

CPs conducts courses of few days to 9 months duration and there are no entry pre-requisites and no certification. The MHRD intends to incorporate CP in all the AICTE accredited institutions. CPs delivers diverse courses in community environment. That are delivered in vocational education in schools, but the focus is on informal sector of the economy. However, the contents of the courses are different as they are mostly drawn based on need assessment. The CP courses are mostly emphasise transfer of technology to rural communities, manpower development and rendering technical and support services. Several CP have adopted innovative programmes to impart soft skills and awareness arising programmes in rural communities.



### Box 1. A Typical Community Polytechnic

The Polytechnic at Mayem Bicholim, Goa, offers courses and services to the local community through its associated Community Polytechnic (CP). The CP describes its objectives as:

- To assess the needs of rural areas so that development programs can be designed and carried out;
- To train village youths for self and wage employment;
- To enhance production and productivity in rural areas to raise their standard of living;
- To make available repair facilities at the doorstep;
- To start people's participation in development; and
- To increase awareness of various development schemes floated by different agencies.

Its courses have no entry pre-requisites. The various courses offered are:

- One month duration courses
  - Glass painting; screen printing; purse making; carving, soft toys making.
- Three month duration courses
  - Mobile and telephone repair; helper for hospital and nursing homes; electric motor winding.
- Six month duration courses
  - Office management; electrician; plumbing; 2-3 wheeler mechanic; dressmaking, designing, embroidery and fabric painting; fashion designing.

It also provides direct community services as below:

- |                                      |                          |
|--------------------------------------|--------------------------|
| ➤ Mahila Mandal                      | ➤ Educational film shows |
| ➤ Rural roads                        | ➤ Medical camps          |
| ➤ Nutrition camps                    | ➤ Safe drinking water    |
| ➤ Social service camps               | ➤ Student counselling    |
| ➤ Tree plantation camps              | ➤ Village environment    |
| ➤ Financial help for self-employment | ➤ Youth club             |

Source: World Bank (2006)

MHRD intends to introduce CP in all the polytechnics accredited to the All India Council of Technical Education. Many of the CPs have established an extension centre for widening their coverage to engage with rural communities. Some of them keep moving extension centres for example CP in Khargone Madhya Pradesh has set up a main centre

within the institution and 5 Extension Centres are being established to undertake various activities of CP. Every in order to cover maximum target area/people, location of extension centres is shifted from place to place, depending on the needs and priorities of Skill development training programs, relevant to the community are being imparted through extension centres, 6500 rural people were successfully trained in various trades, under the community polytechnic scheme, during 2006-2007.

### **Box 2 Successful Expansion CP Activities**

The Community Polytechnic in Ambiiapur, Punjab has established extension centers for successful covering CP scheme for the people located in remote areas:

Established the first Extension Centre in Baikunthapur in 1995, funded by a local leader has its own building. The second Centre in Batauli was started since 2001. Since 2000 a separate building has been provided by the block office. Three more Extension Centers in Lakhanpur, Surajpur and Bishrampur are functioning in hired building.

#### **Training Programmes Conducted**

Under technology transfer/manpower planning scheme, the unemployed people have been trained through trainers in the following different areas- Under technology transfer/manpower planning scheme, the unemployed people have been trained through trainers in the following different areas

- Agriculture/ agricultural, forest products like-Mushroom cultivation, etc.,
- Maintenance of home appliances, Radio/TV repairing, House wiring, motor rewinding.
- Mason training, Fabrication, Preparation of Chalk, Incense Stick (Agarbatti), etc
- Diesel Mechanic, Hand Pump Repair, Two wheeler auto mechanic, Welding,
- Painting, Jute work, Beauty parlor, Knighting, Cutting/Tailoring, etc.
- Screen Printing, Data entry, Photography, etc.

The youth are being trained free of cost in their interested areas.

Source: <http://polyambikapur.com/community.htm> Accessed on 1/8/11

## **Rural Development and Self Employment Training Institute**

A Private Educational Trust (Sri Dharmasthala Manjunatheshwar Educational Trust) which has a long experience of running educational institutions in rural areas in Karnataka state has launched a unique initiative jointly with two Nationalised Banks (Syndicate Bank and Canara Bank) for rural development to mitigate the problem of rural unemployment through imparting training for self-employment in 1982 by establishing Rural Development & Self Employment Training Institute (RUDSETI). Encouraged by the success, the RUDSET has expanded to 24 units in 14 states at the request of state governments. The successful experience of RUDSET led the Central Ministry of Rural Development to establish RUDSET in each district and pursuing NGOs and Civil society to run them. The RUDSETI followed innovative and non-conventional approach by spreading awareness on self-employment by organizing Entrepreneurship awareness programme. RUDSETI training programmes include both technical and soft skills adopting simple and effective strategies in imparting training. RUDSETI imparts more than 60 types of training programmes in different areas such as agriculture, and all of them are of short duration. Any unemployed person of 18-40 years age is eligible for the training. Training and boarding is free and lodging provided during training period. RUDSETI has trained 2, 60,000 rural youth, of which 1, 84,000 trainees have settled with their self-employment, ventures, thus constituting 71% to the settlement rate. A small experiment which started in a small village has become a replicable model in the entire country.

RUDSETI offers more than 60 types of Entrepreneurship Development Programmes in various avenues. All the programmes are of short duration intervention ranging from one to six weeks. Mainly Entrepreneurship Development Programme (EDP) for First Generation Entrepreneurs is classified in to four categories as shown below:

- Agricultural EDPs
- Product EDPs
- Process EDPs
- General EDPs

During last year RUDSETI organized 1086 awareness camps on self-employment, motivating 96 501 rural unemployed to take up self-

employment ventures. RUDSETI helps in settlement after training by assisting to get bank loans.

The majority of RUDSETI trainees are from disadvantaged groups such as scheduled, scheduled tribes and minorities. Women constitute about 37% among the total trainees. RUDSETI works for Central Government sponsored rural development programmes such as poverty alleviation, self-employment and employment generation programmes in rural areas through organizing basic orientation, skill training, management of self-help groups etc. National bank for Agriculture Development has been constantly supporting RUDSETI in its activities to promote rural entrepreneurship.

An important feature of RUDSETI includes organizing marketing support and exposure to trade fairs and exhibitions to help rural people to understand customer and services. As a recognition to its significant contribution to rural self-employment and entrepreneurship development, RUDSETI has been received several national awards. RUDSETI get funding support from Government of India besides partner national bank

Looking at the high success rate of RUDSETI, none other than Ministry of Rural Development, Government of India, New Delhi has advised all the Nationalized Banks in the country to start RUDSETI type Institutes i.e., RSETIs in their Lead Bank Districts and by 2012, MORD wants all 600 plus districts in the country to have RUDSETIs to provide training to the unemployed youth.

### **Mahila Samakhya Programme**

Mahila Samakhya (MS) is an on-going scheme for women's empowerment that was initiated in 1989 to translate the goals of the National Policy on Education into a concrete programme for the education and empowerment of women in rural areas, particularly those from socially and economically marginalized groups. The critical focus within MS is the centrality of education in empowering women to achieve equality. MS is Gol's main scheme targeted at addressing the barriers that prevent rural women and girls from accessing education, such as problems of their relative isolation, struggle for livelihoods, lack of self-confidence, oppressive social customs etc. MS aims to create a collective awareness and understanding of women's subordinate contexts and build their capacities to challenge it.

At the time of inception, the MS Scheme was an Externally Aided Project (EAP), fully funded through a grant received from the

Government of Netherlands. Thereafter, the scheme was being funded by the OGI up to 2007-08. Currently DFID (UP) is providing assistance of €35 million sterling (including €1 million sterling for Technical Cooperation Fund) for the MS programme, on the basis of a 90:10 fund sharing pattern between DFID and GOI, for a seven-year period 2007-14. The 10th Plan budgetary outlay for the scheme was Rs. 984.8 million Rupees. The projected budgetary outlay for the MS Scheme for the 11th Plan is Rs. 2100 million Rupees.

The objectives of the MS programme are:

- i. To create an environment in which education can serve the objectives of women's equality.
- ii. To enhance the self-image and self-confidence of women and thereby enabling them to recognize their contribution to the economy as procedures and workers, reinforcing their need for participating in educational programmes.
- iii. To create an environment where women can seek knowledge and information and thereby empower them to play a positive role in their own development and development of society.
- iv. To set a motion circumstances for larger participation of women and girls in formal and non-formal education programmes.
- v. To provide women and adolescent girls with the necessary support structures and an informal learning environment to create opportunities for education.
- vi. To enable Mahila Sanghas to actively assist and monitor educational activities in the villages—including elementary schools, AE, EGS/AIE Centres and other facilities for continuing education.
- vii. To establish a decentralized and participative mode of management, with the decision making powers developed to the district level and to Mahila Sanghas which in turn will provide the necessary conditions for effective participation.

## **VIII. Current Status**

Currently the programme is being implemented in 102 districts of ten States viz. Andhra Pradesh, Assam, Bihar, Chattisgarh, Jharkhand, Karnataka, Kerala, Gujarat, UP and Uttarakhand. Core activities of the programme centre on the following themes, which generally arises from the issues that concern the women in Sanghas.

### **Issues of Education of Women and Girls**

The Mahila Samakhya programme works in tandem, and has organic linkages with educational schemes aimed at universalization of elementary education, such as DPEP and SSA.

Women collectives under the MS scheme, called Mahila Sanghas, play an active role in working towards removal of barriers to the participation of girls and women in education at the community level and play an active role in school management/running of alternate schooling facilities where needed. State MS Societies are also running 140 Kasturba Gandhi Balika Vidyalayas that are formal, girls' residential schools funded under the SSA programme as well as implementing the National Programme for Girls Elementary Education Programme in 1434 clusters for direct support to girls' education.

### **Economic Empowerment and Seeking Sustainable Livelihoods etc.**

Managing savings and credit group is also helping Sangha women in realizing the strength of collectives. Sangha women have undertaken a variety of tasks for generating income such as vermin-compost, organic farming, making and marketing herbal medicines, growing trees and fuel and fodder, collective garbage management, cattle and poultry farming, sewing and tailoring, making brooms and mats etc.

### **Impact of Mahila Samakhya**

Concurrent and external evaluations have been built into the programme to enable mid-course remedial action and also to inform future planning. The reports of Five National Evaluations undertaken during the course of the programme since inception re-affirm the benefits and strategies of the MS programme and indicate that outcomes of the Mahila Samakhya programme have been the following:

- 1) Demand for literacy has been generated;
- 2) Recognition and visibility of women within the family and the community has increased;
- 3) Women's participation in Panchayati Raj bodies has increased;
- 4) Awareness of the need to struggle for a gender just society has been strengthened;
- 5) Women are demanding accountability from government delivery systems.

Also the Joint Review Missions in 2008 and 2009 have pointed to the success of the MS scheme in laying the foundation for empowerment of women at the grassroots level through the Mahila Sanghas. The Sanghas in the States have taken initiatives to address issues and problems ranging from those of daily minimum needs, drinking water, improving civic amenities, health and nutrition to ensuring educational opportunities for their children especially girls, entering the political sphere, actively accessing and controlling resources and articulating their concerns and tackling social issues such as violence against women, child marriage, dowry etc. Across the country, MS has also influenced mainstream education, networks of organizations working on issues of women and education, as well as the larger arena of social development.

### **Health**

Sangha women have been actively involved in the national health programmes, campaign against prenatal sex determination, female feticides, child marriage etc. The Sangha women are being trained in the use of herbal medicines. Sangha women have also been active in the awareness campaign for HIV/AIDS. Several Sangha women are working as ASHA health workers under the National Rural Health Mission. Nari Sanjeevani Kendras are run by strong federations to offer indigenous medicinal systems and community level education on health and hygiene, as well as generate some income through harnessing natural resources available in mainly forested, tribal areas.

### **Gaining Entry into Local Governance and Accessing Public Services**

Several Sangha women have been elected to various panchayat positions in the MS states and have been instrumental in making other village women overcome their fears and inhibition to come to the panchayat meetings and to speak their mind in public. During Panchayat elections in States of Uttarakhand, Karnataka, A.P. & Assam, e.g., Sanghas and federations facilitated by MS have taken up community-level campaigns and awareness programmes to mobilize local support for women candidates so as to build on the gains of 50% reservations for women in local-self-governance.

### **Addressing Issues of Violence & Social Practices Which Discriminate Against Women & Girls.**

Sangha women have effectively tackled these issues in their villages. In most of the MS project areas; Sangha women have been in the forefront of ensuring the advancement of the age of marriage, stopping practices such as child marriage, stopping practices such as child marriage, fighting alcoholism by preventing illegal sale of liquor in villages, and in making their families and communities more sensitive to the needs of women and girls. At present there are 176 Nari Adalats and Rai/counselling centres in MS states that provide accessible, inexpensive and gender just forums for resolution of disputes especially those involving domestic violence, desertion of women by marital families and properties right of women in families.

## **IX. Recent Progress**

The current focus is on maintaining balance between service delivery and empowerment processes at grassroots, while consolidating and expanding the programme itself on MS' principles of sustainability. This is achieved particularly through the strengthening of federations (of Mahila Sanghas at block and district level) to the point of autonomy and taking on major responsibility in MS activities in the local context (including running MSKs, expanding to new villages within blocks, advocacy and resource support, etc.). Since the last year, more federations have progressed towards autonomy, allowing for concurrent expansion into new districts & EBBs.

### **New Developments at National-level**

In the past year, capacity building of functionaries of the MS programme to deal better with federations' needs and expanding areas of coverage has also emerged as a focus area. In this regard, a year-long training cycle across the programme at national-level was conducted by ERU Pvt. Ltd. under the Technical Cooperation Fund between DFID & GOI.

In wake of latest monitoring and evaluation needs in the socio-educational sector, the Baseline Survey of MS (by ORG Nielsen, also contracted under the TCF) has been completed in this financial year as well. On this basis, the Result Framework for MS programme has been reworked and standardized MIS is being developed to



accommodate both quantitative and qualitative aspects of this process-based programme.

There has also been an increased recognition of MS at the national level by inclusion of MS' recommendations based on two decades of intensive grassroots work in SSA reviews and decision-making.

### **Jan Shikshan Sansthan**

Jan Shikshan Sansthans (JSSs) are established to provide vocational training to non-literate, neo-literate, as well as school drop-outs by identifying skills as would have a market in the region of their establishment. They are categorized into Category "A" "B" and "C" and are entitled to an annual grant up to Rs. 40 lakh, Rs. 53 lakh and Rs. 30 lakh respectively. JSSs impart skill development training in nearly 394 vocational courses in cutting and tailoring. Beauty culture and health care, fashion design, electrical and electronics, automobiles repairs, soft toys making, agriculture allied courses, cottage industry courses, handicrafts, bakery and confectionery, textile technology, leather technology and building technology. In selection of beneficiaries, priority is given to women, SCs, STs, OBCs, minorities and other economically weaker sections.

An amount of Rs.3027 lakhs (302.70 millions) has been sanctioned to JSSs up to December 2009. In all, 5.88 lakh beneficiaries are expected to be covered under different vocational training programmes. The JSS impart skill development training nearly 394 vocational courses with a wide range of skills from electrical & electronics to traditional handicrafts, leather work, soft toys, automobile repairing, beauty culture, healthcare etc.

In selection of trainees priority is given to women, scheduled castes and tribes and other economically weaker sections. A formal review of the performance of the JSSs has been introduced. Performance of all the JSSs was reviewed twice at the level of Minister of State for Human Resource Development, Secretary, School Education & Literacy and Joint Secretary (Adult Education) & Director General (National Literacy Mission Authority). Steps have also been initiated to take up third party evaluation of 100 JSSs through reputed external evaluation agencies.

### **Web-Based Monitoring of the Scheme**

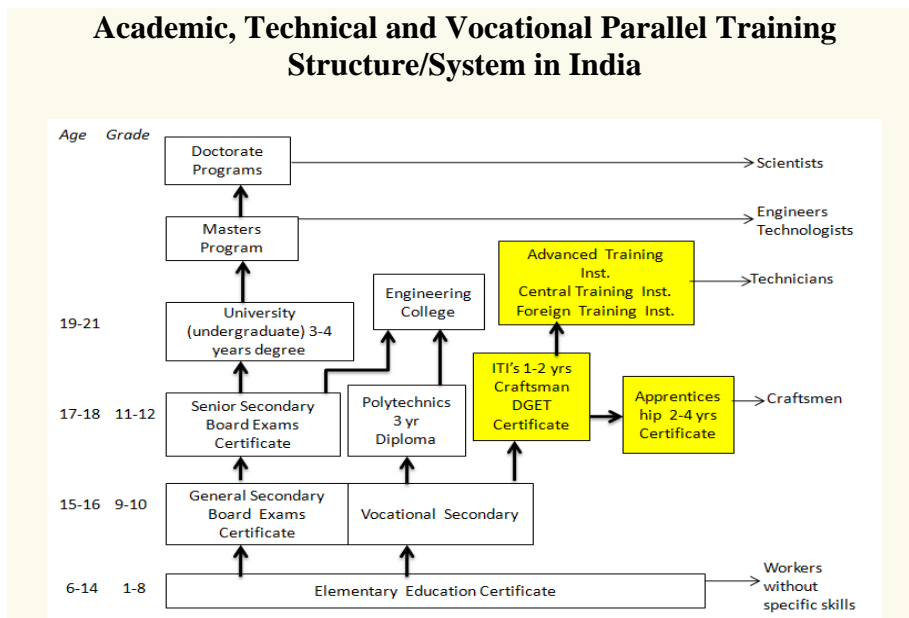
National Informatics Centre (NIC) has been assigned the project of developing a web-based application to keep track of fund allocation,

fund utilization, monitoring, reporting and information collection under the Scheme of Support to Voluntary Agencies for Adult Education and Skill Development. This System will become functional in the next financial year and will yield enormous benefits, including, Uniform System across locations, software supported consolidation of data, inbuilt validation of data, standard operating procedures, near to real time monitoring of allocation and consumption and pro-active strategy formulation as a result of less variance in various calculations of enrolment, consumption

## **References**

- DGE & T (2010-11). *Annual Report*, Ministry of Labour & Employment, Government of India, New Delhi.
- DGE&T (2003). *Tracer Study of Trained Apprentices to Assess the Effectiveness of the Apprenticeship Training Skill (ATS)*, Directorate General of Employment & Training, Ministry of Labour & Employment, Government of India, New Delhi.
- EdCil (2005). *Studying the Effectiveness of Vocational Training in the Private Sector in India: Analysis of Data in Eight States*, Working Paper prepared for the World Bank by Educational Consultants India Limited.
- Government of India (GOI) (2009). *National Policy on Skill Development*, Ministry of Labour and Employment, Government of India, New Delhi.
- GOI, NSSO. *Education in India: Participation & Expenditure* (Report No.532), New Delhi.
- GOI MHRD. (1986). *National Policy on Education (NPE)*, New Delhi.
- GOI, MHRD. (1992). *Revised National Policy on Education*, New Delhi.
- GOI, MHRD. *Programme of Action*, New Delhi.
- GOI. (2004-05). *National Sample Survey of Organization, Status of Education and Vocational Planning in India* (Report No. 517), New Delhi.
- DGET (2011). *Performance Evaluation of ITI/ITCs*, New Delhi.
- Government of India (1948). *Report of the University Education*, New Delhi.
- GOI (1952). *Report of the Secondary Education Commission*, New Delhi.
- GOI, Ministry of Education. (1985). *National Working Group on Vocational Education*, New Delhi.

- ILO (2003). *Industrial Training Institutes of India: The Efficiency Study Report*, Geneva India Labour Report 2008, published by Team Lease Services Retrieved from www.teamlease.com.
- Ministry of Human Resource Development. (2011-11). *Annual Report*, Government of India, New Delhi.
- National Skill Development Board (2010). *Report of the Sub Committee on Vision for Vocational Education*, Draft, March.
- NCERT (2007), *National Focus Group on Work and Education*, Position Paper 3.7,
- Planning Commission (2002). *Tenth Five Year Plan (2002-07)*, Government of India, New Delhi.
- Planning Commission (2007). *Report of Task Force on Skill Development*, Government of India, New Delhi, May
- Planning Commission (2008). *Eleventh Five Year Plan (2007-12)*, Government of India, New Delhi.
- World Bank (2006). *Skill Development in India – The Vocational Education and Training System*, Human Development Unit, South Asia Region, January
- Role of Different Departments in Skill Development.



**Annexure I: National Policy on Skill Development (Government of India, 2009)<sup>6</sup>**

| Sl. No. | Ministry/Department/Organization                                      | Present number of institutions  | Present training Capacity per Annum (In millions) | Projected number Trained persons by 2022 (million) |
|---------|---|---|---|--|
| 1.      | National Skill Development Corporation                                | -   | -   | 150.0  |
| 2.      | Labour & Employment   | 33,000  | 1.20  | 100.0  |
| 3.      | Tourism   | 38  | 0.017   | 5.0  |
| 4.      | Textiles  | 277   | 0.015   | 10.0   |
| 5.      | Transport   | 1   | 0.002   | 30.0   |
| 6.      | Tribal Affairs  | 63  | 0.006   |  |
| 7.      | Rural Development (RUDSETI) And IL & FS                               | 156   | 0.548   | 20.0   |
| 8.      | Women & Child Welfare   | 68  | 1.50  | 10.0   |
| 9.      | Agriculture   | 72  | 1.98  | 20.0   |
| 10.     | HRD Higher Education<br>HRD Vocational Education                      | <u>10,000 (Voc. school)</u><br>(Eng. College 2297<br>Polytechnics 1675) | <u>1.96</u><br>1.40                               | 50.0   |
| 11.     | Department of Heavy Industry  | *   | *   | 10.0   |
| 12.     | Urban Industry  | 34  | 0.003   | 15.0   |
| 13.     | Department of Information Technology                                  | 1000 (Affiliated Centres + 7 CDAC)                                      | 0.13  | 10.0   |
| 14.     | Food Processing Industries  | 34  | 0.010   | 5.0  |
| 15.     | Construction Industry Development Council (under Planning Commission) | 147   | 0.46  | 20.0   |
| 16.     | Health & Family Welfare   | 3802  | 0.13  | 10.0   |
| 17.     | Micro Small Medium Enterprise   | 356   | 0.29  | 15.0   |
| 18.     | Social Justice & Empowerment  | Through NGOs & others   |   | 5.0  |
| 19.     | Overseas Indian Affairs   | Partnership MSME/state Government/CII/NGO etc.                          | 0.013   | 5.0  |
| 20.     | Finance-Insurance/Banking   | *   |   | 10.0   |
| 21.     | Consumer Affairs  | *   |   | 10.0   |
| 22.     | Chemicals & Fertilizers   | 6   | 0.0.91  | 5.0  |
| 23.     | Others (Power, Petroleum etc.)  | NA  |   | 15.0   |
|         |   | Total   | 9.946   | 530.0  |

<sup>6</sup> At present these Ministries are not directly involved in pre-employment training activities.

**Annexure II: Percentage of Distribution of Persons of Age 15-29 Years Who Received Formal Vocational Training by Field of Training (All –India)<sup>7</sup>**

| Field of Training code* | Male | Rural Female | Person | Male | Urban Female | Person | Male | Rural Female | Urban Person |
|-------------------------|------|--------------|--------|------|--------------|--------|------|--------------|--------------|
| (1)                     | (2)  | (3)          | (4)    | (5)  | (6)          | (7)    | (8)  | (9)          | (10)         |
| 01                      | 12.8 | 1.7          | 7.8    | 10.1 | 0.7          | 6.1    | 11.2 | 1.1          | 6.8          |
| 02                      | 18.8 | 1.6          | 11.1   | 17.1 | 2.9          | 11.0   | 17.8 | 2.3          | 11.0         |
| 03                      | 21.2 | 21.3         | 21.2   | 37.0 | 38.8         | 37.8   | 30.5 | 31.2         | 30.8         |
| 04                      | 4.4  | 1.5          | 3.1    | 3.04 | .09          | 2.3    | 3.8  | 1.2          | 2.7          |
| 05                      | 0.2  | 0            | 0.1    | 0.2  | 0            | 0.1    | 0.2  | 0            | 0.1          |
| 06                      | 0.1  | 0            | 0.1    | 0.3  | 0.1          | 0.2    | 0.2  | 0.1          | 0.2          |
| 07                      | 2.1  | 30.5         | 14.9   | 2.3  | 17.9         | 9.0    | 2.2  | 23.4         | 11.5         |
| 08                      | 1.5  | 0.4          | 1.0    | 0.4  | 0.9          | 0.6    | 0.8  | 0.7          | 0.8          |
| 09                      | 1.2  | 2.0          | 1.6    | 1.0  | 2.0          | 1.4    | 1.1  | 2.0          | 1.5          |
| 10                      | 0.4  | 0.2          | 0.3    | 0.7  | 2.2          | 1.4    | 0.6  | 1.4          | 0.9          |
| 11                      | 0.6  | 0.7          | 0.6    | 0.6  | 0            | 0.3    | 0.6  | 0.3          | 0.5          |
| 12                      | 0.9  | 0.9          | 0.9    | 0.3  | 0.3          | 0.3    | 0.5  | 0.6          | 0.5          |
| 13                      | 4.1  | 10.0         | 6.8    | 3.4  | 8.7          | 5.7    | 3.7  | 9.3          | 6.1          |
| 14                      | 4.1  | 6.3          | 5.1    | 4.3  | 5.7          | 4.9    | 4.2  | 6.0          | 5.0          |
| 15                      | 16.6 | 1.0          | 9.5    | 8.5  | 0.6          | 5.1    | 11.8 | 0.7          | 6.9          |
| 16                      | 0    | 2.4          | 1.1    | 0    | 5.5          | 2.4    | 0    | 4.1          | 1.8          |
| 17                      | 0    | 0.1          | 0.1    | 0    | 0            | 0      | 0    | 0.1          | 0            |
| 18                      | 0.2  | 0            | 0.1    | 0.3  | 0            | 0.2    | 0.3  | 0            | 0.1          |
| 19                      | 0.1  | 3.4          | 1.6    | 0    | 2.1          | 0.9    | 0    | 2.6          | 1.2          |
| 20                      | 0.2  | 0            | 0.1    | 0    | 0.1          | 0.1    | 0.1  | 0.1          | 0.1          |
| 21                      | 0.4  | 1.0          | 0.6    | 0.8  | 0.5          | 0.7    | 0.6  | 0.7          | 0.7          |
| 99                      | 8.3  | 13.3         | 10.5   | 8.8  | 8.0          | 8.4    | 8.6  | 10.3         | 9.3          |
| n.r                     | 1.8  | 1.7          | 1.8    | 0.6  | 2.0          | 1.2    | 1.1  | 1.9          | 1.5          |
| All                     | 1000 | 1000         | 1000   | 1000 | 1000         | 1000   | 1000 | 1000         | 1000         |

<sup>7</sup> Mechanical engineering trade-01, Electrical and electronic engineering trades-02, Computer trades-03, Civil engineering and building construction related works -04, Chemical engineering trades-05, Leather related work -06, Textile related work-07, Catering, nutrition, hotels and restaurant related work -08, Artisan/craftsman/handicraft and cottage based production work-09, Creative arts/artists-10, Agriculture and crop production related skills and food preservation related work-11, Non-crop based agricultural and other related activities-12, Health and paramedical services related work-13, Office and business related work-14, Driving and motor mechanic work-15, Beautician, hairdressing and related work-16, Work related to tour operator/travel managers-17, Photography and related work-18, Work related to childcare, nutrition, pre-school ad crèche-19, Journalism , mass communication and media related work-20, Printing technology related work, Others-99

**Annexure III: Percentage Distribution of Persons of Age 15-29 Years Who Received Formal Vocational Training by Institution of Training (All –India<sup>8</sup>)**

| Institution of training code* | Rural |        |        | Urban |        |        | Rural + Urban |        |         |
|-------------------------------|-------|--------|--------|-------|--------|--------|---------------|--------|---------|
|                               | Male  | Female | Person | Male  | Female | Person | Male          | Female | Persons |
| (1)                           | (2)   | (3)    | (4)    | (5)   | (6)    | (7)    | (8)           | (9)    | (10)    |
| 01                            | 35.2  | 9.0    | 23.4   | 24.8  | 63     | 16.9   | 291           | 7.5    | 19.6    |
| 02                            | 7.1   | 8.3    | 7.7    | 3.5   | 42     | 3.8    | 50            | 6.0    | 5.4     |
| 03                            | 1.6   | 0.5    | 1.1    | 4.4   | 34     | 40     | 32            | 2.2    | 2.8     |
| 04                            | 3.1   | 2.1    | 2.7    | 5.9   | 12     | 3.9    | 48            | 1.6    | 3.4     |
| 05                            | 0.5   | 1.2    | 0.8    | 0.5   | 6      | 0.5    | 5             | 0.9    | 0.7     |
| 06                            | 0.1   | .0     | 0.1    | 0.5   | 0      | 0.3    | 3             | 0      | 0.2     |
| 07                            | 0.5   | 0.1    | 0.3    | 0.2   | 4      | 0.3    | 3             | 0.3    | 0.3     |
| 08                            | 0.8   | 0.3    | 0.6    | 0.3   | 5      | 0.3    | 5             | 0.4    | 0.4     |
| 09                            | 0.5   | 0.3    | 0.4    | 0.7   | 2      | 0.5    | 6             | 0.2    | 0.4     |
| 10                            | 0     | 0.1    | 0.1    | 0.4   | 5      | 0.4    | 2             | 0.4    | 0.3     |
| 11                            | 0.9   | 23.8   | 11.3   | 0.9   | 139    | 6.5    | 9             | 18.2   | 8.5     |
| 12                            | 0.3   | 5.2    | 2.5    | 0.2   | 42     | 1.9    | 3             | 4.6    | 2.2     |
| 13                            | 0.4   | 0.1    | 0.2    | 0.1   | 5      | 0.3    | 2             | 0.3    | 0.3     |
| 14                            | 1.0   | 1.0    | 1.0    | 0.9   | 3      | 0.6    | 9             | 0.6    | 0.9     |
| 15                            | 2.3   | 3.6    | 2.9    | 1.6   | 26     | 2.0    | 19            | 3.1    | 2.4     |
| 16                            | 0.4   | 3.7    | 1.9    | 0.1   | 28     | 1.2    | 2             | 3.1    | 1.5     |
| 17                            | 0.9   | 0.6    | 0.8    | 0.4   | 2      | 0.4    | 6             | 0.4    | 0.5     |
| 18                            | 22.8  | 0.4    | 0.3    | 0     | 0      | 0      | 1             | 0.2    | 0.1     |
| 19                            | 0.1   | 0.1    | 0.1    | 0     | 2      | 0.1    | 1             | 0.2    | 0.1     |
| 20                            | 12.8  | 0.6    | 7.3    | 6.6   | 2      | 3.8    | 91            | 0.4    | 5.3     |
| 21                            | 0.3   | 0.8    | 0.5    | 1.1   | 24     | 1.7    | 8             | 1.7    | 1.2     |
| 22                            | 0     | 1.0    | 0.5    | 0     | 39     | 1.7    | 0             | 2.6    | 1.2     |
| 23                            | 2.6   | 3.6    | 3.1    | 4.9   | 43     | 4.6    | 39            | 4.0    | 4.0     |
| 24                            | 0.2   | 0.9    | 0.1    | 0.2   | 3      | 0.3    | 2             | 0.2    | 0.2     |
| 99                            | 26.2  | 30.6   | 28.2   | 41.1  | 448    | 42.7   | 350           | 387    | 36.6    |
| n.r                           | 1.8   | 2.9    | 2.3    | 0.9   | 21     | 1.4    | 12            | 2.4    | 1.7     |
| all                           | 1000  | 1000   | 1000   | 1000  | 1000   | 1000   | 1000          | 1000   | 1000    |

<sup>8</sup> Industrial Training Institutes (it is)/Industrial Training Centre (ITCs)-01, School Offering vocational courses (Secondary, Higher Secondary Level)-02, UGC (first degree level)-03, Polytechnics-04, Community Polytechniques/Jansikshan-05, National Open-06, Hotel Management-07, Food Craft and Catering Institutes-08, Small Industries Service Institute/District Industries Centers/Toll Room Centres-09, Fashion Technology Institutes-10, Tailoring, Embroidery and Stitch Craft Institutes-11, Nursing Institutes-12, Rehabilitation/Physiotherapy/Ophthalmic and Dental Institutes-13, Institutes giving Diploma in Pharmacy-14, Hospital and Medical Training Institutes-15, Nursery Teachers' Training Institutes-16, Institutes offering training for Agriculture Extension-17, Training provided by Carpet Weaving Centers-18, Handloom/Handicraft Design Training Centers/KVIC-19, Recognized Motor Driving Schools-20, Institute for Secretariat Practices-21, Recognized Beautician School-22, Institutes run by Companies/Corporations-23, Institutes for Journalism and Mass Communication-24, Other institutes-99 Source: NSS Report No.517: Status of Education and Vocational Training in India 2004-05

## CHAPTER TWENTY ONE

### DEEPLY PROMOTE COOPERATION AMONG SCHOOLS, COLLABORATIVELY CREATE A WELL- BALANCED QUALITY EDUCATION

#### AN EXPLORATION TO PROMOTE EDUCATION BALANCE BY SCHOOL CHAIN DEVELOPMENT

*Li Wen, Chengdu Yandaojie Primary School, China*

##### **I. Introduction**

As it is known to all, realizing well-balanced educational development is seen as an important means to promote education equity. The *National medium and long-term educational reform and development project summary (2010-2020)* points out that, “Promoting equity is one of the state’s basic education policies. Education equity, as an important basis for social equity, calls for civilian rights to receive education, and the important points are to promote balanced development in compulsory education and to support the disadvantage groups.” To begin education balance can be discussed in three parts.

##### **Behind education balance, there lies democracy and equity**

Why is the government attaching so much importance on education’s balanced development? Realistically speaking, the contradiction in civilian educational needs has turned from “I want to go to school but I cannot” to “I want to go to a quality school but there aren’t so many of them”. Therefore, people’s wish for democracy and equity is hidden behind the call to realize education balance.

##### **To guarantee education balance, it needs responsibility and mechanism**

We all believe that to promote education balance, the responsibility lies with the government. However, from my point of view, the prestigious schools are duty-bound, too. In Jinjiang district, from which I am, the responsibility to lead and help others is invested in the prestigious schools like my school. I believe that with the joint efforts of educational administrative departments, prestigious schools, and all

the other schools, under certain well-built mechanism, the career of balance education must be developing vigorously.

### **The object of education balance is development and quality**

Balanced development means neither simply duplication, nor hand-in-hand march without consideration of the pace. What we are searching for is the balance of development and high quality.

## **II. To Promote Education Balance**

### **Employing projects to promote mechanism innovation**

In the summer of 2004, according to the overall plan of the Jinjiang District Government and the Education Bureau, the former Lianxin Primary school outside the first ring road was renamed as Yandaojie Primary school (East Campus). I became the principal and legal representative. From then on, Yandaojie Primary School has launched the practical exploration towards promoting educational balanced development. To speak the truth, I was then in charge of both schools and all the affairs, which wearied me physically and psychologically. In 2007, the former Desheng Primary School and Hongzhuan Primary School around the third ring road merged into Yandaojie Primary School Desheng Branch. In 2010, outside the third ring road, Yandaojie Primary School Zhuojin Branch was established. Gradually, the pattern that one school consisted of four campuses developing into a chain had formed. Furthermore, on the second half of this year, two more branches of Yandaojie Primary School, the Juxing branch and the Jinxin branch are going to be officially established. The chain school members will increase into six.

To better implement the Chengdu Municipal Committee and the Chengdu Municipal Government's developmental idea to "unify the city and the countryside, and develop Chengdu as a whole", realize the developmental object of "study in Jinjiang District, and gain quality education", it is imperative to be dedicated in the innovation of education chain development. In practice, we hold tight to the principle of "*consultation-oriented*", "*quality-aimed*", and "*cooperation-applied*".



### **III. Employing Projects to Operate the Education Chain**

#### **Running the Curriculum Building Project**

On October, 2010, we set up a curriculum building leaders' group within the Yandaojie Primary School Education Chain. The group is to operate the cooperative projects on curriculum building in order to promote the chain schools' curriculum building ability and upgrade all the schools' leading, planning, and operating capacity. Focusing on the topic of school's curriculum building, we have carried out a variety of activities involving survey, discussion, and direction. In this way, we have formed a settled mechanism about it.

For example, last semester, the Yandaojie Primary School Education Chain has unfolded various discussing activities on curriculum building, which includes the launching seminar "Planning the Curriculum Following the Guide of Schooling Philosophy" hosted by Yandaojie Primary School. The core strategy seminar "Building Teaching Research Groups on Chain Schools Inspiring from the Activity of "Three-dimensional teaching research and training"" was hosted by the Yandaojie Primary School Desheng Branch, the seminar "Focusing on the Curriculum, Emphasizing Implementation, and Promoting Quality" hosted by Yandaojie Primary School (East Campus), the seminar "Teachers' curriculum Implementation Capacity" hosted by Juxing Primary School, and the seminar "Reflection of Curriculum Implementation Capacity in " hosted by Liuli Primary School. In these activities, schools of the Chain cooperated and shared wisdom together so as to emphasize curriculum planning, reinforce curriculum leadership, and enhance curriculum implementation.

#### **Launching the Joint Moral Education Project**

The ultimate benefiter of upgrading the Chain Schools' teaching level are the students. The Joint Moral Education Project since 2007 has been the shiny stage for the students. We persisted in holding activities to provide the students with chances to show their talents, make improvements, expand their outlook, to enhance communication, cultivate character, and to promote their aesthetic ability. We aimed to cultivate them in morality, intelligence, and accomplishments.

An example from the Chorus Festive hosted by the East Campus in 2008, to the New Year Party launched by the Chain schools at the

end of 2009, and the art festive “Recite classic sinology works, and carry forward the idyllic Yandao spirit”, we have witnessed the achievement of the implementation of the school-based curriculum. And happily we have found that through these activities, the Chain schools’ students are growing up, strong and shiny. In 2010, once again the excellent performance of the Chain schools’ students showed the inspiring effect of this Joint Moral Education Project.

### **Setting up the Quality Guarantee Consultation Project**

On the 4<sup>th</sup> of November, 2010, under the agreement of all the Chain schools leaders, the Chain schools started the Quality Insurance Consultation Project. By consultation, we further merged on school culture and schooling believes. By reaching agreements of all, we further improved school management, and ensured schooling quality of all the schools in the Chain. To be specific, together we study our schooling philosophy in depth and consultatively we discuss on the matters of teaching and education. In this way, we are able to guarantee the teaching and education standard of all the Chain schools and upgrade the overall schooling quality of the Chain. This project closely revolves around the central tasks and developmental objectives. By means of observing classes, we initiate discussion and study on education reform among the Chain schools. By means of informal discussion and survey, we put forward suggestions for the Chain schools to improve on school management. By means of visiting member schools, we support them with our ideas of teaching research activities. In a word, the interaction among the Chain schools has been undertaken in full, actively, and effectively.

For example by now, Yandaojie Primary Scholl has carried out several activities under the Quality Guarantee Consultation Project including the consulting conference “Green Quality” conducted in October, 2009 at Desheng Branch; the Three-Dimensional Research and Training activity on English Teaching conducted among the Chain schools on September, 2010; the Consulting Conference on the Special Issue of Classroom Teaching conducted on November, 2010 at the Yandaojie Primary School Desheng Branch; and the Consulting Conference on the Special Issue of Teaching Plan Making conducted on December, 2010 at Yandaojie Primary School Zhuojin Branch.

By the operation of the three main projects, for example the Curriculum Building Project, the Joint Moral Education Project, and the Quality Guarantee Consultation Project, Yandaojie Primary School Education Chain has settled down a fixed operation mechanism. In

Jinjiang District's Curriculum Building Activity, two schools from the Chain gained first prize. We have held curriculum building series activities over 5 times, and joint moral education activities over 10 times. The teaching quality of the Chain schools remains at the top of the whole district.

#### **IV. Optimizing the Teaching Staff to Promote Education Quality**

As it is known to all, the key fact of education balanced development is the teaching staff, and the important fact which bothers it a lot is the ill-balanced distribution of the teachers. Undoubtedly, the reason why these prestigious schools can have such excellent schooling performance is mainly because of the competent staff members. Before we initiated Schools' Chain Development, the teacher resources varied among the schools involved where there are no more than 5 key teachers in each school except in Yandaojie Primary School itself, not to mention the numbers of the subjects' leading teachers and excellent teachers.

In order to foster teachers within the Chain, we stick to 3 principles: "*development-oriented*", "*overall planning*", and "*concentration*". We will attach great importance to the following three aspects:

##### **Innovating teacher training**

With overall planning, we help teachers improve their abilities to learn, to research, to put theories into practice and to reflect. We regularly exchange school teachers within the Chain, have built a system to promote the orderly flow of teachers, developed teacher training programs and measures, organized teaching, research and training activities, etc. to enhance the development of teachers to form a good trend.

For example the two most prominent features are: blood transfusions and training of the fresh blood. Blood transfusions refer to the program where the administrative staff and key teachers in the main school are sent to the other schools in the Chain. For example, senior teacher Wen Fang was appointed as vice principal in Yandaojie Primary school (East Campus). Xu Dan, former vice principal of the main school was appointed as principal in Yandaojie Primary School Zhuojin Branch and a moral education director was sent to Yandaojie

Primary School Desheng Branch. There are more than 10 key teachers sent to the schools in the Chain and the training of the fresh blood refers to the program that new teachers are sent to main school for training ranging from one to two years. They will work as head master and teachers in the main school till they are qualified and subsequently are sent back.

### **Training teachers on different levels**

Teachers will be trained on an administration level, senior level and entry level. As for the training on the management, we will implement departmental liaison mechanisms through establishing bilateral consultation. For example, moral education cadre, teaching cadres, research cadres form management teams in the Chain for regular communication and mutual support. At the senior level, we carry out training led by experts, lesson training, team training, on-site training, training issues, themes training etc., in which the key teacher takes part in to share experiences, to improve their skills. In turn they will play a greater role in teaching and research and other fields. At the entry-level training, we offer training and mentoring to new teachers in the Chain to help new and young teachers adapt faster to teaching.

We often conduct activities involving teachers at every level, so that they can get their teaching ideas and teaching behaviours renewed. By listening to and then discussing their lessons, the Chain school teachers can get the feedback. In this way, they can be open-minded and far-sighted.

### **Teachers' developing jointly**

To make the educational reform and innovation the incentive for the Chain schools to develop, we promote task-based team work, coordination, and sharing in teaching and research, improving class education, creating quality class, performing extracurricular activities, etc. As a result, teachers develop jointly.

In the eleventh five-year, we conducted the research "Cyber-based research in teacher training" in the Yandaojie Primary School Education Chain. After three years, we completed it in 2009 and we won the provincial second prize. In the process of carrying out and summing up the research, we pooled the resources among the Chain schools, which enabled the cooperation among and growth of the teachers. These resources were not only to make cyber resources available but to maximize its value.

In recent years, more than 20 teachers have been exchanged

among the Chain schools, making our team vital. Our research teams have won no less than 30 prizes. The new teachers have been trained together twice, which last more than a week every time. With these measures, we reached the teaching resources balance among the Chain schools.

## **V. Working Effectively Through Information and Technology**

In the process of promoting “all over Chengdu”, Yandaojie Primary School is linked online with five other schools within the same district to form the Yandaojie Primary School Education Chain. Yandaojie Primary School is linked with Yangliu Primary School of Jintang County, Yuhong Primary School of Qingbaijiang District, Cifeng Zhongyuan School of Pengzhou, Tongji Primary School of Pengzhou, Jiangbei Experimental Primary School of Yibin, and Cangxi Lingjiang No.3 Primary School of Guangyuan. Although time, space and human resource might be limited, we strive for effective ways to cooperate. Since we have an advantage of IT and website design, we help the Chains schools improve in this regard to achieve a win-win situation.

We stick to three principles in helping these schools: “*maximize the resources*”, “*lead effectively*” and “*work efficiently*”. The point is to “focus on three dimensions”.

### **Broadening our Service**

By setting up an information sharing database and communication platform among Chain schools we are all able to study “e-courses” and “classes on the screen” and do virtual practice and simulated operation. For example: we can see the video clips of new teachers’ giving lessons, teachers’ three-time seminar and activities like “sound of the music”.

In March, 2008, the Yandaojie Primary School Education Chain held the “three-school cyber-based new teachers’ teaching lessons and discussion”. At the beginning of March, three schools settled on the theme “savour the language and think”. Later on, teachers from the Chain schools took part in a variety of activities around this theme. Ms. Yan from Yandaojie Primary school (East Campus) collected materials related to “Eternal Eyes” from the Internet and used these in her lesson planning. On the 26th of March, she taught this lesson in a teaching competition and was highly praised by experts and teachers.

Her lesson was taped and then put on the Internet so people could watch and comment.

### **Increasing the cyber influence**

Besides providing the teachers and students in Chain schools with the latest information, alternative experiences and chances to create and explore through our website, we have made a great effort to bring our cyber influence among schools which are not in the Chain. For example, in an “e-class” held in September 2010, not only the Chain schools benefited from it, but students in Yangliu Primary School of Jintang County Yuhong Primary School of Qingbaijiang District could see the live video.

In order to increase the cyber influence, we brought forward a “feature-oriented” strategy; that is to say, we will make our website open, popular and innovative. For a start, we made our school website available to the world. It has become a think tank for teaching research and information sharing. At the end of 2008, we built the digitalized system which meets the demands of education modernization. Through intelligent data analysis, we’re able to record teachers’ personal improvement. Through electronic exchange system, we have built an interactive communication platform for teaching and learning. Through standard managing, we fully shared modern education and management ideas.

### **Into the teams**

Only if the IT resources are introduced into research teams, subject teams and grade teams, can the resources be full accepted, used and developed. Our school website has already reached the teams and it is becoming a common platform for the teachers to teach and research. By building this platform, teachers can train and learn about theories and put them into practice. It is important for the teachers to improve together. In strengthening the influence of the Teaching and Research Team, we use the platform to collect topics and themes from other team members. Then we discuss the topics and themes on the platform. We can put the results of our discussion into practice. This kind of activity makes it possible for all the team members to learn effectively. In the process, teachers can better their teaching and research.

Since the operation of our school website, teachers have logged onto it 4146 times, uploaded materials 2127 times, planned lessons online 1518 times, received and sent e-mails 19441 times, used online assessment and other uses around 1200 times. In this way, we have

witnessed a great improvement in administrative efficiency. Our e-class was highly praised by Secretary of Chengdu Municipal Committee, Li Chuncheng.

## **VI. Conclusion**

As a prestigious education brand with a high reputation, Yandaojie Primary School has used its action to speak the motto “Commit to society like the SALT, and integrate into the WAY”. Using head and heart, we are shouldering greater and greater social responsibility. In promoting the Yandaojie Primary School Education Chain, we have greatly activated our school resources, created a balanced development among the Chain schools, and made our contribution to the integration of urban and rural education and a balanced education. We have worked in a leading role, fulfilling our duties and making our school more special and characteristic. We have widened our global view and fostered the modernization of Yandaojie Primary School.





## CHAPTER TWENTY TWO

### "QUALITY OF EDUCATION"

#### HOW FAR IS AN INTERNATIONAL CONSENSUS CONCEIVABLE?

*Gerhard Kutsch, Senior Educational Specialist, France*

##### **I. Introduction: Quality?**

Education does not start as a global activity. We experience education in the home, in the community, in the schools of a country. It is to the needs and aspirations of its own society that education is commonly tailored. It is also from there that excellence, or its absence, is judged. For an understanding of how, in an international context, we may appraise excellence or quality, and confer about it, educators have created so far only a very weak basis. I suggest that the best way forward here is to start at the familiar, national level before entering into debates about what may be internationally understood as quality.

Thus, in the following, some thought is given to the place of quality in what we teach and how we teach it. A theme like this opens out into a very wide field. I can here only offer a few remarks, which I hope are sufficiently coherent to make some sense to you when you try to live up to your various responsibilities in the task of improving education.

As you are well aware, "quality" is not easy to define. Actually, there is no agreement on an objective definition. Recently a major effort to determine the weight of quality in education was undertaken. UNESCO in its Global Monitoring Report on "Education for All" focussed its annual review of the global situation for 2005 on "The Quality Imperative". On the basic question of "what is this educational quality?" the report refers to a study that identified about 50 different definitions for "good quality in education"<sup>1</sup>.

In a brief look in a small Chinese dictionary, three different terms are given in translation of the western word "quality", 质量 zhi [4]

---

<sup>1</sup> D. Adams (1993). "Defining Educational Quality", Arlington (Virginia/U.S.A. Institute for International Research, [IEQ Publication in 1 Biennial Report]), EFA Global Monitoring Report 2005 "Quality Imperative" [UNESCO 2004], p. 29, fn. 4.

liang [4], 性质 xing [4] zhi [4] and 素质 su [4] zhi [4]. Among them, the most common would seem to be 质量 zhi [4] liang [4]. 量 Liang [4] means quantity measure. Thus, as is the case in the west, it would seem that the distinction between what is “quantity” and what is “quality” is far from precise. Yet, all three terms for quality include the character “质 zhi [4]”, which gives us a firmer indication of the meaning of quality. In all three cases, as I understand it, “quality” in Chinese refers to the underlying nature, the specific characteristic of some thing or some process. Maybe one could say a thing exhibits the highest quality when it is most itself, and, a process unfolds best when it fits in with its larger context most easily, without friction. In a way, we all know that. We know when we see or experience something of great quality. The greater it's perceived quality the more difficult it becomes, if not even impossible, to put what is so specific about it into words or numbers. The more we are impressed by the quality, or, the more we are awed by the beauty, the perfection of what we experience, the more difficult it is to put that into words and numbers. We need to keep that in mind, namely, that precise definitions and exact measuring cannot exhaust what we sense is making for the quality in some beautiful object or gracious movement. To put it into different words: somebody wishing for the highest quality, the best fit, will find it very difficult to exactly describe and prescribe what needs to be done to satisfy that purpose. Indeed, it is never easy to realize the standard of quality we have hoped for in this or that project. Of course, we may still be fortunate and bring about a goal the way we had imagined it when we had started with the realization of our plan. But more is needed than a good detailed plan. All along the way of implementation we need to dedicate our full attention to every little interference, every little detail and enlist it to fit in with the whole task underway.

However, as also seems to be intimated by the use of the character 量 liang [4] in the double term 质量 zhi [4] liang [4], there are ways of connecting quality in some ways with measurements; that is very important. Whenever we want to work together for some common goal, we need a common language. For example, to improve the quality of primary education certainly is one such goal. We can hope to reach it only through cooperation. The common language that serves this purpose is based on quantified arguments. This language is actually the only one in the modern world that bestows legitimacy globally. That is nothing new. It is rather evident that how we feel about the value of education does not carry sufficient conviction. By

itself it does not induce the relevant authorities to give the "green light" and release the funds which are needed to provide, for example, primary education of the desired quality. We have to argue with "figures" at our finger tips when we want to win over policy makers and the Minister of Finance. Any substantive or official discussion these days involves figures and money. Our felt convictions are nevertheless important, essential even. Without a strong commitment to the future goal it is much more likely that we will be defeated by the obstacles along the way. The energy needed to liberate the necessary funds, and that which is required to convince small and big decision makers, does not flow from the strength of detailed flowcharts or cost-benefit analyses. The additional energy eventually flows from personal involvement, from the dedication of women and men who care about the needs of schools, teachers and pupils. It stems from the conviction of people who can spark the required enthusiasm in others.

### ***In Summary***

- Quality is something desirable. It is related to the fittingness of a thing or process into its wider context.
- It is an elusive notion, yet we know most of the time when we meet it.
- To make use of arguments for promoting "quality" in the public realm, we need to express them in quantitative terms, without forgetting, though, that these quantitative terms are only an approximation of quality and insufficient by themselves.

## **II. Quality Content for Education**

Quality, as it was just asserted, does not exist in a vacuum. Rather, it arises from its ties with things and processes around it. Quality shows up in the harmonious interplay of components that are meant to fit together. If that is so, then our concern about quality in education will have to take in the societal context. The better education fits in with the goals – or ideals – of the society which provides it, the higher its quality will be. That is rather evident. But, we must then ask another question: "Which society?" Is not the main characteristic of our societies that they are changing societies? And, is not education

regarded as one of the main agents of change? Thus, a thorough study of our theme would lead us to a study of society's needs and aspirations before we could make any statements about what would be high-quality education for the benefit of the pupils, students, citizens of that particular society at that particular time in its history. I admit that this question lies at the centre of my own preoccupation, namely: "What are the things, the ideas, the practices that we should teach our children?" They form, often not too clearly visible, the core of a curriculum; they reflect in any society what this society wants its children to learn – and wants them to become when grown up.

A thorough study would even have to go further. Societies exist in surroundings. Often now, the appropriate body to face a problem would seem to be no longer a single, national society, but the international community in the face of an unforgiving nature. The surrounding nature, earth as a whole, demands attention of all of us together, wherever we live on earth. For a couple of decades we have increasingly come to pay attention to decisive influences from outside our own society. We now routinely pay, at least lip service, to "The Environment". We hear all the time nowadays about climate change. More generally it becomes ever more evident that there are limited amounts of energy, food, air and water available for a population that seems to be growing in appetite and furthermore in numbers beyond any manageable limits. One may sensibly argue that such developments are important factors that need to be considered when judging whether the education we give our children is of an acceptable quality, whether it will enable them to take their place in the future world that is taking shape around them. It is obviously a problem that no nation can tackle alone, but concerted action is still a rarity. In this area of grave concern, we certainly ought to reach understandings about whether respective national ideas about the "good" future are compatible internationally. Each society or nation needs to recognize and adapt to the stern limits set by nature. Not the least in education, where all will need to cherish similar principles for a future that offers a "good" world for everybody to live in. However, a workable definition, a liveable compromise is still not in sight.

This is a large question, and to do it justice there is a need for much further study. But I shall at least return to it once again further on. For now, let me stress once more the importance of seeing that the question of the "quality" in an educational system is intrinsically interlinked with the larger context, namely the society in which it

takes place and even beyond that, to the community of nations and to nature at large.

To do her or his work, an educator will have to presume that there is some overall agreement on the society and the hoped for path into the future. Presumably, what is agreed upon is that there is need for “good” education in this modern society. It will be a society that desires all its citizens to be literate and active participants in its affairs. Let us further assume that agreement has been more or less reached on what this implies for the content of an acceptable curriculum.

It is a big assumption; but action is necessary. Education cannot wait until theoretical discussions have been concluded to everybody’s satisfaction about what the content should be. Such assumptions about overall goals (like relevant and sufficient education for all), and about curriculum content give us at least a more practical starting point. It should be noted however that discussions about the “right” goals are needed at some point, and in reality, reflections on what education should achieve should go on all the time; and they do. Eventually and inevitably they will filter into educational practice even if that may happen much more slowly than the reformers would like. Nevertheless, we need to avoid the dangers of such discussions taking up all our attention. The goal sought after by such efforts can easily be drowned in the endless squabbling of academics, consultants and other experts and decision makers.

Any discussion about the content of education or the philosophy behind it is only worthwhile if in the end we actually do something about teaching, about helping children and adults learn. Thus “Defining Content” is only one part of the educational enterprise, however much it may invite lively academic discussions. The other larger and practical part of the educational enterprise is the “delivery” of education. Delivery turns ideas about content into practice. How does one turn what is known or has been decided about “good” education into teaching and learning? How to do that in a manner so that all children are reached and those adults who may still need it? The same concerns can be formulated in the language of “quality”. How do we apply that knowledge about teaching and learning in the best possible way?

### ***In Summary***

- For assessing “quality” one needs to consider it in context. That is, it’s worth depends on how deeply it is valued in each society. And, more recently we have become aware that

societies jointly need to consider their linkages among each other - and to the natural environment as well - in evaluating the adequacy and fittingness of their education.

- While it is necessary to take care in thinking about the content of education before we embark on action, the best thoughts are only useful if they are followed by action. The quality of what we will do then depends on a further set of considerations about practice. Well thought out education might be delivered badly. Quality rises and falls not only with its underlying concepts but as well with the way in which these are implemented.

### **III. Delivering Quality Education**

It was mentioned earlier that quantity and quality cannot be assigned to neatly separated domains. You may think here of 质量 zhi [4] liang [4] which seems to me a good example of their mutual interaction, however, it is really difficult to quantify conceptual matters. But, this is no longer so once we enter the realm of the practical; there, very often we can count and measure what is going on.

When we come to consider the delivery of education in schools, through teachers, with the help of teaching materials, it makes sense to ask for numbers in order to assess our success. Questions of the kind “how to do this or that” and “how to do this or that better” lend themselves relatively well to quantification. This is a great advantage since here we can use a common language. Quantified arguments have universal currency that allows for quantitative comparisons between different approaches. Between the situations in different countries, we can even distinguish different degrees of their effectiveness and efficiency. Also, we can devise measures for what students have achieved after having undergone educational treatment. Again, that is something you already know, and most likely make use of in your work.

But, let me stress again: all these measures of quality presume that we have reached a “workable” agreement on the concepts underlying the actions which we are going to undertake in the educational field. Nevertheless, “workable” does not mean “perfect”. The search for the “right” concept has no end. It is a search that has to go on without ever stopping. This word of caution needs to be kept in

mind. But if we want to start at all with giving education, and even more so, giving education of good quality, we cannot but assume that we – the actors in the educational field, planners and administrators – have reached a general understanding. We will have taken certain decisions of what ought to be done so that “good” education is the result. Drawing here once more on the extensive study on the place of quality in education, namely the UNESCO EFA Global Monitoring Report for 2005, “Education for All — The Quality Imperative”, improvements in delivering education of improved quality should respond particularly to three kinds of expectations (p.30):

- 1) Education ought to become ever more relevant.
- 2) In providing education one ought to strive for greater equity of access and of outcome.
- 3) The educational system ought to assure the proper observance of individual rights.

The three aspects mentioned would seem to give a rather comprehensive coverage not only of educational objectives but beyond it: how education fits in with society. Just by looking at the three points listed, we see that higher quality, or “better education”, depends, on the one hand, on clarity of what sort of education makes for an “educated person”. On the other hand, only with the full support of society at large can the educational system bring it about that each and every individual can enjoy her or his entitlement to a good education.

Only a very brief look is possible here at points 1: “relevance” and 3: “the individual’s rights.” Point 2: “equity of access and outcome” will receive slightly more attention. This seems justified since it is the area that constitutes the main workplace or construction site of those with responsibilities for doing something about enhancing “her” or “his” educational system. I will address, only in passing, a few comments on the measurability of the quality issues involved.

### **The “Relevance” Issue**

This is the area that depends most strongly on the preparation of the ground by conceptual clarification. We have talked about it in the section above, “Quality Content for Education”. The educator, planner or administrator must trust that the contents that have been defined for being taught are those that the society considers relevant. Once this

can be presumed, it is then possible to devise appropriate teaching-learning materials. For these materials, and accompanying teaching practices, one can then develop criteria, which measures the adequacy of how contents are transmitted, for example, in the classroom. Most likely such measures will look at the levels of literacy and numeracy reached, while also checking on other skills that are of use to the society into which the graduate of an educational course will be propelled. (You may want to look at the PISA study from this perspective.)

The trust in the relevance of what is being handed down in schools and other educational institutions is dependent on stability and continuity. A whole new set of questions arises when there are fundamental changes in the surrounding society. To repeat: relevance is a relative term, bound on how society perceives itself, the role of its citizens and its path into the future. Education itself can be used to accelerate or hinder changes in society; such changes can at times also come as unplanned and unexpected, or even unwelcome, consequences of actions that seemed to be well and comprehensively planned. The impact of climate change may serve as such an event, not only challenging any society's assumptions but in addition, forces international cooperation - sooner or later.

### **Observance of Individual Rights**

The "Observance of individual rights in proper ways" is a very wide and complex issue. I shall touch only on one point here. Any child is entitled and may expect to be treated with dignity and understanding by her or his teacher. There are serious challenges for the quality of teaching. However, if there is no school, the quality of teaching and of teachers is irrelevant to a child with no school to go to. Once more the dependence of the educational enterprise on the larger society becomes apparent. Honouring individual rights cannot be assured solely by the educational authorities. The planner in the Ministry of Education draws here on the support of wider legal and attitudinal givens in the society around him. Though, we must note that, besides being a planner, that person in the Ministry is also citizen in the society. And, being a citizen in society bestows a certain competence, responsibility and obligation (if often not much power) on him to help shape the rights and protect the dignity that may be enjoyed by each one among us.



## **Equal Access and Outcome**

The issue of “Equal Access and Outcome” is where the practitioner is most called upon. From the perspective of the educational planner and administrator, this is the most manageable part of quality creation. Improving access and outcome depends very much on practical steps, and more precisely, on an intensification of effort. Here really the old modernistic saying is most true: more is better, quantity leads to quality. To build more schools will most likely promote access. More training for teachers, and also more trained teachers, will assure better results. More diversity in teaching methods will lead to a better coverage of learning needs by children from varying backgrounds. Of course, one can think of exceptions, and any educator needs to also give thought to them. It is obvious that the equation "more money means better education" is too simple. But, once that is understood and kept in mind in what we do, it is certainly true that more money and more resources are of great help for improving the system. The problem is to find the right use of these monies. Resources are always limited, they need to be carefully allocated between contending requirements in order to achieve a positive impact.

It is at this point that quantitative measures come to the aid of qualitative considerations. In some ways, quality can be bought. Remember again that we have already decided in principle about what we consider to be good and better. Fortunately, these basic decisions and resulting assumptions are often widely and even universally supported. Thus, take the issue of access to education. To aim for access for everybody, to achieve a 100% enrolment rate is “good”. The challenge is how should one go about it? Build schools in more places? Build bigger schools? Neglect schools a bit and rather invest in teacher training? Or, spend money on new text books? How important are school benches, black boards, walls around schools? All these are aspects of education that contribute to the desired result of 100% enrolment. We even have a more or less precise idea of how these various facets help and interact. But, to work out a rational balance between competing and conflicting demands we need to take recourse to quantitative arguments.

This supportive function is performed by statistics, if they are well designed and used prudently. Well-designed means that we ask questions relevant to the goals in our sights, rather than just collecting data on issues that can be collected easily. Prudent use means to see the data in their context, to stay alert to any false assurance one may dearly want to read into them. One of the characteristics of statistics is

that they can be used to prove almost anything somebody wants to see proven. One has to select carefully – statistics themselves do not provide rules about how to select. And one has to keep an open ear for any false note, any double agenda pursued in presenting “objective” statistics. Also, once people have started to collect statistics, their production will often be carried to such lengths that a user may easily drown in them.

After such warnings it still remains that we need statistics to understand the functioning of our system and the direction into which we want it to go. Within our own system, our statistics can give us a time series, whether we have done better this year than last year, or whether the investment in that sector had led to the expected results and deserves the same level of investment in the future. We can also study the experiences of similar processes or even the educational systems of other countries. These inquiries help us to learn about parallel or different approaches, about their comparative efficiency – the avoidance of waste during a process – and effectiveness – the suitability of a process towards its expected outcome. A close scrutiny of statistics can give a first idea about how, for example, enrolment rates have risen by either increasing the size of schools or increasing their number. Or, one can compare what the experiences are with either longer teacher training courses or with the training of larger numbers of teachers. It may even be possible to learn something about the costs of rival claims on future expenditures.

These uses of statistics are some examples of quantitative inputs to understand qualitative questions. But one cannot blindly rely on such measures. To have access to them does not absolve one from thinking for oneself (or in cooperation with one’s team). Available data only very rarely reveals why this or that approach has worked, what special characteristics in that society have helped to bring about good results, or have hindered a successful implementation. Yet, for the planner such information is sought to serve just such practical ends, namely to make the system function better. What is wanted is to raise the quality of education. Thorough questions that seek to understand the situation that lies behind the dry statistics as they appear in comparative tables enhance the value of quantitative data considerably for action that will make education better. Studies that collect and analyse qualitative data exist. Once we generally accept the limitations of quantitative data, we can hope for wider acceptance and support for such inquiries and in consequence, their continuous refinement.

Among the aspects of promoting educational quality we have singled out "Access and Outcome" for their practicality, as the tasks particularly suited for educational administrators and planners when striving for a better system. I have just said a few words on access. Let me add also a few words on outcome. In a very general way one can understand outcome as the effect of education. In one sense, it complements the concern about access to the educational cycle. The "number of years spent in school" is quite generally used as a measure of the achievement and, indirectly, of the quality of a system, often also of its graduates. Did all the students who now have been able to attend school (or go through another comparable educational experience) have a successful and completed learning experience? I shall not go into details here.

But let me mention one facet of a potential divergence between access and outcome. In a community with a place in school for all its children the outcome may still be very poor if the children cannot follow what is being taught because it is not their mother tongue. Reference is made, of course, to the importance of bilingual education, and of bilingual teachers. With them children from non-homogenous backgrounds can then be led to take full advantage from the whole of the educational cycle.

In a further sense outcome also relates to the significance of education in a person's life beyond the years spent on the school bench. One possible simple measure here is the life-long income that follows on this or that kind of education. The "outcome" which is the later career of the student becomes a proxy measure for the quality of education received in younger years. A lack of employment prospects may encourage parents in their conviction to keep their children away from school; children already in school may increasingly lose interest and drop out however good the learning environment may be. Thus, under certain circumstances it becomes unimportant how good or how bad the education on offer actually is. Nevertheless, life-long income is a measure that is used very often in western scrutiny of educational relevance and quality; it apparently also makes its appearance now in China. It is, of course, not the only way to consider the benefits of education; to nurture poets, for example, would rate very badly by this criterion. But admittedly the amount of later income is a very weighty consideration. One can argue that the western style of development and industrialization has been brought about by an educational system that excels in instilling saleable skills in the young. One can also argue that this outlook has led to the present crisis in many of our economic

systems and the serious problems in our relating to the natural world. Also, apart from that, in every society education fulfils still other functions.

***In Summary***

- In difference from issues of educational philosophy, of the reasons why we teach some things and not others, it is comparatively easy to use quantitative measures for assessing the quality of delivery in education. But quantitative findings about a matter are insufficient to give a full picture of the quality of that matter.
- Quality in delivery ought to address relevance, access and outcome and ways to attend properly to individual rights.
- Among those three dimensions the one of most practical concern to workers in the field, like educational administrators and planners, are access and outcome; they are also the ones most conducive to quantitative evaluations. But remember, officials are citizens as well and therefore carry responsibility with all the other members of society for underlying content and for equitable treatment.

**IV. Return to the Qualities of Education**

In this last section I return to my main concern: what do we want our children to know and to be capable of doing? What do we need to teach them? At the most global levels, confirmed during international conferences, we have agreed that everybody has a right to education. We can count on an almost universal agreement from individuals and society alike that it is a welcome right, that it is useful to have received an education. Why is that so? We can give several reasons. They can be grouped roughly into three kinds.

1. Education is needed for anyone to participate successfully in any society; modern societies emphasize action as citizen and participation in work and production.
2. Education promises entrance to high status positions in society.
3. Education helps in deciphering the meaning of our existence.

It is clear that these conceptions of education overlap. But even at a first glance it is also clear that it will not be easy to aim at excellence in all these directions at the same time. (As we quoted earlier, there are about 50 definitions of what constitutes quality in education.)

Take the first one, which we can recognize as most closely connected with the mechanism set in motion by the World Conference on Education for All (EFA) in 1990 and taken up by the international community's Millennium Goals, namely to achieve education for all. Look at the second type of objective, offering education that is sought after because it will confer special, superior status. This latter is most conspicuously pursued by the famous and most expensive private universities in the United States of America, like Harvard, Princeton or Stanford, or, in Great Britain, Oxford and Cambridge, and there are some others. Several universities in China qualify, like BeiDa, QingHua, FuDan. Of course, much of the time they also provide the thorough training that produces the excellent graduates demanded by society. At all these establishments, a further step to increase the quality of education could easily be to seek an additional injection of funds. While this might make it even more desirable to obtain a degree from these institutions, it might interfere with improving educational quality elsewhere. You may think here of all the funds needed for the "Education for All" initiatives. Yet, both strands of approaching education have together helped to develop our societies according to the idea of what is a modern egalitarian society. At the same time, while hardly anybody denies the importance of a good education equally for all members of society, it seems that everybody hopes to derive some extra advantage from having invested in her or his education. Obviously, compromises are needed. One can neither realize both ideas of education to their highest degree, nor pursue one idea of education to the exclusion of the other. What is needed here is still another search for quality, namely that of a high-quality compromise.

We have only considered the first two versions of educational direction, as a democratic right and as a status provider. I leave it to your imagination what kind of compromise would lead to the highest quality education here. When we then aim to include the third component, "meaning", doubts about the right, the best balance among claims become even bigger. Maybe the schools we know are not even the best place? What type of school, institution, course or what other arrangement by community or group would be ideally

suited to answer to the yearning for understanding the meaning of our existence. Why are we here? What do we live for?

## **V. A Word on Internationalization**

There is not only this multi-faceted character of education in any particular educational system. As already pointed out, we have to deal with still another difficulty that prevents us from defining quality unambiguously. We may like the way our educational system has underpinned our own society's development, but inexorably that development will someday sooner or later bump into a ceiling. There are limits that are set by nature. In simple words, our one earth is finite and what we draw from it cannot keep growing forever. Even before running into those global natural limits head-on, we already experience some of their power: the degradation of our living environment becomes ever more palpable.

Certainly, for a while still, a strong nation can continue to consume more than its share of natural resources, to the detriment of other societies and nations. If any kind of world deserving to be called of good quality is to be preserved, we all together (internationally) need to consider what kinds of quality we wish to nurture to this end, in each person, in our society and in our international community. We have to ask whether the kind of citizen, which our education systems now favour in producing, will be able to respond to the demands of tomorrow. We even have to ask to which degree the schools of today are suitable for the construction of a society that can understand and live within the limits of an unforgiving nature. It may well be that the creation of education of a level of quality which is globally relevant and acceptable, an internationally welcome standard, demands new kinds of provision for educating young and old.

These very general remarks are marked by the absence of a notion about "good quality in education" that could be accepted universally by the international community. And it seems there is no agreement so far. Nevertheless in some more specific areas already today one can work together on an international level, more or less effectively, towards setting quality standards and improving quality accordingly. Let me quickly go through the varieties of concern with quality we have mentioned above.

### ***Content of Education***

It is difficult to imagine that nations may give up their sovereign right to create the content of education according to their own history and culture. The heritage shapes aspirations. Curricula will be designed within each society also in the future. However, it will become inevitable to pay close and active attention to the global challenges of a finite earth. Here we may hope to reach an internationally accepted standard of what every child wherever in the world should know, understand about the present world and seek to do in times ahead.

### ***Delivery of Education***

We distinguished three aspects - relevance, equity of access and outcome, observance of individual rights.

### ***Relevance***

We have noted its strong dependence on clarity about "content". That equally holds for its specific aspects: Defining the good citizen as well as his/her roles in public life and work is done based on tenets held by any particular society. It also sets more or less stringent rules about how far individuals may profit, in status or money terms, from the educational system. As to the meaning of life, I think we cannot prescribe a path towards grasping it, not at any level in our familiar educational systems. It is also not at all easy to evaluate the "grasp" or the quality of what has been grasped. However, in the meantime we should heartily encourage everyone to enter on a path of exploration.

### ***Access and Outcome***

Here we are with the classical domain of international cooperation, and most efforts to set standards that are meaningful beyond country boundaries have been undertaken here. Enrolment rates and years of schooling are convincing proxies serving as indicators of how well the system performs. One can even put some trust in the assumption that more years of teacher training make teachers better. Since virtually all countries have similar goals in this respect, it makes sense to develop standards and performance scales. Their use is of real help in characterizing the utility of tools and methods successful in one country for improving comparable aspects in another. They can stand in for evaluating the quality of certain - important - aspects of the system. Yet they are only approximations of a full appraisal of quality, which requires a close attention to the details in each instance.

Repeated and on-going attempts try to mark off the domain of individual rights against the rights of society on its citizens. The most significant is the Universal Declaration of Human Rights from 1948. But the global community has not yet come to an interpretation convincing to everybody. Therefore, we still wait and cannot count on an international or global standard for the definition of personal rights or their protection. But certainly the rights of the child (not only to education) are virtually everywhere acknowledged and are increasingly respected. Much of this has been achieved through international consultation and cooperation; for example, through the United Nations' Convention on the Rights of the Child from 1990.

Finally, let me emphasize again the enormous challenge before us, to which nature awaits our response. Our education systems, like most everything in our societies, are geared to economic growth. But on a planet with finite resources, growth will inexorably come to a stop, sooner or later. We need to prepare a practical answer, and it better be good!



## **PART THREE**

### **THE CHALLENGE FOR INTERNATIONALIZATION**

#### **CASE STUDIES AND LESSONS LEARNED**



## CHAPTER TWENTY THREE

### EDUCATION INTERNATIONALIZATION

#### HOW CHINA PREPARES STUDENTS FOR THE 21ST CENTURY AND A GLOBALIZING WORLD

*Abhimanyu Singh, Director and Representative, UNESCO Beijing  
Office, China*

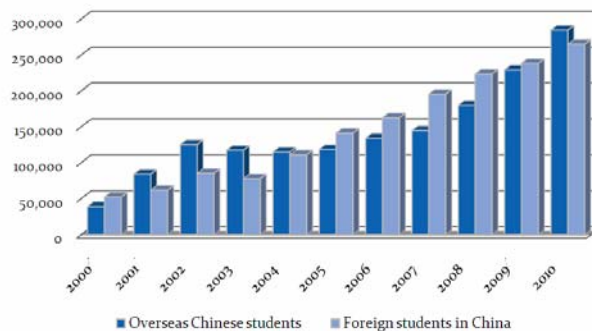
In the twenty-first century, globalization and technology have become two mega trends which have a major impact on all aspects of our life, including education. Globalization, reinforced by new information and communication technologies (ICTs), has enabled countries to maintain constant communication and exchange of information. It brings more competition but it also calls on for increased and new forms of cooperation. Globalization and new technologies have prompted new modes of production. Human and social relations are changing at a faster speed than ever before. Globalization and technology together offer opportunities to education systems to go beyond borders. Hence, internationalization of education is taking place rapidly in recent decades in terms of the profile of students, scholars and institutional providers. Internationalization has created demand on education systems to become competitive regionally and globally through enhancement of the quality of education and increased use of technologies. The purpose of this article is to introduce how China as an emerging global power and the second largest world economy is participating and contributing to the process of internationalization of education.

A review of China's educational policies and programmes reveals that China is making significant efforts to prepare its education system, curricula and students for a new age of globalization. Chinese education policy clearly articulates the need to make the country's educational system one of the best in the world. The recently published *National Outline for Medium and Long Term Educational Reform and Development (2010-2020)* lays out a comprehensive and far reaching programme for developments in all sectors of education.

It adopts a positive attitude to globalization of education. There are two aspects the National Outline addresses. First is to strengthen the introduction of foreign experience. This is illustrated by the following objectives: a) to strengthen international cooperation and exchange and improve the international status, influence and competitiveness of China's education; b) to encourage foreign experts and professionals to work in China; c) to improve international exchange at all levels and types of education and strengthen education for international understanding and tolerance; and d) to improve quality assurance and accreditation in higher education cooperation. Second is to lay emphasis on the preparedness of institutes and students for internationalization in terms of: a) enhancing the capacity of Chinese education institutions abroad and supporting the teaching of Chinese language; b) increasing China's international education aid and providing scholarship for developing countries; and c) contributing to bilateral, multilateral, regional and global collaboration and the development of international education norms and standards.

One key indicator of education internationalization is the number of overseas students a country hosts and sends abroad for higher education. Available statistics show that China is increasingly becoming both a major sender and receiver of international students. In 1978, China had as few as 880 students studying abroad. This number increased to 38,989 in 2000 and 284,700 in 2010. There has been similar growth in the number of overseas students attending Chinese universities. In 2000, there were 52,000 foreign students in China; the corresponding figure for 2010 has been 255,078. All in all, the numbers of both overseas students in China and abroad is almost five times than those in the year of 2000 as shown in the graph below.

**Figure 23:1. Overseas Students in China and Abroad, 2000-2010**



China has established 306 Confucius Institutes and 272 Confucius Classrooms in 88 countries with a view to promoting Chinese culture, language and Confucius philosophy. These institutes serve as a window for introducing and promoting Chinese culture overseas as well as a channel for improving communications and exchanges between China and other countries. It is reported that a total of 290,000 people were registered in Confucius Institutes / Classrooms all over the world in 2009<sup>1</sup>.

On the other hand, China is supporting education development in developing countries through the establishment of international prizes and awards. In 2005, China established the “International Confucius Literacy Prize” which recognizes the activities of outstanding individuals, governmental agencies and non-governmental organizations (NGOs) working in literacy serving rural adults and out-of-school youth, particularly women and girls. This prize has been instrumental in promoting literacy in developing countries. China, in cooperation with UNESCO, has also recently established the Wenhui Award for Educational Innovation to recognize the contributions of educators and institutions which have optimized the potential of education and the human innovative spirit to address and resolve pressing issues and problems facing our world today. The award has been a milestone in promoting innovation and creativity in education.

In recent years, China is rising as an emerging donor in supporting education in developing countries. In 2005, when China hosted the Fifth Meeting of the High-Level Group on Education for All in Beijing, the government committed a cash donation and provision of training, scholarship and school buildings for developing countries, in particular African countries. Later in 2008 at the MDG Summit in New York China committed scholarship to 10,000 more students from developing countries in the next five years and training courses for 1,500 headmasters and teachers from African countries. The education aid to African and ASEAN countries was further expanded in the following year. China provided a financial contribution of 1 million US dollars to a UNESCO Institute IICBA (International Institute for Capacity Building in Addis Ababa, Ethiopia) and the International Centre for Girls’ and Women’s Education in Africa (Burkina Faso) to strengthen teacher training, educational planning and girls’ education in Africa. China supports the China-Africa 25+25 initiative to strengthen the capacity of

---

<sup>1</sup> Official website of Hanban (Confucius Institute Headquarters) <http://english.hanban.org/>

administrators, educators and planners of higher education institutions in Africa and promote exchange in the field of higher education. China also offers 100 four-year scholarships to African scholars in the field of Science.

A related and significant challenge for the Chinese Government is to prepare students for globalization and education internationalization. In the global economy and society of the 21<sup>st</sup> century, students will be left behind if their education is not organized with a global context in mind. They need to be equipped with the ability to work in international environments such as in multinational companies at home or abroad. They need the language skills and competences to manage colleagues from other countries and cultures as well as to compete globally for jobs and markets. They need a heightened awareness of cross-border issues such as HIV/AIDS, climate change, global warming, natural disasters, energy crisis and the proliferating conflicts between and within nations.

China has constantly updated/refined curricula both at the school and university levels and modernized instruction to give a global context to its education. The teaching of English and other foreign languages is on the increase both in schools and universities. Educators in the 21<sup>st</sup> century must respond to new demand and deal with a new kind of learner. Blackboards, books and classroom lectures are no longer sufficient for effective teaching. Teachers must adapt to computing, internet and mobile devices. Learners will become impatient if information is not available at their fingertips across a wider range of subjects. People's global consciousness is increasing and their capacity to engage in continuous learning is a paramount need. Citizenship, ethics, creativity, and critical thinking need to be cultivated. Resourcefulness and problem solving abilities are essential attributes of good learners. The new school curriculum of China which came into effect in 2001 emphasizes creativity, critical thinking, problem solving, citizenship education and international understanding.

In the meantime, educators need to help their students to get prepared for a dynamic and different job market after graduation. Pure manual and blue-colour jobs are diminishing and creative skills and imaginative applications are in demand. There is a need for complex communication skills and expertise in diverse fields. In its report on education for the 21<sup>st</sup> century, popularly known as the Delors Report, UNESCO proposed four pillars of education for the 21<sup>st</sup> century, namely, learning to know, learning to do, learning to live together and

learning to be. The medium and long-term education reform and development outline of China stresses on the need to introduce reforms in education along these lines.

According to the Organization for Economic Co-operation and Development (OECD), the most essential competencies for students to adapt themselves to new education and a new kind of job market are: 1) interacting in socially heterogeneous groups: this refers to the ability to relate to others, ability to cooperate and ability to manage and resolve conflicts; 2) acting autonomously: this refers to the ability to act within the big picture, ability to form and plan for one's own life and ability to defend and assert one's rights, interests, and limits; and 3) using tools purposively and interactively which includes ability to use language, symbols and texts, ability to use knowledge and information and ability to use technology. The City of Shanghai of China took part in OECD's latest PISA survey for the first time and scored higher marks in reading than any other country; it also topped the table in mathematics and science. OECD reports that more than one-quarter of Shanghai's 15-year olds demonstrated advanced mathematical skills to solve complex problems, compared to an OECD average of just 3%. This may not represent the country's education achievement as a whole but it is an indication of the fact that Chinese schools are seriously preparing their students for international competitiveness.

Evidently, China has taken significant steps to internationalize its education and prepare children for the 21<sup>st</sup> century. Formal education may be a good start for internationalization but it has to be complemented by opportunities for continuous learning through life. Learning should be possible anywhere and at any time. The illiterates of the 21<sup>st</sup> century will not be those who cannot read and write but those who cannot learn, unlearn and relearn. It is essential for a worker in the new century to be a life-long learner so as to keep pace with the rapidly developing environment of communication, multitasking and continuous learning. It is therefore necessary that China consider appropriate steps to promote more lifelong learning opportunities.

Educators and policy makers all over the world are seeking to answer a central question on how much of what we need to know in the 21<sup>st</sup> century can be obtained in schools. As China strives to take the lead globally, Chinese policymakers and educators should continuously examine whether educational institutions in China are providing children with necessary international skills. This requires

modernization of classroom pedagogies and integration of emerging technologies. The contents of curricula should also be responsive to the needs of the markets and of changing societies. Curriculum planners should work to address any knowledge gap by giving appropriate space to global subject matter in the curricula. It is also important that exam-oriented teaching methods that emphasize memory-based learning are replaced by innovative, creative and interactive teaching methods. Efforts must be made to increase 'cross-cultural experience' and 'linguistic competence.' UNESCO in its role as a global leader in education continues to support China in its efforts to internationalize education and prepare its citizens for the 21<sup>st</sup> century.



## CHAPTER TWENTY FOUR

### RURAL TRANSFORMATION THROUGH INCLUSIVE EDUCATION: EXPERIENCES FROM AFRICA

*Awol Endris, UNESCO IICBA, Addis Ababa, Ethiopia*

#### I. The Context

It is believed that, of all the regions of the world, the disparity between rural and urban areas is most prominent in sub-Saharan Africa and South Asia. It is also the case that a sizable population in the People's Republic of China lives in rural areas. The quality of life in rural areas is considered to be low and the opportunities provided for rural dwellers are very few compared to urban centres. According to the Millennium Development Goals Report:

*Roughly half the world's population now lives in rural areas. Nevertheless, rural dwellers represent more than 70 per cent of the people without improved sanitation. Some 742 million rural people lived without access to improved drinking water, compared to 137 million urban residents. The same disparity applies to piped drinking water, with only 30 per cent of piped drinking-water connections in rural households (2008, pp. 41 & 42).*

This has a very large impact on the potential of rural areas to attract qualified and skilled personnel to work in rural areas. One of the sectors that suffer to a great extent in such situations is the education sector, as it faces formidable challenges in encouraging trained and motivated teachers to accept deployment in rural areas. Many studies have shown that most teachers do not like to be assigned in rural areas, and those who are, tend to leave the rural schools for urban ones, or leave the job of teaching altogether. It has been indicated that some of the major reasons that force teachers to leave rural areas are social, cultural and/or professional isolation. As a result, most rural schools are left with untrained and unqualified teachers. According to the EFA Global Monitoring Report (GMR), "African countries, such as Madagascar, Mozambique, Sierra Leone and Togo have ratios of pupils to trained teacher in excess of 80:1" (GMR, 2010 p.115). In addition, many rural schools suffer from lack of needed materials such

as textbooks and support resources, and infrastructure such as sufficient classroom space, library and laboratory that would have made learning more relevant and appropriate. All these situations lead to lower achievement levels by rural students, a challenge that most countries are confronted with in their drive to provide quality education for all their citizens.

But it is not only those that are within the school system that are deprived of the benefits of quality education. It is also millions that are not given the chance of schooling in the first place. According to the GMR (ibid: 59, quoting Bruneforth, 2009):

*Living in a rural area often puts children at greater risk of being out of school. In Burkina Faso, Cameroon, Ethiopia, Malawi, the Niger, Senegal and Zambia, household survey data suggest that rural children are more than twice as likely not to be in school.*

In addition to the low quality of education offered to rural children and the complete lack of schooling opportunity to millions of eligible children, there is the equally worrying situation of adult illiteracy, most of which exists in rural areas. In this connection:

*Most of the approximately 774 million adults unable to read and write – about one-fifth of the world's population – are concentrated in South and West Asia, sub-Saharan Africa, and East Asia and the Pacific. Moreover, there remain significant disparities between – and within – rural and urban areas. Pastoralist and nomadic populations, which number in the tens of millions across the African dry lands, the Middle East and parts of Asia, have much lower literacy levels than other rural populations. In addition, indigenous groups, linguistic minorities, migrants and people with disabilities are among populations with lower literacy rates, reflecting exclusion of these groups from mainstream society and reduced access to formal education and literacy programmes (UIS, 2008, p.9).*

The problems of low quality of education within the formal school system and the very high level of adult illiteracy are further compounded by the wide gender imbalance among school populations and adults that exists in most countries in sub-Saharan Africa and South Asia. While the problem is also found in urban centres, gender

imbalance is more pronounced in rural settlements. As reported by the GMR (2010, p. 64),

*Twenty-eight countries had GPIs [gender parity index] of less than 0.90 in 2007; of these, eighteen are in sub-Saharan Africa. These countries have not yet achieved the goal of gender parity in primary schooling, set for 2005.*

The challenges of education in most developing countries are further compounded by the low level of learning achievement registered by pupils in the formal school system. Many of those who have had a number of years of schooling could not read, write and/or compute at the level required for the grade level they complete. This has been attested through various learning achievement studies conducted to measure student learning and administered by dedicated testing agencies such as PISA, SAQMEC and PASEC. Countries such as Ghana and Zambia (World Bank, 2007), Ethiopia (World Bank, 2008), Indonesia and Morocco (UNESCO, 2010), fall in this category. As expected, a majority of the pupils that are found to be low achievers reside in rural schools where the learning environment in terms of teacher qualification and motivation, learning and teaching materials and other school support systems are in short supply. This is an issue of grave concern as the meagre resources put to education are not producing the kinds of citizens that are equipped with the knowledge and skills required to survive in the knowledge society that is emerging fast at the present time.

The bleak picture one gets of formal schooling, adult literacy and wide gender gaps in rural areas in Africa and other parts of the world calls for a reassessment of our policy regarding the provision of quality and inclusive education in these areas. The fact that the proportion of rural populations is very high, and considering the fact that the disparity between rural and urban areas is not a healthy development path to pursue, countries need to think seriously about being inclusive and work for the transformation of rural areas to keep pace with developments in urban settlements. Furthermore, when this happens countries will need to be holistic in their approaches to development as what happens in the education sector is determined by what happens in other sectors. That is exactly why rural transformation should be seen in an integrated manner, and it is believed that education has a lot to contribute to this. However, the kind of education provided and the philosophy underlining it needs to be carefully thought out in order for it to be effective in bringing about

the desired changes in the vast rural areas spread across the world. This kind of education is what is known as inclusive education. The following brief discussion relates to what inclusive education is and how it can be organised and run.

## **II. Inclusive Education: Defining Features**

The concept of inclusive education emerged from the failures of the conventional form of schooling that focused on segregation of pupils in terms of physical and / or mental ability or perceived lack of it. In fact, a more naked form of segregation based on race and ethnicity existed in some countries before the advent of inclusive education. South Africa is one obvious example of such a situation as:

*Prior to 1994, the South African Education Department was split into 18 racially divided education departments. Each education department had their own policies regarding learners with special education needs. Not all education departments made provision for these learners and the disadvantaged communities were totally marginalised (<http://curriculum.wcape.school.za/index>, accessed 25 July 2011).*

The ideological basis of traditional and compartmentalised education was that different groups needed to be put separately either because they were naturally endowed with varying levels of intelligence or because they could not be considered the same by some measure, however flawed that measure may be. It was therefore the case that children of varying groups would be taught separately (and very possibly differently), or children of minor disability may be put in separate schools from those who are considered 'normal', whatever the word designates to those in charge. In fact, the issue of the education of children with some form of physical and/or mental challenge led to the emergence of a categorisation called special needs education. This designation could be justified to a degree as children and/or adults with some kind of physical and or mental challenge may require special training of teachers and use of special materials. However, the fact that children thus designated are treated as being 'special' to the extent of not being considered able to learn and achieve any level of excellence at par with those not having the same kind of challenges would take a toll on their psychological wellbeing and self-image.

The psychological damage such segregation causes and the resource constraints that came about from trying to provide education to various groups with perceived varying needs, led to the debate of whether there is any sound pedagogical and/or psychological justification for putting children separately along assumed differences. In fact, it was argued very persuasively that categorising learners a priori into groups based on subjective decisions masquerading as objective criteria, accentuates social stratification and marginalisation of those who are not in an economic and social position to defend their right for quality and relevant education. The result of that debate is the adoption of the more egalitarian and just system of education that looks at every learner as endowed with the ability to learn given a learning environment that is humane, accommodating and relevant. In addition, the issue of inclusion in education is closely linked with the idea of education as one of the basic human rights of every individual. Any form of discrimination shall eventually lead to marginalisation, and that is unacceptable on grounds of equity, equality and social cohesion.

### **III. Inclusive Education and Rural Transformation**

The arguments for inclusive education are very relevant to rural populations, as most deprived of the chance to a decent quality of education for the reasons mentioned in the first part of this paper. The rural-urban divide and the fact that those who have the power to decide, favour urban more than rural areas, put rural populations at a great disadvantage when it comes to having their fair share of the national wealth. As a result, they are provided, if at all, with education that is neither relevant nor adequate. While the education provided should have empowered them to beat their abject poverty, it rather sustains it. This is primarily because the curriculum is not formulated in such a way to enable rural learners to solve their developmental problems. As Atchoarena and Gasperini state, four guidelines should underpin curriculum design and implementation in rural areas in order for it to be meaningful and effective in helping rural people improve their lives. These are:

*First, the curriculum should relate to the local context, customs, livelihoods and rural development activities. Second, it should take due account of the teachers'*

*qualifications and training (although ideally these should be in accord with the curriculum). Third, it should make use of locally available skills, knowledge and other resources. Fourth, it should respond to the expressed wishes of the community (i.e. be demand-driven), determined through consultation and negotiation with the community, or the adult learners (Atchoarena and Gasperini 2003, p.145).*

In this connection, rural education should contribute to solving the two most important challenges facing rural communities almost everywhere: food self-sufficiency and environmental protection. It is unfortunate that this is not the case with most of the curriculum provided to rural children and youth. This is because most curriculum content within the formal school system is designed, approved and implemented nationally with very little allowance for local adaptation. As a result, education has not been relevant or meaningful to the majority of the rural poor. In fact, the major role of education as a tool for human, economic and social development has not been exercised to any appreciable degree in most rural settings. A great majority of rural population still languishes in extreme poverty and deprivation and education has failed them utterly by not being relevant and adequate. As would be expected, the major concern of the rural poor is being able to produce enough both for themselves and their non-farming compatriots, and improve their living conditions in terms of better nutrition, health care, education and other social services. For this to happen, education must contribute to the raising of the productivity of rural agriculture. In fact, for sustainable rural transformation to take place, the transformation of the agricultural sector is seen to be a pre-requisite. However, this has not happened to the degree required as most of the learning taking place in rural schools simply does not consider local situations and is not geared to solving local problems.

One defining feature of the inappropriate content of the curriculum in most rural schools is the fact that education in rural areas has not equipped rural children and youth with the skills necessary to survive in this competitive and ever globalising world. There is very little opportunity for rural school children and adults to familiarise themselves with the ICT tools that are very essential in this modern digitised world. Rural education has also not provided rural children and youth with the technical and vocational skills that would make them employable or be self-employed. Most curriculum

content is too theoretical and devoid of any link with life in rural areas. As a result it creates learners who do not seem to have any love for manual labour, but rather aspire to join the millions who are in urban centres seeking employment in the public sector. However, as the economy in most developing countries does not create jobs at the rate that citizens seek them, we now experience the sad situation of rural and urban mass unemployment.

The language of instruction is yet one more issue in connection with rural education and whether it is relevant or not. If knowledge is to be accessible and meaningful, it has to be presented in a language that is closest to learners, and that language is the language of the home, or what is variously known as the first language or the mother tongue. New concepts and complex ideas can be understood better by children when they are explained in the language in which they are most fluent in either for speaking or listening. When we consider the low level of student learning taking place in most of our schools, especially those found in rural areas, it may not be difficult to agree that one of the reasons for it is the use of a foreign language for instructional purposes, which is a big barrier for understanding and knowledge assimilation.

As highlighted above, inclusive education seeks to correct the wrongs of the traditional way of educating our children and youth, be it in urban or rural areas. But, as the challenges developed in sub-Saharan Africa and South Asia are more pronounced in rural areas where the majority of the population lives, its effect is expected to be more significant in rural settings much more than in urban ones.

Inclusive education, by definition, considers all learners as being equally capable of success and therefore begins by valuing the contribution of each learner in the teaching and learning process. An education system that is based on the ideas of equity, equality and social cohesion cannot be oblivious of the need to be relevant and adequate. It therefore takes the perspective of the learners and the community in an inclusive manner. Curriculum that is negotiated through the participation of the community cannot be irrelevant and too theoretical for its own good. This in turn would mean that the contents, organisation and management of education that is based on the principles of inclusiveness will include learning items that will equip rural children and youth with the knowledge, skills and attitudes that would enable them solve their problems. Knowledge that is primarily based on local contexts and then extends to regional, national and international domains; vocational and technical skills that

will make them employable or create their own jobs; attitudes that are conducive for peaceful co-existence, love of manual labour, and being lifelong learners are very possible in an inclusive education system than otherwise.

#### **IV. Experiences of Selected Sub-Saharan African Countries in Inclusive Education**

Though the above potential results of inclusive education are easier stated than achieved, the trend is inclusiveness in all aspects of the term, and the results will, in time, come to fruition. In this regard, many sub-Saharan African countries have endorsed the ideas of inclusive education and are trying their best to put them into practice, admittedly, with varying degrees of success. The following are brief descriptions of the current situations in six countries selected on the basis of regional representation. These are Botswana and South Africa from Southern Africa, Ethiopia and Kenya from East Africa, and Gambia and Ghana from West Africa. The intention in doing this is to share the experiences of these countries and draw some lessons from them. The issue of rural transformation is complex and requires a concerted effort on a multi-sectoral approach, and education is only one aspect of that, albeit a very important one. The descriptions that follow should therefore be looked at as such.

##### **Botswana**

Botswana has a total area of 581,730 sq. km, and according to the UNFPA estimate, it had a population of 2 million in 2010. It is therefore one of the most sparsely populated countries in the world with a population density of 3.44 persons per km<sup>2</sup>. However, most settlement is concentrated in the eastern part as most of the country is covered with the Kalahari Desert. The rural population of Botswana accounted for 39% in 2010. The country is rich in mineral resources such as diamonds, copper, nickel, soda ash, and therefore has a very high GNI per capita of 13,100 in 2008. This hides a very big gap in income distribution as 40% of the population lives below the poverty line, and subsists at less than two US dollars a day.

In terms of education, Botswana, perhaps due to its low population and relatively high income compared to other sub-Saharan African countries, has achieved the EFA and education-related MDG goals of universal access to primary education (GER of 104%) and



achieved a gender parity index of 1 for boys and girls (EFA GMR 2010, p.344).

According to a national report entitled, *Inclusive Education: The Way of the Future*, presented in the 2008 International Conference on Education that focused on inclusive education, Botswana highlighted the measures it has taken in order to promote inclusive education within its education system. In this regard, the country states that its education system, true to the ideals of inclusive education, ensures that:

- i) all children in the neighbourhood attend the same regular school and classroom, regardless of their differences in their learning needs as well as their disability, health, social and economic background,
- ii) all children receive an appropriate quality education in effective schools and are assisted to achieve their potential irrespective of their physical and economic condition, sex and learning needs,
- iii) all key stakeholders in the community, especially teachers, parents, pupils, staff, other ministries and departments provide support and conducive learning environment and views inclusion as an important component which should be incorporated in the planning process.

Botswana has introduced a flexible admission policy in order to enable children from rural areas (remote dwellers, as the document designates them) to start school at a later age than the official school starting age of six. The country has also considered the special situation of girl students who may become pregnant to come back to school after an absence of six months; the previous provision was twelve months. In addition, there are now more opportunities for girls to enrol in vocational training programmes, gender mainstreaming and child-labour issues are approached at multi-sectoral level.

The curriculum is one area in which a lot of adaptation of content and mode of delivery have been done in order to make it accessible and relevant to learners. Teacher training for multi-grade teaching and teaching of disabled students have also been considered in the bid to reach out to the marginalised groups in the country due to disability or residing in remote parts of the country. Mother tongue instruction is instituted up to Standard 2. Learning support materials

such as Braille, reading boxes, etc. are supplied to disabled children, and buildings and toilets are redesigned to suit children with physical challenges.

### **South Africa**

In 2010, South Africa had a population of 50.5 million people, out of which 38% live in rural areas (UNDP 2010, p.103). The country has the most developed economy in sub-Saharan Africa with the GNI per capita for 2008 reaching to 9,780 US dollars (ibid). However, as most national average figures do, this hides a very big difference in standard of living between the urban middle and upper class and the vast majority of rural and urban poor. In fact, South Africa, due to its apartheid past, has a very skewed human development in that the majority black South Africans fare worse than the rest of the population in all measures – education, health care, employment, housing, etc. For the period 1990-2005, 34% of the population survived on less than 2 US dollars per day.

In terms of education, South Africa has adult literacy rate of 88% for 2007 for both male and female. The Gross Enrolment Ratio (GER) for primary level in 2007 was 116% with a GPI rate of 0.97. With regard to the adoption of inclusive education, South Africa states that:

*Inclusivity is one of the basic principles of the South African education system. An inclusive approach is necessary in order to meet the requirements of the Constitution by eliminating discrimination, providing universal access to basic education and progressively extending access to further education. Inclusivity is considered by the South African government as essential for promoting nation building and national development and overcoming the legacy of the apartheid past (DoE, 200, p.2).*

South Africa has declared its commitment to inclusive education across all the sub-sectors of education. However, it is faced with a lot of challenges in implementing inclusive education due to “... inherited patterns of poverty, racism, sexism and negative attitudes to disability in South African society. These patterns are deeply entrenched and often more resistant to change than initially expected” (ibid, p.3). In spite of these challenges, the Government of South Africa has put in place legislation and structures that will ensure the implementation of inclusive education. This extends to bills on governance and finance

of education, formulation of a National Qualifications Framework and three councils (Umalusi, Council for Quality assurance in General and Further Education and Training; Council on Higher Education (CHE) and Quality Council for Trades and Occupations (QCTO) entrusted with some regulatory role to make sure that the education provided is of acceptable quality and inclusive of all eligible candidates.

The Government has also decided to convert 500 primary schools in the country into 'full-service schools' over a 20-year period for severely handicapped learners. These are expected to be resource centres for teachers and schools in the area.

One important feature of the inclusive education scene in South Africa is that the country has adopted a broader definition of what inclusive education is. In this connection, it has included learners not only with physical, mental or neurological challenges, but also those with learning difficulties because of their deprived socio-economic background. In addition, South Africa gauges the learning achievement of learners in its bid to make sure that learning is taking place in South African schools, rural and urban, and also provides opportunities for equipping learners with ICT and e-learning skills in order to make them lifelong learners.

### **Ethiopia**

The total area of Ethiopia is 1.14 million sq. km. In 2010, the country's population stood at 85 million, giving a population density of 74.5 persons per sq. km. With an average annual population growth rate of 2.6%, the country's projected population in 2050 is 173.8 million. According to the 2010 figures, Ethiopia has only 17% of its population as urban dwellers; the remaining 83% (70.5 million) are rural. The GNI per capita for 2008 was 870 US dollars. Despite rapid economic growth the country is registering over the last ten years, Ethiopia still lags far behind in terms of human development as it stands 157th from a list of 169 countries ranked according to level of development in 2008. The country has 39% of its population living below income poverty line of \$1.25 dollars a day.

While the overall picture is as described above, the country has achieved impressive results in education and other sectors over the last ten years. As reported by the UNDP (2010, p.108), "Primary school enrolment in Ethiopia rose from 33 percent in 1991 to 95 percent in 2007, astounding for a country with a per capita income of less than \$1,000". The Net Enrolment Ratio (NER) for primary level in 2007 was 71%, with a GPI of 0.92 (EFA GMR 2010: 418).

Ethiopia declared its Special Needs Education Programme Strategy in 2005 and pledged to "... ensure equitable and quality education regardless of poverty, gender, ethnic background, language, learning difficulties and impairments" (2008, p.10). The MoE has also developed an inclusive education manual, and the Teachers Development Programme (TDP) and the School Improvement Programme (SIP) are made to align with the principles of inclusive education. In addition, a Special Needs Education Resource Centre is established in the Addis Ababa University and a directory of special needs education services, equipment and materials are prepared. In addition, a dedicated department of special needs education has been established within the Faculty of Education of the Addis Ababa University both at the undergraduate and graduate levels.

Ethiopia follows the federal system of government, and as education is a state affair rather than a federal one, regional and zone education bureaux are entrusted with the implementation of the guidelines for inclusive education in their respective zones and regions. Accordingly, each region has assigned one focal person for special needs and inclusive education, and coordinated awareness raising activities have taken place to familiarise the populace with the ideas of inclusive education.

As inclusive education is about catering to every learner's learning needs, special support is given to those who are not performing well in school; one of the mechanisms of doing so is arranging tutorial classes for under achievers.

Inclusive education is based on the premise that no child should be left behind in the drive to provide good quality education for all. This is in keeping with the international commitments that country has gone into in relation to Education for All and the education-related MDG goals. In this connection, Ethiopia is diversifying the ways in which education is provided to its hard-to-reach and marginalised citizens. These include Alternative Basic Education Centres (ABECs) for adult learners who have not had a chance to enrol in the formal school system; mobile schools for pastoral communities, village schools in settlements that are sparse and therefore home-school distance could hinder girls from attending school; and multi-grade classrooms where the number and age of students could not justify the establishment of 'mainstream schools'.

## Kenya

In 2010, Kenya had a population of 40.9 million, and this figure is estimated to rise to 85.4 million by 2050, as the country, just like Ethiopia, has a very high annual population growth rate of 2.6%. The total area of the country is 582,650 sq. km., giving a density of 70 persons per sq. km. Out of the nearly 41 million people, close to 32 million (78%) live in rural areas. Kenya's economy is twice as strong as Ethiopia's as it had a GNI per capita of 1,628 US dollars in 2008. Nearly 20% of the population lives on less than 2 dollars a day. Kenya ranked 128<sup>th</sup> among 169 countries arranged in descending order of development in the year 2008.

Kenya has a primary gross enrolment ratio of 111.5% and a net enrolment ratio of 81.5% for 2009. This was made possible because the country abolished primary school fees in 2003, and that led to a rapid expansion of enrolment at primary level.

According to the national report submitted to the 2008 International Conference on Education, Kenya pledged to have:

*... embraced inclusion education that provides quality education for all children, youth and adults through the targeted support to specific or vulnerable groups; moving away from the traditional view of inclusive education as "providing education for children with special needs.... The Government has put in place mechanisms to help mainstream gender, marginalised groups, Children in Especially Difficult Circumstances (CEDCs) and other excluded categories (2008, p. ix).*

In trying to implement inclusive education, Kenya has identified a number of challenges that stand in its way. These are high levels of poverty, especially among those living in the vast rural settlements and the slums of urban centres, the regional and gender disparities existing in the country, and absence of policy guidelines on inclusion. There are also other challenges related with the negative cultural attitudes towards the education of girls and disabled persons.

In spite of these challenges, Kenya is doing all it can to mainstream inclusive education within its education system. Accordingly, it has done curriculum revision to include emerging issues and issues of development, and has also structured the delivery of education to cater for ever growing number of students. These restructuring include the adoption of a double-shift system and the introduction of multi-grade classrooms for sparsely populated areas in

the country. The country has also decided to recruit trainees to teacher education institutions on a fifty-fifty basis for male and female recruits in order to take care of gender imbalance in the teaching force in Kenya. Changes have also been made in the area of national examinations in order to consider the requirements of pupils with special needs.

In trying to address the development agenda through education, Kenya has also developed a comprehensive national skills training strategy with the involvement of stakeholders in technical and vocational education. It has also reviewed the curriculum for TVET and made it modular so that it becomes flexible and easier for increased access and gender responsiveness. In fact, according to the report, gender issues have been mainstreamed in Government strategic plans and policies ensure targeted interventions for girls and women. A media campaign has also been conducted to sensitize the public on cultural barriers to girls' education and participation of women in decision making.

## **Ghana**

The population of Ghana in 2010 was 24.3 million. The projected population by 2050 is 45.2 million. This is because Ghana has an annual population growth rate of 2.1%. The percentage of urban population is 51%, giving us a little below 12.4 million people living in towns, whereas a little less than 12 million live in rural areas. The population density of Ghana is 101 persons per sq. km. as its total area is 238,533 sq. km. Ghana had a GNI per capita of 1,430 US dollars in 2010, and ranks 130th from a total of 169 countries in the world. It is also the case that 30% of the population lives on less than 1.25 US dollars per day.

In terms of education, Ghana had an adult literacy rate of 65.8% in 2008. It also had a gross enrolment ratio of 101.8% (net enrolment ratio 73.9%) in 2009. Ghana is likely to achieve gender parity in secondary education in 2015.

Ghana has adopted inclusive education through its Education Strategic Plan (ESP) 2003-2015. It has declared that inclusive education shall be "... the main policy which will inform the future direction for special educational provisions in the country" (2008, p. 43). Ghana has reported that a total of 5,092 pupils (3,004 boys and 2,088 girls) are enrolled in segregated and integrated schools drawn from 35 schools in 10 district education directorates of three regions,

namely Greater Accra, Central and Eastern for the piloting of inclusive education practice all over the country.

As inclusive education is a new phenomenon in Ghana, it requires a lot of publicity and sensitisation efforts. Accordingly, there have been orientation seminars on inclusive education for district directors, the four frontline assistant directors and all teachers in the target districts and schools. In addition, over 1,000 parents and guardians of all children have also been briefed about inclusive education so that they would support the idea and assist their children.

Another measure that Ghana has taken in relation to inclusive education is that it has developed educational assessment tools to identify children with disabilities, learning difficulties and other special needs of learners. Teachers are trained with ideas on inclusive education contained in their training syllabus, and they are required to apply what they have learned in their classroom practice. It has also undertaken curriculum revision in order to emphasise participatory and problem-solving pedagogy. Under this participatory approach, teachers are encouraged to use a mix of teaching methods within a lesson to ensure that the needs and expectations of every child is met (ibid, p.35).

In its bid to reach all marginalised populations, Ghana has introduced multi-grade teaching to cater for sparsely populated areas and remote rural settlements. This new approach allows the school timetable and curriculum enough flexibility to address the needs of mixed ability children in a class under the instruction of one teacher.

Ghana has solicited partnership with interested organisations in order to implement the various inclusive education 'projects'. Such partnership has particularly contributed to the ICT component of the changes introduced. Among the partners involved were USAID, GTZ, Intel Corporation, and Microsoft.

## **Nigeria**

Nigeria is the most populous country in Africa with 158.3 million people in 2010. This figure shall increase to 289.1 million in 2050, as Nigeria has an annual population growth rate of 2.3%. Half of the population of the country lives in urban areas, with the other half residing in rural areas. The country has a total area of 923,768 sq. km. and therefore has a population density of 171 persons per km. Nigeria has a GNI per capita of 1,940 US dollars. This partly is because of the fact that Nigeria is an oil exporting country and draws substantial amount of income from it. Meanwhile, the wealth of the country does

not seem to be distributed equitably as 64.4% of the population survive on income of less than 1.25 US dollars per day. Nigeria ranked 142<sup>nd</sup> in development measures out of 169 countries of the world.

Nigeria had an adult literacy rate of 60.1% in 2008. The gross enrolment ratio for primary level in 2009 was 93.1% and the net enrolment for the same period was 61.4%. Nigeria is faced with a lot of out-of-school children as it "... alone contributed over 10% of the global total" (EFA GMR 2010, p.56).

Nigeria states that its decision to adopt the ideas of inclusive education is based on a number of conventions and international commitments to which she has subscribed. These include the Universal Declaration of Human Rights, the EFA and education related to the MDG goals, and others. In this connection, the landmark decision of the Nigerian Government was the Compulsory, Free and Universal Basic Education Act of 2004, which is being implemented in a multi-sectoral approach bringing together the ministries of education and finance and other national stakeholders.

The policy guidelines formulated in order to provide the legal framework for the implementation of inclusive education in Nigeria are meant to target three groups, namely "the disabled, the disadvantaged and the gifted or talented, with greater focus on desegregation, anti-discrimination, and enforcing the fundamental human rights of these special needs groups" (2008, p.58). Implementation of the principles of inclusive education shall also require that changes and modifications be introduced in the content of the curriculum, in the methodology of the teaching and in the organisation and governance of the education system as a whole.

As anticipated, Nigeria faces quite a few challenges in its efforts to carry out inclusive education to its fullest. One such challenge is that, "... thousands of children attend Quranic education institutions in Northern Nigeria whose curriculum are yet to be fully harmonised with the mainstream curriculum, while thousands more in the South East States prefer commercial activities to schooling" (ibid, p.60). Such challenges are formidable in that they take quite a long time before they could be overcome as they are culturally and religiously engrained in the community where they occur. The high corruption index in Nigeria has also been mentioned as one of the problems in the way of inclusive education.

There are also challenges within the education system itself, and the national report for Nigeria calls these internal exclusions. These



relate to a very high repetition and dropout rate and absence of linkages between non-formal setting of basic education such as nomadic and adult education.

## **V. Summary and Conclusions**

This paper discusses the context in which inclusive education is being implemented in Africa. It also underlines the major features of inclusive education and what contribution it can make to rural transformation. In this connection, the very dire situation in most rural settings in Africa has been highlighted to create a perspective in the implementation of inclusive education.

The paper then related the theoretical discussion on inclusive education with its application in selected sub-Saharan African countries, namely Botswana, South Africa, Ethiopia, Kenya, Ghana and Nigeria. This part of the paper is intended to familiarise readers with the kinds of measures being put by African countries in their bid to provide inclusive education to their citizens. Some of the lessons learnt from such a review are:

- i) inclusive education is a new concept that still requires to be understood better by stakeholders; some still think inclusive education is about catering for disabled pupils;
- ii) there are a lot challenges in the effort to implement inclusive education in the various settings discussed;
- iii) a multi-sectoral approach has a better chance of success in the implementation of inclusive education;
- iv) the education sector should be considered as only one part, albeit, an important one, in the important work of working for the transformation of rural societies.
- v) good practice stories should be documented and shared for mutual learning.

In conclusion, it must be stressed that “improving rural access roads, improving telecommunication access, expansion of general education and technical-vocational training, development of small-scale credit markets, and rural electrification” (Zewdu and Malek, 2010, p.16) are key elements in rural transformation.

## **References**

- Ministry of Education and Skills Development, Republic of Botswana (2008) *Draft National Report on the Development of Education “Inclusive Education: The Way of the Future”*.
- Ghana National Commission for UNESCO, September 2008. *Report on the Development of Education in Ghana*.
- Ministry of Education (November 2008) *The Development of Education: National Report of Kenya*, Report presented in the 48<sup>th</sup> International Conference on Education, Geneva, Switzerland, 25-28 November 2008.
- Department of Education, Republic of South Africa, (25-28 November 2008) *The Development of Education: National Report of South Africa*, presented in the 48<sup>th</sup> International Conference on Education, Geneva, Switzerland, 25-28 November 2008.
- Ministry of Education, October 2008 *The Development of Education: National Report of the Federal Democratic Republic of Ethiopia*.
- The Federal Ministry of Education (2008) *The Development of Education: National Report of Nigeria* presented in the 48<sup>th</sup> International Conference on Education, Geneva, Switzerland, 25-28 November 2008.
- UNESCO (2010) *EFA Global Monitoring Report 2010: Reaching the Marginalised*, Paris.
- UNDP (2010) *Human Development Report 2010: 20<sup>th</sup> Anniversary Edition. The Real Wealth of Nations: Pathways to Human Development*, New York.
- UNFPA (2010) *State of World Population 2010. From Conflict and Crisis to Renewal: Generations of Change*.
- UIS (2010) *Global Education Digest 2010: Comparing Education Statistics Across the World*, Montreal.
- Getnet Alemu Zewdu and Mehrab Malek (October 2010) *Implications of Land Policies for Rural –Urban Linkages and Rural Transformation in Ethiopia* ESSP II Working Paper 15. International Food Policy Research Institute and Ethiopian Development Research Institute, Addis Ababa.

# CHAPTER TWENTY FIVE

## EQUITY PROMOTION IN EFA INITIATIVES IN TANZANIA

### ACHIEVEMENTS AND SHORTFALLS

*Joel Jonathan Kayombo, Tutorial Assistant, Dar Es Salaam  
University College of Education, Tanzania*

#### I. Introduction

The quest for equity in educational opportunities and outcomes is at the centre of the Education for All (hereafter EFA) global initiatives. This is reflected in all the six EFA goals that were adopted during the Dakar conference in 2000. The Dakar conference re-affirmed the vision of the World Declaration on Education for All that was set and adopted in 1990 at the Jomtien Conference. In the Dakar declaration, six EFA goals were set forth to be achieved by 2015. The United Republic of Tanzania (hereafter Tanzania), like all other United Nations Educational, Scientific and Cultural Organization (hereafter UNESCO) member states, agreed on the implementation of those goals. Providing education for all, children, youths and adults, regardless of their socio-economic, cultural, political, physical and other backgrounds is one of the viable strategies for equity promotion in the society. Then, one may ask “why do we seek equity in education? At a basic level, our quest for equity in education as in all public service arises out of our innate sense of fair play and compassion. We are led by a sense of a 'natural law' that tells us all members of a society are of equal value before the law and should have equal access to the benefits of that society. This paper, therefore presents the achievements made and shortfalls encountered by Tanzania towards achieving the EFA goals since the on-set of the new millennium from the equity perspective. Before the achievements made and shortfalls encountered are presented, the Tanzanian profile is described to indicate the context through which EFA initiatives have been taking place. In addition, the concept of educational equity is introduced to facilitate an understanding of the nature and scope of equity from the education perspective.

## **II. Tanzania: General overview and EFA Context**

Tanzania as one of the signatory countries for EFA initiatives has its own socio-economic and political features and the cultural base for education. The country was formed in 1964 as a union of the then sovereign republic states of Tanganyika and Zanzibar (United Republic of Tanzania [URT], 2010). Administratively, Tanzania constitutes two governments: the Union Government which oversees all matters on mainland Tanzania and union matters and the Zanzibar Revolutionary Government which has full autonomy on all aspects except on union matters that are spelt out in the Constitution of the United Republic (URT, 2010). The country is one of the world's poor economies in terms of per capita income despite of the considerable stable Gross Domestic Product (hereafter GDP) growth rate in the last decade (Research And Analysis Working Group, 2009). Despite the fact that the macro-economic stance indicated strong growth rates over the last decade, it did not lead to significant declines in poverty rates (Research and Analysis Working Group, 2009). Income poverty declined only slightly while the population continued to grow rapidly (Research And Analysis Working Group, 2009). For instance, the estimated numbers of Tanzanians living in poverty were 12.9 million compared to 38.964 million country's total population estimate in 2007 (Research And Analysis Working Group, 2009).

The economy depends heavily on agriculture, which accounts for more than one-fourth of GDP, provides 85% of exports and employs about 60% of the workforce (Central Intelligence Agency, 2011). However, the agriculture sector performed less well, averaging 4.4% growth since 2000, below the National Strategy for Growth and Reduction of Poverty (hereafter NSGRP)'s target of 10% by 2010 (Research And Analysis Working Group, 2009).

Therefore, the poor performance of the agricultural sector and other economic activities has in one way or another impacted the financing of the education system at the national as well as family or individual levels. Due to introduction of cost-sharing and private provision of education services in 1995, communities have taken more responsibility in financing their children's education (URT, 1995). This becomes more serious when even the "free" and compulsory primary education is not entirely free. There are costs of transport, school uniforms, writing materials, students' lunch and other direct school contributions that parents have to pay.

Rapid population growth, demographic structure and distribution have directly and significantly impacted the demand for social services including education. With the 2011 population estimate of 43.1 million people, Tanzania has about 43% of people aged between 0 and 14 years, 55.1% of people aged 15 to 64 and only 2.9% aged 65 and above (Central Intelligence Agency, 2011). Within the socio-economic perspective, the country needs to invest more in schools because of the high percentage of young population under 15 years of age. Urban dwellers constitute about 26.2% of the population in this country whereas the vast majority (73.8%) of the population finds its abode in the rural areas outside the reach of the main social services including quality education (See Table 1).

**Table 25:1. Selected Tanzania Socio-Economic Indicators**

| Population Estimate 2011(Million) |        | Under-five Mortality (Per/1000 live births) | Life Expectancy at Birth (years) 2010 |        | Rural Population (%) | Income in GNI per Capita (PPP US\$) | Adult Literacy Rate (15 +Years) 2008 (%) |        |
|-----------------------------------|--------|---|---------------------------------------|--------|----------------------|-------------------------------------|--|--------|
| Total                             | Female | 2008  | Male                                  | Female | 2011                 | 2010                                | Total                                    | Female |
| 43.1                              | 21.9   | 104   | 57                                    | 59     | 73.8                 | 1344                                | 73.2                                     | 66.3   |

Sources: Adapted from URT (2010; 2011), the Citizen Newspaper (2010, March 2) and Human Development Report (2010)

From the Mid 1990's, the Tanzanian education system has been restructured and several policy reforms have been promulgated to respond to the demands of EFA provision as well as socio-economic development needs of the country. The reforms and policy directives have shaped the thinking and guided design and implementation of educational activities and programmes to attain the EFA goals.

### III. The Concept of Equity in Education

Before embarking on a deep analysis of the status and progress in promoting equity within the framework of EFA initiatives in the country, it is important to unpack the conception of the term "equity" as used in education contexts. The concept "equity in education" is

rooted in the notion of being fair and impartial. However the current notions of equity are much more broad and complex. Reimer (2005) defined equity in education from two perspectives; one by identifying the inequities we hope to eradicate and the other by considering the broad sequential elements of education. From the inequities point of view, he identified those inequities arising from the education system's structure and practices and those arising from the student's cultural and socio-economic context. On the other hand, he identified three sequential elements comprising equity in education namely equity of resources, process and outcomes. A more pragmatic definition was propounded by Opheim (2004) who viewed educational equity to an educational and learning environment in which individuals can consider options and make choices throughout their lives based on their abilities and talents, not on the basis of stereotypes, biased expectations or discrimination. Broadly, equity in education stresses both equity in educational opportunities and outcomes. Therefore, equity in education is not only a question of opportunities provided in the educational system, but it also concerns the actual results of the various educational choices and performances of different groups of pupils and students through the educational system (Opheim, 2004). Educational equity can also be viewed as the practice of holding a stance, developing policies and processes, using a set of tools, and making decisions and taking actions towards the explicit and intended goal of "equal and excellent results" for students regardless of external or internal, social or cultural contexts<sup>33</sup>.

The concern for equity in education lies on the reality that students are different along several dimensions which have an impact on their need for learning and follow-up in the educational system. The profile of educational equity can be seen by indicators of access to schooling and participation in education, completion and drop-out rates and school performance across different groups in deferent parts of the education system.

#### **IV. Equity Promotion in EFA Initiatives in Tanzania: Achievements**

From the onset of the new millennium, Tanzania's education system was restructured and reformed to align it with national development

---

<sup>33</sup> San Francisco Coalition of Essential Small Schools. (2006). Working definition of educational equity. Retrieved July 28, 2011 from [http://www.sfCESS.org/pdf/SF-CESS\\_EQuity.pdf](http://www.sfCESS.org/pdf/SF-CESS_EQuity.pdf)

demands, societal needs as well as responding to international commitments on the provision of education. As noted earlier, Tanzania is a signatory to the Dakar declaration that set forth the EFA targets. Therefore educational reforms were carried out in such a way that they lead to the attainment of EFA goals while addressing the national development needs. Meanwhile the disadvantaged groups were given priority in the overall education system to promote fairness in terms of educational opportunities and outcomes. Therefore, the following part provides the overall status and progress in the provision of EFA from the equity point of view across different groups in the country. The status and progress is explored by looking at key indicators of educational equity namely access to schooling and participation in education, completion and drop-out rates and school performance across different groups in four major categories of educational levels under EFA global initiatives. Then, correlative data are provided accordingly to show the status and progress for each categorical theme.

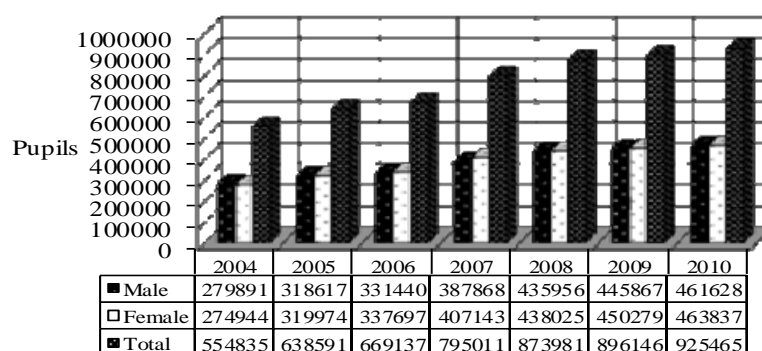
## **V. Early Childhood Care and Education**

*EFA Goal 1: Expanding and improving comprehensive early childhood care and education, especially for the most vulnerable and disadvantaged children.*

In Tanzania, ECCE is provided in both forms of formal pre-primary education which is integrated with the national education system and informal preschool programmes which are often home-based activities. Ministry of Education and Vocational Training (hereafter MoEVT) recognizes pre-primary education as a formal school system for children aged 5 and 6 years with a cycle that lasts for 2 years with no examinations for promotion purposes (URT, 2010). Therefore, children below that age receive preschool experience either at home or at privately run day-care centres mostly urban based.

Between 2004 and 2010 total enrolment of formal pre-primary pupils increased from 55 4835 to 92 5465 which is a 40% increase (URT, 2006; 2010). Total enrolment has been rising annually implying that there is an increased participation in formal pre-primary education (See Figure 1)

**Figure 25:1. Pre-Primary Education: Total Enrolment by Sex in Government and Non-Government Schools, 2004-2010**



Source: Adapted from Basic Education Statistics of Tanzania [BEST], URT (2006, chart 1.1; 2010, p.2)

Although the country has experienced linear growth in enrolment at this level of education as shown in Figure 1, participation and access is far from being universal. Majority of preschool age children are not provided with this level of education. This can be seen from the intake and enrolment rates. For instance, the Gross Intake Ratio (hereafter GIR) of 43% and Net Intake Ratio (hereafter NIR) of 23% in 2010 show that the capacity to absorb the school age population in formal pre-primary education in the country is still low (See Table 2).

**Table 15:2 Pre-Primary Intake and Enrolment Rates, 2010**

| Intake of 5 year-olds in year 1 |    |    | Enrolment of Age 5-6Year 1 & 2 |    |    |         |      |      |         |      |      |     |
|---------------------------------|----|----|--------------------------------|----|----|---------|------|------|---------|------|------|-----|
| GIR (%)                         |    |    | NIR (%)                        |    |    | GER (%) |      |      | NER (%) |      |      | GPI |
| M                               | F  | MF | M                              | F  | MF | M       | F    | MF   | M       | F    | MF   | MF  |
| 42                              | 44 | 43 | 22                             | 23 | 23 | 39.3    | 39.6 | 39.5 | 37.4    | 37.7 | 37.5 | 1.0 |

Source: Adapted from BEST (URT, 2010b, p. 3-5)

On top of that, breakdowns by regions reveal large disparities, with some regions having as low as 21% GIR while some few had above 70% GIR in 2010 (URT, 2010). For instance Dar es Salaam<sup>34</sup> and

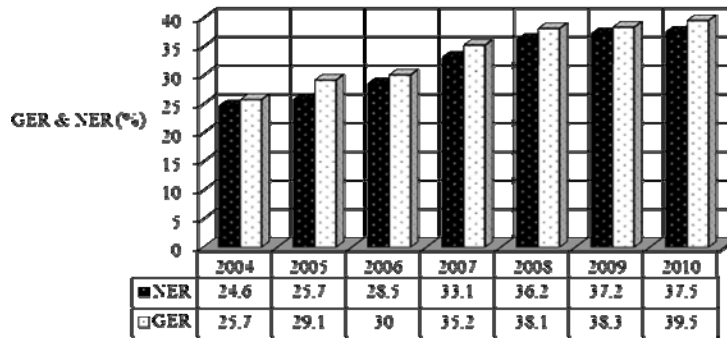
<sup>34</sup> It should be noted that Dar es Salaam is the largest city in the country. The the lowest GIR and NIR reported in pre-primary education cannot be easily explained. If the statistics provided by the MoEVT are correct and valid, one assumption could be that the city is highly inhabited by low class families that cannot afford to send their children to private preschool since the government is not taking full



Kigoma had 21% and 25% of GIR respectively where as Iringa and Ruvuma had 71% and 72% of GIR respectively (URT, 2010).

The Gross Enrolment Ratio (hereafter GER) at this level of education rose from 25.7% in 2004 to 39.5% in 2010 while Net Enrolment Ratio (hereafter NER) rose from 24.6% to 37.5% within the same period (See Figure 2). This means that majority of the pre-primary age children are not enrolled in this level of education.

**Figure 25:2. GER and NER in Pre-Primary Education, 2004-2010**



Source: Adapted from BEST (URT 2006, Chart 1.3; 2010b. p. 5)

The proportion of boys and girls expressed in terms of gender parity revealed no significant differences. The 2010 statistics indicated a 1.0 GPI in 19 regions while other 2 regions had 1.1 GPI in Tanzania mainland (URT, 2010). From that perspective, it can be argued that that there is fairness in terms of educational opportunities between boys and girls. Generally, despite the importance of this education level in laying the foundation for success in higher levels of education, access to schooling and participation is still low. The government has not directly committed to take full responsibility to provide this level of education. The government’s failure to provide comprehensive ECCE especially in rural areas where low income families live has resulted into low access and participation in this level of education. The private sector is taking an advantage of that to set up pre-schools particularly in urban centres hence alienating the rural and poor communities. Therefore, vulnerable and disadvantaged children are

---

responsibility for this level of education. Therefore, this indicates that the educational inequity is not only rural-urban but also between the poor and rich.

yet to benefit from comprehensive ECCE in accordance with the EFA Goal 1 as well as the educational equity promotion quest.

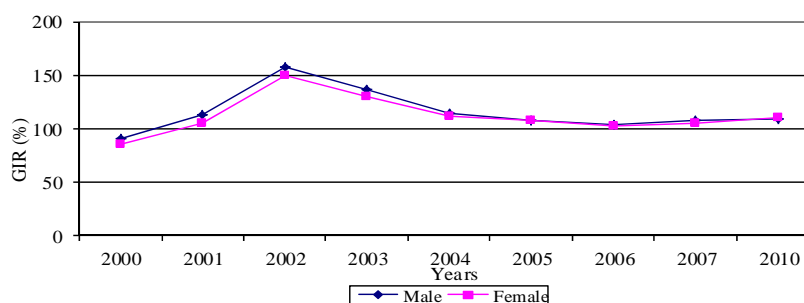
## VI. Primary and Secondary Education

*EFA Goal 2: Ensuring that by 2015 all children, particularly girls, children in difficult circumstances and those belonging to ethnic minorities, have access to and complete free and compulsory primary education of good quality*

*EFA Goal 5: Eliminating gender disparities in primary and secondary education by 2005 and achieving gender equality in education by 2015, with a focus on ensuring girls' full and equal access to and achievement in basic education of good quality*

Since 2001, Tanzania's basic education has been marked by significant realization of access to schooling, participation and equity with remarkable increase in the number of primary and secondary schools. Universal enrolment of children in school cannot be achieved unless first grade intakes approximate 100% of the notional starting age range. Figure 3 shows that since 2001, primary school intakes expressed in terms of GIR have been above 100% in the country marking an increase from the year 2000 which was 90% (males) and 85% (females) to 109.2% (males) and 110% (females) in 2010. This GIR indicates a high degree of access to primary education.

**Figure 25:3. Primary Education: Gross Intake Rates (GIR) in Grade One 2000-2010<sup>35</sup>**



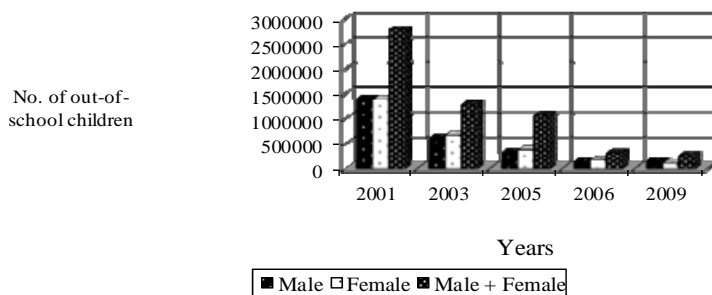
Source: Adapted from BEST (URT, 2006; 2010. p. 15-16) and World Development Indicators (The World Bank, 2010a)

<sup>35</sup> Data for 2008 and 2009 were not available

Moreover, the regional analysis for the 2010 academic year of GIR and NIR reveals great disparities. In terms of GIR, some regions had as high as 150.2% while others had as low as 68.3% (URT, 2010). In regard to NIR, Iringa region had the highest (97.5%) while Mtwara region had the lowest (43.5%) in 2010 (URT, 2010).

The World Bank development indicators as presented in Figure 4 indicate that the absolute number of out-of-school children of primary school age decreased from 2784074 in 2001 to 26 7243 in 2009 (World Bank, 2010a). This indicates potential success in enrolling children and making them stay in schools.

**Figure 25:4. Primary Education: Out of School Children, 2001-2009**



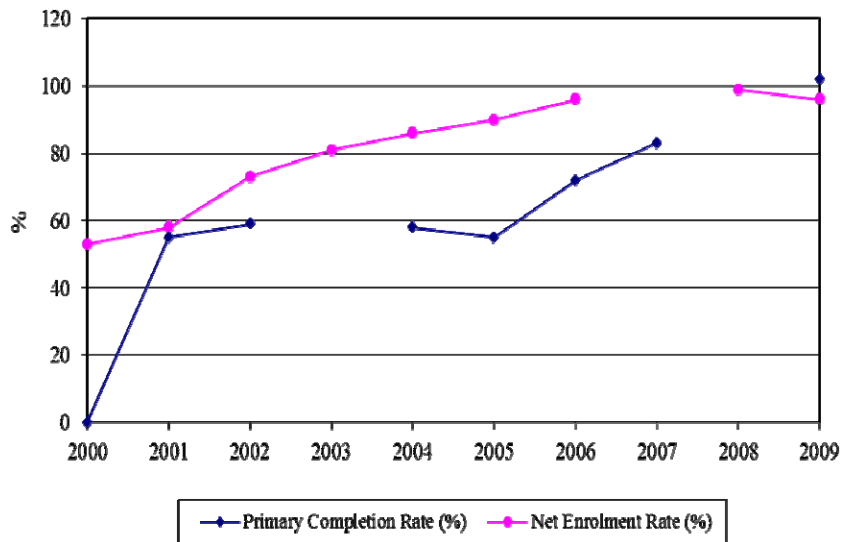
Source: Adapted from World Development Indicators (The World Bank, 2010a)

While time spent by pupils repeating grades is not necessarily wasted, it is undeniable that efforts to reduce rates of repetition and drop-out are crucial parts of any universal primary education strategy. EFA Global Monitoring Report (hereafter GMR) revealed that Tanzania is one of a small group of countries that have successfully combined a rapid increase in primary school enrolment with low dropout rates in the early grades (UNESCO, 2011). From 2000 to 2006, dropout rates fell from 26% to 17%, (UNESCO, 2011). A considerable number of primary school students drop-out of school for various reasons such as truancy, pregnancy, unable to meet basic needs, illness and taking care of ill relatives (URT, 2010). It should be noted that truancy contributes to more than 75% of primary school drop-out in the country (URT, 2010). Figure 5, NER vis-a-vis completion rates, indicates that in recent years the country has been making up to ensure

that majority of primary pupils complete their seven years of schooling.

The automatic promotion policy has significantly reduced the repetition rate in the country. Persistence to last grade of primary has been irregular, with a higher percentage of girls surviving to the last grade than boys (See Table 3). When assessing the status and progress of primary education by Primary School Leaving Examination (PSLE) pass rates, the situation in the country went worse. In addition to that, Figure 6 indicate a considerable decline in PSLE pass rates from 2007 to 2009 (URT, 2010).

**Figure 25:5. Primary school: enrolment and completion rates (%), 2000-2009**

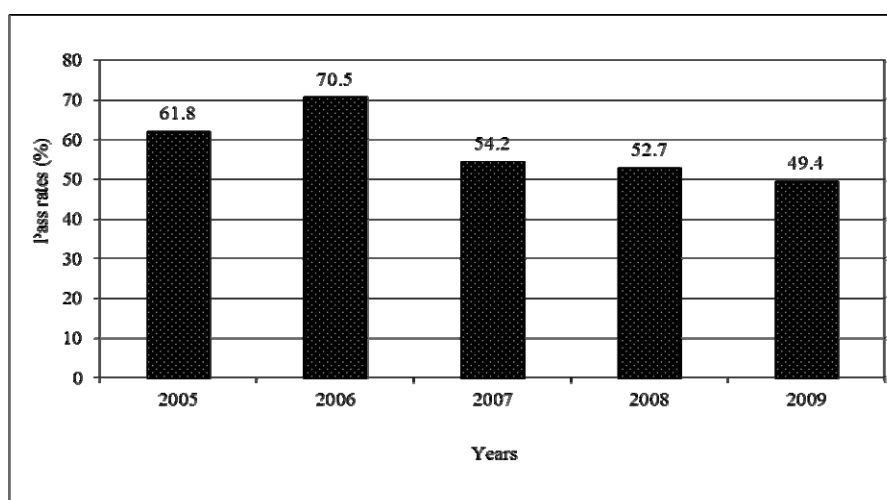


Source: The World Bank in Education Statistics (2010b)

**Table 25:3. Primary School: Repetition Rate and Persistence to Last Grade by Gender, 2000- 2007**

| Year | Repeaters<br>(% of<br>Enrolment) |     | Persistence to Last Grade<br>(% of cohort) |     |
|------|----------------------------------|-----|--|-----|
|      | F                                | M   | F  | M   |
| 2000 | ...                              | ... | 77   | 71  |
| 2001 | 3                                | 3   | 95   | 94  |
| 2002 | 2                                | 2   | ...  | ... |
| 2003 | ...                              | ... | 81   | 79  |
| 2004 | 5                                | 5   | 81   | 81  |
| 2005 | 6                                | 6   | 81   | 78  |
| 2006 | 5                                | 5   | 85   | 81  |
| 2007 | 4                                | 4   | ...  | ... |

Source: Adapted from World Development Indicators (The World Bank, 2010a) and BEST (URT, 2010).

**Figure 25:6. Primary Education: Primary School Leaving Examination (PSLE) Pass Rates, 2005-2009**

Source: Adapted from BEST (URT, 2010)

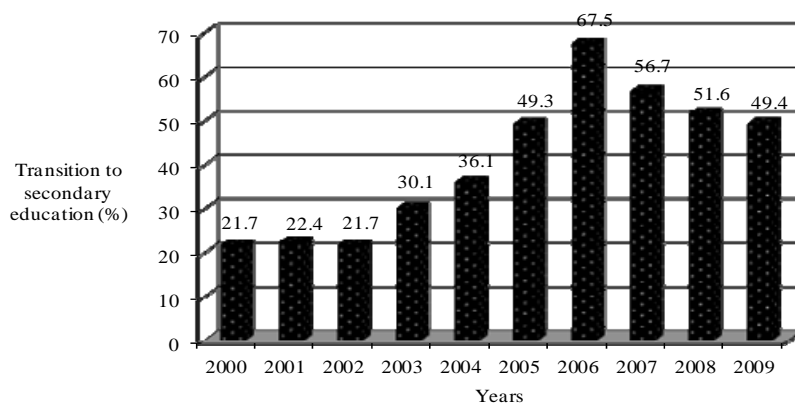
For many years, the dominant feature of secondary education has been its restrictive size. Transition from primary to secondary education depends upon passing PSLE and availability of places in secondary schools. Although the transition rate improved in the last decade,

majority of primary school leavers are not attending secondary schools. For instance, it increased from 21.7% in 2000 to 67.5% in 2006 and sharply decreased to 49.4 in 2009 (See Figure 7).

Eliminating gender disparities in primary and secondary education has been the dominant challenge in the last decade. The country has been successful in removal of the gender gap in the primary level education. The World Bank reported that the ratio of female to male enrolment was 99 in 2000 and dropped to 96 in 2004 (The World Bank, 2010a). The reported Gender Parity Index (hereafter GPI) was 0.96 and 1.02 between 2000 and 2010 (URT, 2006; 2010).

In case of secondary education, despite the fact that the overall participation all over the country is relatively low, the disparity between males and females is not pronounced. Table 4 denotes the general level of participation in terms of GER and NER of both males and females to portray the status and progress in eliminating gender disparities in secondary education.

**Figure 25:7. Transition to Secondary Education, both Male and Female (%), 2000-2009**



Source: Adapted from World Development Indicators (The World Bank, 2010a) and BEST (URT, 2010b).

**Table 25:4. Secondary Education GER and NER by Gender, Form 1-4, 2006-2010**

| % GER | 2006 |    | 2007 |    | 2008 |    | 2009 |    | 2010 |    |    |    |    |    |      |    |
|-------|------|----|------|----|------|----|------|----|------|----|----|----|----|----|------|----|
|       | M    | F  | M    | F  | M    | F  | M    | F  | M    | F  |    |    |    |    |      |    |
|       | 21   | 19 | 20   | 29 | 32   | 29 | 30   | 39 | 32   | 36 | 47 | 39 | 43 | 52 | 42   | 47 |
|       |      | 3  | .2   |    |      |    | 5    | 70 | .6   | .2 | 8  | .3 | .6 | 0  | 6    |    |
|       | 12   | 14 | 13   | 20 | 21   | 20 | 24   | 24 | 24   | 29 | 28 | 29 | 31 | 29 | 30.8 |    |
|       | .4   | 3  | .4   |    | 5    | 7  | 50   | .3 | .4   | 7  | .5 | .1 | .8 | .9 |      |    |

Source: Adapted from BEST (URT, 2010)

UNESCO (2011) asserts that formal education during the adolescent years is the most effective base for developing learning and life skills; and secondary schooling is the cornerstone of education for youth. The country has been making efforts to expand secondary education in the last decade. There has been an increase in total enrolment (Form 1-6) by 143% from 67 5672 students in 2006 to 163 8699 students in 2010 (URT, 2010). The rapid increase of enrolment has been a result of a well-orchestrated government initiative of constructing at least one secondary school for each ward all over the country and increase in private secondary schools.

However, despite of experiencing rapid increase in enrolments, participation in this level of education is still low. For instance, the GER and NER as noted in Table 5 for Form 1 to Form 4 that increased from 10.2% to 47.3% and 6.3% to 30.8% respectively between 2003 and 2010 reveals the extent to which this system is incapable of absorbing majority of youths aged 14 years and above. Moreover, in all cases, enrolments for males were higher than those of females.

**Table 25:5. Gross and Net Enrolment Ratios (%) for Secondary Education, 2003-2010**

| Ratios (%)   | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|--------------|------|------|------|------|------|------|------|------|
| GER Form 1-4 | 10.2 | 12.9 | 15.9 | 20.2 | 30.5 | 36.2 | 43.6 | 47.3 |
| GER Form 5-6 | 1.7  | 2.1  | 2.4  | 3.2  | 3.7  | 0.0  | 4.4  | 4.8  |
| GER Form 1-6 | 7.4  | 9.4  | 11.7 | 14.8 | 22.1 | 26.1 | 31.3 | 34.0 |
| NER Form 1-4 | 6.3  | 8.4  | 10.3 | 13.4 | 20.7 | 24.4 | 29.1 | 30.8 |
| NER Form 5-6 | 0.4  | 0.5  | 0.6  | 1    | 0.9  | 1.3  | 1.5  | 1.9  |
| NER Form 1-6 | 6.3  | 5.9  | 10.1 | 13.1 | 20.6 | 23.5 | 27.8 | 29.9 |

Source: Adapted from BEST (URT 2010)

Similarly, the participation in advanced level of secondary is relatively low. The GER and NER in Form 5 and Form 6 that increased from 1.7% to 4.9% and 0.4% to 1.9% between 2003 and 2010 respectively as noted in Table 5 also show how secondary education in the country is unable to meet the learning needs of youths.

## VII. Adult and Non-Formal Education

***EFA Goal 3:** Ensuring that the learning needs of all young people and adults are met through equitable access to appropriate learning and life skills programmes*

***EFA Goal 4:** Achieving a 50% improvement in levels of adult literacy by 2015, especially for women, and equitable access to basic and continuing education for all adults*

Learning needs for youths and adults have also been addressed by the introduction and strengthening of the Non-formal Education (hereafter NFE). Two major NFE programmes are under the direct supervision of the MoEVT are Complementary Basic Education in Tanzania (hereafter COBET) and Integrated Community Based Adult Education (hereafter ICBAE). COBET offered to school children aged 11-18



years which is a 2 to 3 years cycle (URT, 2010). This programme was specially designed to cater for the needs of the out-of-school children. By 2006, there were 22 1479 registered COBET learners in the country, out of those females constituted about 41.4% (URT, 2006). An adult education programme of 18 months learning circle was provided to cater for the needs of people aged 19+ in the form of Integrated Community Based Adult Education (ICBAE) which includes functional literacy and post literacy with components of extension services, income generation, life skills and vocational skills (URT, 2010)

Adult illiteracy in the country remains high. The target of eliminating illiteracy by 2015 is still challenging particularly for rural women. According to world development indicators, the country had 73% adults who were literate in 2008, a growth of 4% from 2002 (World Bank, 2010a). However, the percentage of literate women (66%) was lower than that of men (79%) in 2008 (World Bank, 2010a). Moreover, the literacy level of youths aged 15 to 24 was still low in 2008 (78%), implying that there was about 22% illiterate youths in the country (World Bank, 2010a).

### **VIII. Equity Promotion in EFA Initiatives in Tanzania: Some Shortfalls**

The greatest impact on educational equity in the last decade has been the achievement of fair rates of enrolment in pre-primary, primary and secondary education of girls and boys. While figures for primary education enrolment are high for the country as a whole, completion rates across regions are not, and the impact of poverty on low completion levels is an important factor (Woods, 2007). Street children and those from nomadic populations are confronted with huge obstacles to regular attendance and are routinely co-opted into household and economically productive tasks, resulting in poor attendance and high drop-out rates (Woods, 2007).

Pre-primary education is not provided to all children of the relevant age. Majority of pre-school children living in rural and urban poor income families and disadvantaged areas are not attending schools. For instance the BEST statistics indicate that only 60.2% of new entrants in STD I in 2010 had pre-primary education experience (URT, 2010). Although the Education and Training Policy (1995) asserts that children aged 5-6 years should have pre-primary education

before they are admitted to STD I, participation in this level is significantly low.

Socio-economic and regional disparities in terms of students' learning and performance have been revealed (Uwezo Tanzania, 2010). Children with educated mothers were seen to perform better than others. At the same time urban based pupils were also seen to perform better than rural-based pupils (Uwezo Tanzania, 2010). Moreover, breakdowns by districts reveal large disparities, with some districts performing far below the national average (Uwezo Tanzania, 2010). Children in districts such as Rombo, Moshi Urban, and Ilemela had relatively high Kiswahili and English literacy and numeracy levels while children in districts such as Muleba, Kasulu, and Mwanza had poor literacy and numeracy competencies (Uwezo Tanzania, 2010).

## **IX. Conclusion**

Since students are different along several dimensions, the barriers to participation in education system are also different. Several factors are responsible for educational inequity in Tanzania like many other developing countries. Opheim (2004) categorized these factors into four groups of institutional, economic, socio-cultural and motivational barriers. These factors constrains majority of Tanzanians including the population living in rural, remote and resource poor areas, difficult urban contexts like slums and squatter settlements, nomadic groups, street children, physically handicapped and mentally retarded; women and girls cutting across all categories.

However, with the achievements made and shortfalls encountered by Tanzania in promoting equity in the broader EFA initiatives there are some questions educators needs to debate. They include: Is equity in education possible? Is it possible for the school system to make up for all the inequities outside the school; inequities in resources, learning strategies and parental follow-up which the pupils bring with them into the classroom? Is it possible to maintain equity in education together with a high quality education for all?

## **References**

Central Intelligence Agency. (2011). *The World Fact Book*. Retrieved March 29, 2011 from <https://www.cia.gov/library/publications/the-world-factbook/geos/tz.html>

- Human Development Report. (2010). *Tanzania (United Republic of) country profile of human development indicators in Human Development Report 2010*. UNDP. Retrieved 29<sup>th</sup> March, 2011 from <http://hdrstats.undp.org/en/countries/profiles/tza.html>.
- Opheim, V. (2004). *Equity in education thematic review: Country Analytical Report (Norway)*. Norwegian Institute for Studies in Research and Higher Education
- Reimer, A. (2005). Equity in public education. *Manitoba Association of School Superintendents*, Volume 2 Issue 1 - Spring 2005.
- Research and Analysis Working Group. (2009). *Poverty and Human Development Report 2009*. Dar es Salaam, Tanzania. Retrieved March 29, 2011 from <http://www.povertymonitoring.go.tz/whatisnew/phdr%202009%20text.pdf>.
- The Citizen. (2010, March 2). *About Tanzania: Country profile*. Retrieved December 16, 2010, from <http://www.thecitizen.co.tz/about-tanzania.html>.
- The World Bank (2010b). *The World Bank in education statistics 2010*. Retrieved April 4, 2011 from <http://go.worldbank.org/x1ls46nuj0>.
- The World Bank. (2010a). *World Development Indicators (WDI)*. Retrieved April 9, 2011 from <http://data.worldbank.org/indicator>.
- United Nations Educational, Scientific and Cultural Organisation. (2011). *The hidden crisis: Armed conflict and education. Education for All Global Monitoring Report 2011*. Paris, UNESCO. Retrieved March 29, 2011 from <http://www.unesco.org/new/fileadmin/multimedia/hq/ed/pdf/gmr2011-part1-ch1.pdf>.
- United Republic of Tanzania (2011). *2003-2025 Population projection*. National Bureau of Statistics, Retrieved March 29, 2011 from [http://www.nbs.go.tz/index.php?option=com\\_phocadownload&view=category&id=116:table-11&Itemid=106](http://www.nbs.go.tz/index.php?option=com_phocadownload&view=category&id=116:table-11&Itemid=106).
- United Republic of Tanzania. (1995). *Education and Training Policy*. Dar es Salaam, Ministry of Education and Culture. Retrieved November 3, 2010 from <http://www.tzonline.org/pdf/educationandtraining.pdf>.
- United Republic of Tanzania. (2006). *Basic Education Statistics in Tanzania (BEST) 2002- 2006. National data*, Dar es Salaam, Ministry of Education and Vocational Training. Retrieved April 6, 2011 from <http://moe.go.tz/statistics.html>.

- United Republic of Tanzania. (2010). *Basic Education Statistics in Tanzania (BEST) 2006- 2010. Revised National Data*, Dar es Salaam, Ministry of Education and Vocational Training. Retrieved April 6, 2011 from <http://moe.go.tz/statistics.html>
- United Republic of Tanzania. (2010). *Country Profile*. Retrieved December 16, 2010, from the Tanzania national website, <http://www.tanzania.go.tz/profile1f.html>.

# **CHAPTER TWENTY SIX HIGHER EDUCATION QUALITY ASSURANCE AND ACCREDITATION SYSTEMS IN AFRICA ORIGINS, STRUCTURES AND CHALLENGES**

*Abetu Kefyalew Waktole, East China Normal University, China*

## **I. Background Introduction**

Higher education has tremendously changed over the last 20 years. The increasing needs of the global economies for flexibility, cognitive skills, professional behaviour, competencies and the emergence of the so-called ‘knowledge-economy’ have changed the context during the last two decades. Concurrently, the enrolment in Higher Education (HE) has been democratized in many countries. This ‘massification’ has put pressure on the quality of the services delivered by higher education institutions. At the same time, mobility of people and ideas has become a clear trend of ‘globalized societies’ and has largely affected HE and quality standards.

Higher education in Africa-just like elsewhere in the world-has witnessed a rapid expansion in the last 10 years than ever (Oyewole, 2007). This is due to an increased public investment, establishment of public higher education institutions and socio-economic reforms allowing public-private partnership in higher education investment. This has led to a proliferation of higher education providers through the establishment of private universities and increased use of Information and Communication Technologies (ICTs) in the provision of higher education. While this expansion has led to an increased access, the quality of the education provided by the existing and newly established higher education institutions has continued to raise serious concern. Thus, quality control mechanisms have become an inevitable endeavour to separate authentic from sub-standard higher education outcomes and qualifications in the market pool.

This expansion, diversification and privatization of higher education system has generated growing concern for the quality of

higher education processes and outputs, in both developed and developing countries. Many of them are currently in the process of devising new system of external quality management at national level. One common approach to tackling quality concern in higher education institutions, quality assurance and accreditation systems are setting up in higher education.

Thus, the advent of complex mass higher education systems have led to the need to assure quality of higher education all along, it is important that the national and state governments arrange for quality assurance mechanisms as a part of the higher education systems in the country. Since 1980s, with the increasing intake of students in higher education institutions, establishment of structured quality assurance agencies has become a common phenomenon which becomes a central objective of governmental policies and an important steering mechanism in higher education systems (AAU, 2009).

The quality of higher education and the need for effective quality assurance mechanisms are becoming priority themes in most African countries. In recent years, the development of effective quality assurance and accreditation system is identified as pertinent strategy for the improvement of higher education in the continent. The Association of African Universities (AAU) has also prioritized the issue of quality assurance for the development of credible education and training systems in Africa (AAU, 2009). Similarly, quality assurance and accreditation is increasingly becoming an important aspect of higher education institutions in developing countries, as expressed in the development of relevant policies, structures and systems at national and institutional levels (Mhlanga, E., 2008).

Quality improvement and quality assurance are among the most complicated problems facing higher education because they touch on almost every aspect of the system. It is much more than meeting some minimal standard measures of inputs. And if quality assurance is to be carried out effectively it must be seen as important to those involved, impart critical information to tertiary institutions, employers, and the public, and be meaningful to the international higher education community and other international actors.

According to Joel, K., (2010) the challenges of quality concern of HEIs have led to institutional-universities and colleges, national and international quality assurance and accreditation initiatives across the continent. Consequent to this, the issue of quality assurance has become internationally relevant and topical beyond national and institutional. Mobility of students and the demands of a globalized

world of work have increased the need for a common appreciation of standards necessary to support the transfer of academic credits; the recognition of certificates, diplomas and degrees, as well as the definition of equivalences.

Quality of higher education in Africa is challenged by the forces of globalization, information and communication technologies (ICTs), mass higher education and student-centred learning. These challenges have led to institutional-universities and colleges-, national and international quality assurance and accreditation initiatives across the continent. Accreditation as means for controlling and assuring quality in higher education involves programme and institutional accreditation. Gola (as cited in Tagoe, 2008) defined quality in higher education as “specifying worthwhile learning goals and enabling students to achieve them,” it involves “articulating academic standards” to meet society’s expectations, students’ aspirations, and the demands of the government, business and industry; and the requirements of professional institutions.”

African countries like many other parts of the world are in the move toward internationalization of their education systems particularly higher education to respond to societal demand for the creation of knowledge society that is competent and competitive nationally and internationally. Mobility of knowledge, skills and qualifications nationally and across nations dominates higher education discourses in many parts of the world. In Africa, it takes in the form of harmonization of higher education programmes. Harmonization of study programmes goes concurrently with harmonization of quality assurance and accreditation systems (AAU, 2009).

As a process towards harmonization of quality assurance and accreditation systems, a number of cross-state organizations, government treaties and conferences across Africa have been initiated with more impetus in the beginning of the last decade. Indeed, African countries have moved quickly to establish quality assurance and accreditation systems at the institutional, national and cross-state levels within a short period.

The development of quality assurance systems in the African continent, the AAU in collaboration with the international organizations (World Bank), national governments and regional organization has initiated. This was to promote the revitalization of quality of African higher education in order to optimize its capacity to facilitate the social and economic development of the continent and

prioritized quality assurance and accreditation issues in higher education. Furthermore, the capacity development for HEIs and quality assurance and accreditation agencies, as key strategies for the development of credible and effective education and training systems in emerging knowledge societies has been given priority (AAU, 2004). Hence, pave the ways for the commencement and expansion of quality controlling systems in Africa. The current state of accreditation and quality assurance in Africa varies considerably, ranging from countries with a history of quality assurance dating back to the establishment of the first higher education institutions, despite the fact that a large number of countries have no formal national quality assurance or accreditation systems. At present, about 20 African countries have quality assurance and accreditation agencies functioning at national level including Botswana, Cameroun, Egypt, Ethiopia, Ghana, Kenya, Liberia, Namibia, Nigeria, Madagascar, Mauritius, Mozambique, Tanzania, Uganda, Rwanda, Tanzania, Tunisia, South Africa, Sudan and Zimbabwe (AAU, 2009 and Materu, 2010 ).

Within a short period of time as many developing and developed countries, African countries have established and are still establishing accreditation systems of higher education to monitor quality of their higher education. This is a good trend for African countries to move forward in today's competitive global world which needs highly qualified man power that Higher Education Institutions (HEIs) are expected to produce. However, effective quality assurance and accreditation systems are becoming a priority as well as increasingly an important aspect to improve, insure and monitor the quality of man power that HEIs produce to meet countries' demand for high quality graduates. From its early establishment, many other factors have also triggered the effectiveness of the accreditation systems in African countries to meet such demands. This scenario manifests itself into two major factors: external and internal. These two factors influenced HEIs origin and policy reform, besides they also strongly shape, influence and determine the effectiveness of the systems of accreditation in higher education in Africa.

External influences, in this case the expertise of international actors like the (World Bank) and national agencies, and foreign experts in the field of quality assurance and accreditation, are crucial in the development of these policies. Besides the external influence, internal influences such as the countries' economic and socio-political systems and government structures are also strongly influencing and



shaping and determine the accreditation systems choices in Africa. These influences were a result of fundamental changes in governance structures within the education sector and political systems of the countries. In this case how accreditation systems were originated established, structured and functioning could be attached to the government structures.

The functionality of accreditation systems was also determined by how the systems were originated, structured, and administered. In this view, and also in consideration of its recent establishment, higher education accreditation systems in African countries have many loopholes and challenges in monitoring and enhancing the quality of HEIs. The following portion of the paper is dedicated towards discussing the current state of quality assurance and accreditation systems, structures, issues, challenges and strategies to overcome these challenges in HE accreditation in the continent to assess the prevailing current situation and to design ways for improving the systems in Africa in turn high light ways to improve quality concern in HEIs.

## **II. Status of Quality Assurance and Accreditation Systems in Africa**

### **The Concepts of Quality, And Quality Assurance**

Quality, as a concept, has received much attention in the world although no definitive general agreement on its meaning is known. Njoku (2006) conceptualize quality as exceptional, degree of excellence, fitness for purpose, perfection or consistency, value for money. He asserted that quality is a relative concept, meaning different things to different people. Also, different stakeholders have different perspective on quality depending on their objective but there is general agreement that the absence of quality will cast doubt on any higher educational endeavour. The World Conference on Education conceives quality in higher education as:

*A multidimensional concept, which should embrace all its functions, and activities: teaching and academic programmes, research and scholarship, staffing, students, buildings, facilities, equipment, services to the community and the academic environment. Internal self-evaluation and external review conducted openly by independent*

*specialist, if possible international expertise, are vital for enhancing quality. Independent national bodies should be established and comparative standards of quality, recognized at international levels should be defined. Due attention should be paid to specific institutional, national and regional contexts in order to take into account diversity and to avoid uniformity. Stakeholders should be integral part of the institutional evaluating process (Article 11(a) of the World Declaration on Higher Education for the Twenty First Century: Vision and Action- UNESCO, Paris 1998, quoted in Van Ginkel and Dias, 2007).*

Related to the concept of quality is quality assurance. Quality assurance is conceptualized as:

*a continuous process of evaluating, assessing, monitoring, guaranteeing, maintaining and improving the quality of higher education system, institutions or programmes. As a regulatory mechanism, quality assurance focuses on both accountability and improvement, providing information and judgment through an agreed and consistent process and well established criteria. (IIEP, 2006).*

Quality assurance may be external or internal. Quality assurance is:

*a generic term used as shorthand for all forms of external quality monitoring, evaluation or review and may be defined as a process of establishing stakeholder confidence that provision (inputs, processes and outcomes) fulfils expectations or measures up to the minimum requirements.*

### **Reasons for the Growth in Importance of Quality Assurance**

A number of inter-related factors have been linked to the evolving significance of quality assurance in the past decade. The first of such factors is the concern for a potential decline of academic standards against the background of massive interest and popular subscription to higher education in most countries. This is both in the developed and developing countries. Second is the loss of confidence in the traditional academic quality management capacities of key stakeholders. Third is the declining or at best, stagnating government funding of university education as well as the pressure to increase

efficiency in public expenditure. Also, there is the increasing competitiveness in the higher education environment (Van Damme, 2000).

- Increased institutional autonomy which calls for greater accountability
- Increased access in and variety of expectations on higher education which is putting pressure on institutions and system to diversify in order to cater to a student population that does not have the same academic preparation
- Diminishing resources which are generating demands to do more and better with less
- Increased globalization which makes institutions and systems more prone to market pressures and encourage them to enhance their services, to sharpen or change their mission statements and to demonstrate more explicitly their quality

The above factors have therefore made the introduction of quality assurance in institutions of higher education globally imperative. Many countries, regions and international agencies have therefore established agencies to regulate quality. In most countries, quality assurance agencies have been set up to coordinate quality assurance activities. At times, the mode of operation differs from country to country and from agency to agency. Woodhouse (2004) identified a desirable External Quality Assurance Agency as one that:

- has an explicit and relevant mission
- evinces independent, impartial, rigorous, thorough, fair and consistent decision making,
- carries out its assessment in relation to both the institution's own self-analysis and external references
- respects institutional integrity (and autonomy), while being supportive of the institutions
- demonstrates public accountability by reporting openly on its institutional review decisions

- has adequate and credible resources, both human and financial, with appropriate provision for development
- has its own quality system that emphasizes flexibility and quality improvement
- collaborates with other agencies with similar mandate

### **Accreditation**

The major vehicle for external quality assurance is accreditation. Globally, countries have adopted one form of accreditation or another as a major platform of quality assurance. Adelman (1992) sees accreditation as “a process of quality control and assurance in higher education, whereby, as a result of inspection or assessment, or both, an institution or its programmes are, recognized as meeting minimum acceptable standards.” Van Damme (2002) provides an extensive definition of the concept as “a kind of formal recognition of a programme or institution by an external body, on the basis of an assessment of its quality through self-study, peer review, site visits that results in report writing and presentation.

The major roles of accreditation include sustaining and enhancing the quality of higher education, maintaining of academic values in higher education, being a buffer against the politicizing of higher education and serves public interest (CHEA, 2003). In summary, the major objectives of accreditation are:

- to foster excellence in HEIs through the development of criteria and guidelines for assessing their effectiveness
- to encourage improvement of HEIs through continuous self-study and planning
- to assure other organization and agencies, the education community, and the general public that the institution or particular programme has both clearly defined and appropriate objectives, maintains conditions under which their achievement can reasonably be expected, appears in fact to be accomplishing them substantially, and can be expected to do so
- to provide counsel and assistance to established and developing institutions and programmes

- to encourage the diversity of HE to achieve its objectives and goals
- to protect institutions against encroachments that might jeopardize their educational or academic freedom.

### **III. Why Quality Higher Education is so Important in Africa**

Competitiveness and economic development increases the importance of tertiary education. Changes brought by the transition to a knowledge economy have created a demand for higher skill levels in most occupations. A new range of competences such as adaptability, team work, communication skills and the motivation for continual learning have become critical. Thus, countries wishing to move towards the knowledge economy are challenged to undertake reforms to raise the quality of education and training through changes in content and pedagogy. Recent studies have demonstrated that for developing countries, higher education can play a key “catch-up” role in accelerating the rate of growth towards a county’s productivity potential (Bloom, Canning, and Chan 2006).

In addition, through research and advisory services, they contribute to shaping national and international policies. Higher Education is critical to achieving the EFA and Millennium Development Goals (MDGs). Higher Education institutions educate people in a wide range of disciplines which are key to effective implementation of MDGs. The question of whether the training provided by HEIs is consistent with new thinking advocated by EFA and, in general, with the new and emerging demands of the global agenda. An increased focus on quality and relevance of HE would contribute to strengthening the link between HE and various MDGs and more generally with the needs of the labour market.

Supporting other levels of education and buttressing other skill levels, HE plays a key role in supporting other levels of education (Hanushek and Wossmann 2007). This ranges from the production of teachers for secondary schools and other tertiary education institutions, to the training of managers of education and conducting research aimed at improving the performance of the sector. According to a recent study, low quality or lack of a critical mass of graduates at the secondary school level reduces the productivity of tertiary-educated workers and dampens the overall incentives for education investments

(Ramcharan 2004). Increasing the value of investments to expand access, the challenge for Africa in creating knowledge economies is to improve the quality of tertiary education and at the same time increase the number of people trained at high quality levels in appropriate fields. The record to date in this area is not particularly good. Examples abound of rapid growth in the number of students in higher education while at the same time higher education quality drops substantially.

#### **IV. Development of Quality Assurance and Accreditation systems in Africa**

Accreditation and quality assurance in Africa had their origin in 1968 in 17 francophone African member countries at non degree level. At University level accreditation in Africa began in 1985 in Kenya, followed by Nigeria in 1990-91, and Cameroon in 1991. It grew out of a long history of the use of external examiners and the relationship of many African universities with European institutions. For example, Fourah Bay College in Sierra Leone (1827) was affiliated with Durham University in England from 1876 and Makerere University of Uganda in 1922, also affiliated with the University of London, and University of Ghana, Legon, in 1948, affiliated with the University of London; the University College of Addis Ababa of Ethiopia in 1951 (unaffiliated).

Authority over the quality of university education in those early days was a function of their governing boards and faculty. With affiliation, the institutions automatically became part of the British, French, Portuguese or other systems of quality assurance through their partner universities. These institutions were subject to the same kinds of quality control as were British or other European universities, including external examiners and other aspects of these systems (World Bank, 2006).

As other new universities were established, some of them were also affiliated with external institutions. Nigeria was the second of the pioneers in university-level accreditation in Africa. Its efforts took the form of program accreditation (not institutional accreditation). The first accreditation exercise was undertaken by the National Universities Commission (NUC) in 1990-91, 10 years after the first tertiary accreditation exercise in Nigeria by the National Board for Technical Education. The NUC was established in 1962 to provide

oversight to the national higher education systems. It was given accreditation responsibilities in the 1990s (Okojie, J., 2008. Cameroon, Ghana, Tanzania and Mauritius continuously established their quality assurance agencies between 1991 and 1997 (Moustapha, S. M., 2007).

For an initial period, all these agencies limited their activities to accreditation of private universities. In Cameroon, the process is carried out under the auspices of the National Commission on Private Higher Education (NCPHE), but the final decision on accreditation is made by the Minister of Higher Education. Ghana instituted accreditation in 1993 with actual accreditation of polytechnics and private universities starting in 1996 and public universities in 2005. The Ghanaian National Accreditation Board accredits public, private, foreign, and distance education institutions (Saffu, y., 2006). Tanzania has just changed the law to extend the mandate of its QA agencies to public tertiary institutions from 2005 (TUC-IIEP, 2006).

Mauritius set up the quality assurance division of the Tertiary Education Commission (TEC) in 1997, but did not begin the process of quality audits and program accreditation until 2005. South Africa began preparation for higher education audits and accreditation with the establishment of the Higher Education Quality Committee (HEQC) of the Council for Higher Education (CHE) in September 2001. Ethiopia established its Higher Education Relevance and Quality Agency (HERQA). Moreover, Cameroon, Ethiopia, Sudan and Kenya are limited their activities to accreditation of private universities only (Shabani, 2006). Public universities are not subject to accreditation process because they established by act of the parliament. Other countries are now followed this lead. Currently about 38% (total 20) out of 53 national accreditors operate in Africa.

### **Major Category of Accreditation Systems in Africa**

To discuss individual countries' higher education accreditation systems, it is important to categorize them into major types of accreditation systems in Africa based on their similarities and differences. Thus, based on each country's case studies and report documents, they are categorized into three major different groups based on major types of accreditation systems found in African countries: accreditation systems based on types of higher education institution, accreditation systems based on the accreditation methodology being applied in HEIs and accreditation systems based on agencies' autonomy.

### **Accreditation Systems Based on Types of HEIs**

Some of accreditation agencies set up for only private higher education institutions but most of the agencies accredit both private and public higher education institutions for example, out of 20 countries with established QA agencies in place 6 countries (Kenya, Cameroon, Ethiopia, Madagascar, Sudan & Rwanda) accredit only private higher education institutions and the rest 14 countries accredit both public and private HEIs.

*Ghana, Mauritius, Nigeria, South Africa, Tanzania, and Uganda are directed to oversee QA in both public and private institutions. Tanzania and Uganda amended their laws within the last five years from 2005 to extend the mandate to both private and public universities (World Bank 2006).*

### **Accreditation Systems Based on the Accreditation Methodology**

Based on the types of accreditation methodologies they carry out, African countries grouped in to three categories, namely: institutional accreditation, institutional audit and program accreditation has been observed. There is convergence in methodology across countries. At the national level, three different types of quality assurance practices can be observed: institutional audits, institutional accreditation, and program accreditation. Irrespective of the approach taken, a convergence among these methodologies is becoming apparent, evidence from individual African countries in the study show that all QA agencies follow the same basic approach, which is similar to that followed by QA agencies in developed countries. This approach entails an institutional (or program) self-assessment, followed by a peer review and transmission of findings to the institution, the government and even to stakeholders. However, experience from the case study countries shows that the methodology demands a high level of human and financial capacity. In a situation where the pool of qualified human resources is already strained, not all countries can afford to set up a full scale national agency.

### **Accreditation Systems Based on Autonomy of Agencies**

Based on their autonomy, accreditation agencies in African countries are remarkably similar; but based on the evidence of individual county accrediting agencies' autonomy, the accreditation systems in African countries, they are two main categories found as can be observed:



these are agencies those are tight government control (totally non autonomy) and those semi-autonomous accreditation systems. All accreditation agencies in Africa are governmental and dependent on government in all of their funding (Hayward, 2008). In some cases, countries those are tight governments controlled in funding, their operation, and decision making process all control by the ministry of education rather than the accrediting agencies. Currently, all other than six of quality assurance agencies operate as semi-autonomous bodies (Kenya, Nigeria, South Africa, Ghana, Mauritius, Tanzania, Uganda, Tunisia, Libya, Botswana, Liberia, Rwanda and Egypt) with their own establishing law, governing board and budget allocation, and their decisions on accreditation are final. The rest of the six countries (Cameroon, Sudan, Tunisia, Madagascar, Namibia and Zimbabwe) are highly dependent on government. This seems that their governance, management and financing are tightly controlled by government and their decisions are subject to approval by the government-ministry of education. Cameroon, Ethiopia, and Sudan are good examples, that the accreditation agencies are funded as department of Ministry of Higher Education and the minister has tremendous power over quality assurance and accreditation systems the final to say in accreditation decisions.

*At a first glance, this arrangement might seem effective as it elevates the quality assurance function to a high level of decision-making by the governments. However, since ministerial positions are political in nature and often subject to high turnover, there could be problems of consistency leading to loss of credibility and trust in the higher education accreditation systems.*

This heterogeneity in accreditation activity and rigor from country to country raises doubts as the ability of some tertiary education systems to respond to global challenges which intended to harmonize tertiary education systems which leads to have a common frame work for recognition of programs and credentials.

### **Structures of QA and Accreditation Systems in Africa**

Each of the accrediting agencies has its own board and governance structure though the compositions differ. The structures of the agencies in different countries differ in their size of the agencies. In some countries the agencies have a large corporate fully fledged structured organization with many staff members. For example,

countries like South Africa, Nigeria, and Tanzania are good examples.

In some countries where by agencies are at their infant stage of development and totally dependent on the ministry of education for their operation as unit or department in the ministry, their structures are composed of small numbers of staffs (for example, Cameroon, Sudan, and Ethiopia). The common features of agencies in all African countries accreditation systems, the appointment of the members of the accreditation agencies. The key governing board members and top managements are appointed by the government and, from government representatives and officials. Their difference is countries those totally dependent on government all of the members of the accrediting agencies staff members are appointed by the government from members of its party, while the countries with semi-independent accrediting agencies the members of their agencies has to be from different broad cross section of professionals, employers, government, universities, and public at large including students.

It seems to reflect a general trend in African universities to strive to conform to international quality standards, in most cases drawing from standards in developed countries. As it has been discussed later in the study, though there is nothing wrong with this desire, lack of autonomy, inadequate financial and limited human capacity are main constraints that inhibit full-scale deployment of quality assurance processes in Africa and determined their choice of accreditation systems. Perhaps African countries need to reconsider their approach to quality assurance and adopt approaches commensurate with available resources.

## **V. Major Issues and Challenges of Quality Assurance Agencies in Africa**

This part is dedicated to the analyses of the main challenges confronting quality assurance systems in Africa and highlights strategies for reforms. Compared to higher developed education systems in other regions, accreditation systems in Africa are still at an infant stage and thus confronted by many challenges. Some of these challenges were highlighted in previous discussion. This part attempts to discuss the major challenges, the main capacity enhancement and development, and reforms needs for African countries quality QA agencies, based on observations from twenty countries in the study.

## **Issues and Challenges of Human Capacity in Accreditation Agencies**

Effective quality assurance systems depend largely on the availability of highly qualified faculty members and administrators within institutions and competent professional and technical staff in national quality assurance agencies. Lack of properly trained and experienced personnel thus limiting their ability the accreditation systems for diligent execution of duty. The success of quality assurance, accreditation, audits, and other related to accreditation systems are particularly demanding of highly qualified human capacity since the legitimacy and credibility of the results are dependent on the quality, dedication, and integrity of the people who serve as peer reviewers the administrators and the professional staffs in the national quality assurance agency, who eventually review the panel reports and disseminate the results to stakeholders and the public.

According to Hayward (2008), higher professionals (expertise) in the field of accreditation are a key not only to successful accreditation of higher education but also to the legitimacy of the process of accreditation systems. These individuals must not only be experts in their respective fields, but they must also be accepted as neutral parties to the process, and possess the personal skills and diplomacy necessary to conduct effective accreditation process in higher education quality assurance systems in Africa (including those countries with stronger economies like South Africa) are experiencing several challenges: the difficulty of finding a sufficient number of academics who are qualified and experienced, and available to serve as peer reviewers (Mhlanga, T., 2010 ). Lack of appropriate trained and qualified manpower who involved in accreditation process is among the challenges quality assurance agencies in all African countries facing.

Professional staff in national quality assurance agencies require main types of skills. Two sets of skills: skills for system conceptualization and development of methodologies, and skills for implementation of quality assurance processes. In the early stage of an agencies' development as is the case in most national agencies in Africa, the skills required have to do with capacity for analysing the higher education context and conceptualizing appropriate quality assurance systems, translating those into methodologies and procedures, and then understanding how and where to start the implementation.

One of the most critical problems faced in all of the cases countries, except Nigeria was the scarcity of competent academics and professionals who could serve as peer reviewers. Even in South Africa, with a very large base of experienced faculty members and a sizeable pool of outstanding professionals, there was consensus that the magnitude of the accreditation process was requiring qualified professionals in the accreditation systems. According to World Bank (2006) study, man power capacity is the most pressing constraint in African national quality assurance agencies. This manifests itself in three ways:

- i) Insufficient numbers of adequately trained and credible professional staff at the agencies to manage quality assurance processes with integrity and consistency across institutions/programs and over time
- ii) Inadequate numbers of academic staff in higher education institutions with knowledge and experience in conducting self-evaluations and peer review
- iii) Strain on senior academic staff in higher education institutions as they have to support both their own internal quality systems as well as external quality assurance processes of their national accreditation agencies

The study shows that one of the most critical needs for establishing effective quality assurance systems in Africa is human capacity development. Expertise in conducting self-evaluation and institutional audits is limited in the region. It is therefore essential to provide capacity building training courses on quality audit procedures and techniques of quality assessment for peer reviewers, internal quality assurance coordinators, as well as for academic staff involved in institutional self-evaluation activities.

### **Issues of Inadequate Financial Capacity in Accreditation Agencies**

There is no doubt that funding is critical to any capacity building activities of quality assurance agencies to be executed in the region. Adequate funding will be needed for professional capacity development, conducting needs assessments, research and developing standards as well as accreditation processes and other quality assurance accreditation development policies and reforms. Funding is also required both at the regional, national and the institutional levels

to execute the professional capacity building of accreditation agencies. Another concern is the financing of accreditation, both of the process itself (peer reviewers, site visits, and agency staff salary) and to the institutions in terms of the time and staff involved, diversion from other activities such as operational expenses, research, and other costs of the process such as fees for accreditation, publications and data collection. The cost of the accreditation and audit process is a critical factor affecting success of the accreditation systems. In all the African countries cases show that all of the countries, it has posed problems for the quality assurance agencies being examined. There are a number of issues about the financing of accreditation and other quality assurance processes that should be examined.

Among the issues is who pays the cost of accreditation and audits, the government, the institutions being reviewed, donors, business and professions, or some combination of all of them. Looking at issues of adequate funding in general, it is a great challenge in all African countries higher education and accreditation organizations. Regardless of who pays, however, cost is a real issue. Some approaches to accreditation and audits are more costly than others. Insufficient financial resources and lack of funding to cover the high costs required for maintaining and enhancing the quality of higher education in the expanding system is a big challenge of quality assurance agencies in all African countries. Even in South Africa, which has a stronger economy than any of the other countries in the study, cost was a serious challenge for the institutions (World Bank and Ncayiyana, D., 2006).

In some countries, lack of adequate funding in the agencies, have been resolved through setting up quality improvement funds mainly with external donor agencies support. Through a World Bank credit and other donor agencies, for example, Mozambique established a Quality Enhancement and Innovation Fund (QIF) in 2002. The implementation of which has been rated as “highly successful” (World Bank, 2004 cited in Materu, 2007). Ethiopia recently established a similar facility-the Development Innovation Fund (DIF)-also through World Bank support to innovations in relevance, content, and quality of academic programs. Ghana too has established a Teaching and Learning Innovation Fund (TALIF) with World Bank financing “to support improvement in quality, relevance and efficiency of the teaching and learning process” through QA agency. Similar funds are envisaged in Nigeria and Tanzania (Mihyo, Paschal, 2006 & Julius A. O., 2008).

While these funds are likely to have a positive impact on quality, their sustainability would be better assured if at the policy level a clear connection were made between the results of QA processes and financing decisions for institutions. Linking public financing (competitive funds and other public funding) to quality assurance processes and outcomes could play a key role in strengthening accountability and in encouraging institutions to undertake quality improvements.

### **Legitimacy of Quality Assurance Process**

The quality, integrity and professionalism of peer reviewers are other factors that can compromise the legitimacy of the quality assurance and accreditation process. This credibility came largely at the institutional level from the fact that accreditation was based on a model in which the academics and professionals assess and make the major decisions about accreditation. But such credibility is not in place in many countries where accreditation has been started and fostered by governments and where the initial aims were more about accountability than quality improvement like all African countries (Hayward, 2008). This put great pressure at the outset to insure the integrity, honesty, and transparency of the process.

Thus, the effectiveness of standards will in part be determined by the legitimacy of the process for all its stakeholders, the institutions, citizens, governments, students, families, business, graduates, and others. Massification has increased the number and diversity of stakeholders and thus the difficulty of gaining broad legitimacy. So it becomes especially important that the process itself demonstrates early on that it is run in an honest, ethical, and transparent way that fosters legitimacy broadly in accreditation systems.

According to Daniel, J., (2009), success in fostering legitimacy will require that the process is clear; the process broadly participatory, well managed, and well written; the peer review process seen as fair, professional, and transparent; the evaluation and assessment of standards impartial; and the decision about accreditation based on the merits of the case and nothing else. Part of guaranteeing that is to insure that the staff of the accreditation agencies are well prepared; the standards clear and unambiguous; the peer reviewers well trained, professional, and unbiased; and the decision-making process for accreditation, is clear, transparent, and fair.

The success of institutional accreditation is largely dependent on the legitimacy of the process (Hayward, 2008). A review of

accreditation in many national settings suggests that there are a number of actions that can foster legitimacy. One of the keys to success in legitimacy is transparency – providing institutions and the public with a clear view of the process and how it works. That is important for the general public. The public needs to understand what accreditation means, why it is important to decisions about where to send their children, its implications for jobs on graduation, transfer to programs in other countries, and successful national development. Some accreditors do an excellent job of making their process clear. Eaton, J. (2006). The best spell out the goals, the process, and the results of accreditation in publications, on the web, and to the public. They provide information about the purposes of accreditation. They list institutions that have been admitted to candidacy for accreditation, gained accreditation, been denied accreditation, or put on probation. They also share their standards or criteria for accreditation, provide information on accredited institutions, list diploma mills, and provide other information of use to universities and the general public.

### **Issues of Autonomy of Quality Assurance Agencies**

We usually do not think about quality assurance and accreditation in terms of power and yet the process involves decisions and processes which have major impacts on institutions, students, faculty members, administrators, parents, graduates, business, government and the public.

While the goals of quality assurance are not about power, the process is one in which many actors exercise a great deal of power. There is the power and authority in accreditation decision making process. Who should do that? The state? An autonomous agency? Universities? Or Governments? Does it seem fair, legitimate, and does it consider public participation? Power sometimes creates situations in which there are opportunities for abuse of power, cases in which it is indeed abused, and those in which there are wide spread perceptions of abuse. Dickenson, R. (2009) notes that:

*If quality assurance is about to improve quality of higher education institutions and to be legitimate systems of accreditation which are seen as fair, open, equitable, accountable, and broadly participatory and result in the quality improvements and excellence are desired.*

There are many stakeholders in the quality assurance process including: higher education institutions, the public, students, faculty, alumni, government, business and professions. They have a wide range of stakes in the accreditation process such as verification of quality standards, protection against fraud, certification of graduate training, and recognition that an institution meets expected national standards. In most countries the authority over accreditation rests with the national government, which gives varying degrees of autonomy to the accrediting agencies. Accreditation in the United States, New Zealand, and Japan for example, are administered by non-governmental organizations (Lenn, M.P., 2004). The critical issue for accreditation is whether or not decisions are influenced by factors beyond the focus on institutional or program quality. According to Hayward, (2008), it is a difficult question to answer in cases where accreditation is run by government or where government is represented on the accreditation governing body, as they are in all African countries.

Who makes the decisions on accreditation? One of the critical questions for accreditation is that of who makes the decisions. Is it government? Is it an autonomous governing body? Is it officials in a ministry or in the accreditation body? Related to that, who makes the rules? Institutions, government, some collection of institutions, others? All these issues pose questions that accreditors need to address and revisit from time to time. This goes to show that higher education accreditation systems in Africa countries where by government political control in their autonomy in decision making, funding and their operation is big challenges of accreditation systems. In all countries with established accreditation systems all governing bodies and top managements are appointed by the government and in some cases decision making is by the government rather than agencies.

A key concern about accreditation is the autonomy of the decision-making process. Lack of autonomy is hard to prove but easy to assert. To the extent that governments seem to control the decision-making process, there is a perception of lack of autonomy. At the same time, experience in setting up accreditation agencies in all African countries shows that authorization and funding by government is vital to success (Hayward, 2010). In most developing countries accreditation has been initiated and funded by governments. This was true in all of the cases in Africa. Without that support the process is unlikely to have either the funding needed or the legitimacy to operate effectively.



All quality assurance in African countries were examined that they all under the government control in their all funding and the agencies are observed that they are from tight government control to semi-autonomous; no countries have established fully autonomous free of government political interference with in all African countries with establishing quality assurance and accreditation agencies in place. Currently out of 20 quality assurance agencies examined 14 of them are semi-autonomous and six of them are no autonomous at all. They are tight government control in all directions- funding and authority of decision making.

It is quite evident that, from their origin government political interfering, funding, high control over their governance and decision making power is a norm in African countries in both higher education institutions as well as accreditation systems as pointed before. such state interference in HEIs affairs contributed to a decline in quality of education as a desire for political control of education, which was always give political priority rather than academic one in funding, appointing top management and governing bodies of higher education institutions were made largely based on political, rather than on the merit or professional basis. This was also contributed that the state government established centralized power authority on the autonomy of higher education and quality assurance agencies. Moreover, though higher education accreditation agencies in all African countries were established by the law of individual countries as independent legal body but in reality all agencies are dependent on government for their total funding and in some cases in their decision making process (World Bank, 2006). This goes to show that Quality Assurance institutions must subscribe to what the government sees as priority. This is one disadvantage of the absence of autonomy with the Quality Assurance institutions. It will be important for quality assurance agencies in Africa to be autonomous, if the process is to maintain its legitimacy. Therefore, it will be important to develop mechanisms that will enhance autonomy and thus protect the legitimacy of the process form government political influence.

The study by Sterian (1992) evidences state that, the principle factors which affect the quality of accreditation of a given institution, among others are its autonomy, competency and the independency of its decision making power of higher accreditation agencies. It can be argued that the idea of Sterian is important for accreditation agencies to be legitimate because, accrediting agencies dependency on government interferences in their funding and decision making and

autonomy adversely affects the outcome of higher education accreditation systems over all operation which in turn affects the quality of higher education in general as analysed before. Similarly, the evidence concerning autonomy of higher education accreditation systems Lenn, P.M, (2004) investigates, reveals that regardless of modes of higher education accreditation systems whether governmental or non-governmental, private or professional, and quasi-governmental accrediting organizations, it is optimal that higher education accrediting bodies have autonomy or independent in their decision making in order to be legitimated, credible trust worth and respect in the eyes of all stakeholders.

### **Challenges of New Mode of Higher Education Provision on QA Agencies**

#### ***Challenges of Cross-Border HE Providers***

At the beginning of the 21st century, the worlds of education and learning are changing rapidly. Higher education in a more globalised world brings new realities and challenges. The knowledge economy/society, innovations in ICT, emphasis on market economy and trade liberalization have important implications for higher education. Massification of education provision and participation continues to challenge existing institutions, policies, funding arrangements and regulatory frameworks in many African countries as other parts of the region.

New opportunities and possibilities such as online delivery of educational services, cross-border delivery and consumption of educational services, skills development outside formal learning arrangements, new types of qualifications and for-profit provision of teaching and learning challenge and stimulate the reform of existing educational values. These developments also pose new questions for the regulatory capacities and boundaries of existing national or regional policy frameworks.

This current issues and challenges associated with the growth and diversity of cross-border education provision as a response to the increasing demand for higher education in African countries; how institutions, agencies and policy makers in the fields of quality assurance and accreditation can enhance protection for students/learners of higher education and assure quality provision in cross-border higher education need immediate policy objective. Learners need to be protected from the risks of misinformation, low quality provision and qualifications of limited validity. The term

student/learner protection can be used as an appropriate label for this policy objective. Strong approval, quality assurance and accreditation systems which extend their coverage to non-traditional delivery modes, including cross-border and for-profit provision, should guarantee that learners are safeguarded from rogue providers and are acquiring qualifications that are meaningful and valid. The impact of globalization on African higher education which characterized by several phenomena mentioned above including the increasing and new forms of cross-border provision of higher education calls for a revisit of existing mechanisms and the development of appropriate procedures for accrediting cross-border higher education providers. ICT-facilitated cross-border provisions of higher education have not been adequately considered in the national quality assurance systems of African countries. For example, the study of East African countries higher education quality assurance (Kenya, Uganda, Tanzania, and Ethiopia) shows that, lack of standard and accreditation mechanism for cross boarder higher education providers is among the major challenges countries' QA agencies are facing.

The report shows that, large number of cross-border higher education providers arising from commercialization of higher education, lack of standards and mechanism to regulate quality of education from cross-border providers. Lack of quality assurance mechanisms for distance and open learning modes including e-learning are serious challenges in all countries of Africa region. From the information gathered from individual countries cases and reports similarly shows that, it is a big challenge to handle the issue of quality assurance with cross boarder higher education. Therefore, there is a capacity building need in the region to address this challenging problem. Adopting the UNESCO/OECD (UNESCO, 2006) guidelines on quality provision and control in cross boarder higher education for the African context is purposeful. To have an internationally competent and accepted accreditation system and qualified educational awards, the Agency have to adopt standard procedures and quality controlling mechanisms by which all HIEs could be evaluated and accredited.

### **Rapidly Increasing Number of Higher Education Institutions**

The number of both universities and non-university tertiary institutions has been growing at a remarkably high rate in all African countries. For example, between 1990 and 2007, public HEIs grew from 100 to 200; private higher education institutions exploded from

24 to 468. Non-degree private tertiary institutions are the fastest growing sector (Materu, 2010).

As the number of new higher education institutions grew in most of African countries, there were (are) highly increasing of demands for new higher education institutions to be dispersed geographically. For example, geographically wide and large countries like Nigeria, Ethiopia, Sudan, Uganda, and others countries' higher education institutions expanded rapidly throughout different individual country remote areas in all their provinces and cities particularly private higher education institutions for commercialization (Materu 2007). This is a good trend to match the ever increasing demands of consumers of higher education. However, the national accreditation for higher education agencies in African countries are young they have been in place for a short period of time, are just beginning to develop capacity to regulate higher education and how to monitor such uncontrollable expansion and provision of higher education institutions; the balance with single national quality assurance agencies compared with such huge expansion of higher education institutions has put big challenge on accreditation agencies in different African countries especially countries with large higher education systems. This creates challenges that African countries could end up consuming low quality higher education (Kasozi, 2005).

Similarly the case in Ethiopia (Biratu, T., 2010) report shows, as compared to the huge amount of work to be accomplished by the agency and the distribution of higher education institutions on very wide geographic area of the country. Lack of sufficient number of staff and inability to open branch offices further challenged the quality assurance agency to monitor the quality of higher education institutions and protect the public from sub-standard quality providers of higher education institutions particularly private for profit institutions. As a result there are many unaccredited private higher education institutions particularly non degree granting institutions

As compared to the number of both private and public higher education institutions and the deep rooted quality problems in both types, one single national agency alone cannot bear all the issues of quality control and accreditation in all of African countries. As such, the individual countries should give room to an establishment of other independent and private professional quality assurance agencies so that they could share the burden of controlling quality and accredit HEIs effectively. This will make ease the process of supervision and monitoring and will make it easier for agencies to encourage private

providers to set up more institutions legally and up to standard quality HEIs.

## **VI. Concluding Remarks**

Even though the development of effective quality assurance and accreditation systems were identified as pertinent strategy for the improvement and development of credible HEIs in recent years in the continent, still many countries have lagging behind and unable to establish effective accreditation systems in their higher education systems. The accreditation systems seem that they are at their infant stage, and confronted by many challenges. As argued earlier, internal factors such as the countries' socio-political systems and external factors like foreign influence of international standards and emergency of new development in HEIs shaped the structures and policy reform. Besides, they also strongly shaped, influenced and determined the effectiveness of HE accreditation systems in Africa.

From the analysis made on the higher education accreditation systems' origins, structures and challenges in African HEIs, accreditation systems have no enough capacity to ensure, improve and monitor quality of HEIs as expected. The constraints are lack of autonomy of the agencies that hindered their self-governance, and the agencies' strong dependence on international financial assistance as well as government funding which led the systems to be politicized and lack innovativeness. The study has revealed that, top down governance approach, high political interference, undeveloped systems accompanied by problems of poor resourcing and system's capacity are challenged the capacity of the systems and significantly contributing to ineffectiveness of accreditation systems as well as the incapacity to revitalize quality decline of HEIs in Africa.

To have the effective QA and accreditation systems that can significantly contributed to quality control and improvement in all types of HEIs, which are also quite significant in building high quality graduates of the nation, policies and reforms are needed to established legitimate and credible systems that have autonomy in their decision making and transparency, consider broad participation of stakeholders, and with adequate financial and qualified human capacity in the systems. If the systems have no capacity to control and improve the quality of HEIs, it may not be in a position to have quality graduates in the countries' in all sectors of economy. As it has been argued

earlier, autonomy, qualified human capacity and adequate funding are the most important contributor to the legitimacy and credibility as well as effectiveness of accreditation systems. Any failure in this regard, among other things, could be due to lack of autonomy of agencies and lack of sufficient funding, as well as qualified human resources, which in turn lead to the ineffectiveness of accreditation systems as well as low quality HEIs.

It is an important point to note that investing in the development of sound quality assurance and accreditation systems policies is necessary but not sufficient to enhance improving institutional quality. Good policies need to be supported by a sound resource base if they are to yield the desired effects. The existence of sound and relevant quality assurance and accreditation policies, the deployment of reasonable levels of resources towards supporting effectiveness of accreditation systems is key factors explaining that could bring a change in insuring high quality in HEIs. Sound quality assurance and accreditation systems in improving quality of HEIs, where resources are inadequate and capacity is limited should be developed organically, taking into account where the institution is, setting appropriate standards to be attained, and planning for continuous development through net working with national, regional and international stakeholders and partners.

## **VII. Recommendations**

The establishments of strong and independent national and regional quality assurance institutions are a *sine qua non* in the effort of African nations to develop universities capable of comparing with the best in the world. Quality assurance, accreditation and improvements are the salt of university education. They give value to degrees, certificates and awards and drive the capacity of the university to contribute to the generation of knowledge for national economic, political and technological development, and the advancement of society. The 21st century is the knowledge age and top quality African universities have the essential wand to transform Africa from a raw material-dependent economy to a knowledge-driven economy. Also, it is such universities that will transform the current fears of globalization in Africa to opportunities and fortunes. Cognizant of the above, the following policy options have been forwarded.

- ❑ In the countries with no QA agencies in place in African, should be encouraged to set up QA agencies in their HEIs
- ❑ Individual country's HE proclamations should give room for the establishment of other independent and private professional QA agencies to share quality controlling burden in HEIs.
- ❑ Not only private HEIs, but also all types HEIs need proper accreditation and external quality control mechanism including public
- ❑ Accreditation systems should be independent of any kind of interference so that their autonomy would be ensured
- ❑ Accreditation agencies' structures should be composed of large corps of professionals from HEIs, government, society, students, employers and professional community who are credible in their fields should be set up
- ❑ There should be strong partnership and cooperation with foreign institution and QA agencies with sound experience and professionalism
- ❑ To integrate the work of national QA agencies and harmonization of HEIs in Africa there should be regional and sub-regional collaboration among QA agencies

## References

- AAU. (2007). *The Quality Assurance Situation and Capacity Building Needs of Higher Education in Africa*. Association of African Universities. Accra, Ghana November, 2007.
- Association of African Universities (AAU), (2009). Meeting on Regional Harmonization of Higher Education for Africa 24th – 26th February, 2009, *Meeting Report, Accra, Ghana*. Retrieved December 26, 2010, from <http://www.ohmeslogistics.com/afriqanbeta/?q=node/17>
- Biratu, T. (2010). *Higher Education Accreditation System in Ethiopia*. The Final Term Paper Revised prepared for project course work at East China Normal University. China, 2010 unpublished

- paper retrieved from Course Discussions board: December, 2010
- Bloom, D. Canning, D., and Chan, K. (2006). *Higher Education and Economic Development in Africa*. Africa Region Human Development Working Paper Series No. 102. Washington, D.C.: The World Bank.
- Freire, A. D. (2009). Swiss Quality Assurance and Accreditation System In *Higher Education: Perspectives & Discussions For South East Asia Seameo Conference, 10-11 August 2009*. Retrieved February 18, 2011 from: [www.vnseameo.org/InternationalConference/.../10\\_Freire\\_Full%20Paper.pdf](http://www.vnseameo.org/InternationalConference/.../10_Freire_Full%20Paper.pdf)
- Hayward, F. M. (2010). Rethinking standards for quality assurance and accreditation thoughts from the field: *Third International Conference on Assessing Quality in Higher Education, 6th – 8th December, 2010*, Lahore – Pakistan.
- Kasozi, A.B.K. (2005). *The development of a strategic plan for higher education in Uganda 2001-5: the interplay of internal and external forces in higher education policy formation in a southern country*. Retrieved on Tuesday 23 November 2010 from [www.nuffic.nl/pdf/os/em/kasozi.pdf](http://www.nuffic.nl/pdf/os/em/kasozi.pdf)
- Lenn, M.P. (2004). *Strengthening World Bank support for quality assurance and Accreditation in Higher Education In East Asia and the Pacific*. February, 2004 Education Sector Unit East Asia and the Pacific Region.
- Martin, M., & Stella, A. (2007). *External quality assurance in higher education: making choices*. Paris: UNESCO: International Institute for Educational Planning (IIEP).
- Materu, P. (2007). *Higher Education Quality Assurance in Sub-Saharan Africa Status, Challenges, Opportunities, and Promising Practice*. World Bank working paper No. 124. Accessed November, 2010 from: [www.educationdev.net/edudev/Docs/Q2.pdf](http://www.educationdev.net/edudev/Docs/Q2.pdf)
- Oyewole, O. (2007). *Developing Quality Assurance Systems in African Universities*. *Association of African Universities Initiatives*. Paper presented at the Quality Assurance in Tertiary Education Conference, Sevres, and Quality in Distance Learning. CHEA Monograph Series, Number 1. <http://www.chea>
- UNESCO. (2006). *Guidelines for Quality Provision in Cross-border Higher Education*. Paris



- Van damme. (2002). *Trends and Models in International Quality Assurance and Accreditation in Higher Education in Relation to Trade in Education Service*. OECD/US Forum on Trade in Educational Services 23-24 May 2002 Washington, D.C. USA.
- World Bank. (2006). Higher Education Quality Assurance in Africa: Status, Challenges, Opportunities and Promising Practice. *Africa Region Human Development: World Bank Synthesis Report*, September 2006.



**CHAPTER TWENTY SEVEN**

**CURRICULUM STANDARDS FOR QUALITY  
BASIC EDUCATION**

**THE CASE OF NAMIBIA**

*Mzingisi Gqwede, Deputy Director, Ministry of Education, Namibia*

**I. Introduction**

Before independence in 1990, the colonial government had segregated Namibia education system into eleven ethnic educational administrations. After independence the eleven ethnic educational authorities were combined into one Ministry of Education with the current thirteen regional offices. However, even though the regions operated under the umbrella of a unified Ministry of Education there were still different curriculum delivery approaches followed in the different regions, hence the differences in performance and educational achievement varied from region to region. The quality of curriculum delivery also varied also from school to school due to historical, social and geographical causes. Consequently, there was a need to have a uniform approach and policy to level the standards throughout all the schools across the country.

In 2004, the Government of the Republic of Namibia established a comprehensive framework to fundamentally transform the Namibian political and economic landscape in areas such as land reform, housing, the environment, health, education and building an economy that provides equal opportunities for all. It set out the key development challenges for government such as human resource development, job creation, provision of infrastructure, changes in the ownership patterns of the economy and the reduction in income inequality and poverty in the Namibian society. Namibia therefore needed an education system that would be able to rise to the call of *Vision 2030*; an education system that would heighten its contribution to the actualization of *Vision 2030*, and the realization of national development goals.

## **The Establishment of the Education and Training Sector Improvement Programme (ETSIP)**

ETSIP represents the education and training sector's response to the call of Vision 2030. Its key purpose is to substantially enhance the sector's contribution to the attainment of strategic national development goals, and to facilitate the transition to a knowledge based economy. ETSIP is a 15 year strategic plan with the timeframe of 2006 – 2020. It targets improvement of the entire education sector. It aims to articulate education to the Vision 2030 goals. It is premised on a realization that a weak education and training system cannot facilitate the attainment of complex and ambitious development goals. It represents a sustained response of the sector, based on a fifteen-year strategic plan accepted by the Namibian Government in 2005. For ease and feasibility of implementation, ETSIP is phased into three five-year cycles, with the first cycle spanning 2006/07 to 2010/11, which coincides with the Third National Development Plan.

## **II. Development of Curriculum Standards in Namibia**

### **General Overview of Curriculums Standards**

In 2006, a Formal Education Circular of the Ministry of Education, Form. Ed. 3/2006, signed by the Permanent Secretary of the Ministry of Education addressed to the stakeholders in education including all school principals, teachers, and Teachers' Unions marked the launch of the policy on the implementation of *National Standards and Performance Indicators for Schools in Namibia* (Form. Ed. 3/2006). This national policy document was launched by the Minister of Education on 15 March 2006 and this day marked the official commissioning of a national policy in terms of Section 2(1) (a) of the Education Act to be used by all schools in the entire country.

The policy document was developed by the Namibian professionals in the field of education with the assistance of a consultant and other stakeholders. This meant that all schools were now in a position to deliver the same quality curriculum which would be evaluated using the instruments developed for this quality assurance measure.

The schools and teachers were expected to evaluate their own performance through School Self Evaluation (SSE) and Teacher Self

Evaluation (TSE) instruments and the national evaluation teams compiled from professional education officers based in the regions would be assigned to carry out national evaluation responsibilities. Consequently, the formulation, training, and implementation of the policy of National Standards and Performance Indicators for Schools in Namibia, a quality assurance tool, needed constant monitoring and evaluation. Thus, successful implementation of this policy therefore becomes key to improving at least an aspect of ‘improving the quality of education and ensuring excellence of all so that recognized and measurable learning outcomes are achieved by all, especially in literacy, numeracy and essential life skills’ as EFA Goal 6 alluded to.

### **The Structure**

The National Standards and Performance Indicators for schools in Namibia comprises of seven (7) Key Areas of the work of schools. According to MoE (2006b), the work of the schools according to this policy document is the following:

- i. Provision of resources for the school and hostel
- ii. Curriculum and attainment
- iii. The teaching and learning process
- iv. The school as a social unit
- v. Management and leadership of school and hostel
- vi. Links with parents and community
- vii. Links with other schools and hostel.

For each of these key areas a number of Performance Indicators (PI) has been written. There are 29 PIs in total. Each PI deals with a group of themes / aspects – 111 themes.

The PIs are designed to enable grading to be given to the aspect of school work on a four-point scale:

- Level 4: Excellent [Strong in all or almost all themes]
- Level 3: Good [More strengths than weaknesses]
- Level 2: Fair [More weaknesses than strengths]

Level 1: Weak [Extensive weaknesses]

If used, standards would guide the school on following:

- i. what it is aiming to do; how well it is achieving its aims;
- ii. how what is happening measures against a national standard;
- iii. what aspects of the school needs sustenance;
- iv. where effort is needed to keep things at good standard;
- v. what aspects of the school needs improvement;
- vi. what can be done to improve things within existing resources;
- vii. whether or not the action currently undertaken is succeeding;
- viii. what further actions or interventions are planned

An evaluation exercise like this is meaningless if its findings are not reflected in a well-developed: School Development Plan (SDP) with actions to improve the overall quality of education, and a Plan of Action for academic Improvement (PAAI) with actions to improve academic performance. The internal evaluation of the school's own work would also provide the starting point for the work of external evaluators (MoE, 2006b).

### **The National External School Evaluation (NESE)**

The national external school evaluation is conducted by a team of inspectors, subject advisors and school counsellors. The external school evaluation is required for the following:

- i. to provide MoE with feedback on the state of education system as it actually is;
- ii. to enable preparation of the annual report to the Ministry on the state of education;
- iii. to make all participants in the school system aware of the meaning of national standards;
- iv. to strengthen the hand of the principal of a school in leadership and management areas and executing the work of the school as prescribed by the national standards; and,
- v. comparison of the internal audit and that an external team should lead to improvement in the quality of SDP and PAAI (MoE, 2006c)

### **The Advantages of National Standards in Namibia**

The national standards for schools were designed and developed with level 4 (=excellent) school academic performance in mind. The performance indicators, all 30, as well as the 111 themes or aspects under these PIs, are for a well-functioning and a very successful school. All instruments developed for the evaluation of key areas of the work of the school also reflect excellence. The advantages for such design are as follows:

- i. All schools and stakeholders become aware of what and how a successful level 4 school should look like and perform;
- ii. All schools are aware of the kind of teachers, and their commitments to teaching, that are found at a level 4 school;
- iii. All schools are aware of the kind of leadership of principals they should have and principals themselves are aware of how should they run the schools to achieve the level 4 standard;
- iv. At a School Self Evaluation (SSE) meeting where each staff member evaluates the school in all 7 key areas of its functioning, critical issues are discussed until all agree on the final grading for that particular key area;
- v. The School Development Plan (SDP), addressing deficiencies in Key Areas 1, 4–7, and Plan of Action for Academic improvement (PAAI) addressing deficiencies in Key Areas 2 and 3, are drawn up collectively by school management and staff. Responsibilities are assigned accordingly. Therefore, no staff member would be able to say he or she does not know what is happening at school.
- vi. The Classroom Observation Instruments (COIs) are standardized and each teacher is in possession of these documents. When class visits are conducted, a teacher is aware of what will be evaluated and expected of him or her.
- vii. The National External School Evaluation (NESE) visits are not inspection *per se* but a way of validating the schools' own self-evaluation culminating with oral feedback indicating strengths, weaknesses and recommendations for improvement. A written report is received at a later stage. Follow-up visits

aim to assess the extent of the implementation of the recommendations.

It should however be mentioned that despite the advantages listed above there also have been strong debates about the national standards being not sensitive to the contexts of the different schools in a country such as Namibia. The majority of schools are in rural areas and have challenging contexts. According to these debates, how can anyone expect advantaged urban schools to perform the same as schools in disadvantaged and challenging contexts in rural schools? The counter argument has been how low should the country lower the quality of its basic education to further disadvantage the already disadvantaged children in already challenging contexts? The argument goes further to suggest that, in fact, even more resources should be devoted to providing quality basic education to improve the lives of these children in the future.

### **Some Implementation Challenges**

The success of the curriculum standards implementation depended on addressing the issues and challenges as soon as these became apparent. Postponing these is tantamount to deferring the quality aspect of basic education which, in the very beginning, was the basis for the development of standards. The issues and challenges are discussed below:

1. *Consultation of stakeholders on development of the standards*  
Although the standards were developed with the input of the school principals as claimed, thus far no principal has claimed involvement in the development of the policy. The researcher was a school principal of a secondary school at the time when the policy came out.
2. *Development of evaluation instruments*  
The indicators contained in the documents are for high-performing with little or no relevance to the contexts of the majority of schools in challenging circumstances in rural schools.
3. *Haphazard distribution of policy documents and instruments:*  
Policy documents were delivered to schools with instruction to



school principals to ensure that each teacher possessed a copy of the document. Few days later, the evaluation instruments were delivered for use at school (e.g. Classroom Observation Instruments (COIs), School Self Evaluation (SSE), Teacher Self Evaluation (TSE), etc., including those which had to be completed and information forwarded to the Regional Office of Education such as SSE index indicating the average scoring of each of the 7 Key Areas.

4. *Absence of training of school principals*

There was no training on the side of the school principals regarding the policy and benefits of national standards with regard to school improvement in teaching and learning as well student achievement being the ultimate goal.

5. *Inability to cope with multiple national standards documents*

School principals and teachers complain that they are unable to cope with the volumes of documents including numerous files developed with the policy on national standards. They have been informed that the complaint would be addressed following the first review of the implementation of the policy in 2011. This means that if they had this problem in 2006 it would receive attention only in 2011.

6. *Training of Regional Education Officials at the national level*

At national level, the school inspectors, the education officers specializing in subject advice (Advisory Teachers) and the Regional School Counsellors were trained on conducting the National External School Evaluation meant to validate the results obtained by the school through its school self-evaluation activity or exercise. The education officials trained at national level, especially the school inspectors, are required to *cascade* the training down to their respective schools, that is, train the school principals who, in turn, provide training to the staff and community members through school boards.

7. *Monitoring of the cascading training*

No monitoring mechanism was developed to ensure accountability in this area. School evaluation visits revealed that some school principals never received any training

whatsoever on national standards' implementation.

8. *National External School Evaluation by Regional Education Officials*

Based on the school needs of the schools to be visited, an education official was required to book off six weeks of his/her regional activities in order to attend a trimester national external school evaluation in other regions excluding his/her own. Furthermore, as part of the policy, there should be follow-up visits to the schools which were visited by the national external school evaluation program to determine the extent of the implementation of the recommendations of the NESE report and to provide the necessary support to the school.

9. *Disgruntled Regional Education Directors*

As much as the regional directors appreciated the evaluation activity:

- (a) Absence of the education officers from the duty stations posed serious constraints on the implementation of the regional activities.
- (b) Based on the experience and skills gained from participating in the national external school evaluation exercise, one would expect the schools in the jurisdiction of the school inspectors to improve academic performance as these officials were equipped and well versed with what was expected of a school to improve. On the contrary, some of their schools continued to perform poorly hence the regional directors became more and agitated with the absence of these officials from their planned regional activities including visiting schools as part of their job description.

10. *Copy-and-paste of NESE reports*

When the education officials tasked with school evaluation became familiar and comfortable with external school evaluation, it became uncommon to realize that the reports produced from the school evaluations were becoming more of a cut-and-paste activity.

11. *Less than half of the total schools visited by NESE showed improvement in national examinations*

In terms of academic improvement in performance of the schools visited by the national external school evaluators, only 40 percent of schools showed improvement in national examination results.

### **III. Standards as Benchmarks for Quality Education**

National standards can be used as indicator of quality education but the success of their implementation heavily relies on the professional competencies of teachers as well as the level of commitment on the part of both teachers and students. Without the quality teacher in class, no matter how politically correct the goal of the national standards can be, neither school improvement nor student achievement can be achieved. In essence they are merely statements of intent to improve the quality of education unless their implementation is followed by action and commitment from both teachers and students. Teachers need to be committed to teach and to pay attention to the progress and success of each and every student as these are important to the achievement of the goals of national standards.

#### **The Literature**

Some of the various reasons advanced by literature regarding why standards can be used as benchmarks of quality of basic education are as follows:

- a) According to the World Bank (2005:37), the best indicator of the quality of an education system is students' learning achievement. With the assistance of the World Bank, Namibia developed ETSIP and the national standards and performance indicators are but one of the strategies to improve the quality of basic education under this program.
- b) Standards-driven reform, according to Christopher and Scott (1997), include developing and administering assessments to measure student achievement, creating consequences to hold students and schools accountable for student achievement, and linking teacher education and professional development to the standards. Standards and reforms linked to them offer an opportunity to raise student achievement and improve educational equity across races and social classes.

c) The tenets of standards-based reform or curriculum-driven agendas identified by Swanson and Stevenson (2002) should be benchmarked by all education systems. They are:

- i. *Content Standards* - detailed statements of the high-quality academic material students should learn;
- ii. *Performance Standards* - established levels of mastery students should be able to demonstrate over this content;
- iii. *Aligned Assessments* - testing of students to measure their level of performance on the specified content, especially using performance based methods.

d) Finally, Flood and Lapp (1993) offered some suggestions on how to work and manage national standards: *Keep the goals in sight*. With all the debate over issues related to national standards, it is easy to lose sight of the purposes of national standards and how they will help achieve educational excellence.

### **The Case of Namibia**

- a) The National External School Evaluation (NESE) process has indicated improvement in national examinations in schools as a result of the implementation of recommendations for improvement by this team of evaluators. The results have not been as good as one would have expected. Possibly, the stakeholders might have expected drastic change in results within a short span of time.
- b) There is nothing wrong about going back to the drawing board in order to address various implementation issues and challenges that are in the way of realizing and appreciating the impact and progress already made in the process of implementing the national standards. Resolving obstacles and challenges need immediate attention before the country can fully realize the impact of national standards on quality of basic education.

- c) To obtain the desired academic achievement that tally with the huge financial investment into education through curriculum-based standards there need to be a top-down mind-set change - from policy makers to implementers of the national standards policy on the ground.
- d) The commitment, motivation, will power and attitudes of the implementers on the ground should improve regarding national standards otherwise the noble objective of improving quality of basic education will become futile.

It should always be back of our minds that we are educators and education officials, because of the learner at a school. According to UNESCO EFA Global Monitoring Report (2005:41), higher student achievement keeps students in school longer, which leads, among other things, to higher completion rates at all levels of schooling, hence the provision of the quality of education or lack thereof, determines the life the students will lead in the future.

#### **IV. Recommendations**

There is no doubt that the policy of National Standards and Performance Indicators for Schools in Namibia is the policy that will improve the quality of basic education for all. However, based on the issues and challenges highlighted above, recommendations for improvement are hereby made as follows:

- a) Training or re-training the implementers of the national standards on the ground and holding them accountable for the implementation and results.
- b) Increase support by immediate supervisors (inspectors) of the implementers (school principals) in their effort to implement the standards.
- c) If the bone of contention by the regional directors is their education officials attending 100% to the regional activities for improved performance, then the Ministry should let it be. But the Ministry should demand results now that the dust has settled.

- d) The establishment of a quality assurance office tasked with the evaluation of national standards as the national external school evaluation teams did would be an option. If any program has to be successful, there should be monitoring and evaluation.
- e) There is ample research into curriculum-based standards and therefore as Namibia is still in the infant stages of the implementation process, the research can still inform the progress and success of the process.
- f) The University of Namibia (UNAM), other tertiary institutions, as well as the Research, Information and Publicity (RIP) office of the Ministry' Programmes and Quality Assurance (PQA) directorate must also play a significant role in research to inform the policy decision making process. Many countries such as China, United State, United Kingdom, etc., work hand in hand with universities on research that eventually informs the decisions on education policies. Besides, the Ministry of Education subsidizes these institutions and there a percentage of the subsidy should go into research that will benefit the Ministry of Education and the nation at large.

## **V. Conclusion**

Several empirical evidences published recently duly recognize the need for the renewed functions of schools and call for a teacher with a variety of skills. Admittedly, ability to teach continues to be the fundamental requirement for the teaching profession, but the nature of this ability needs to be transformed considerably. A teacher is no longer visualized as someone who just “gives lessons” but someone who has the ability and capacity to organize, observe, stimulate, assess and foster the various learning processes in children and to take remedial measures whenever necessary.

Without the quality teacher in class, no matter how politically correct the goal of the national standards can be, neither school improvement nor student achievement are achievable. National standards can be used as benchmarks of quality education but the success of their implementation heavily relies on the professional competencies of teachers as well as the level of commitment on the part of both teachers and students. In essence they are merely statements of intent to improve the quality of education unless their

implementation is followed by action and commitment from both teachers and students. Therefore, it is necessary to reshape teacher-related policies by investing in research-based continuing teacher development in term of professional knowledge, skill and practices.

## References

- Christopher T Cross and Scott Joftus. (1997). *Are academic standards a threat or an opportunity? National Association of Secondary School Principals (NAASP) Bulletin*, 81, pp.12-20.
- Flood, J. and Lapp, D. (1993). *Clearing the confusion: A closer look at national goals and standards. The Reading Teacher*, 47(1), pp.58 – 61
- Government of the Republic of Namibia. (2001). “Act No. 16 of 2001: Education Act” Windhoek: Government Gazette.
- Ministry of Education. (2006). *Education and Training Sector Improvement Program (ETSIP)*. Windhoek, Namibia, Retrieved from: C:\Users\User\Desktop\Education and Training Sector Improvement Programme (ETSIP) Planning for a Learning Nation PROGRAMME DOCUMENT.htm
- Ministry of Education. (2006). *National External School Evaluation (NESE) Framework*. Windhoek: Ministry of Education.
- Ministry of Education. (2006). *Policy of National Standards and Performance Indicators for Schools in Namibia*. Windhoek: Ministry of Education.
- Swanson B.C. and Stevenson D.L. (2002). *Standards-Based Reform in Practice: Evidence on State Policy and Classroom Instruction from the NAEP State Assessments*. Educational Evaluation and Policy Analysis, 24(1), pp.1-27.
- UNESCO. (2000). *The Dakar Framework for Action, Education for All: Meeting our Collective Commitments*. World Education Forum Dakar, Senegal. 26–28 April 2000. Paris, UNESCO <http://unesdoc.unesco.org/images/0012/001211/121147e.pdf>
- UNESCO. (2004). *EFA global monitoring report 2005: the quality imperative*. Paris: UNESCO.
- World Bank. (2005). *Namibia Human Capital and Knowledge Development for Economic Growth with Equity*. Washington D.C., World Bank.





## CHAPTER TWENTY EIGHT

### **THERE ARE NO BAD STUDENTS, ONLY BAD TEACHERS BUT WE MUST NEVER FORGET THERE ARE TWO SIDES TO LIFE'S COIN**

*Greg Rudd, Chairman, GPR Asia, Australia*

#### **I. Introduction**

Students have many teachers during their lives; people, institutions, experiences and the environments within which they operate. They are pulled in many directions. In the end they make their own choices and live by the consequences of those choices.

*The coin of life is made up of good and bad. It has a light side and a dark side. We have to teach the bad as well as the good to get well rounded students.*

As a teacher in my 20's I always believed that students were not empty glasses that teachers had to fill. I believed the glasses were already full with potential. It was a teachers job to help students understand that potential and to help create pathways to opportunity by giving students social and intellectual tools and skills to utilize that potential. Back in those days I thought if you gave all students a broad and comprehensive education eventually everyone would see reason and the world could be a more peaceful and productive place. But life is not that simple. Ego, ambition, status, greed, the pursuit of power, the desire for material (brand) possessions where things end up owning you rather than you own them, and for some, the lack of basic essentials are all potent driving forces that can take a sound education in disparate directions.

Let's look at ourselves. Writers reflect humanity in novels and movies. They are mirrors to our souls. If every movie production company in the world from today started to make movies where all characters got along, saw reason, worked for the betterment of the broader community, were kind and generous to each other, forgave rather than sought revenge, saw the positive rather than the negative,

were never judgmental, then Hollywood and Bollywood and all the other production houses around the world would go broke.

It's in our DNA that we like action and conflict. We thrive on difference. We can only take so much peace and harmony before we get bored. We need tension in our lives to give that edge to life. As educators our job is to guide that tension into being a creative tension rather than a destructive tension. We make sense of life through contrast. We pit those contrasts against each other. The strong against the weak and vice versa, the poor striving to be rich, the ugly wanting to be beautiful, the good fighting the bad, constant efforts to turn failure into success, dealing with the differences between East and West, black and white, Christian and Muslim, Asia and non-Asia. We appreciate love by contrasting it with hate. Sorrow is deeper when remembered against the joy that preceded it.

## **II. Let's understand ourselves**

As people, we are flawed. This is easily proved. When as a species we are entertained by movies, novels and video games where members of our own kind serial kill, mutilate, torture, zombie eat, vampire suck, betray, revenge kill, be jealous of, ridicule and epic slaughter each other in historic and futuristic battles then you know finding peace and harmony in our human lives is not an easy task.

Can you imagine a herd of giraffes having epic battles of slaughter while other giraffes cheer for blood from the side-lines? Most other species stick together as a herd, not slaughter each other. The human herd is different. We have bigger brains.

We live in a hypocritical world where history is written by the victors so dubious in its veracity. Young people should know that. We should not try and hide it. Just because something is written in a book or can be googled doesn't make it true. It's nothing to be embarrassed about. There is nothing wrong with admitting there are degrees of truth, degrees of right and wrong, and different perspectives to be view from as we search for a positive balance in life. How can you sculptor a civilized future for ourselves or a student if we don't understand the clay from which we're derived? This world of ours is full of promise yet full of danger. Humanity has the capacity to improve the world or damage or destroy it. That both excites and scares us, a bit like standing on the edge of a cliff, for some the temptation to jump themselves or push others is as alluring as the view.

As educators we are the eternal optimists, and so we should be. Pity those who think life on earth is hell and only by killing those different to us will it lead to a paradise in some afterlife. That is sad, and lacking in humour. Humour is vital in our endeavours to keep life in balance. Humour drains tension like a safety valve drains steam from a boiler. People without humour are in danger of exploding.

So what does the internationalization of education mean? Obviously it means different things to different people because each person's circumstances are different. If I'm viewing from Maslow's pinnacle of self-actualization then my brain is in a different place to those still struggling at the bottom for food and shelter. I don't want to talk about specific curricula content. I don't want to talk about arithmetic, formulas and grammar. Content is the trees in the forest. I want to talk about the forest, the values that underpin the content, because to appreciate and live by values it doesn't matter where you sit on Maslow's hierarchy. Over the years I've worked in many situations where every content box has been ticked for appropriate criteria and process but still no worthwhile outcome has been achieved. Life has taught me that just because you've been to class and learnt knowledge to help you make money; it doesn't mean that you're educated.

We all live in four worlds, at least. First there is the public world where we largely say what we're expected to say according to our jobs, our beliefs, our instructions from those that have power over us. Second, there is our private world where we share some of our fears, concerns, doubts, secrets, suspicions, aspirations only with people we think we can trust. Third there is our inner world which is just us. We talk to ourselves, keep secrets to ourselves, keep core beliefs to ourselves, keep ultra hopes, fears and aspirations to ourselves because we fear the consequences of trusting anyone. Fourth there is the world of the unexpected and unexplained. It is the world full of fate, accident, luck, both good and bad, and unintended consequences, events we have little hope of controlling but events that can change our lives dramatically. It is the interaction and tensions between these four worlds that makes us who we are, gives us depth of character, and guides our future.

People are complex. Life is complex. That's why we and it are interesting. That complexity creates good literature and can also create good people. It can also create bad people if they are not guided in the right direction, given positive value settings by good teachers.

### **III. Let's go back to internationalization of education**

As a kid growing up on a dairy farm I enjoyed the isolation. Me, my horse, the cows, the dog, the silence, my imagination, the land and open spaces. I had to adjust when visitors came, I had to adjust when extended family came, I had to adjust when I first went to town and city, I had to adjust when I went to boarding school, I had to adjust when I went to teachers college, I had to adjust when I hitch-hiked around Australia living high and low, I had to adjust when lecturing at university, adjust when administering theatre and ballet companies, adjust when being a Chief of Staff in federal politics, adjust running my own business, adjust travelling overseas, adjust working in China and Asia, adjust when parents died, adjust when children were born, adjust when I married a black African woman from Botswana ... and so it goes on.

The internationalization of education is no more than that, adjusting to changing circumstances, adjusting as the world shrinks around us, adjusting to maintain a creative and positive tension within all that we do. But unlike me who largely learnt as he went along, learning more from failures than successes, modern international education is about creating and giving skills to young people in advance to help them adjust to their continually changing circumstances while limiting unnecessary damage. It's all about trying to give them a positive advantage in advance, without having to go through the nasty and messy mistakes caused by avoidable experience. We all don't have to all burn our hands to know the stove is hot.

Internationalization of education is about helping today's youth to survive and prosper socially, commercially, spiritually, emotionally and intellectually in a world that has become claustrophobically close and threateningly competitive as a result of economic globalization and the opening of the global mind via the internet. This is not easy. You can be taught how to pass an exam but still miss the point of the lesson. However, young people are better at embracing change. Older people largely fear it, in a world where comforting certainty is forever decreasing while uncomfortable uncertainty is forever increasing.

#### IV. How do we keep peace in this evolving world?

At the beginning of the Zhenguan Era in China, Emperor Taizong (599-649) of the Tang dynasty decreed, after many years of bloodshed, that a book of wisdom on the Essentials of Governing should be compiled. Taizong ordered his advisors to comb through all the historical records on government and distil the most important lessons related to (1) cultivation of oneself, (2) managing the family properly, (3) governing a country successfully, and (4) bringing peace and equality to the world.

The result was a collection, titled *Qunshu Zhiyao*, carefully drawn from 14,000 books and 89,000 scrolls of ancient writings—500,000 words in all. When summarized, the art of good governing, being a good person, managing family responsibilities and bringing peace to the world came down to two simple words, “sincerity and respect.”

Sincerity and respect are the values behind everything we try to teach in our schools. But it is a lesson never fully learnt, in youth or adult life. That doesn't mean we shouldn't aspire. As I have said, humanity is flawed, we know that. That flaw can bring out the best or worst in us, depending on who our teachers are, depending on our own moral fibre. Education is more than giving us the skills to get a job. It is about giving us the skills to create a job if we can't get a job. It is about keeping ourselves happy, because unless we are happy, it's very hard to keep those around us happy. Happiness is about values and state of mind, it is not being taught that one plus one equals two. Happiness makes us resilient through tough times; it helps us enjoy life through good times.

In Australia I looked at some primary and high schools that have embraced the internationalization of education over the past 20 years. At Jindalee Primary School where 36% of students are from non-Australian backgrounds covering 30 countries the values of confidence, cooperation, consideration, conscientiousness, courtesy and courage are the core principles.

At Sunnybank Primary School they focus on inclusiveness and harmony where the H in harmony means 'help others', the A in harmony means 'ask for assistance', the R in harmony means 'respect differences', the M in harmony means 'make friends', the O in harmony means 'offer alternatives', the N in harmony means 'nice words', and the Y in harmony means 'your choice'... bearing in mind

that for every choice we make in life there are consequences, some good, some bad, but we must own them and not lay the blame at someone else's feet.

At Trinity Beach Primary school there are 47 different cultures represented. The School Code of Conduct has three major expectations of all students: Be safe, be respectful, be a learner.

I have written newspaper articles in Australia where I talk about these good and worthwhile values we try to instil in our youth. Yet when today's Australian youth go to our national or state parliaments they see adult politicians behaving the way they are told not to behave in their classrooms. They see different sides of politics yelling and shouting at each other. They see political leaders ridiculing each other, being sarcastic, making snide comments, knifing each other in the back, constantly breaking the rules of the Parliament, In short, acting childish.

## **V. Maybe some adults need to be re-taught by their students?**

Education is life-long. It stops when we stop. As children we play games and live in our imagination where anything seems possible. As adults we learn the world is not as nice as we were led to believe. We become cunning, manipulative, jaded, defensive, hard and hypocritical in order to provide for ourselves and our families.

We hide our adult angst from our children under the justification of protecting the innocence of youth. Youth want rules and surety. Youth want black and white, right and wrong, 'goodies' and 'badies', right triumphing over wrong. They want simplicity in a complex world. Youth think adults know what they're doing. They think we adults know how the world works. We try not to disillusion them. We teach them facts and figures: that is safe. We teach values and aspirations: that is safe. We teach them rules: that is safe. We teach them what life should be like. Adulthood comes fast enough for them so let children enjoy their youth before the weight of adult responsibility sets heavily on their shoulders.

All done for the right reasons, we are naturally protective, but this does not prepare students for the world of today. In fact, it creates a disadvantage and sets them up for unnecessary emotional/spiritual/intellectual and physical hardship as they begin to see the world for what it really is, a world without Santa Claus, a world

without the tooth fairy, a world where good does not always overcome evil, a world full of grey and compromise rather than a world full of rules that everyone obeys to create a perfect society.

I've always believed children are far more resilient than we give them credit. I think they are far more adaptable. Young people soak up languages like a sponge if exposed and taught early. I also believe young people can understand the complex layers of life at an early age if we teach them. Forewarned is forearmed. To me it is no coincidence that teenagers tend to rebel against parents and authority, inwardly or outwardly, during their high school or early teenage years. Up until then they tend to idolize parents. Parents can do no wrong. That's hard for us parents to live up to when we know it's not true. Teachers can do no wrong because they're teachers and teachers know everything. Policemen can do no wrong because they're policeman, they protect us. Governments can do no wrong because governments run the country and to run the country you have to be even smarter than teachers.

Then the penny drops. Inconsistencies arise, hypocrisy is outed, and adults have been hiding parts of the truth, only telling part of the story, only explaining one side of the coin of life, avoiding revealing the dark side of humanity.

Prior to television, the insidious internet, social networking and spur-of-the-moment tweeting, adults could hide the full truth of life better from their children. But today, kids have caught on to the hard realities of life at a much earlier age. They understand that adults are struggling to make the world work. It's hard. Adults don't have all the answers as can be seen from two world wars, numerous spot wars, depressions, recessions, slave trade, drug trade, arms trade and an overall lack of understanding of how the current financial system actually works.

Life is complex. The systems we've created to try and put order into this complex life are even more complex and fallible within themselves. In my view we should tell our young adults this from as earlier age. There is nothing to be ashamed about by saying we don't have all the answers. We tell them that math is hard, that science is hard, that grammar is hard... why not tell them that life is hard? Not in a dark, we-are-doomed, kind of way, but simply telling the truth, educating them. Lying to people on serious issues never works over time. Eventually they always find out and think less of you accordingly.

In Australia the rationale for the internationalization of education is grounded in the belief that the acquisition of global awareness and the understanding of the diversity of cultures and societies is an integral part of education. It's essential to development of global citizenship and equipping students to work in growing international, multicultural and multilingual environments. All this is true, but it is more than simply exchanging facts, figures, beliefs, customs and cultures. It is understanding the values behind all of this, understanding our strengths and weaknesses, understanding our human frailties, and determining which values are acceptable and which values are not acceptable if we are to move in a more positive direction toward a somewhat harmonious global village.

## **VI. Internationalization of education is about helping people make good choices.**

I've met senior politicians and business leaders from around the world who think a third world war is inevitable. Why hide this from our youth? They are going to bear the consequences. Let them have a say. War should be part of all curricula. Not just remembering dates of battles and each country lauding their heroes. But what was the purpose of the war? How did it start? Could it have been avoided? What kind of personality wants war? Who benefits from war? Who doesn't? What do we learn from war? Is another world war inevitable? What role does religion play in war? How does geopolitics work? How is war and economic growth related? How can we stop another war? How is another war likely to start? Will it be a cyber-war? Will it be a nuclear war? Will it be a traditional war? Will there be distinct winners and losers or will we all just be losers?

Whether it be war, politics, commerce or community there are common questions that should be part of every curriculum. How are leaders created? How do they acquire power? How do they retain power? Why do people follow them? How is their power transitioned or taken away without causing chaos? If we are ignorant of the answers of these questions then we relinquish control of our futures. And as always in life, there are no simple answers, so we should stop pretending to our youth there are. Give our youth more responsibility to see if they can rise to the occasion.

As we jostle closer and closer together in our constricting global village these issues need to be discussed and explored. They need to



be seen as important as understanding accounting, law and science. We have to understand ourselves. We have to adapt and learn to enjoy each other's company and humour. If we can't laugh together we can't live together. We cannot allow the expanding negative tension created by our differences to grow into uncontrollable explosions of hate and violence. We have to learn to continually adapt.

In the state of Queensland in Australia alone we have students from over 90 countries. We are learning from them and they are learning from us. That is a good thing. But we can't just focus on the bright side of how the world works. We have to equip our youth to understand and control the dark side as well. Not "do" the dark side but understand it, control it, and guard against it.

We don't do this in a judgmental way as is currently happening in many parts of the world, where multiculturalism in Europe for example is seen by some as an abject failure. People always like to blame the obvious when times get tough. They go for the most blatant difference, the lowest common denominator, the thing that required the least amount of intellectual thought. We need to educate our youth against jumping to these stereotype conclusions as a root cause of human problems. We need to educate our youth to think more, not just jump through academic hoops to make money while unquestioningly carrying out instructions.

To me it's as important to understand how corruption works and what drives corruption as to understand what drives the banking system and how international banking works. Corruption was always hushed over during my education except to say it was bad. But why does it exist? How did it start? Why does it continue? How can you reduce it? How can you stop it? Should it be totally stopped or is it necessary to oil the wheel of commerce? Do some families rely on minor corruption to make ends meet? Is corruption in some countries not seen as corruption at all but as a normal way of doing business?

## **VII. Summary**

*If we are true educators we need to discuss these things. We cannot simply focus on one side of the coin. We simply cannot live in the light when the dark is all around us.*

Last year I was invited to join an Asian group of 12 differing religions from various countries to visit the Pope in the Vatican. It was a motley

crew led by a Chinese Buddhist Master. I was invited because I neither believe nor disbelieve, so in the Buddhist Master's mind, I completed the circle. I simply believe in doing what I think is right and treating people the way I like to be treated... with sincerity and respect.

The highlight of the week as 30 disparate religious leaders travelled together in bus and plane was not meeting the Pope. He gave a public world speech, not a private world speech, certainly not an inner world speech, and I'm not even sure he believes in fate or luck. The highlight of the week was watching these 30 travellers with different beliefs constantly talking to each other, searching for commonalities in their texts and teachings, trying to understand differences, laughing and joking as they got to know each other, and desperately trying to find practical ways to make the world a better place. This is what internationalization of education is all about. Meeting as strangers, parting as friends: despite our differences.

## **CHAPTER TWENTY NINE**

### **DISASTER REDUCTION CONSIDERATIONS TO ENHANCE RURAL SUSTAINABILITY**

*Garry de la Pomerai, Specialist in Disaster Prevention Education, UK*

One term that I didn't see within the various titles is a globally accepted terminology 'Education for Sustainable Development', I suspect that by the time we reach the Dujiangyan Forum this year 2011, many will have included it within their presentations, and I hope so. Although the various sessions are addressing the same topics, but from slightly different directions: Quality Education, Inclusive Human development, rural transformation, Internationalization, and improved Equity and Quality. Quality seems to reoccur and so does Development. Quality development requires sustainability; sustainable growth, both economically and socially; and sustainability of life itself, survivability and resilience; and this means resilience to all aspect of daily life, from health care to economic diversity to materialistic retainment. If any one of these three fails to be resilient than the others are doomed to become unsustainable in the long run.

Before we address the role of Disaster Risk Reduction in the file of modern rural life, lets us reflect on what is incorporated within 'normal' rural life.

Starting with our understanding of 'economics'; Standards of living expectations is a key factor. We compare to others, with what they have; with what we actually need to survive and for our families to survive; and to what we aspire to. This is the driving force behind any economy. The consequences are that with the younger generations temptation is too easy to be drawn away from their rural communities towards the brighter lights of urban life, of regeneration zones and foreign countries.

We have expectations within the family; the ability to care for each other, the ability to provide for the children, for the wife or elderly parents and extended family or the sick within the family. But this needs to be balanced with the capacity to provide. One can only expect so much produce from a field and no more. Capacities maybe

restricted, because resources are limited and restricting growth, limiting the desired and necessary development. The economic factors are also often governed by physical abilities; that is personal abilities; logistical capability; and ability of the market to receive or supply. These are key considerations when we address Disaster Reduction and resilience to adverse factors. Then we have the social ingredients essential for quality development; access to hands on training and to education; access to community collaborations and the exchange of knowledge; the maintaining of the family structure; and the encouragement of empowerment. All of these aspects of quality development have to be taken into account and enhanced when administering resilience strategies.

One of the major challenges within any rural environment which is surrounded by a quickly expanding economic development within urban areas is to retain the next generation. With better communication, easier access to the media and more efficient transport systems, the youth are tempted by better education facilities, easier and more lucrative jobs, with a better life style with wider social activity choices. In the long term this cycle of temptation will potentially deplete the rural environments of its workforce, of its guardians, of its management so vital if cities and towns are to be supplied with the much needed produce.

Within Europe, giant supermarkets force the prices of produce down at the farmers market and encourage industrial style agriculture; automated, engulfing the family small-holding farms. This in turn forces the smaller farms to diversify away from pure agriculture and branch out into alternative farming produce and tourism and rural crafts, all of which is changing the face or the rural environment. The question is, is this a bad thing? In Europe, where all receive college education and offered boundless opportunities to explore ideas and are taught diversification and land management, the smaller rural population remains strong. But populations generally are smaller over the same land mass. Within Asia this is not so. Consequently, can the rural environment afford to become industrialised with high tech automation or rely purely upon tourism and craft shops. What will happen to the rural communities so desperate to maintain a living with this melting pot of challenges for sustainability?

Communities ought to be allowed to determined destiny, be empowered to develop and diversify and compete; but equally the youth need to be given a sense of belonging, encouragement and support to stay or return after college. And that's not answered by

continual subsidies or hand outs. It must be supported by strategic plans for the countryside, investment into infrastructure on similar grounds to that of urban communities and industrial zones. China has recognised this during its recovery from the Sichuan earthquake, investing in new homes and crop stores, improved roads and market places supported by better power supplies, water and drainage. In turn this allows children to travel more efficiently to new schools and colleges further from their communities without the need to relocate. It encourages them to maintain the rural life a part of their life. Farmers can move produce more efficiently and further to better markets. Broader cooperatives can be formed; technology and machinery can be shared.

But should all of this really have to await a disaster; to first cripple a region and community before investment is forthcoming? Maybe we should learn from the recovery regions, see what can be done and then decide what needs to be done elsewhere to create the sought after sustainability and rural economic and social development of the countryside.

Why do I paint this picture? Primarily because it demonstrates the very knife edge existence, the fragile fabric, that exists within the 21<sup>st</sup> century countryside. So much attention is paid to megacities and urban frameworks purely for the potential size of ‘consequence’ and not necessarily for the quality of life or indeed the importance to wider society and its need for food. When it comes to Disaster Risk Reduction, resilience, preparedness, continuity plans, early warnings, building codes and compliance with building codes, the rural communities are the poor sister to society. Ill prepared, neglected or indeed forgotten and vulnerable until after the event. I believe they deserve equal consideration, because they maintain our most precious resource for the future: food and mother earth’s resilience to man, the tree and plants absorbing our toxic wastes and city pollutions.

Later this week I attend the 2011 World Cities Scientific Development Forum in Chengdu, where I shall contribute by speaking and intervening about urban resilience. But this will not be to the detriment of the rural community. Both face challenges in this changing world, with global environmental change which.... Yes, it includes climate change but equally industrial expansion, waste management and urbanisation. Both rural and urban must respect each other needs and the affect they have on each other by making demands upon governments.

So with such a strong movement within the cities globally, now is the time to also design resilience into the rural environments, plan and protect for the future through conservation and investment and diversification. Invest in the quality education of potential farmers, support technology that enhances their environment and society, but not replaces it.

We need to provide incentives to the next generation to stay within the countryside, not make them feel isolated and forgotten, neglected and not cared about, because that simply encourages, in fact forces migration and that then results in increased redundant land, which is then by default absorbed into the urban sprawl, with desperately needed housing, with sporadic industry chasing cheap land for alternative usage unsuited to the long term sustainability and character of the countryside. Disaster Risk Reduction in this context inherits different challenges with equal potential to devastate the rural economy and coexistence with the demands of urban society. It doesn't necessarily need an earthquake or flood or cyclone to bring the demise of a rural region, in fact those affected by such disasters are more often than not rebuilt stronger, with real potential for sustainability and a positive future, in comparison to those forgotten, neglected, under invested in regions, which slowly but surely are absorbed and dismantled permanently.

It is down to this generation to make the stand, you the policy makers, the decision makers, the investors for tomorrow's generations; it's down to you to recognise the needs of your rural environments, to realise that without key strategic planning now, tomorrow will become too late; the opportunity to create this sought after sustainability, rural transformation through accessible quality education and the need for critical investment.....will all be too late!

Having said that, if we are to master the needs of the rural community, does it not seem bizarre that we omit the consequence of natural hazards, forget to include DR into ESD or within Quality Education, Inclusive Human Development, Rural Transformation, Internationalization, Improved Equity and Quality? Maybe by the time I present this paper, some of you will have addressed and recognised this need.

There is a wide range of actions that can be and should be considered within any economic support structure to ensure resilience. From understanding the perception of risk, raising awareness of hazards, understanding consequences and realising opportunities to mitigate, minimise and prepare for such hazards. It is not only natural

hazards that pose a threat; industrial accidents, especially by unauthorised activities in isolated rural land areas, pollution and poor waste management and ground contamination, all equally adversely affect irrigation, crops and livestock. Longer term hazards include drought, inundation and build-up of nitrates or bleaching of the ground. These tend to creep up upon you until it's too late or the costs become unmanageable.

I Suspect when you read this papers title “Disaster Reduction Considerations to Enhance Rural Sustainability” you expected to discuss only floods, landslides, cyclones, wild fires and earthquakes. Well yes, they need to be included because what is the point of addressing all that we have discussed already, only to have it all wash away, collapse in a heap, get buried or burnt. Or indeed have all of the children die within their classrooms; whilst eager to learn, but without structural protection that they deserve. It is they who are the hope for the future; they deserve protecting. Equally if we are to invest into the rural economy, then that must include developing resilience and continuity plans for the farmers and their crops. In these changing times indigenous knowledge, local knowledge needs to be enhanced, to be reviewed, reassessed and developed, taking into account our forever changing environment and technology.

Often it is the consequence of changes upon the land; long distances away, that potentially have adverse effects upon the unprepared, the unaware, and the ignorant. Assessments must review the wider field, the longer term, the holistic viewpoint.

Also less frequent events must be considered. An earthquake, even if calculated as a remote opportunity, can be prepared for with some basic life enhancing preparedness. Structurally safe new and retrofitted buildings are a basic start and entitlement, from schools and health centres and homes. This needs to be supported by DR education and preparedness training with capacity build programs to teach masons and carpenters. Relatively simple community training can minimise the effect of a range of potential natural or manmade disasters. Land and services can also be designed to be resilient. Location of buildings and of crop storage and of livestock housing can be carefully considered. Access routes can be widened and foliage and trees alongside cleared avoiding blockage to main and local access routes. Irrigation and waterways can be cleared, widened or deepened or slowed. Hillsides liable to landslide or mud slide can be terraced,

strengthened or planted. Some communities or individual buildings or homesteads maybe need to consider relocating locally.

In conclusion, in reality strategies for Disaster Reduction towards Natural hazards have been developed and tested. It is simply down to implementation and the political will. The biggest challenge is to understand the potential erosion of the rural physical environment and the social diminishment within the rural society. Only then can we expect to properly address and comprehend how to use 'Education for Rural Transformation in Inclusive Development.'



## CHAPTER THIRTY

### REVISIT THE AIM OF EDUCATION FROM AN EDUCATION FOR INTERNATIONAL UNDERSTANDING (EIU) PERSPECTIVE

*Seunghwan Lee, Director, UNESCO Asia-Pacific Centre of Education  
for International Understanding, Republic of Korea*

#### I. Introduction

Today, I wish to reflect on some important educational problems in light of aims of education, viewed from EIU perspective. The role of education is emphasized more than ever before. It is not exaggerating to call it an era of education. Educational input is rapidly increasing and educational industries are flourishing. On the other hand, educational problems, both conventional and emerging ones, are also becoming more serious.

In this opportunity, I would like to call to revisit the aims of education. Why have we not solved many problems related to education, and what are the aims – the objectives – of education. I would like us all to look back and seek the underlying reasons behind education problems, and what can we do to overcome those problems. We can have different ideas on the aim of education depending on different times and space. In this regard, I wish to refer to the Article 26 of the ‘Universal Declaration of Human Rights’ (UDHR) which, was approved and universally agreed in 1945.

#### *Article 26*

*1. Everyone has the right to education. Education shall be free, at least in the elementary and fundamental stages. Elementary education shall be compulsory. Technical and professional education shall be made generally available and higher education shall be equally accessible to all on the basis of merit.*

*2. Education shall be directed to the full development of the human personality and to the strengthening of respect*

*for human rights and fundamental freedoms. It shall promote understanding, tolerance and friendship among all nations, racial or religious groups, and shall further the activities of the United Nations for the maintenance of peace.*

In over 60 years since the adoption of UDHR in 1945, world education has made such rapid expansion that its impact on our present and future has become so immense. It is the reality of today's world that education has become much emphasized, although on the other hand it has also come with many problems that affect our society. It is my point that to overcome such educational problems, either conventional or emerging ones, we need to reflect on the aims of education. With this in mind, I would like to note on three major problems that need our special attention, as follow: The first one is the most fundamental issue related with the right to education. The second and third ones are coming from recent rapid expansion of education, particularly in the level of higher education. 1) Over 900 million people in the world are still illiterate. 2) The exponential increase of education cost. 3) The crisis of education in general; the crisis of teachers in particular.

## **II. Still more than 900 million are not able to read and write.**

Notwithstanding repeated recognition of the importance of the right to education accompanied by international commitments to literacy for all, 72 million children remain out of school and 759 million adults continue to be illiterate. Concern for adult illiteracy seems to have weakened continuously. In addition, the deadline for Universal Primary Education (UPE) has been repeatedly postponed to 1980, 1990, 2000 and 2015.

The provision of literacy education was given top priority. But with the limited resources, there has been much debate over whether to prioritize expansion of primary education or the adult literacy program. With fluctuations in priorities, we have experienced new concepts that have a substantial impact on the provision of educational rights. In the 1960's UNESCO invented the concept of functional literacy, which refers to the acquisition of knowledge and skills in reading and writing that enable one to engage effectively in daily

social activities (i.e. activities for personal development). In the 1970's, the concept of lifelong education was created, and it later contributed to the birth of the concept of basic learning needs. All of these new concepts had a negative impact on the provision of universal primary education and adult literacy, as their advent only resulted in the continuous extension of the definition of literacy and the minimum level of education needed in a rapidly changing society. This in turn contributed to the dilution of limited resources for provision of basic universal literacy.

The concept of lifelong education was created by the International Commission on the Development of Education (ICDE) in 1972. With the recognition that linear expansion of the existing static school system is not effective to overcome the new challenges arising from a rapidly changing society, a more flexible, continuous, and learning-centred view of education was suggested. Lifelong learning ensures that citizens are provided with learning opportunities at all ages and in numerous contexts: at work, at home, and through leisure activities, not just through formal channels such as school. With this new view of education centred on the learner, the responsibility of education comes to be shared by both government and individuals. The ICDE report advocates the importance of pre-school education, stressing that "the importance of early childhood in the later development of aptitudes and personality is beyond doubt, as modern psychophysiology and ordinary observation testify." Nonetheless, current educational systems very frequently operate as if this phase of life were of no concern to them. The concept of lifelong education and lifelong learning contributed to the extension of education needed in rapidly changing societies in terms of level and age group as well as in terms of formality. Consequently it blurred the boundaries of the minimum level of education to be provided by the government by introducing a vague concept of basic learning needs.

In the process of extending the minimum required level of education, it seems that the linkage between education and development has been highly prioritized. With the launching of the UN Development Decade in the 1960's, development became the priority goal in the world, and education was downgraded to a tool of development. In this kind of "development-addicted" environment, it would be very difficult to find a proper place to discuss the aim of education seriously.

### **III. The cost for education has skyrocketed over the years**

Although I cannot find the exact figures for the total increase of educational cost during the past several decades, the figure on absolute numbers of students in tertiary education tells us about the exponential expansion of higher education all over the world during the past three decades. In 1970, we had less than 25 million students in tertiary education, but it increased more than 150 million in 2007. This rate of increase also applies to secondary students. Early childhood education is also not an exception. This rapid expansion of education in general, except for adult education, has brought about rapid increase of educational cost. Household's educational burden, in particular, seems to have reached an unbearable point. Recently we can see that student demonstration against rapid increase of tuition fees have become widespread.

What makes this matter become the most critical social issue lies in the gloomy fact that, even if they do succeed to graduate, many of them remain unemployed. Some say that a few exceptionally talented graduates could feed great numbers of people, but if more education means to produce more talented human resources with more efficiency, more education cannot solve the issue of increasing unemployment. Generally more efficiency means more production with less resource, particularly with less human resources. I do not think that education focusing on more competition and efficiency could contribute to the lessening of the unemployment issue.

### **IV. Crisis of education in general; crisis of teacher in particular.**

As more and better educational means emerge to produce more competitive people to have better jobs, secondary education becomes a place to prepare entering exams for better university, and no more than this. Private educational institutions of various kinds compete with the public schools to reach this aim. In many cases, private ones win and we begin to hear about the increasing number of class collapses in public schools. The number of drop-out also is skyrocketing in many countries. More students are not satisfied with the quality of education, and a large number of students are also being

damaged by bullying acts.

Teachers are also required to be more competitive. Digitalization of society has asked teachers to change their roles compared to the past when teachers could enjoy the privilege of some exclusive information for teaching. As students can access information more easily, the teacher's role becomes more difficult. These days, teachers are asked to change and to upgrade themselves everywhere in the world. Innovation of education and innovation of teachers have become popular catch phrases.

### **Three intensifying world problems**

1. Widening gap between rich and poor
2. Reoccurring of international financial crisis and economic downturn
3. Intensified conflicts between different religions, cultures and diverse groups among and within countries

These three problems tell us what kind of education we need for a better future. Why do we strive to learn? What are the ultimate aims of education? The answers to these questions could derive from our vision for the future. What kind of world, nation, and society do we wish to build?

I am confident that all human beings wish for a more peaceful, just, and sustainable live. It is my hope that in this difficult time we can remember that as global citizens, we must also engage in cooperation with our neighbours, have respect for diversity, and move steadfastly forward in a world with equal human rights and peace for all. It is time for a re-emphasis on the importance of Education for International Understanding (EIU) and a reconsideration of its aims.

## **V. Re-emphasis of Education for International Understanding (EIU)**

What concerns me is that education today seems to only focus on preparing our young generation to get into good universities and get good paying jobs. As our education becomes more market-oriented with the strong tide of globalization, such trends of degradation of education become more accelerated. It seems that while everyone is

getting busy to become more competitive, discussion on the aim of education disappeared briskly.

However as we previously discussed, despite the rapid expansion of education, the right to education is denied for some 900 million children, the education budget for each household has come to an unbearable level and number of student dropouts are increasing rapidly. We know that education is not a panacea for all major problems of our society. But the current mainstream education that is obsessed with more competition does not seem to contribute in alleviating such problems and in making our world more peaceful and sustainable.

EIU was the most representative and popular educational program of UNESCO in the early stages of UNESCO. It reflected the spirit of the UNESCO Constitution which says that “since wars begin in the minds of men, it is in the minds of men that the defences of peace must be constructed”.

However during the 1970's-1980's, due to the alteration in UNESCO priority toward development and the increasing conflict between East and West, EIU began to lose support. After the collapse of the Berlin Wall, EIU was revived in the name of '*Education for Peace, Human Rights, Tolerance and Democracy*'. With the designation of UNESCO as the lead agency for the Decade of ESD (2005-14), EIU's position was belittled under the more ambiguous terminology of 'quality education'. I believe that EIU aptly reflects the aim of education manifested in the UDHR. It is now a proper time for us to revisit the aim of education.

If I am asked to explain briefly what EIU is, I wish to say that EIU has three key elements. Firstly, we need to respect “the other” in building a culture of peace. The diversity of different identities, cultures and natures is an invaluable heritage to be preserved for generations. Secondly, we need to abide by universal values and norms such as human rights and environmental ethics to celebrate “commonness” among peoples. These are the two wheels that are vital to successful and productive international understanding. Thirdly when we have conflicts between various values and diverse cultures, we should learn to solve it peaceful and in non-violent ways. I think these are the essence of EIU.

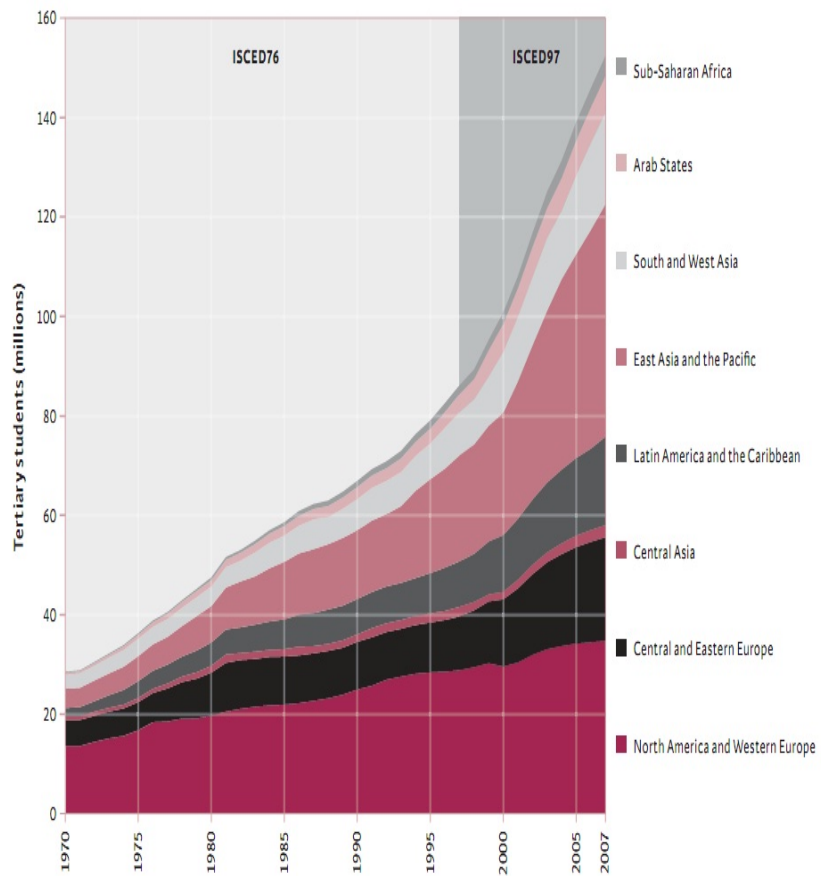
## VI. Closing

As the director of APCEIU, I have the pleasure to note the increasing support for EIU from the Asia Pacific region and beyond UNESCO. To take a few examples, we extended our regional and sub-regional workshops from twice to four times annually. Our UNESCO Fellowship program has also tripled recently. Request for learning materials including our CD Game SEAJOURNEY, SangSaeng Magazine, and other publications from our institution are increasing very rapidly.

I am pleased to announce our appreciation for the new priority placed by DG of UNESCO, Mme. Irina Bokova. She has made it clear that UNESCO should go back to the spirit of its constitution, emphasizing the importance of “new humanism”, a “culture of peace”, and “global citizen education”, among others. In the 36 C/5 Draft Programme and the budget for 2012-2013, we find a strong message on quality education and EIU.

*Quality education should empower learners to become responsible and active citizens who can contribute to a culture of peace and non-violence in the spirit of a ‘new humanism’. Major programme I will therefore give increased emphasis to promoting education for values, democratic citizenship, human rights, tolerance and dialogue for reconciliation and peace.*

**Appendix 1 Tertiary Enrolment by Region, 1970 to 2007**



Note: Data before 1998 are classified according to ISCED76. Some programmes classified as post-secondary non-tertiary education with ISCED97 were included in tertiary education using ISCED76. To provide consistent time series, tertiary enrolment data after 1998 include post-secondary non-tertiary education. This accounts for more than 100,000 students in Australia, Canada, Kazakhstan, Morocco and the United States. Therefore, enrolment presented here exceeds regional figures based on ISCED97 by approximately 1 percentage point.

Source: UNESCO Institute for Statistics, Time Series Data, Table 1.



**CHAPTER THIRTY ONE**  
**TO AMALGAMATE CHINESE-FOREIGN**  
**CULTURES IN**  
**OPEN INSTITUTIONAL EDUCATION**

*Jian Tian, Chengdu Shishi High School, China*

**I. Introduction**

Renowned as the first education institution sponsored by local authorities, Shishi High School in Chengdu of Sichuan was established by Wen Dang the Viceroy appointed to prefecture of this province around 141 BC; the last years of the Western Han Dynasty when Emperor Jing was on the throne. Despite the successions of dynasties from the Western and Eastern Han (206 B.C.-220), through the Three Kingdoms' period and epochs of Tang, Song, Yuan and Ming to Qing, Shishi School has persevered in its educational orientation uninterruptedly at the same location under varied appellations.

Having witnessed our nations' rises and falls for more than 2150 years, the initial Wen Dang's school survived the ages of both turmoil and prosperity and eventually evolved into the present day Shishi High School, which has so far branched out into two districts, i.e. Wenmiao and Beihu, together counting up to 5000 enrolment and more than 300 faculty and staff. Shishi High School, awarded as one of the first national-level model high schools, has continually fostered large numbers of assets with international consciousness admitted to higher education. Among whom the seven academicians of Chinese Academies of Sciences and Engineering are the most distinguished. However, we never cease seeking to explore and research into better school-operation patterns which I'd like to mention a few below.

Under the leadership of Chengdu Municipal Committee and Government and the Municipal Education Bureau, especially since the establishment of the Foreign Affairs Office, Shishi High School has been sustaining the concept of not only striving to carry forward Chinese traditions, but also attempting to bridge Chinese-foreign cultures through a global perspective. Apart from that, we fulfil the belief that a school to take its education to a new height, it could only

do so with excellent and talented students, the dedication of teachers, high class efficiency, feasible assessment mechanism, and a collaborative and organized administrative team. In addition, we set the consistent objectives of zero accident and injury on campus, quality education centring on academic excellence, the durative development of both teachers and students, a higher domestic and even international reputation. Lastly and practically, we seek to maintain the liveliness of our traditions through inheriting, to act in accordance with apparent objectives, to excel with regard to an outstanding education performance, to enhance the working efficiency by sound administration, to advance under the guidance of cultural construction, and to display the viability by innovation. In a word, to adhere to an open route for our school's prospect as well as to boost the educational internationalization, we shall put our hearts and souls into carrying Shishi's fine tradition and continue with its legendary development.

## **II. New Training Modes**

Under the guidance of thoughts of globalization, equalization and modernization, Shishi High School steadily introduces new training modes so as to provide the students with a wide variety of access to higher education at home and abroad.

### **Overseas mode**

To parallel the globalization of Chengdu's education, 10-15% of our top students apply yearly for the world TOP 100 universities such as Harvard and Cambridge universities.

### **Domestic mode**

Around 30% students are enrolled in national top universities through the Independent University Entrance Exam System or the Artistic and Sports Specialty Recruitment. The remaining 60% students take the College Entrance Exams, among whom 70% are admitted by Tier 1 universities and 100% students are accepted by regular colleges.

As the concrete embodiment of globalization of education, Shishi High School, acting to its Educational Evaluation System, recognizes and inspires the teachers who prepare their students for the top-ranking universities around the world and rationally separates the students according to their scholar performance and talents so as to

strengthen their competitiveness.

In a local environment of educational globalization, Shishi High School has for many years been expanding the channel of its academic development and carrying out the strategy of Open Education. We are not just open to our counterparts in and out of the province, but also to schools, institutions and organizations at home and abroad.

Our school lays much stress on extending its academic development from senior high years further down to junior middle and even primary schools years. In order to realize the seamless transition from the 9-year compulsory years of education through the senior high years and be a practical model of the integration of elementary education, we have established cooperative partnerships with some key primary and junior middle schools.

Our school also attaches great importance to the mutual contact with top-ranking universities. We seek for the resources and support from higher education through well-rounded cooperation in terms of artistic and sports specialty, autonomous enrolments, the faculty training, scientific innovation and invention and educational research projects.

Shishi High School carries on with the strategy of Open Education and stays in active contact with the outside. First, we verify our ways of operation both in and out of the Group of Shishi; we recruit students from Chengdu as well as other excellent students from other parts of Sichuan; we strive to develop the influence of our school both at home and abroad. Second, the Shishi Pulpit regularly takes place, where well-known experts and scholars of different fields are invited to give lectures, which makes it an international pulpit of no boundaries and beyond racism, cultivates the students' sense of science and innovation and helps build grand ambition and pursuit of excellence in them. Third, we founded Shishi alumni and an alumni board from which the school can receive proposals and raises money for school funds. We have already alumni branches in most cities and we are further organizing ones in Hong Kong, Macau, the States, Canada and Australia. Fourth, we uphold a mutual open mode. Apart from exchanging teachers and students with our sister schools in the States, we have continued to introduce international classes and courses. Specifically we are planning to start another well-organized and reputable project to go hand in hand with what we already have, the A-level project. Moreover, in cooperation with Bixby High School of America, our school initiated the first Chinese promotion project abroad in Sichuan, the Confucius Classroom. We are also connected

with Canada's Toronto University in a Greenpath Program and similarly, we also send several students to Nanyang Technological University, Singapore, Hong Kong University and the Chinese University of Hong Kong.

Backed by the Municipal Education Bureau and Foreign Affairs Department, Shishi High school was one of the first schools taking on an open strategy in 1984. Since then we have successively been in sister-school relationship with Snohomish High School, Broken Arrow High School, Oklahoma, Bixby High School of Oklahoma, USA, Kumano High School of Hiroshima in Japan, Shinan High School of Kofu, Yamanashi in Japan, Adenauer High School of Bonn, Germany and the Chinese High of Singapore. In 2006, Shishi High School became one of the first Chinese International Promotion High Schools, authorized by the Office of Chinese Language Council International. Every year, Shishi High School undertakes a large number of tasks issued by the Office, like receiving foreign guests and teaching Chinese as a foreign language. In 2008, Shishi High School worked on the project of General Certificate of Education Advanced Level and became the only A-level school and test centre designated by CIE (Cambridge International Examinations) expanding international exchanges. Not only it expands the scope of international exchanges, it also enhances the level of it. In 2002, the first preparatory class for going to America and Canada in Sichuan came into being. Up to now, seven batches of graduates have been admitted to world-renowned universities both in America and Canada and successfully received their visas. Almost half of them were awarded scholarship. Other preparatory classes also built bridges for those who want to study abroad with great success.

### **III. Verified Method of Management**

In the course of boosting a more globalized way of running our school, we incessantly expanded the channel providing us a verified method of management and so as to extend our capacity of developing an international way of education.

#### **To establish an overall organization**

To adapt to the environment of Chengdu's globalization of education, our school bases the Centre of International Projects and Overseas Study Service Centre and the International Exchange Centre on the

International Department, cater for the demands from international alliances in education, students' overseas studies and foreign exchanges.

**To explore through scientific research**

The projects Practice and Research on Bilingual Education in Senior High School and Cultivating the Students' Cross-culture Capacity on the Platform of Chinese-foreign Cooperation in Running School were separately listed as the educational research projects for "Tenth Five-year Plan" and "Eleventh Five-year Plan", thus hugely improving the quality and cultural role of the International Department of our school.

**To sustain the operation with international projects**

Since the foundation of the Shishi High School International Department, we have introduced the projects such as, the General Certificate of Education Advanced Level, the preparatory courses for American and Canadian universities and the Chinese-New Zealand Experimental Class, providing the students more approaches to further education and the projects are well accepted.

**To dredge the channel of education**

In classes, we renew the structure of the stereotypical curriculum and have offered Bilingual Classes, Foreign Teachers Classes, A-level Courses and Chinese-New Zealand Cooperative Courses and they together make it possible for the students to experience the cross-cultural activities and to have a close contact with the world. Since the Reform of New Curriculum, the globalized courses are included in the school-based courses and will surely embrace a promising development. In after-school activities, we sponsored the Model United Nations on campus and the students represented our province to participate in a national contest and won many awards. Our school has also held the Model World Expo and English Drama Week etc. where the teachers and students alike broadened their horizons and enrich their global understanding.

Shishi High School has successively introduced international courses in cooperation with the States, Canada, New Zealand, England, Australia and Germany and today such courses link our school with all the continents with the exception of Africa. Every year Shishi High School undertakes a large number of tasks issued by Hanban such as receiving foreign guests, teaching Chinese as a foreign language and composing the Chinese language and cultural textbooks, which

pragmatically enhances the mutual understanding with outside world and helps to promote the Chinese civilization.

We send teachers and students on missions for a two-way cultural interaction with foreign sister-schools. Various performances and communications have been made by visiting groups such as guests from Hokkaido, professors from Waseda University, baseball coaches from Denmark, orchestras from Austria, and Jazz Band of Roosevelt High School from Washington State, USA, etc. Varied lectures and speeches have been given by outstanding authors and scholars from Taiwan and USA. Over the recent decade, Shishi High School has received and accommodated more than 2,000 visitors from the USA, Britain, France, Germany, Australia, Japan, Canada, Belgium, Korea, Vietnam, Thailand, India, Hong Kong, Macao, and Taiwan and recently we received UNESCO officials. Around 600 students and teachers have been abroad on different exchange programs during the past three years, to name but a few; the students choir members performed in the Golden Hall of Vienna, our school girls basketball team visited America and the school orchestra performed for the Chinese diplomatic envoys abroad. During the past twenty years, we formed sister-school relation with American high schools and maintained an exchange of students and teachers who live and go to school with host families and also provide board and lodging for the American students to come.

Under the guidance and supervision of the Chengdu Municipal Education Department, Shishi High School persists on the internationalization in school administration and is now featured as an Exterior Oriented school.

An international institutional mode of education has already taken its original shape and to make it distinguishable from other modes. The Shishi International Department is a functional section belonging to the school administration and the Director of the Department is assigned within our school. Furthermore, all the cooperative courses are under the direct guidance of Educational Administrative Division and tutors are appointed from the teachers group. The assisting involvement of the consultation companies to fulfil the projects guarantees the quality of the education and to the largest extent averts the possible issues from outsourcing the international projects to the companies.

A school-based curriculum system has taken on a global feature. On the one hand, our school keeps introducing international curriculum from abroad; on the other hand, we provide courses on

calligraphy, paper cutting, Chinese arts, Taiji and Chinese martial arts, history and geography of Sichuan, Confucianism and Taoism and Chinese culture for the exchange students coming to our school. Moreover, we have compiled three volumes of textbooks for the Confucius class in the sister schools.

#### **IV. Conclusion**

A prospect of two-way communication in a global institutional mode has been achieved, which implies that we not only learn lessons from advanced cultures from foreign countries but also propagates the Chinese civilization across the boundaries. We not only introduce courses and curriculum from abroad but we also design selective language courses for our sister schools. We not only send teachers and students overseas but also receive the visits from opposite sides. Furthermore, we not only have short-term exchange programs but also we foster students with an international sense to study overseas. The author of “Megatrends”, John Nesbitt has also, many times, paid visits to our school.

The support of Chengdu Municipal Education Department and the guidance and supervision of Office of Chinese language council, the provincial and municipal Foreign Affairs Departments and the Foreign Affairs Bureau of Municipal Education Department have made it possible for our school to achieve the many exploits in the international institutional education. In the years ahead, we shall incessantly strive to make Shishi High School an internationalized elementary education role-model in Chengdu.





## APPENDIX

### LIST OF PARTICIPANTS

#### International Participants

**Abdalla**, Alsiddig. Teaching Assistant, University of Khartoum, Sudan

**Abetu**, Kefyalew Waktole Human Resource Development Coordinator, Wollega University, Ministry of Education, Ethiopia

**Ahmed**, Manzoor. Senior Advisor, BRAC University, Institute of Educational Development, Bangladesh, email: amahmed40@yahoo.com

**Ali**, Habibu Dadi. Tutorial Assistant, University of Dodoma, Tanzania

**Ayalew**, Habtamu Reta. Assistant Lecturer, Axum University, Ethiopia

**Babiker**, Amir. Teaching Assistant, University of Khartoum, Sudan

**Bungu**, Lance Samuel Munyaradzi. Teacher, Fraderick Mabamba Secondary School, Zimbabwe

**Cavanagh**, Darol. Professor, Charles Darwin University, Australia, email: darolcavanagh@bigpond.com

**Chinapah**, Vinayagum. Head, Institute of International Education, Stockholm University Sweden, email: vinayagum.chinapah@interped.su.se

**Chu**, Shiu Kee. Former Representative of UNESCO Hanoi Office, email: chu\_shiukee@yahoo.com

**Elsunni**, Hesham. Teaching Assistant, University of Khartoum, Sudan

**Endris**, Awol. Program Officer, UNESCO International Institute for Capacity Building in Africa (IICBA), email: eawol@unesco-iicba.org

**Gqwede**, Mzingisi. Deputy Director, Ministry of Education, Namibia

**Kashea**, Mweneni Martha. Science & Technology Officer, Ministry of Education, Namibia

**Kayombo**, Joel Jonathan. Tutorial Assistant, Dar Es Salaam

University College of Education, Tanzania

**Khan**, Qutub Former Senior Program Specialist, UNESCO Asia and the Pacific Principal Office, email: qutubkhan2009@gmail.com

**Kigozi**, Edward. Center coordinating Tutor, Ministry of Education, Uganda

**Kutsch**, Gerhard. Senior Educational Specialist, France, email: gerwyn@neuf.fr

**Luwangula**, Ismail. Education Officer, Wanyange Girl's School, Uganda

**Mhlanga**, Tiwirirai Pearl. Student, Africa University, Zimbabwe

**Mnindwa**, Titoga Titose. Principal Education Officer, Skills of Development, Botsvoana Government, Ministry of Education, Botswana

**Molefe**, Joyce. Principal Education Officer, Directorate of Public Service Management, Ministry of Education, Botswana

**Mucangando**, Emmanuel. Special Program Expert, Ministry of Education, Rwanda

**Nandala**, Milton Wotunya Chris. Teacher, Ministry of Education, Uganda

**Panigrahi**, Sudarsan C. Professor and Head, Department of Education, Faculty of Education and Psychology, M.S. University of Baroda, Vadodara, India, email: panigrahi24@rediffmail.com

**de la Pomerai**, Garry. Specialist in Disaster Prevention Education, email: gdpsaraid@aol.com

**Pushpanadham**, Karanam. Associate Professor, M.S. University of Baroda, Vadodara, India, email: pushpanadham@gmail.com

**Rudd**, Greg. Chairman, GPR Asia, Australia, email: grudd@gpr-asia.com

**Sacramente**, Ravai. Teacher, Ministry of Education Madamombe High School, Zimbabwe

**Shaw**, Greg. Senior Educational Specialist, Charles Darwin University, Australia, email: greg.shaw@cdu.edu.au

**Lee**, Seunghwan. Director UNESCO Asia-Pacific Centre of Education for International Understanding, email: shlee@unescoapceiu.org

**Zhao**, Shangwu. Senior Lecturer, Institute of International Education, Stockholm University, Sweden, Email: shangwu.zhao@interped.su.se

**Sima**, Biratu Tollessa. Faculty Member, Debre Birhan University, Ethiopia

**Sujatha**, Kalimili. Head, Department of Comparative Education and International Cooperation, National University of Educational Planning and Administration, New Delhi, India, email: sujakalimili@yahoo.com

**Vollmann**, Wolfgang. Former Coordinator of EFA, UNESCO Headquarters, email: w.vollmann@yahoo.fr

**Zhang**, Jiaying. Doctoral Student, Institute of International Education, Stockholm University, Sweden, email: jia-ying.zhang@interped.su.se

## **National Participants**

**Cheng**, Fengchun. Principal of High School Attached to Beijing Normal University

**Cui**, Changhong. Deputy Director of Chengdu Education Bureau

**Diao**, Ruicheng. Director-General, Education Bureau of Xindu District

**Dong**, Qi. Executive Vice President, Beijing Normal University; Director of INRULED email: dongqi@inruled.org

**Du**, Yuhong. Professor, Beijing Normal University, Email: dyh@bnu.edu.cn

**Fan**, Luyan. Principal of Beijing Jingshan School

**Fan**, Qi. President of Hangzhou Mingzhu Education Group, email: hzfanqi@sohu.com

**Feng**, Zhongxiang. Director-General, Education Bureau of Xinjin County

**Fu**, Yonglin. Vice Mayor of Chengdu Municipal Government

**Gao**, Xianzhong. Director-General, Education Bureau of Pengzhou City

- Ge**, Honglin. Mayor of Chengdu Municipal Government
- Guo**, Xiaoya. Deputy Inspector, Chengdu Education Bureau
- He**, Huazhang. Chief, Publicity Department of Chengdu Municipal Committee
- Hu**, Defu. Director-General, Education Bureau of Wenjiang District
- Huang**, Li. Director-General, Education Bureau of Qingbaijiang District
- Huang**, Tao. Professor, Centre for Studies in Higher Economics Education, Southwest University of Finance and Economics
- Jia**, Zhaoyu. Director of the Education Bureau of Shuangliu County
- Ke**, Ling. Vice President of Chengdu University
- Lei**, Fumin. Director of the Education Bureau of Wuhou District
- Lei**, Yu. Director of the Educational Bureau of Pujiang County
- Li**, Chuncheng. Secretary of Municipal Committee, Chengdu Municipal Committee
- Li**, Panyao. Secretary of Party Membership Committee, Chengdu Education Bureau
- Li**, Xianggui. Director-General, Education Bureau of Chenghua District
- Li**, Xiaoming. Director of Dujiangyan Educational Bureau
- Li**, Xiaoping. Researcher of Guizhou Institute for Educational Research
- Li**, Xiaoxi. Professor, Beijing Normal University, Email: lxx62205058@263.net
- Li**, Zeya. Director-General, Education Bureau of Qingyang District
- Liu**, Fangjian. Head, Institute of Economics, Southwest University of Finance and Economics
- Liu**, Junlin. Secretary of CPC Dujiangyan Municipal Committee
- Liu**, Li, Dean of Department of Education, Zhejiang International Studies University; Director of Zhejiang Adjunct Centre of INRULED

- Liu**, Yonggong. Professor, China Agricultural University, email: liuyg@cau.edu.cn
- Liu**, Zhihui. Deputy Director-General, Chengdu Education Bureau
- Lu**, Linyue. President, Zhejiang International Studies University
- Lv**, Yi. Director-General, Civil Affairs Bureau of Gaoxin District
- Lv**, Xinwei. Director of Chengdu Education Bureau
- Miao**, Fengchun. UNESCO Program Specialist
- Ning**, Wangcheng. Director-General, Education Bureau of Longquanyi District
- Qi**, Zhiyong. Director, Gansu Institute for Educational Research, email: qzy\_gsier@gsier.com.cn
- Qie**, Zhiwei. Director-General, Education Bureau of Dayi County
- Shi**, Xingguo. Deputy Inspector, Chengdu Education Bureau
- Song**, Guanghui. Director, Teacher Training and Evaluation Centre, Southwest University of Finance and Economics
- Tian**, Jian. Principal of Shishi Middle School
- Tan**, Xuejun. Deputy Director-General, Chengdu Education Bureau
- Tao**, Xiping. President, China National Federation of UNESCO Clubs and Associations
- Tao** Sha. Professor, Institute of Brain and Recognition Science, Beijing Normal University
- Tong**, Ruochun. Deputy Director, Chengdu Municipal People's Congress
- Wang**, Cong. Chief, Publicity Department of Dujiangyan Municipal Committee
- Wang**, Juncheng. Principal of Beijing No.8 Middle School
- Wang**, Lizhong. Deputy Director-General, Chengdu Education Bureau
- Wang**, Qiang. Professor, Nanjing Normal University, email: qwang666@126.com
- Wang**, Wei. Director-General, Education Bureau of Chongzhou City

**Wang, Xiaohui.** Professor, Beijing Normal University, email: wang\_education@sina.com

**Wang, Yun.** Deputy President, Institute of Brain and Recognition Science, Beijing Normal University

**Wang, Zhicheng.** Director of Admission Office, Chengdu Education Bureau

**Wen, Li.** Principal of Yandaojie Primary School, Chengdu

**Wu, Chengwu.** Director-General, Education Bureau of Qionglai City

**Xiao, Desong.** Director-General, Education Bureau of Pi County

**Xu, Hua.** Principal of Luhe High School

**Xiao, Jianshu.** Director-General, Education Bureau of Jinniu District

**Xin, Tao.** Professor, Beijing Normal University, Email: xintao@bnu.edu.cn

**Yan, Daixiong.** Deputy Mayor, Dujiangyan Municipal Government

**Yang, Xiaoying.** Deputy Secretary-General, Chengdu Municipal Government

**Yang, Xingping.** Deputy Chairman, Chengdu Municipal Political Consultative Conference

**Yao, Bianfang.** Professor, Chengdu University

**Yuan, Aijun.** Director of the World Heritage Education Centre for Youth; Former Principal of the Experimental High School Attached to Beijing Normal University

**Zhang, Licheng.** Director-General, Education Bureau of Jintang County

**Zhang, Shousong.** Professor of Zhejiang International Studies University, Executive Deputy Director of Zhejiang Adjunct Centre of INRULED, email: zjhz999@163.com

**Zhang, Xiaojun.** Deputy Secretary-General, Chengdu Municipal Committee

**Zhao, Dewu.** President, Southwestern University of Finance and Economics

**Zhou, Peizhi.** Director of the Education Bureau of Xiacheng District, Hangzhou

**Zhong**, Weichun. Director-General, Education Bureau of Jinjiang District

**Zuo**, Huarong. Deputy Director-General, Chengdu Education Bureau

### **Ministry of Education**

**Gao**, Xuegui. Director of Policy Division Basic Education Department 1, Ministry of Education

**Hao**, Ping. Vice Minister of Education for the People's Republic of China

**Lin**, Shiliang. Deputy Director of Education Supervision Office

**Shi**, Gendong. Executive Director of China National Working Committee for UNESCO Project on Education for Sustainable Development

**Wang**, Dinghua. Deputy Director-General of Department of Basic Education I

### **Chinese National Commission for UNESCO**

**Dong**, Jianhong. Director of Education Division, National Commission of the People's Republic of China for UNESCO

**Du**, Yue. Deputy Secretary-General, National Commission of the People's Republic of China for UNESCO

### **UNESCO**

**Bokova**, Irina. Director-General of UNESCO

**Tang**, Qian. Assistant Director-General for Education, UNESCO, email: q.tang@unesco.org

**Singh**, Abhimanyu. Director and Representative, UNESCO Beijing Office, email: abh.singh@unesco.org

### **ILO**

**Herbert**, Ann. Director, International Labour Organization Office for China and Mongolia, Email: Herbert@ilo.org

## **INRULED**

**Zhou**, Nanzhao. Advisor of UNESCO INRULED; President of UNESCO Asia-Pacific Network for International Education and Value, Education (APNIEVE), email: zhounz@hotmail.com

**Wang**, Li. Deputy Director of UNESCO INRULED, email: wangli666@hotmail.com

**Meng**, Hongwei. Advisor of UNESCO INRULED; International Consultant for Program Monitoring and Evaluation, email: hongwei\_meng@yahoo.com.cn



## INDEX

- accountability, xxiii, 5, 23, 29,  
 99, 119, 310, 394, 395, 406,  
 425
- achievement, xxvii, 5, 6, 7, 13,  
 31, 34, 35, 36, 38, 39, 45, 52,  
 56, 57, 81, 89, 103, 127, 166,  
 183, 186, 188, 189, 191, 193,  
 194, 196, 197, 264, 265, 266,  
 267, 322, 339, 351, 354, 355,  
 363, 378, 385, 396, 419, 425,  
 427, 429, 430
- administration, xxvi, xxvii, 31,  
 36, 41, 51, 86, 87, 109, 199,  
 207, 214, 215, 222, 270, 290,  
 299, 324, 419, 458, 462
- administrator. *See* principal
- administrators, 16, 34, 37, 53,  
 335, 339, 340, 335, 337, 350,  
 403, 407
- adult education, 58, 84, 104,  
 118, 128, 166, 255, 313, 314,  
 369, 384, 385, 452
- adult literacy, 66, 106, 450
- Africa, xvii, xviii, xxix, xxxi,  
 12, 17, 18, 19, 26, 72, 141,  
 215, 219, 222, 226, 227, 349,  
 353, 354, 355, 356, 359, 360,  
 362, 363, 367, 369, 370, 389,  
 390, 391, 392, 393, 397, 398,  
 399, 400, 401, 402, 403, 404,  
 405, 408, 409, 411, 413, 414,  
 415, 416, 417, 461, 465, 466
- agriculture, xxvii, 25, 26, 73,  
 76, 100, 101, 102, 103, 104,  
 105, 111, 113, 115, 116, 141,  
 146, 154, 156, 157, 230, 232,  
 233, 234, 235, 236, 237, 242,  
 249, 253, 254, 256, 257, 259,  
 269, 276, 281, 287, 291, 307,  
 313, 358, 372, 444
- assessment, xxvi, 9, 10, 13, 15,  
 33, 34, 37, 55, 57, 77, 81, 84,  
 109, 110, 150, 166, 170, 171,  
 176, 181, 182, 184, 198, 225,  
 304, 326, 367, 395, 396, 400,  
 404, 406, 458
- attendance, 166, 271, 385
- Australia, xxx, 139, 175, 436,  
 437, 438, 440, 441, 459, 461,  
 462, 465, 466
- balanced development, xiv, xvi,  
 xxii, xxviii, 85, 86, 90, 200,  
 202, 212, 213, 214, 261, 262,  
 267, 319
- Bangladesh, xxiv, 21, 61, 62,  
 63, 64, 65, 66, 68, 137, 139,  
 465
- basic education, xiii, xviii, xxvi,  
 18, 46, 57, 58, 143, 153, 162,  
 165, 168, 181, 182, 364, 368,  
 376, 384, 387, 388, 471
- beneficiaries, 15, 100, 119, 135,  
 181, 313
- Botswana, xxix, 360, 361, 369,  
 370, 392, 401, 436, 466
- boys, 30, 95, 181, 189, 190,  
 195, 291, 292, 361, 366, 377,  
 380, 385
- budget, 31, 79, 82, 184, 212,  
 217, 401, 454, 455
- buildings, 32, 36, 38, 40, 52,  
 86, 159, 185, 202, 281, 349,  
 362, 393, 447
- Canada, 82, 263, 303, 459, 460,  
 461, 462
- capacity building, 58, 73, 76,  
 77, 78, 79, 81, 82, 83, 114,  
 139, 141, 146, 167, 312, 349,

- 404, 411, 415, 465  
chain school, 320, 324  
challenges, xxiii, xxiv, xxvi,  
xxvii, xxix, xxx, 6, 14, 23, 26,  
28, 30, 34, 53, 61, 71, 72, 73,  
75, 76, 82, 83, 102, 103, 136,  
140, 141, 145, 146, 147, 153,  
154, 155, 156, 210, 217, 226,  
242, 278, 336, 343, 353, 355,  
356, 358, 359, 362, 363, 365,  
368, 369, 390, 391, 393, 401,  
402, 403, 408, 410, 411, 412,  
413, 419, 424, 428, 429, 444,  
445, 446, 451  
Chengdu, xiv, xv, xvii, xviii,  
xxi, xxvii, xxxi, 85, 86, 91,  
93, 95, 140, 199, 202, 207,  
209, 211, 212, 213, 214, 240,  
319, 320, 325, 327, 445, 457,  
458, 459, 460, 462, 463  
children, xxiv, xxv, xxviii, 5, 6,  
7, 13, 26, 30, 32, 34, 36, 39,  
40, 41, 43, 50, 51, 57, 71, 73,  
80, 89, 90, 92, 93, 94, 95, 96,  
104, 133, 140, 159, 162, 173,  
174, 189, 205, 206, 219, 231,  
239, 252, 255, 261, 262, 263,  
264, 265, 266, 267, 268, 311,  
332, 333, 337, 339, 340, 351,  
354, 356, 357, 358, 359, 361,  
362, 365, 367, 368, 371, 372,  
375, 376, 377, 378, 379, 384,  
385, 386, 407, 424, 430, 436,  
438, 439, 443, 445, 447, 450,  
454  
China, xiv, xv, xvi, xvii, xxi,  
xxvi, xxvii, xxviii, xxix, xxxi,  
18, 24, 25, 62, 63, 64, 65, 66,  
68, 71, 72, 74, 75, 78, 80, 82,  
83, 84, 92, 93, 95, 100, 102,  
103, 104, 105, 111, 113, 114,  
115, 116, 117, 118, 119, 120,  
121, 126, 128, 129, 136, 137,  
138, 139, 140, 141, 142, 143,  
149, 157, 158, 199, 210, 212,  
215, 217, 220, 224, 225, 226,  
229, 230, 231, 232, 233, 234,  
235, 236, 237, 238, 239, 240,  
241, 243, 244, 245, 246, 247,  
248, 249, 250, 251, 252, 253,  
256, 259, 261, 262, 263, 264,  
265, 267, 268, 339, 341, 347,  
348, 349, 350, 351, 353, 389,  
415, 430, 436, 437, 445, 469,  
471  
civil society, 11, 14, 16, 35,  
120, 129, 140, 279, 280  
class size, 9, 12, 194, 195, 197  
classrooms, 4, 9, 34, 41, 90,  
159, 197, 364, 365, 438, 447  
climate change, 25, 26, 332,  
336, 350, 445  
collaboration, 18, 54, 136, 140,  
142, 164, 175, 281, 348, 391,  
415  
colleges, 73, 199, 206, 223,  
279, 303, 390, 391, 445, 458  
colonial, 215, 419  
communication, 10, 24, 32, 36,  
54, 55, 159, 233, 317, 321,  
324, 325, 326, 347, 350, 351,  
391, 397, 444, 463  
communications, 10, 53, 349,  
462  
communities, xxii, xxiii, xxv,  
15, 21, 22, 23, 26, 32, 34, 46,  
48, 50, 55, 57, 65, 73, 74, 75,  
82, 91, 94, 99, 117, 118, 121,  
122, 125, 126, 127, 128, 129,  
135, 143, 159, 174, 199, 231,  
232, 248, 251, 256, 304, 305,  
312, 356, 358, 364, 372, 377,

- 443, 444, 445, 448
- community, xxv, xxviii, 3, 4, 6, 7, 8, 10, 13, 14, 16, 23, 24, 32, 34, 36, 38, 41, 44, 46, 48, 49, 50, 52, 53, 54, 76, 78, 79, 81, 82, 91, 93, 94, 95, 96, 100, 101, 104, 106, 108, 109, 111, 112, 113, 125, 127, 135, 138, 157, 160, 161, 172, 182, 202, 215, 247, 248, 249, 251, 252, 253, 255, 256, 259, 260, 281, 304, 306, 310, 311, 329, 332, 333, 339, 341, 342, 344, 358, 359, 361, 368, 390, 393, 396, 415, 421, 425, 433, 440, 444, 445, 446, 447
- competition, 11, 74, 75, 87, 91, 280, 325, 347, 452, 454
- completion, xxvii, xxviii, 46, 69, 76, 109, 169, 181, 203, 204, 205, 273, 374, 375, 379, 380, 385, 429
- compulsory education, xv, xvi, 86, 199, 200, 202, 261
- constraints, 10, 72, 73, 75, 219, 357, 402, 413, 426
- construction, 32, 40, 43, 65, 78, 86, 91, 93, 94, 95, 96, 149, 150, 152, 157, 181, 182, 184, 185, 186, 201, 202, 203, 212, 213, 216, 244, 249, 251, 257, 262, 263, 264, 265, 316, 317, 335, 342, 458
- cooperation, xvii, xxix, xxxi, 5, 50, 84, 90, 93, 109, 110, 111, 139, 206, 255, 259, 269, 304, 309, 312, 320, 324, 330, 336, 338, 343, 344, 347, 348, 349, 415, 437, 453, 459, 461, 467
- coordination, xv, xxvii, 5, 84, 111, 200, 224, 249, 279, 280, 324
- costs, 36, 75, 77, 154, 287, 338, 372, 405, 447
- crisis, xxi, xxx, 25, 156, 225, 339, 350, 387, 450, 452, 453
- cultural, xxiv, xxv, xxx, xxxi, 5, 8, 10, 12, 31, 45, 47, 61, 69, 91, 92, 94, 102, 104, 106, 107, 109, 115, 117, 118, 128, 147, 162, 213, 233, 241, 249, 252, 255, 256, 258, 261, 352, 353, 365, 366, 371, 372, 374, 386, 458, 461, 462
- curriculum, xxiv, xxix, xxx, 9, 10, 12, 15, 17, 31, 33, 34, 35, 40, 42, 44, 45, 46, 47, 48, 49, 50, 51, 52, 55, 57, 61, 82, 83, 84, 137, 159, 164, 171, 172, 173, 175, 194, 214, 218, 219, 221, 277, 299, 321, 322, 323, 332, 333, 350, 356, 357, 358, 361, 365, 366, 367, 368, 419, 420, 424, 428, 429, 430, 440, 461, 462, 463
- Dakar Framework for Action, 15, 35, 59, 431
- data, xxiv, 3, 8, 14, 61, 62, 64, 66, 67, 137, 138, 150, 165, 169, 170, 185, 193, 194, 195, 196, 201, 209, 210, 211, 220, 230, 239, 261, 262, 264, 265, 267, 288, 291, 314, 326, 337, 338, 354, 375, 387, 405
- decentralisation, 6, 14, 36, 154, 161, 172, 174, 175
- Delores Report, 350
- democracy, 319, 454
- developing, xxi, xxiii, 120
- developing countries, xxiii, xxiv, 8, 21, 24, 25, 29, 31, 33, 34, 40, 43, 45, 46, 49,

- 51, 52, 56, 62, 71, 72, 82, 83, 92, 103, 110, 133, 136, 139, 145, 157, 159, 161, 164, 168, 171, 172, 216, 217, 219, 220, 225, 230, 263, 278, 291, 313, 320, 324, 348, 349, 351, 355, 359, 374, 383, 386, 390, 392, 394, 396, 397, 404, 408, 427, 447, 460
- development, xxi, xxiv, xxv, xxvi, xxvii, xxviii, xxx, 5, 7, 8, 9, 12, 15, 16, 21, 22, 23, 25, 26, 27, 28, 29, 31, 32, 34, 35, 41, 42, 44, 45, 48, 49, 50, 51, 54, 56, 57, 61, 62, 64, 65, 66, 71, 73, 74, 75, 76, 79, 81, 82, 83, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 96, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 133, 135, 136, 137, 138, 139, 140, 141, 142, 143, 145, 146, 147, 148, 151, 152, 153, 154, 155, 156, 157, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 170, 171, 172, 173, 174, 175, 183, 200, 201, 202, 205, 206, 207, 209, 210, 211, 212, 214, 215, 216, 217, 218, 219, 220, 221, 223, 225, 229, 230, 232, 233, 234, 238, 239, 240, 241, 243, 244, 245, 247, 248, 249, 251, 252, 253, 255, 256, 257, 258, 259, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 276, 277, 278, 279, 280, 281, 282, 283, 304, 306, 307, 308, 309, 311, 313, 319, 320, 323, 327, 339, 342, 348, 349, 351, 355, 357, 358, 362, 363, 365, 366, 368, 369, 373, 374, 379, 385, 387, 390, 391, 392, 396, 397, 402, 403, 404, 407, 410, 411, 413, 414, 416, 419, 420, 424, 427, 431, 440, 443, 444, 445, 449, 451, 454, 458, 459, 461
- distance education, 171, 175, 203
- district, 8, 37, 51, 140, 154, 160, 161, 168, 203, 209, 210, 211, 212, 213, 214, 267, 307, 309, 312, 319, 323, 325, 366, 367
- diversity, 4, 9, 11, 29, 31, 91, 100, 105, 337, 394, 397, 406, 410, 440, 443, 453, 454
- drop-out, 31, 273, 374, 375, 379, 385, 452
- economic, xv, xxx, 12, 30, 74, 75, 84, 94, 102, 115, 118, 128, 146, 149, 151, 158, 207, 225, 227, 230, 232, 233, 238, 242, 243, 244, 245, 261, 280, 310, 351, 371, 373, 386, 414, 416, 431
- economic development, 71, 91, 101, 136, 226, 247, 269, 391
- economy, xxx, 26, 28, 61, 82, 111, 115, 116, 117, 120, 141, 149, 151, 154, 155, 160, 215, 216, 217, 218, 221, 223, 225, 232, 233, 234, 244, 248, 251, 252, 253, 254, 259, 278, 280, 297, 304, 309, 347, 350, 359, 362, 365, 372, 389, 397, 405, 410, 413, 414, 419, 420, 443, 446, 447
- education department, 265, 356, 462, 463
- education development, 74,

- 212, 247, 262, 266
- education institutions, xxx, 82, 106, 111, 113, 257, 348, 350, 366, 368, 389, 390, 392, 397, 399, 400, 404, 407, 408, 409, 411, 412
- EFA, xiii, xvii, xxi, xxii, xxiii, 4, 5, 6, 7, 8, 17, 18, 19, 23, 24, 29, 34, 35, 39, 61, 62, 68, 69, 110, 140, 219, 230, 243, 244, 329, 335, 341, 353, 360, 363, 368, 370, 371, 372, 373, 374, 375, 378, 379, 384, 385, 386, 397, 421, 429, 431, 467
- E-learning, xxvi, 140, 279, 363, 411
- employment, xxiv, xxv, xxviii, xxix, 26, 29, 61, 72, 75, 99, 103, 118, 123, 125, 126, 129, 133, 138, 140, 146, 153, 155, 156, 219, 220, 230, 233, 235, 269, 277, 279, 280, 281, 285, 288, 297, 298, 302, 303, 307, 308, 316, 339, 359, 362
- enrolment, xxiv, 7, 30, 31, 43, 51, 65, 106, 162, 181, 196, 205, 271, 294, 295, 314, 337, 338, 363, 365, 366, 368, 375, 376, 378, 379, 380, 382, 383, 385, 389
- entrepreneurship, 154, 218, 219, 281, 307, 308
- environment, xxi, xxii, xxx, 9, 12, 15, 16, 22, 27, 31, 34, 35, 67, 69, 78, 124, 128, 133, 141, 147, 154, 159, 166, 172, 173, 175, 215, 216, 218, 233, 264, 266, 267, 304, 309, 334, 339, 342, 351, 355, 357, 361, 374, 393, 395, 419, 444, 446, 447, 448, 451, 459, 460
- equipment, 43, 73, 86, 164, 170, 181, 194, 201, 203, 212, 240, 249, 253, 259, 260, 364, 393
- equitable, 49, 100, 103, 105, 133, 153, 175, 212, 222, 230, 340, 364, 384, 407
- equity, xiii, xvii, xxi, xxii, xxiii, xxix, xxx, 3, 4, 8, 22, 23, 28, 35, 36, 39, 43, 104, 105, 118, 129, 138, 141, 210, 211, 221, 222, 227, 231, 280, 282, 319, 335, 343, 357, 359, 371, 373, 374, 375, 378, 385, 386, 387, 427, 431, 443, 446
- Ethiopia, xxix, 349, 354, 355, 360, 363, 364, 365, 369, 370, 392, 398, 399, 400, 401, 402, 405, 411, 412, 415
- Europe, 14, 25, 242, 441, 444
- evaluation, xxvi, xxviii, xxx, 4, 8, 13, 14, 42, 44, 87, 89, 109, 133, 168, 205, 262, 263, 264, 265, 266, 267, 268, 303, 312, 313, 393, 394, 404, 406, 421, 422, 423, 424, 425, 426, 430
- expenditures, 202, 239, 338
- facilities, xxvii, 9, 15, 33, 34, 36, 44, 52, 65, 72, 73, 78, 80, 83, 84, 86, 153, 164, 181, 182, 196, 197, 202, 203, 205, 249, 251, 257, 259, 271, 272, 281, 288, 292, 293, 295, 299, 304, 309, 310, 393, 444
- family, xxiv, 5, 34, 65, 76, 91, 93, 148, 194, 195, 233, 252, 285, 310, 372, 436, 437, 443, 444
- FAO, 28, 141, 142, 235, 243
- farmers, xxiv, xxvii, 72, 74, 75, 76, 80, 81, 82, 83, 84, 102,

- 104, 115, 117, 118, 119, 120,  
122, 125, 127, 234, 241, 242,  
248, 249, 252, 253, 254, 256,  
257, 258, 444, 446, 447
- feedback, xxvii, 165, 169, 324,  
422, 423
- fees, 36, 80, 126, 365, 405, 452
- females, 67, 273, 284, 287, 378,  
382, 383, 385
- fertility, xxiv, 64, 65, 68
- finance, 119, 362, 368
- funding, 42, 43, 163, 173, 277,  
280, 292, 308, 394, 401, 404,  
405, 406, 408, 409, 410, 413,  
414
- GDP, 63, 75, 105, 147, 155,  
160, 232, 239, 372
- gender, xxv, 5, 11, 15, 35, 36,  
48, 61, 67, 189, 195, 267,  
279, 287, 310, 312, 354, 355,  
361, 364, 365, 366, 377, 378,  
382
- Ghana, xxix, 142, 355, 360,  
366, 367, 369, 370, 392, 398,  
399, 400, 401, 405, 415
- girls, xxvii, 7, 30, 65, 68, 95,  
181, 189, 190, 195, 197, 273,  
291, 308, 309, 310, 311, 312,  
349, 361, 364, 365, 366, 377,  
378, 380, 385, 386, 462
- globalization, xxi, xxiv, 30, 74,  
83, 156, 216, 269, 347, 350,  
391, 395, 411, 414, 436, 453,  
458, 459, 460
- government, xxi, xxiii, xxv,  
xxvi, xxviii, xxx, 43, 65, 72,  
73, 74, 75, 76, 79, 80, 83, 84,  
86, 89, 93, 94, 97, 99, 100,  
101, 104, 105, 106, 111, 115,  
116, 118, 119, 120, 121, 124,  
125, 126, 128, 129, 135, 138,  
139, 141, 143, 145, 146, 148,  
149, 151, 154, 155, 156, 158,  
161, 162, 165, 173, 185, 197,  
200, 202, 204, 206, 209, 211,  
212, 213, 214, 216, 217, 224,  
239, 241, 249, 251, 259, 263,  
266, 270, 276, 278, 279, 280,  
281, 282, 286, 288, 289, 292,  
299, 300, 303, 308, 309, 310,  
314, 315, 316, 319, 320, 349,  
350, 362, 363, 364, 365, 366,  
368, 372, 376, 377, 383, 391,  
392, 394, 400, 401, 402, 405,  
407, 408, 409, 413, 415, 419,  
420, 431, 437, 451, 457, 466,  
467, 468, 470
- grants, 292, 295
- grassroots, 73, 100, 101, 103,  
122, 241, 311, 312, 313
- guidelines, 10, 16, 47, 172, 276,  
357, 364, 365, 368, 396, 411
- health, xiii, 9, 16, 36, 61, 62,  
63, 64, 68, 78, 102, 103, 133,  
140, 214, 218, 220, 225, 253,  
257, 268, 276, 270, 281, 287,  
291, 311, 313, 316, 317, 358,  
361, 362, 419, 443, 447
- higher education, xviii, xxx, 73,  
106, 136, 140, 152, 153, 195,  
198, 223, 231, 237, 239, 241,  
243, 244, 245, 257, 276, 287,  
290, 296, 298, 316, 348, 350,  
363, 387, 389, 390, 391, 392,  
393, 394, 395, 396, 397, 398,  
399, 400, 401, 403, 404, 405,  
407, 408, 409, 410, 411, 412,  
413, 415, 416, 417, 449, 450,  
452, 457, 458, 459
- higher education institute, 239
- human development, xiii, 6, 69,  
71, 99, 113, 133, 153, 227,

- 230, 315, 370, 373, 387, 416, 417, 446
- human resources, 54, 106, 116, 125, 150, 203, 213, 452
- human rights, 344, 368, 449, 454
- ICT, xxvi, 10, 23, 32, 105, 140, 141, 175, 363, 367, 389, 391, 410, 411
- illiteracy, 101, 102, 252, 256, 257, 354, 385, 450
- illiterate, 48, 72, 100, 133, 215, 254, 257, 258, 289, 385, 450
- inclusive, xiv, xvii, xxi, xxii, xxiii, xxiv, xxix, 5, 72, 83, 133, 135, 138, 154, 269, 279, 355, 356, 357, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 443, 446, 448
- India, xv, xvi, xxiv, xxvi, xxviii, 24, 25, 58, 62, 63, 64, 65, 66, 67, 68, 69, 103, 112, 113, 114, 136, 137, 138, 139, 140, 141, 142, 143, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 243, 269, 270, 271, 272, 274, 275, 276, 278, 280, 282, 284, 285, 286, 288, 289, 290, 292, 293, 294, 296, 298, 299, 301, 303, 305, 308, 314, 315, 316, 317, 318, 462
- indigenous, 147, 311, 354, 447
- Indonesia, xv, xxvi, 137, 158, 160, 161, 162, 168, 170, 171, 172, 173, 174, 175, 238, 355
- industry, 54, 74, 78, 100, 102, 109, 111, 117, 122, 146, 155, 223, 224, 225, 233, 235, 236, 238, 278, 280, 299, 302, 313, 391, 446
- integration, xxv, xxviii, xxix, 117, 118, 121, 124, 126, 128, 156, 280, 327, 352, 459
- internationalization, xvii, xxii, xxiii, 342, 347, 436, 440, 443, 446
- Internet, 30, 95, 119, 172, 325
- inter-school, xxvii, 85, 86, 202, 201, 204, 207, 211
- Japan, 408, 460, 462
- Kenya, xxix, 143, 360, 365, 366, 369, 370, 392, 398, 399, 400, 401, 411
- knowledge society, 28, 112, 141, 355, 391
- language, 5, 15, 30, 127, 176, 189, 193, 195, 197, 221, 224, 264, 325, 330, 333, 334, 348, 349, 350, 351, 359, 364, 460, 461, 463
- leadership, xxvi, 3, 6, 16, 17, 42, 53, 54, 159, 161, 172, 173, 174, 175, 251, 321, 421, 422, 423, 457
- learning and life skills, 230, 383, 384
- learning environment, 159, *See* environment
- learning outcomes, 4, 5, 7, 12, 15, 16, 38, 162, 165, 171, 221, 421
- legislation, 50, 124, 362
- life skills, 16, 35, 221, 247, 256, 281, 385, 421
- lifelong learning, xxiii, xxvi, 15, 23, 95, 101, 104, 138, 146, 152, 247, 279, 351, 451
- literacy, xxiv, 7, 23, 29, 30, 61, 62, 66, 67, 69, 100, 101, 102, 107, 113, 155, 221, 224, 229, 230, 248, 251, 252, 254, 255,

- 257, 258, 269, 273, 281, 303,  
310, 336, 349, 354, 355, 362,  
366, 368, 384, 385, 386, 421,  
450
- literacy rates, 67, 354
- loans, 206, 308
- males, 273, 287, 378, 382, 383
- management, xxiv, xxvi, xxvii,  
8, 14, 15, 24, 33, 34, 39, 41,  
44, 50, 52, 53, 54, 57, 58, 76,  
77, 78, 79, 80, 81, 82, 84, 86,  
87, 89, 95, 106, 115, 120,  
133, 135, 143, 154, 160, 161,  
164, 172, 173, 174, 181, 204,  
205, 206, 210, 211, 213, 221,  
222, 226, 241, 249, 250, 251,  
256, 257, 267, 270, 277, 292,  
299, 302, 308, 309, 310, 318,  
322, 324, 326, 359, 390, 394,  
401, 409, 421, 422, 423, 444,  
445, 447, 460
- marginalization, 27, 145
- materials, xxiv, 9, 11, 15, 34,  
35, 36, 37, 43, 44, 57, 162,  
163, 164, 165, 166, 167, 168,  
169, 170, 171, 172, 173, 176,  
235, 258, 291, 325, 326, 334,  
336, 353, 355, 356, 361, 364,  
372, 455
- migrant, 71, 73, 80, 121, 125,  
206, 233, 234
- migrants, xxv, 103, 115, 117,  
118, 121, 125, 126, 127, 128,  
129, 138, 354
- minorities, xxvii, 106, 182, 191,  
308, 313, 354, 378
- Nepal, xxiv, 62, 63, 64, 65, 66,  
68, 139, 143
- NGOs, 76, 79, 100, 101, 121,  
129, 281, 300, 304, 307, 316,  
349
- Nigeria, xxix, 137, 367, 368,  
369, 370, 392, 398, 400, 401,  
402, 404, 405, 412
- non-formal education, 16, 101,  
110, 112, 142, 152, 247, 248,  
256, 309, 384
- numeracy, 107, 221
- OECD, 13, 18, 37, 47, 48, 58,  
220, 225, 227, 351, 411, 417
- Pakistan, xxiv, 62, 63, 64, 65,  
66, 68, 69, 137, 143, 416
- parents, 11, 29, 36, 39, 44, 48,  
49, 50, 53, 61, 88, 94, 104,  
107, 137, 160, 194, 215, 252,  
257, 296, 339, 361, 367, 372,  
407, 421, 436, 439, 443
- participation, 11, 26, 31, 35, 49,  
50, 76, 79, 100, 101, 120,  
135, 140, 141, 156, 206, 254,  
271, 272, 274, 275, 277, 283,  
284, 285, 288, 295, 304, 309,  
310, 314, 340, 359, 366, 374,  
375, 376, 377, 378, 382, 383,  
384, 386, 407, 410, 413
- participatory, xxv, 15, 16, 27,  
54, 79, 81, 82, 106, 109, 181,  
249, 367, 406, 407
- partnership, 11, 82, 141, 155,  
278, 280, 302, 367, 389, 415
- PISA, 13, 18, 221, 336, 351,  
355
- planning, xvi, xxiv, 19, 31, 46,  
47, 48, 54, 55, 57, 58, 65, 72,  
76, 77, 78, 79, 81, 84, 100,  
101, 109, 111, 139, 141, 158,  
163, 164, 181, 213, 269, 270,  
277, 280, 290, 299, 302, 310,  
314, 315, 316, 321, 323, 325,  
349, 361, 396, 414, 416, 431,  
446, 459



- policy, xxiii, xxvi, 3, 4, 8, 10,  
 11, 12, 13, 14, 15, 22, 26, 27,  
 28, 33, 35, 40, 46, 53, 61, 62,  
 65, 67, 68, 74, 75, 100, 102,  
 104, 105, 115, 121, 135, 138,  
 139, 140, 141, 145, 148, 149,  
 154, 160, 161, 162, 196, 210,  
 215, 216, 217, 220, 226, 227,  
 243, 245, 262, 263, 265, 266,  
 267, 276, 277, 280, 281, 299,  
 331, 347, 351, 355, 361, 365,  
 366, 368, 373, 380, 392, 406,  
 410, 413, 414, 416, 419, 420,  
 421, 424, 425, 426, 429, 430,  
 446
- poverty, xxi, xxiv, 6, 22, 26, 27,  
 29, 36, 61, 62, 68, 71, 79, 81,  
 83, 99, 100, 105, 110, 118,  
 119, 121, 133, 135, 136, 140,  
 145, 146, 147, 148, 152, 153,  
 156, 160, 174, 206, 217, 225,  
 227, 230, 232, 242, 244, 247,  
 248, 249, 254, 256, 257, 258,  
 281, 308, 357, 358, 360, 362,  
 363, 364, 365, 372, 385, 419
- primary education, 23, 35, 36,  
 37, 40, 45, 46, 52, 61, 139,  
 153, 161, 216, 219, 237, 239,  
 252, 330, 360, 372, 375, 376,  
 378, 379, 380, 385, 450
- primary school, xxvi, 51, 52,  
 72, 75, 92, 181, 183, 189,  
 193, 195, 202, 204, 205, 209,  
 225, 267, 365, 378, 379, 382
- principal, xxvi, 29, 35, 159,  
 160, 161, 164, 170, 173, 174,  
 176, 189, 320, 323, 422, 424
- principals, 159, 160, 161, 162,  
 163, 164, 166, 167, 168, 170,  
 172, 173, 174, 176, 182, 213,  
 267, 420, 423, 424, 425, 429
- programmes, 22, 24, 28, 33, 34,  
 46, 51, 52, 54, 55, 56, 65,  
 139, 140, 141, 148, 154, 163,  
 165, 166, 172, 270, 277, 278,  
 279, 282, 291, 299, 302, 303,  
 304, 307, 308, 309, 311, 313,  
 347, 354, 361, 373, 375, 384,  
 391, 393, 394, 396, 430
- public expenditure, 63, 395
- qualifications, 81, 122, 161,  
 213, 223, 358, 389, 391, 410
- quality, xxi, xxii, xxiii, xxiv,  
 xxv, xxvi, xxvii, xxviii, xxix,  
 xxx, 3, 6, 7, 8, 9, 10, 11, 12,  
 13, 14, 15, 16, 17, 21, 22, 23,  
 27, 28, 30, 31, 33, 34, 35, 36,  
 37, 38, 40, 41, 42, 43, 44, 46,  
 47, 51, 56, 57, 61, 62, 67, 75,  
 76, 80, 82, 84, 85, 86, 88, 89,  
 90, 91, 95, 96, 100, 101, 102,  
 104, 107, 111, 127, 129, 138,  
 141, 147, 152, 153, 154, 162,  
 167, 173, 174, 175, 181, 196,  
 201, 202, 203, 204, 205, 206,  
 209, 210, 212, 213, 214, 217,  
 219, 220, 221, 222, 224, 225,  
 240, 241, 242, 247, 248, 249,  
 252, 253, 257, 258, 260, 261,  
 262, 263, 264, 265, 266, 267,  
 268, 271, 279, 280, 281, 302,  
 319, 320, 322, 323, 324, 329,  
 330, 331, 332, 333, 334, 335,  
 336, 337, 338, 339, 340, 341,  
 342, 343, 347, 348, 353, 354,  
 355, 357, 361, 363, 364, 365,  
 373, 378, 386, 389, 390, 391,  
 392, 393, 394, 395, 396, 397,  
 398, 399, 400, 401, 402, 403,  
 404, 405, 406, 407, 408, 409,  
 410, 411, 412, 413, 414, 415,  
 416, 419, 420, 421, 422, 424,

- 427, 428, 429, 430, 431, 444,  
445, 446, 452, 454, 455, 458,  
461, 462
- quality of education, xxix, 3, 6,  
7, 12, 13, 14, 17, 19, 37, 38,  
41, 46, 173, 174, 222, 266,  
271, 338, 339, 341, 347, 354,  
357, 397, 409, 411, 421, 422,  
427, 429, 430, 452
- remote, 30, 72, 73, 85, 100,  
104, 137, 138, 173, 361, 367,  
386, 412, 447
- resources, xxv, xxvii, xxviii, 7,  
9, 11, 12, 13, 14, 22, 25, 33,  
36, 37, 41, 42, 43, 45, 46, 67,  
84, 85, 86, 87, 89, 90, 91, 92,  
93, 94, 95, 103, 104, 106,  
108, 109, 110, 112, 115, 118,  
120, 125, 133, 136, 140, 149,  
156, 160, 163, 166, 169, 171,  
173, 182, 200, 201, 202, 203,  
205, 206, 209, 210, 211, 214,  
222, 233, 248, 249, 251, 252,  
259, 262, 263, 265, 266, 303,  
311, 323, 324, 325, 326, 327,  
337, 342, 344, 354, 355, 358,  
360, 374, 386, 395, 396, 400,  
402, 405, 414, 421, 422, 424,  
444, 450, 452, 459
- rights, xxv, xxvii, xxix, xxx, 6,  
7, 11, 22, 121, 122, 123, 124,  
125, 129, 139, 148, 200, 220,  
264, 319, 335, 336, 340, 343,  
344, 351, 357, 368, 450, 453,  
454, 455
- rural, xiii, xiv, xv, xvi, xvii,  
xviii, xxi, xxii, xxiii, xxiv,  
xxv, xxvi, xxvii, xxviii, xxix,  
xxx, 7, 21, 22, 23, 24, 25, 26,  
27, 28, 30, 34, 35, 36, 48, 57,  
62, 65, 67, 68, 69, 71, 72, 73,  
74, 75, 76, 77, 78, 79, 80, 81,  
82, 83, 84, 85, 86, 87, 88, 89,  
93, 94, 95, 96, 99, 100, 101,  
102, 103, 104, 105, 106, 107,  
109, 110, 111, 112, 113, 114,  
115, 116, 117, 118, 119, 120,  
121, 122, 123, 124, 125, 126,  
127, 128, 129, 133, 134, 135,  
136, 137, 138, 139, 140, 141,  
142, 143, 145, 146, 147, 148,  
151, 152, 153, 154, 155, 156,  
157, 158, 160, 173, 200, 201,  
202, 203, 204, 206, 207, 209,  
210, 211, 212, 213, 214, 222,  
229, 230, 231, 232, 233, 234,  
235, 238, 239, 240, 241, 242,  
243, 244, 245, 247, 248, 249,  
251, 252, 253, 254, 255, 256,  
262, 265, 266, 267, 269, 270,  
271, 272, 273, 274, 275, 276,  
279, 281, 283, 284, 285, 286,  
287, 288, 289, 291, 292, 293,  
295, 296, 298, 303, 304, 305,  
306, 307, 308, 311, 316, 317,  
318, 327, 349, 353, 354, 355,  
356, 357, 358, 359, 360, 361,  
362, 363, 365, 366, 367, 369,  
370, 373, 377, 385, 386, 424,  
443, 444, 445, 446, 447, 448
- rural transformation, xxii, xxiv,  
xxv, xxvi, xxvii, 21, 22, 23,  
25, 28, 75, 76, 99, 102, 103,  
113, 133, 135, 136, 137, 138,  
141, 142, 148, 156, 229, 230,  
232, 233, 234, 235, 242, 303,  
355, 358, 360, 369, 443, 446
- scholarship, 280, 348, 349, 393,  
460
- schools, xxiv, xxv, xxvi, xxvii,  
xxviii, xxx, 3, 6, 31, 32, 33,  
35, 37, 38, 39, 40, 41, 42, 43,

- 44, 45, 46, 48, 49, 50, 51, 52,  
55, 65, 67, 73, 80, 85, 86, 87,  
88, 89, 90, 91, 93, 96, 104,  
106, 109, 137, 140, 154, 159,  
162, 165, 173, 174, 182, 183,  
184, 185, 186, 187, 188, 189,  
191, 192, 193, 194, 195, 197,  
199, 201, 202, 203, 204, 205,  
206, 209, 210, 211, 212, 213,  
214, 221, 222, 225, 242, 248,  
249, 251, 252, 253, 257, 259,  
266, 270, 271, 273, 278, 279,  
281, 287, 291, 292, 293, 294,  
295, 300, 304, 309, 310, 319,  
320, 321, 322, 323, 324, 325,  
326, 327, 329, 331, 334, 336,  
337, 338, 341, 342, 350, 351,  
353, 355, 356, 358, 359, 361,  
363, 364, 366, 367, 373, 377,  
378, 379, 381, 383, 385, 397,  
419, 420, 421, 423, 424, 425,  
426, 427, 428, 430, 437, 445,  
447, 452, 459, 460, 462, 463
- secondary education, 23, 45,  
68, 69, 153, 175, 217, 270,  
271, 275, 276, 277, 278, 287,  
290, 298, 366, 378, 381, 382,  
383, 384, 385, 452
- skill development, xv, xvi,  
xxiv, xxvi, xxvii, 73, 75, 77,  
81, 110, 140, 145, 146, 149,  
151, 155, 156, 158, 220, 229,  
238, 269, 278, 279, 280, 281,  
283, 304, 314, 315, 316, *See*  
development
- skill training, 71, 73, 80, 81, 82,  
83, 304, 308
- social change, 48, 151
- social development, 74, 100,  
128, 241, 248, 264, 280
- social transformation, 118, 232,  
233
- socio-economic status, 103,  
189, 296
- South Africa, 18, 362, 363, 370,  
392, 401, 403
- special needs, 4, 356, 364, 365,  
366, 367, 368
- streaming, 6, 140, 291
- students, xxvii, xxviii, xxix,  
xxxi, 4, 5, 7, 13, 15, 29, 36,  
38, 42, 44, 45, 46, 48, 50, 53,  
54, 55, 67, 68, 73, 85, 88, 89,  
90, 91, 92, 95, 104, 107, 137,  
138, 140, 153, 154, 159, 173,  
175, 182, 183, 186, 187, 188,  
189, 190, 191, 192, 193, 194,  
195, 196, 197, 199, 200, 203,  
204, 205, 206, 212, 214, 218,  
259, 262, 263, 266, 267, 268,  
271, 273, 277, 278, 283, 284,  
285, 286, 291, 292, 293, 295,  
296, 298, 299, 300, 302, 321,  
322, 326, 332, 334, 339, 347,  
348, 349, 350, 351, 354, 361,  
364, 365, 372, 374, 379, 383,  
386, 390, 391, 393, 398, 402,  
406, 407, 408, 410, 415, 427,  
428, 429, 430, 433, 437, 438,  
440, 441, 452, 453, 458, 459,  
461, 462, 463
- sustainability, xv, xviii, xxvi,  
100, 146, 148, 149, 173, 175,  
280, 312, 406, 443, 444, 445,  
446, 447
- sustainable, xxi, xxii, xxvi,  
xxvii, xxx, 22, 27, 34, 76,  
102, 104, 135, 136, 142, 145,  
146, 149, 152, 153, 154, 156,  
200, 217, 242, 245, 247, 248,  
268, 358, 443, 453, 454
- sustainable development, xxii

- Sweden, 5, 17, 158, 229, 465, 467
- Tanzania, xvii, xxix, 139, 371, 372, 373, 374, 375, 376, 377, 378, 379, 384, 385, 386, 387, 388, 392, 399, 400, 401, 402, 405, 411
- teachers, xviii, xxiv, xxvi, xxix, xxx, xxxi, 4, 7, 9, 10, 11, 13, 14, 15, 32, 33, 34, 37, 38, 39, 40, 41, 42, 43, 48, 51, 52, 53, 55, 56, 57, 61, 73, 83, 84, 86, 87, 88, 89, 90, 91, 104, 107, 111, 137, 138, 140, 159, 160, 161, 162, 168, 171, 173, 174, 175, 182, 195, 196, 197, 200, 204, 206, 209, 210, 211, 213, 214, 219, 221, 222, 240, 251, 253, 255, 257, 259, 266, 267, 318, 321, 323, 324, 325, 326, 331, 334, 336, 337, 338, 339, 343, 349, 350, 353, 356, 357, 361, 363, 364, 367, 397, 420, 423, 425, 427, 430, 433, 435, 436, 437, 439, 450, 453, 458, 459, 461, 462, 463
- technologies, xxiv, xxviii, xxix, 10, 24, 32, 76, 77, 78, 81, 88, 101, 107, 152, 153, 154, 199, 221, 240, 241, 280, 304, 316, 318, 325, 347, 352, 391, 465
- tertiary education, 23, 239, 397, 401, 452
- training, xxi, xxii, xxiv, xxv, xxvi, xxvii, xxviii, xxxi, 10, 11, 12, 14, 28, 33, 40, 43, 45, 48, 52, 55, 56, 67, 72, 73, 76, 77, 80, 81, 82, 83, 84, 87, 88, 90, 100, 101, 102, 103, 104, 106, 108, 109, 110, 111, 118, 119, 120, 121, 123, 128, 137, 138, 139, 140, 141, 145, 146, 151, 153, 154, 160, 162, 163, 164, 166, 167, 170, 171, 172, 173, 181, 184, 196, 197, 200, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 241, 242, 248, 249, 251, 252, 253, 256, 257, 258, 259, 260, 269, 270, 276, 277, 278, 279, 280, 281, 282, 283, 284, 286, 287, 288, 289, 291, 299, 300, 302, 303, 304, 306, 307, 308, 312, 313, 316, 318, 321, 323, 324, 337, 338, 341, 343, 349, 356, 358, 361, 366, 367, 369, 390, 392, 397, 404, 408, 420, 421, 425, 429, 444, 447, 458, 459
- tribes, 308, 313
- tuition, 101, 126, 452
- unemployment, 215, 216, 220, 223, 288, 289, 307, 359, 452
- UNESCO, xiii, xvii, 5, 6, 11, 13, 17, 18, 19, 24, 27, 28, 29, 30, 31, 58, 59, 61, 69, 99, 101, 102, 113, 114, 135, 139, 141, 143, 152, 157, 226, 235, 243, 244, 247, 251, 255, 329, 335, 347, 349, 350, 352, 353, 355, 370, 371, 379, 383, 387, 394, 411, 416, 429, 431, 450, 454, 455, 462
- UNICEF, 5, 11, 13, 18, 19
- United Nations, 244, 344, 371, 387, 450, 461
- universities, xxiii, 73, 94, 151, 199, 263, 341, 348, 350, 389, 390, 391, 398, 399, 400, 402, 407, 411, 414, 430, 453, 458, 459, 460, 461
- urban, xxii, xxiv, xxv, xxvii,

- xxviii, 22, 23, 28, 30, 34, 35, 36, 65, 67, 71, 73, 74, 75, 78, 79, 80, 83, 84, 85, 86, 87, 89, 93, 100, 101, 103, 112, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 141, 147, 160, 200, 201, 202, 203, 204, 206, 207, 209, 210, 211, 212, 213, 214, 222, 229, 231, 234, 235, 239, 241, 243, 256, 262, 265, 267, 271, 273, 276, 279, 284, 286, 287, 288, 291, 293, 295, 327, 353, 354, 355, 357, 359, 362, 363, 365, 366, 367, 375, 377, 385, 386, 424, 443, 444, 445, 446
- vocational, xxvi, xxvii, xxviii, 10, 23, 29, 72, 73, 80, 103, 104, 140, 153, 156, 215, 218, 219, 220, 221, 223, 224, 225, 226, 227, 229, 230, 231, 239, 241, 242, 253, 255, 257, 269, 270, 276, 277, 278, 281, 282, 283, 284, 286, 287, 288, 289, 290, 291, 292, 293, 295, 296, 297, 298, 299, 300, 302, 303, 304, 313, 318, 358, 359, 361, 366, 369, 385
- vocational education, xxvi, xxvii, xxviii, 10, 72, 104, 215, 218, 219, 221, 223, 224, 225, 226, 227, 230, 239, 241, 242, 253, 255, 257, 269, 270, 276, 277, 278, 282, 283, 284, 286, 287, 288, 290, 291, 292, 293, 295, 296, 297, 298, 299, 302, 303, 304, 366
- vocational schools, 73, 218
- vocational skills, 153, 156, 227, 358, 385
- women, xxvi, xxviii, 7, 27, 34, 35, 65, 78, 81, 94, 95, 100, 102, 152, 155, 156, 254, 255, 276, 279, 281, 282, 283, 303, 308, 309, 310, 311, 312, 313, 316, 331, 349, 366, 384, 385, 386
- workforce, 100, 150, 155, 216, 217, 220, 269, 273, 279, 280, 302, 372, 444
- World Bank, 28, 157, 158, 219, 226, 227, 231, 245, 269, 278, 295, 305, 314, 315, 355, 378, 379, 380, 381, 382, 385, 387, 391, 392, 398, 400, 404, 405, 409, 416, 417, 427, 431