The political pledge of the Bangladesh government outlined in Vision 2021 to combat poverty, build Digital Bangladesh and move into the rank of middle income countries make strategies and action in education and skills development the fulcrum of change.

This eleventh annual Education Watch focuses on skills development, commonly known as technical and vocational education and training (TVET), in Bangladesh. Being the first Watch report on TVET, it attempts to construct a skills profile of young people in the age range of 10-24 years depicting their access and participation in general and occupational skills development as well as their employment status. It offers policy recommendations based on the findings of the study.

Primary data for the study, first of its kind, were collected from a random nationwide sample consisting of 24,300 households with a population of 119,232, of whom 38,752 were 10- 24 years old.

The study highlights that of some 60 million workers and 1.5 million new entrants to the workforce every year, over 80 percent are in the informal economy engaged in self-employment or household activity without wages, with a majority of them in agricultural and rural occupations. Even those with TVET training of some kind have an average income close to the per capita national income of Taka 68,000 ($850), with 60 percent earning below the international poverty line of $1.25 per day. This suggests that the average worker is stuck in a low-productivity and low earning trap. This situation also points to problems in quality of education and training as well as deficiencies in labour market and workers' social protection policies and their implementation. Women's participation in wage labour remains low despite recent progress and they continue being subjected to gender-based wage discrimination.

The study urges leadership and commitment on the part of national policy and decision-makers to overcome the conventional sectoralised and fragmented approach of government operations and policy making to enhance the possibility of a comprehensive and coordinated approach to skills development. It affirms that the National Skills Development Council, with its mandate of helping implement the National Skills Development Policy, has a special role in this respect.

Dr. Manzoor Ahmed is Senior Advisor at the Institute of Educational Development, BRAC University (IED-BRACU) and a former Director and education advisor of UNICEF. He has authored many books and articles on education and is active in research and writing on education policy issues. Dr. Ahmed is a member of the Advisory Board and working Group of Education Watch and has contributed to several of the annual Education Watch publications. He was the Country Coordinator of CREATE, the international consortium for research on educational access, transition and equity led by University of Sussex.

Md. Altaf Hossain is a Research Fellow and Team Leader in the Research and Development Unit of the Institute of Educational Development, BRAC University (IED-BRACU). He has contributed to several of the annual Education Watch publications and books chapters on education in Bangladesh. He was part of a team that designed, planned and implemented a large community and school survey for Consortium for Research on Educational Access, Transitions and Equity (CREATE) in Bangladesh. He has also written several research monographs for CREATE and is completing his doctor in education from the University of Sussex.

Md. Abul Kalam is a Senior Research Associate at the Research and Development Unit of the Institute of Educational Development, BRAC University (IED-BRACU). With Post-Graduate degree in Sociology and Education and Development from the University of Dhaka and the University of Manchester, UK, Mr. Kalam has contributed to several of the annual Education Watch publications. He was part of a team that designed, planned and implemented a large community and school survey for Consortium for Research on Educational Access, Transitions and Equity (CREATE) in Bangladesh and also has written research reports for CREATE and other research reports on socio-economic development and education.

Kazi Saleh Ahmed is the president of the Foundation for Research on Educational Planning and Development (FREPD). He is a former Vice-Chancellor of the Jahangirnagar University. With a Ph.D from Kiev Institute of National Economy he has had a lifelong contribution in education and statistics.

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Skills Development in Bangladesh : Enhancing the Youth Skills Profile

Education Watch 2011-12

Skills Development in Bangladesh
Enhancing the Youth Skills Profile

Campaign for Popular Education (CAMPE)
Bangladesh

Education Watch 2011-12

Skills Development in Bangladesh

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Enhancing the Youth Skills Profile

Research Team

Manzoor Ahmed
Md. Altaf Hossain
Md. Abul Kalam
Kazi Saleh Ahmed

Reviewers

Dr. M. Ehsanur Rahman
Netai Chandra Sutradhar
Kazi Fazlur Rahman

Coordinator

Rasheda K. Choudhury

Campaign for Popular Education (CAMPE)

Swiss Agency for Development and Cooperation SDC

Campaign for Popular Education (CAMPE), Bangladesh
5/14 Humayun Road, Mohammadpur
Dhaka 1207, Bangladesh
Phone: 88 02 9130427, 8155031, 8155032
PABX: 88 02 8115769
Tele Fax: 88 02 9123842
Email: info@campebd.org
Website: www.campebd.org

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Contents

Foreword

This eleventh Education Watch report attempts to provide a comprehensive picture of access and participation of young people of age 10 to 24 in general and occupational skills development initiatives as well as their employment status. For the first time the skills development and technical and vocational education and training (TVET) issue was selected as the theme for Education Watch.

Education is the key to addressing the challenges of development. Skills development of youth has been emphasised in Goal 3 of Education for All (EFA). Bangladesh has attained significant achievements in various aspects of education during last two decades, but only during past few years attention has been given to skills development and TVET. However, over the years, growing inequity has become a serious concern. Inequities exist in terms of school type, streams of education, geographical locations and socioeconomic status. Coexistence of development and inequity does not match with the spirit of our Constitution, the National Education Policy 2010 or Skills Development Policy 2011. Elimination of inequity from education including TVET in Bangladesh is urgently needed.

Skills, knowledge and innovation are key driving forces of economic growth and social development of a country. Countries with higher levels of education and skills can respond effectively to challenges and opportunities in the global economy. In response to this need, Government of Bangladesh adopted National Education Policy and Skills Development Policy in 2010 and 2011 respectively in line with the political commitment expressed in the Vision 2021. The Sixth Five Year Plan (2011-15) proposes medium term priorities and strategies for education including skills development. These documents emphasized the development of skills and capacities of young people enabling them to respond effectively to the employment market in the country and the opportunities in the global economy.

The study tried to construct a skills profile of young people in the age range of 10-24 years which would include past and current participation in education and training activities of any form (TVET and general), involvement in apprenticeship, and participation in employment. It also tried to ascertain demands for and expectations from skills development as expressed by youth, and provide a critical review of adequacy and efficacy of skills development policy, strategy and programs, based on the skills development profile, and perceptions and expectations of youth about skills development, in the context of national development and poverty reduction objectives. It also offered policy recommendations regarding skills development based on the findings of the study.

This is high time to implement the National Skills Development Policy focusing on youth and disadvantaged segments of the society. We expect that the concerned authorities of the government would look into the findings seriously and take necessary actions so that the nation's foundation can

be built strongly. A strong political commitment for human resource development is very much needed. We believe that the government will be able to give right direction to the nation in this regard.

Finally, I would like to thank all concerned individuals and institutions including the research team for their effort from the start to the finishing of this research work, its publication and dissemination. Let's work together for achieving the goal of 'Education for All'.

Dhaka
March 2013

Kazi Fazlur Rahman
Chairperson
Advisory Board, Education Watch

Preface

With this eleventh Report of Education Watch we have tried to explore a new area titled Skills Development in Bangladesh: Enhancing the Youth Skills Profile. The study tried to develop a skills profile of young people of age range 10-24 years – portraying their participation in general education, skills development and Technical and Vocational Education and Training (TVET) along with involvement in apprenticeship, and employment. It also summarizes the demand side constraints and expectations of the youth from skills development initiatives towards poverty reduction along with strategies to overcome the identified deficiencies.

A quantitative methodology in the form of a national sample survey was adopted for the stydy. Much of the quantitative information came from a household survey in different rural and urban locations. As different studies on education highlighted variations in the educational attainment among the geographical regions in the country, 15 separate surveys were carried out considering rural and urban areas of each administrative division and statistical metropolitan cities, as well as gender breakdown (i.e. 7X2+1). Therefore a total of 24,300 households in 900 villages/mahallahs from 225 upazilas/municipalities/ thanas of 15 strata throughout the country were covered under the household survey. It included a target population of 38,752 in the selected age group (including 4,254 TVET and/or apprenticeship participants). In addition, relevant official statistics were used to supplement the qualitative and quantitative information.

The research conclusion emphasized the need for a collaborative and coordinated approach to bring the major stakeholders together, guided and encouraged by the government and political authorities adopting a holistic vision of skills development. This collaborative and holistic approach was considered more appropriate than the suggestion for separate efforts by different key actors.

We strongly urge the policy makers of Bangladesh to look carefully at the findings of this study and to make use of the evidence, analyses and policy recommendations. Strong political commitment accompanied with pragmatic strategies, sufficient resources and continuous monitoring will be required to prepare our next generation, particularly the disadvantaged, to contribute to nation building and enable them to perform well in the era of globalization and competitive, market oriented human resource development all over the world. We believe that providing an enabling environment for skills development and exploiting the opportunities in overseas employment market call for state leadership. All development actors like the government, political parties, the corporate sector, CSOs and development partners must come forward to play their role in national development.

We would like to express our sincere thanks to Mr. Kazi Fazlur Rahman, Chairperson of Education Watch Group and Mr. Kazi Rafiqul Alam, Chairperson of CAMPE for their continued interest in the Education Watch initiative. Education Watch is privileged to have the unflinching support of CAMPE. Its staff has all along played the key role in producing the annual watch reports and facilitating their dissemination. Our sincere appreciation goes to them for their tireless efforts.

Dr. Manzoor Ahmed and Prof. Kazi Saleh Ahmed took the lead in carrying out the study and preparing the report. We are grateful to them. The panel of reviewers comprising Dr. Ehsanur

Rahman, Prof. Netai Chandra Shutradhar, and Mr. Kazi Fazlur Rahman deserve our special thanks for their valuable comments on the draft. Our sincere gratitude to the Education Watch community, who participated in various sharing sessions on the draft report, provided valuable suggestions on the design, approach and findings of the study. Their contribution in preparing the key messages and policy recommendations of this report is highly appreciated.

Our appreciation will remain incomplete if we do not acknowledge the contribution and wholehearted cooperation of the National Skills Development Council (NSDC), Director General of the Directorate of Technical Education (DG DTE), Chairman of the Technical Education Board and the International Labour Organisation (ILO) for their support in different stages of the study.

We would like to extend our thanks and appreciation to the respondents of the survey, particularly, the youth for sharing their thoughts, experience and pertinent information to fulfill the objective of the study.

The field survey conducted by research assistants was planned, coordinated and supervised by Mr. Altaf Hossain and Mr. Md. Abul Kalam of the Institute of Educational Development of BRAC University (IED- BRACU) They also played a major role in analysing and interpreting the data and preparing the drafts of the chapters. Mr. K M Enamul Hoque and Mr. Ghiasuddin Ahmed of CAMPE played very important roles at various stages of the study. We acknowledge their contribution with a lot of appreciation.

Education Watch and its reports have been possible due to the generous support received from the Embassy of the Kingdom of the Netherlands (EKN), Swiss Agency for Development and Cooperation (SDC), Bangladesh and Oxfam-Novib of Netherlands. We acknowledge their assistance and express our deep appreciation.

Finally, we would ask the readers, users and well wishers of Education Watch to send us if they have any suggestion regarding selection of topics for research , improvement of quality of research, presentation style and any other issue related to these.. Our efforts will be worthwhile if this report could serve as a useful input in the key decision making process for improving the foundational education along with skills development and Technical and Vocational Education and Training in Bangladesh. Let us all work for building a better future, a beautiful Bangladesh.

Dhaka
March 2013

Rasheda K. Choudhury
Executive Director, CAMPE
Member-Secretary, Education Watch

The Contributors

Advisory Board

Sir Fazle Hasan Abed
Advisor, CAMPE
&
Founder Chairperson, BRAC

Brigadier General (Rtd) Aftab Uddin Ahmad
Executive Director
Underprivileged Children's Educational Program (UCEP)

Dr. Qazi Kholiquzzaman Ahmad
Chairman, Palli Karma-Sahayak Foundation (PKSF)
&
President, Bangladesh Economic Association (BEA)

Dr. Manzoor Ahmed
Senior Advisor
Institute of Educational Development, (IED-BRACU)

Kazi Saleh Ahmed
Former Vice Chancellor
Jahangirnagar University

Prof. Shafi Ahmed
Department of English
Jahangirnagar University

Dr. Zaheda Ahmed
Prof. Department of History
Dhaka University

Zahin Ahmed
Executive Director
Friends in Village Development Bangladesh (FIVDB)

Prof. S. M. Nurul Alam
Department of Anthropology
Jahangirnagar University

Kazi Rafiqul Alam
Chairperson, CAMPE
&
President, Dhaka Ahsania Mission (DAM)

Dr. Syed Saad Andaleeb
Editor, Journal of Bangladesh Studies
&
Chair, Sam & Irene Black School of Business
Pen State Eric, USA

Mohammad Niaz Asadullah
Senior Research Associate
Research & Evaluation Division RED), BRAC

Dr. M. Asaduzzaman
Research Director
Bangladesh Institute of Development Studies (BIDS)

Rasheda K. Choudhury
Executive Director
Campaign for Popular Education (CAMPE)

Dr. A. M. R. Chowdhury
Advisor to the Chairperson, BRAC
Convenor, Education Watch

Dr. Md. Fazlul Karim Chowdhury
Former Director General
Directorate of Primary Education (DPE)

Nabendra Dahal
Chief, Education Section
UNICEF, Bangladesh

Subrata S. Dhar
Senior Operations Officer, Education
The World Bank

Dr. Mohammed Farashuddin
President, East West University

Shamse Ara Hasan
Head, Education Programme
Gonoshahajjo Sangstha (GSS)

Dr. M. Anwarul Huque
Former Director General
National Academy for Educational Management (NAEM)

Working Group

Ahsan Abdullah
Director
Bangladesh Bureau of Educational Information and Statistics (BANBEIS)

Chowdhury Mufad Ahmed
Project Director
Skills Development Project (SDP)

Principal Quazi Faruque Ahmed
President, Bangladesh College Teachers Association & Treasurer
National University

Dr. Mahmudul Alam
Professor & Head Department of Governance Studies
Northern University of Bangladesh

Prof. Md. Shafiul Alam
Former Director, BANBEIS

Khondoker Shakhawat Ali
Research Fellow
Power and Participation Research Centre (PPRC)

Dr. Anwara Begum
Senior Research Fellow
Bangladesh Institute of Development Studies (BIDS)

Dr. Abbas Bhuiyan
Social Scientist
International Centre for Diarrhoeal Disease Research, Bangladesh (ICDDR,B)

Professor M. Nazmul Haq
Institute of Education and Research (IER)
University of Dhaka

K. M. Enamul Hoque
Program Manager, CAMPE

Md. Mofazzal Hossain
Former Systems Manager, BANBEIS

Dr. Safiqul Islam
Director, BRAC Education Program (BEP)
BRAC

Nurul Islam Khan
Former Official, UNHCR

Simeen Mahmood
Lead Researcher BRAC University - BRAC Development Institute (BU-BDI)

Erum Mariam
Director
Institute of Educational and Development, (IED-BRACU)

Dr. Ahmadullah Mia
Professor & Dean
Faculty of Social Sciences
American World University (Bangladesh Study Centre)

Mohammad Mohsin
Manager, Education
UNICEF-Bangladesh

Samir Ranjan Nath
Programme Head
Education Research Unit
Research and Evaluation Division (RED)
BRAC

Elizabeth Pearce
Education Director
Save the Children

Abdur Rafique
National Professional Consultant
International Labor Organization (ILO)
Bangladesh Technical Board, Dhaka

Dr. M. Ehsanur Rahman
Executive Director
Dhaka Ahsania Mission (DAM)

M. Habibur Rahman
Education Sector Advisor
Save the Children

Dr. Siddiqur Rahman
Professor
Institute of Education and Research (IER)
University of Dhaka

Mohammad Muntasim Tanvir
Senior Programme Manager
Education & Youth Action
Action Aid International

Technical Team

Jasim Uddin Ahmed
Principal
Europa International School, Dhaka

Prof. Kafil Uddin Ahmed
Consultant, PEDP III
Directorate of Primary Education (DPE)

Tahsinah Ahmed
Programme Manager
Swiss Agency for Development and Cooperation (SDC)

Romij Ahmed
Consultant
Directorate of Primary Education

Syeda Tahmina Akhter
Associate Professor
Institute of Education and Research (IER)
University of Dhaka

Prof. Muhammad Ali
Former Member, Curriculum
National Curriculum and Textbook Board (NCTB)

Md. Ayub Ali
Divisional Coordinator
Underprivileged Children's Educational Programs- Bangladesh (UCEP)

Ruhul Amin
Former Assistant Specialist
National Academy for Primary Education (NAPE)

Prof. Ali Azam
Former ChairmanNational Curriculum and Textbook Board (NCTB)

Jiban K. Chowdhury
CEO
National Skill Development Council (NSDC)

Hari Pada Das
Programme Officer, Component-1
TVET Reform Project
International Labor Office (ILO)

S A Hasan Al Farooque
Capacity Development and Advocacy Support (CDA) Officer
CSEF Project, Asia South Pacific Association for Basic and Adult Education (ASPBAE)

Dr. M. Shamsul Hoque
Former ELT Advisor
Bangladesh Open University

Md. Altaf Hossain
Research Fellow
IED –BRACU

Prof. Md. Riazul Islam
Former MemberNational Curriculum and Textbook Board (NCTB)

Md. Humayun Kabir
Vice- President
Bangladesh Enterprise Institute

Laila Rahman Kabir
Member, Executive Committee
National Skill Development Council (NSDC)

Md. Abul Kalam
Senior Research Associate
IED –BRACU

Khandaker Lutful Khaled
Manager - Education
ActionAid-Bangladesh

Md. Quamruzzaman
Principal (Madaripur TSC)
Directorate of Technical Education (DTE)

A. N. S. Habibur Rahman
Consultant
Management Development & Training
ROSC, Directorate of Primary Education (DPE)

Dr. Nitai Chandra Sutradhar
Vice Chancellor
University of Textile Engineering & Technology

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Acronyms

ADB	Asian Development Bank
ADP	Adolescent Development Program
APON	Adolescent Peer Organized Network
BANBEIS	Bangladesh Bureau of Educational Information and Statistics
BBS	Bangladesh Bureau of Statistics
BEP	BRAC Education Program
BMET	Bureau for Manpower, Employment and Training
BPS	BRAC Primary School
BRAC	Bangladesh Rural Advancement Committee
BTEB	Bangladesh Technical Education Board
BUET	Bangladesh University of Engineering and Technology
CAMPE	Campaign for Popular Education
DTE	The Directorate of Technical Education
EFA	Education for All
ELA	Employment and Livelihood for Adolescents
EU	European Union
GMR	Global Monitoring Report
GOB	Government of Bangladesh
HSC	Higher Secondary Certificate
ILO	International Labour Organization
ISC	Industry Skills Council
KC	Kishori Club
MDG	Millennium Development Goal
MPO	Monthly Payment Order
NEP	National Education Policy
NFDDP	National Foundation for Development of Disable People
NFOWD	National Federation of Organizations Working on Disability
NGO	Non-governmental Organization
NSA	National Student Assessment
NSDC	National Skill Development Council

NSDP	National Skill Development Policy
NTVQF	National Technical and Vocational Qualification Framework
QA	Quality Assurance
RMG	Ready-made Garments
RPL	Recognition of Prior Learning
SCDC	Standard and Curriculum Development Committee
SDC	Swiss Agency for Development and Cooperation
SDP	Skills Development Project
SEP	Skills for Employment Project
SFYP	Sixth Five Year Plan
SME	Small and Medium Enterprise
SNAP	Special Network of Adolescent Photographer
SoFEA	Social and Financial Empowerment of Adolescents
SSC	Secondary School Certificate
STAR	Skills Training for Advancing Resource
STEP	Skills Training Enhancement Project
TVET	Technical and Vocational Education and Training
UCEP	Under-privileged Children's Education Program
UN	United Nations
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations International Children Emergency Fund

Overview

Background and purpose of the study

Skills, knowledge and innovation are driving forces of economic growth and social development in any country. Countries with higher levels of education and skills can respond effectively to challenges and opportunities in the global economy.

The political pledge of the Bangladesh government outlined in Vision 2021 to combat poverty, build Digital Bangladesh and move into the rank of middle income countries make strategies and action in education the fulcrum of change. A new education policy adopted in 2010 is intended to set the course for envisioned change. The Sixth Five Year Plan (2011- 15) proposes medium term priorities and strategies for education including skills development. A National Skills Development Policy has been approved by the government. A key element of the anticipated change is the development of skills and capacities of young people enabling them to respond effectively to the employment market in the country and the opportunities in the global economy.

Considering the critical need for an objective assessment of the skills development situation, the Advisory Board and the Technical Committee of Education Watch decided, having devoted ten previous Watch studies to aspects of primary and secondary education and literacy, that the present study should focus on skills development, commonly known as technical and vocational education and training (TVET), in Bangladesh. Being the first Watch report on TVET, it was decided that the study should attempt to provide a comprehensive picture of access and participation of young people of age 10 to 24 in general and occupational skills development activities as well as their employment status. In order to achieve this broad objective, the following were identified as specific objectives of the study:

1. To construct a skills profile of young people in the age range of 10- 24 years which would include past and current participation in education and training activities of any form (TVET and general), involvement in apprenticeship, and participation in employment.

2. To ascertain demands for and expectations from skills development as expressed by youth (age 10- 24 years).

3. To provide a critical review of adequacy and efficacy of skills development policy, strategy and programs, based on the skills development profile, and perceptions and expectations of youth about skills development, in the context of national development and poverty reduction objectives for the next decade.

4. To offer policy recommendations regarding skills development based on the findings of the study.

Research methodology

Data for this study was collected from households. An instrument was prepared for household survey by the research team based on the objectives of the study. It was shared with the Working Group members of *Education Watch*, seeking their observations. It was validated through field testing and by undertaking a pilot study.

The sampling strategy adopted for Education Watch 2008 was followed in this study with minor modifications. Past and current participation of young population aged 10-24 years in schooling or training was the key variable in determining sample size for the household survey. Considering enrolment in education programs as a dichotomous variable the minimum sample size of a valid estimate was calculated to be 768. We arrived at such a figure adopting 95 percent confidence limit and 5 percent precision level, and doubling the sample size in order to reduce the design/cluster effects. This figure was increased to 787 for convenience of allocation and execution.

As different studies on education highlighted variations in the educational attainment among the geographical regions in the country, 15 separate surveys were planned to be carried out, one in each of the following strata:

Rural Bangladesh:

- Rural Barisal division
- Rural Chittagong division
- Rural Dhaka division
- Rural Khulna division
- Rural Rajshahi division
- Rural Rangpur division
- Rural Sylhet division

Urban Bangladesh:

- Urban Barisal division
- Urban Chittagong division
- Urban Dhaka division
- Urban Khulna division
- Urban Rajshahi division
- Urban Rangpur division
- Urban Sylhet division

Statistical Metropolitan: Metropolitan cities

In order to derive separate estimates for boys and girls, it was necessary to double the above sample size. This meant that 1,574 (= 787 X 2) young people aged 10- 24 years were needed to be brought under the survey in each of the stratum indicated above, totaling (1574 X 15 =) 23,610, 11,805 boys and 11,805 girls, for the total study.

The study followed a four-stage sampling procedure for survey in each of the stratum. At the first stage, in each rural stratum 15 upazilas, in each urban stratum 15 municipalities/pouroshova and in Statistical Metropolitan 15 thanas were selected using simple random sampling technique. At the second stage, one union (ward for urban strata and Statistical Metropolitan) for each selected upazila/municipality/thana was selected through simple random sampling. At the third stage, four villages (mahallah for urban strata and Statistical Metropolitan) were randomly selected from each of the selected union/ward. This meant that 60 (=15 X 4) villages/mahallahs were selected for each stratum, totaling 900 (= 60 X 15) for the whole of Bangladesh. Latest available census information of 2001 produced by the Bangladesh Bureau of Statistics (BBS) was used for the purpose. It turned out that 59 out of 64 districts of the country were represented in the sample. The non-represented districts are: Narayanganj, Munshiganj, Tangail, Laxmipur and Chapainowabganj.

It was calculated that a survey of 1,620 households from each of the 15 stratum, 24,300 households in total for the whole study, would allow the selection of adequate samples for valid estimates. Available survey information (in this case Household Income and Expenditure Survey 2010) produced by BBS was used for the purpose. The household survey was carried out in 27 households in each of the selected village/mahallah. It was also calculated that the survey of such number of households in each village/mahallah could produce required numbers of young people for valid estimates at the stratum level. At the fourth stage of sampling, the households were selected through a systematic random sampling procedure.

Thus a total of 24,300 households in 900 villages/mahallahs from 225 upazilas municipalities / thanas of 15 strata throughout the country were covered under the household survey. The total population in these households were 119,232. Of them 38,752 were aged 10- 24 years old and 4,254 of age 10- 24 participated in TVET and/or apprenticeship. Table 1.1 provides the sampling details.

Table 1.1: Sample for the household survey

Strata/domain/ division	Upazila/ municipality/ thana	Village/ mahallah	No. of HHs	Population	Population aged 10 - 24	TVET participants
Rural Barisal	15	60	1,620	8,446	2,758	249
Rural Chittagong	15	60	1,620	8,557	2,745	221
Rural Dhaka	15	60	1,620	8,098	2,749	313
Rural Khulna	15	60	1,620	7,645	2,575	253
Rural Rajshahi	15	60	1,620	6,968	2,129	182
Rural Rangpur	15	60	1,620	7,336	2,298	161
Rural Sylhet	15	60	1,620	9,400	3,256	237
Urban Barisal	15	60	1,620	7,945	2,538	333
Urban Chittagong	15	60	1,620	8,652	2,835	278
Urban Dhaka	15	60	1,620	7,958	2,600	440
Urban Khulna	15	60	1,620	7,347	2,232	319
Urban Rajshahi	15	60	1,620	6,903	2,195	261
Urban Rangpur	15	60	1,620	7,519	2,267	265
Urban Sylhet	15	60	1,620	8,807	2,896	223
Statistical Metropolitan	15	60	1,620	7,651	2,679	519
Total	225	900	24,300	119,232	38,752	4,254

Key Conclusions

1 A Global Perspective

- The international discourse and analyses have shown the need for a broader skills development vision beyond the traditional confines of TVET, recognising the essential role of formal general education, need to take a lifelong perspective of learning and capacity building, linking skills development with employment policies, and a skills and jobs agenda linked to social protection and upholding human rights and human dignity of workers. However, the conventional sectoralised and fragmented approach of government operations and policy making have so far limited the possibility of a comprehensive and coordinated approach to skills development in Bangladesh.

- A broad definition of skills development as a part of human capability enhancement requires comprehensive and coordinated attention to the spectrum of skills comprising foundation skills, transferrable skills and job-specific skills. These are provided by formal and non-formal modes of learning through basic and general education institutions and occupation related training institutions and programmes. This broad view of provisions and providers needs to be taken as the conceptual framework for exploring policies and actions for the TVET sub-sector.

- Monitoring access to appropriate learning and life skills development (EFA goal 3) has been neglected, in part because skills are gained in diverse ways and through the work of many actors and providers. Moreover, the reality of a rapidly changing world required a radical reconsideration of what skills are and how they are acquired. Reflecting these uncertainties, a consensus is still lacking on internationally comparable indicators of skills development, their national adaptation, and the means to measure them.

- In looking at post-2015 agenda for new versions of MDG and EFA and the agenda for skills development in the larger context, there is increased recognition of the pertinence of a lifelong learning perspective in linking skills to productivity. A prominent part of this perspective is the reality of the spectrum of skills including cognitive, non-cognitive and technical skills acquired through general basic, secondary, and vocational-technical education and various forms of on-the-job learning including apprenticeship. Other recurring themes for the new post-2015 skills development frontiers include: revisiting the scope and concept of TVET, nurturing informal and non-formal learning and TVET in the informal economy, increasing TVET responsiveness to new development priorities, promoting multi-stakeholder partnerships through new approaches to governance, sustainability and "greening" of TVET, and handling uncertainties and building resilience in the face of rapid change in society and economy.

2 National Policy and Strategy Discourse

- A greater national recognition of the importance of skills development and serious deficiencies in the TVET system as well as increased donor support in this area have prompted various reform initiatives. However, challenges loom large within the traditionally defined TVET system and other aspects of skills development in respect of effective access, quality, equity and relevance. Dealing with these challenges require a broader and coordinated skills development approach backed up by political and policy vision and support at the highest tier of national decision-making. Resistances have to be overcome against a broader vision and acting on stated political commitment.

- Within the TVET sub-sector, the analysis of problems and issues undertaken to formulate various externally assisted projects have helped the diagnosis of major problems in general terms. However, commensurate policy responses and implementation of strategies have not emerged regarding important concerns, such as, adequate TVET financing, shortage of motivated and qualified TVET instructors, strengthening links to industry, enforcing standards in TVET delivery, credible assessment including establishing and recognising equivalence, and determination to implement the planned activities effectively. The actions and assistance planned in these areas are not proportionate to the magnitude of the problems. Moreover, effective implementation of even those actions envisaged remains problematic.

- There are serious limitations in the present structures and practices in skills development. The policy and action priorities of the National Skills Development Council (NSDC), proclaimed as the apex body, remain focused on formal and institutional skills development linked to formal employment, giving less attention to the majority of workers and potential workers who are in the informal economy, a large part of which lie in the agriculture sector. To the extent this skewed focus persists, the contribution of TVET to fighting poverty and promoting equity through skills development and job creation will remain compromised.

- NEP 2010 objectives, the sixth five year plan (2011-15) proposals, as well as much of the Government TVET development, supported by donor assistance, are for reforms and attempts to improve quality within the existing structure of organization and management of TVET. Due priority is lacking to policy and action, despite rhetoric in this regard, on basic change in planning, managing, establishing accountability in a decentralised way at the institutional level, and redefining roles of different actors and stakeholders, including the private sector and providers of non-formal and informal skills development. This concern has been highlighted often in policy discourse.

- The emphasis on expansion of TVET, which is the thrust of government policy objectives and donor support, is likely to compound the present problems and inefficiencies, unless reforms focusing on quality, efficiency and responsiveness to market are designed and effectively put in place.

- Overall technical capacity to implement the various externally assisted projects, supported by different development partners, in a coordinated way by establishing necessary links and complementarity appears to be a major challenge. This coordination is necessary

horizontally and vertically across the sub-sector reflecting a broad view of it, as emphasized in this study. Attention to build this capacity is critical to overcome systemic weaknesses and thus achieve the desired outcomes. The dilemma in this regard is that the goal of strengthening organisational capacities in the projects themselves suffers from the weak institutional capacities to plan, coordinate, and manage to take full advantage of external assistance.

3 Exploiting the demographic dividend

- The demographic transition characterised by declining fertility and population growth rates in Bangladesh has created the potential for a "demographic dividend." The window of opportunity arising from the low dependency ratio for non-working to working population will remain open for about two decades. The potential for reaping the demographic dividend depends on effective skills development, job creation and social protection of workers.

- The survey confirms a declining dependency ratio – overall 58 % in 2012, with almost 10 percentage points lower for metropolitan areas and generally lower for all urban areas and significant differences among regions (Table 4.1). This ranges from a low of 51 percent for rural Rajshahi to 70 percent for rural Sylhet.

4 Foundation Skills and Transferrable Skills

- In the 10-24 age-group, just over two-thirds (68%) were found to be current participants in some form of education and training; 29 percent not current participants and over 2 percent never took part in education or training. Compared to findings of last labour force survey of 2005-6, when half of the workforce (15-59 age range) was found without any education, the new cohorts of workers generally possess a higher level of education. Major urban-rural and male-female disparities were not observed in terms of educational participation; though somewhat greater differences were found between geographical regions. The implications for TVET planning of these disparities have to be examined for considering appropriate remedial measures.

- Age-specific net enrolment in education/training at the secondary and higher secondary levels, showed a sharp decline from 58.5 percent to 34.6 percent for 11-15 and 16-17 age groups respectively. There were significant disadvantage for rural areas in this respect. However, girls were ahead of boys by almost 10 percentage points at both levels.

5 Participation in TVET and Apprenticeship

- In the 10-24 age group, the large majority (87 percent) benefited from formal general education of different lengths. In contrast, only 3 percent participated in formal and non-formal TVET (2.3 + 0.7). Participation in apprenticeship was 6 percent – predominantly, in informal apprenticeship (5.7 percent). Reported participation in non-formal general education was small at 0.3 percent. Two percent reported to be engaged in multiple education and training activities, while just under 2 percent were not involved in any training or education. These numbers add up to total participation in TVET and

apprenticeship of 11 percent of the population in 10-24 age group with informal apprenticeship accounting for about half of the total. The desirable direction of change clearly is larger participation in various skills development opportunities which may be combined with or complementary to general education through flexible programming, illustrated by some NGO initiatives such as those of UCEP. There is also a need to expand systematically apprenticeship opportunities.

- A bimodal distribution is observed in TVET participation with peaks for degree and diploma level courses (13.5% of TVET/apprenticeship participants) and short courses under six months duration (28% of TVET/Apprenticeship participants.) Formal certificate courses and SSC and HSC vocational courses together accounted for just over 5 percent of the participants in the sample population. Among all forms of skills development, apprenticeship (mostly under informal arrangement) attracted most participants serving 53% of TVET/apprenticeship beneficiaries. Yet there is little scope for accreditation of apprenticeship and prior experience which could expand and encourage apprenticeship and short courses.

- In TVET participation, urban areas had an edge - the metropolitan areas had more than double the combined participation rate in formal and non-formal TVET at 5.4 percent compared to 2.4 percent in rural areas, and 3.3 % in municipalities. There is a need to expand services to bridge the gap.

- In respect of gender, girls' participation in TVET, was about one-third of boys (1.2% against 3.3%). Similarly, in informal apprenticeship, girls' engagement was less than half of boys' (3.6% and 7.8%), whereas it was equally low in formal apprenticeship for both boys and girls (0.4 and 0.3% respectively). This disadvantage for girls in TVET and apprenticeship contrasts with girls' favourable position in general education. Persistent gender gap in skills development clearly demands priority attention.

- At the secondary level (grades 6 to 10), overall participation in TVET was 1.1 percent of the total secondary enrolment – half of average for Asian countries. At the higher secondary level (grades 11-12), participation improves to an overall rate of 4.7 percent. There is again an advantage for urban areas and a substantial disadvantage for girls at both secondary and higher secondary levels.

6 Equity with Quality

- Participation in education and training was affected by family economic status. In the 10-24 age group, those from families with per capita earning of less than a dollar a day, the rate of continuing in some form of education and training was 13 percentage points less than for those earning more than two dollars (65.3 percent and 78.1 percent respectively). Those never enrolled in school were more than three times among the poorer families (2.8% against 0.8% for others).

- Income level of families influenced participation in TVET and apprenticeship in distinct ways. Formal longer duration TVET at degree and diploma level was patronised in almost double the percentages by those with more than 2 dollars a day earning compared to those with less than a dollar of daily earning. SSC and HSC vocational courses within the

secondary system, on the other hand, had a substantially higher participation from the poorer families. There was higher participation by almost double the rate by young people from poorer families in apprenticeship. Short duration trade courses, offered often by private providers, were largely patronised by those with more than two-dollars-a-day earning. All of the differences in participation appear to be a matter of cost of participation – higher tuition and other costs for degree and diploma courses and the short courses by private providers and relatively less private costs for participants in SSC and HSC courses and apprenticeship. The exception was the gender factor, with girls participating less than boys in different TVET programmes irrespective of income.

- Direct evidence regarding quality of general education and TVET was not available or intended to be collected from the household survey. Indications of low earning and productivity of workers who have passed through education and training programmes compared against the benchmarks of per capita income and poverty level (see below) raise questions about the outcome for learners in terms of their competencies and skills.

- Other evidences from research and evaluation have underscored the general problems of quality of education and training programmes and their learning outcomes. For example, National Student Assessment (NSA) of a representative sample of grades 3 and 5 Students was carried out by the Directorate of Primary Education, in 2006, 2008 and 2011.The Monitoring and Evaluation Wing of the Directorate of Secondary and Higher Education also conducted an assessment of learning in 2012 of a sample of students for grade 8, which showed that a very small proportion of students could perform at the expected level for grade 8. The following information about learning outcome at primary level is particularly disturbing:

  - According to 2011 primary level assessment, only one of four students at the end of grade 5 acquired competencies in Bangla and one in three mastered the competencies in math specified in the primary curriculum.

  - The test items used in NSA to test the specified competencies and the criteria for acceptable performance are considerably below the internationally defined standards such as those for Progress in International Reading and Literacy Study (PIRLS).

  - The NSA and grade eight assessment results were remarkably inconsistent with high rates of pass and year-to-year reported improvement in student performance in public examinations, such as the primary completion examination, the Junior Secondary examination and SSC and HSC examinations.

7 Household Costs of Education and Training

- Monthly average household cost per participants for general education was Tk. 1,257 and for TVET Tk 2,577. Out of this, tuition charges were about 7 percent of the total cost for general education and about a quarter of the cost for TVET. For general education, the costs in urban areas were significantly higher, but for TVET, the costs in rural areas were slightly higher. This may be due to transportation and accommodation costs for more dispersed TVET provisions in rural areas.

- Girls were subject to substantial disadvantage in household spending in all categories of education and TVET as indicated by reported costs. For general education household spending for girls on average was about 10 percent less than for boys, but it was 30 percent less in TVET and about half in non-formal TVET and apprenticeship.

8 Employment and earnings of young people after education/training

- In the 10-24 age group, the large majority (53 percent) were engaged in household work without a cash earning. The next highest category was self-employment (22 percent), followed by full-time wage employment (15.8 percent), unemployed (5.5 percent) and part-time employment (3.7 percent).
- In the age-group 15-24, when more are expected to be in jobs rather than in education/training, the pattern did not change significantly from the 10-24 age range and the percentages changed only slightly – 54 percent in household work, 22 percent in self-employment, 16 percent in full wage employment, 3 percent in part-time jobs and 4 percent unemployed. The total for household work, self-employment and part-time employment add up to 80 percent, which presumably largely coincides with informal sector employment.
- The mean monthly income for young people in the age group 20-24 was Tk. 6,280, which is about the same as per capita annual income of Tk. 75,000 (US$850). Monthly earning varies according to individual education and training accomplishments – i.e., no education/training, apprenticeship, TVET and only general education. The highest monthly earning is of those with TVET at Tk. 7,373 and the lowest is of those without any education and training at TK4,442, which is more than 40 percent lower. The difference in earning for those with some form of education and training of different types is not pronounced. The return from apprenticeship is higher than average return for general education, but somewhat lower than that of TVET.
- Expectedly, average earnings are higher in all categories in urban areas than in villages – the highest in metropolitan locations of workers with TVET at Tk 8,313, which is more than double of that for rural workers with no education or training at Tk 4,079.
- Monthly average earning for females (10-24 years) was less than half at Tk. 2,667 against Tk 5,476 for males in rural areas. TVET qualifications of women slightly raised their earning to 56 percent of average for males. Women without any education/training or with apprenticeship experience were worse off, earning about one-third of male remuneration. However, the gaps are slightly lower in urban and metropolitan areas.
- Two important points about earnings of workers worth noting are: first, the fact that per capita average earning of workers in the 20-24 age group with TVET qualifications is about the same as per capita national income indicates that workers even with skills are stuck in a low-productivity and low-earning trap. The average of course hides the fact that over 60 percent of the workers survive on less than US$ 1.25 per day – an international poverty line benchmark. Secondly, the relatively narrow differential in earnings of workers with different TVET qualifications indicates general quality problems and mismatch of skills and jobs in TVET. The causal factors for both of these related phenomena point to problems in quality of education and training as well as deficiencies in labour market and workers' social protection policies and their implementation.

9 Preferences and expectations of youth

- Overall two-thirds of the young people were interested in participating in TVET. Interest varied by educational level. Almost three quarters of those who are currently in secondary or higher secondary level or have acquired such qualifications were interested in TVET opportunities. A lesser proportion, about half of those in primary education or have completed primary education, were interested in further TVET; presumably they felt a greater need for further general education.

- Regarding types of TVET, the preference overwhelmingly was for short trade courses and apprenticeship opportunities compared to formal diploma or certificate courses, or even degree level TVET. Similar views were expressed by about 80 percent of the respondents in favour of course duration of less than six months, when a question was posed about preferred length of courses.

- While existing short trade course are generally popular, girls expressed much greater preference for these at 56.4 percent compared to 37.1 percent in the case of boys. A similar pattern was observed in both urban and rural areas. On the other hand, more boys (42.1 percent) expressed the desire to join apprenticeship than girls (35.0 percent).

- Asked about willingness to pay for TVET courses, about one-third would like the courses to be free, another third would be willing to pay Tk 100-300 per month, and a third were willing to spend Tk 400 or more per month. The degree of willingness to pay appears to be a function of the low income level and general poverty of most of the potential TVET participants.

- Regarding inadequacies in education and skills development provisions, the problems that topped the list were similar for general education, TVET and apprenticeship. Ineffective teaching-learning practices and style were mentioned frequently (34.3 percent in apprenticeship, 27.3 percent in TVET and 18.0 percent in general education, respectively). Other frequent mentions were inadequate physical infrastructures (22.1 percent for apprenticeship, 26.8 percent in TVET and 39.0 percent for general education); and deficiencies in basic facilities, such as toilets, water and electricity (13.6 percent in apprenticeship, 15.2 percent in TVET and 25.4 percent in general education). The suggestions for improvement of education and skills development mirrored the respondent's views about identified areas of inadequacies in their urging for improvements in the same areas to remove the deficiencies.

10 Conditions of special vulnerabilities

- The situation regarding pockets of disadvantaged groups has not been captured in the present general national sample survey. These pockets add up to a large proportion of the total population. Attention to the disadvantaged groups is needed both to diagnose situations and develop appropriate measures. A small number of case studies shed light on this question in the present study.

- The case studies illustrate various special vulnerabilities that affect significant proportions of the population. Poverty is a common feature of the disadvantaged and vulnerable groups which interacts with other characteristics of the affected population. Special circumstance of

geographical locations; ethnic and language attributes; and traditional socio-cultural disadvantage of populations determine opportunities and prospects for skills development. A combination of social and economic situation and gender norms affect adolescents and youth of vulnerable groups as described in the case studies included in this report. Personal attributes of people such as disabilities and special needs add to the disadvantage and deprivation from opportunities in the absence of proactive affirmative action.

Recommendations

The recommendations below are based on the findings of the survey and their analysis in the context of other relevant research evidence. The research team's judgement and feedback from the Education Watch advisory and technical committee members at different stages of the study about policy concerns have guided the emphases and propositions included in the recommendations.

The research team considered suggestions about grouping the policy and action priorities in terms of the responsibilities of the major actors – such as, the government, the private sector, NGOs and the academic and research community. The research team came to the conclusion that a collaborative and coordinated approach to bring the major stakeholders together, guided and encouraged by the government and political authorities adopting a holistic vision, was necessary in all major areas of action. This collaborative and holistic approach was considered more appropriate than the suggestion for separate efforts by different key actors. Hence, the recommendations are listed thematically.

The recommendations are clustered under six thematic areas – upstream policy environment, expansion strategy for skills development, ensuring equity with quality, persistent disadvantage of girls and women, costs and resources, and addressing special vulnerabilities.

1 Creating an upstream policy environment

- A broad skills development vision beyond the traditional confines of TVET, encompassing roles of formal general education, non-formal and second chance education and occupational, including on-the-job training, is needed that would emphasize:

  a) a lifelong perspective of learning and capacity building,

  b) linking skills development with employment policies, and

  c) adopting a skills and jobs agenda linked to social protection and upholding human rights and human dignity of workers.

Leadership and commitment on the part of national policy and decision-makers are needed to overcome the conventional sectoralised and fragmented approach of government operations and policy making to enhance the possibility of a comprehensive and coordinated approach to skills development. The National Skills Development Council, with its mandate of helping implement the National Skills Development Policy, has a special role in this respect.

- A broad definition of skills development as a part of human capability enhancement requires comprehensive and coordinated attention to the spectrum of skills comprising foundation skills, transferrable skills and job-specific skills. These are provided by formal and non-formal modes of learning through basic and general education institutions and occupation related training institutions and programmes. This broad view of provisions and providers needs to be taken as the conceptual framework for exploring policies and actions for the TVET sub-sector.

- The discourse on post-2015 agenda for skills development should be guided by the reality of the spectrum of skills including cognitive, non-cognitive and technical skills acquired through general basic, secondary, and vocational-technical education and various forms of on-the-job learning including apprenticeship, guided by a lifelong perspective of learning. The related and pertinent themes for the post-2015 agenda include: revisiting the scope and concept of TVET, nurturing informal and non-formal learning and TVET in the informal economy, increasing TVET responsiveness to new development priorities, promoting multi-stakeholder partnerships through new approaches to governance, sustainability and "greening" of TVET, and handling uncertainties and building resilience.

- The discourse and policy advocacy in relation to the National Skills Development Policy (NSDP) can be used to promote a holistic approach to skills and capability development, even though the National Skills Development Council does not have directly within its remit general basic education. (See below.)

- The National Skills Development Council (NSDC), proclaimed as the apex body, should enlarge its focus beyond formal and institutional skills development linked to formal employment. The majority of workers and potential workers who are in the informal economy must come under the policy and action purview of NSDC. Effective policy responses and actionable strategies are needed on important concerns, such as, adequate TVET financing, shortage of motivated and qualified TVET instructors, strengthening links to industry, applying quality standards in TVET delivery, effective assessment of competencies and establishing equivalencies and the capacity and determination to implement the planned activities effectively.

- The elaboration and implementation of government TVET development, in line with NEP 2010 objectives, including that under the sixth five year plan (2011-15), supported by donor assistance, need to go beyond reforms strictly within the existing structure of organization and management. Due priority in policy and action is needed to basic change in planning, managing, establishing accountability in a decentralised way at the institutional level, and redefining roles of different actors and stakeholders, including the private sector and providers of non-formal training and apprenticeship, highlighted often in policy discourse.

- A low-productivity and low wage trap created through self employment and household work for more than three quarters of youth is indicative of poor learning quality and outcome in both general education and TVET. Escaping from this trap requires attention in quality, relevance and efficiency of general education and TVET, with non-formal and

second chance remedial measures to overcome deficiencies in general education quality and relevance. These steps need to be combined with labour market measures and social protection of workers guided by a national skills and jobs agenda consistent with human rights and human dignity.

- The demographic transition characterised by declining fertility and population growth rates in Bangladesh has created the potential for a "demographic dividend." The window of opportunity arising from the low dependency ratio for non-working to working population will remain open for about two decades. The potential for reaping the demographic dividend depends on effective skills development, job creation and social protection of workers leading to "decent work."

2 Expanding Skills Development – What kind?

- Expansion of formal and non-formal TVET is essential. However, policies and programmes must focus on quality, efficiency, responsiveness to market and effectively implementing these priorities to avoid compounding further the present problems and deficiencies through expansion without effective reform.

- About eleven percent participation of young people (10-24 years) in all kinds of TVET including apprenticeship must be increased substantially – especially, through relevant and flexible short courses and formal and informal apprenticeship (currently 6 percent) based on preference expressed by young people.

- The low TVET participation of 1.1 percent out of secondary level enrolment must be raised substantially, but through reformed programs to ensure better quality and market responsiveness, rather than mere expansion of the current programs.

- Second chance non-formal general education and skills development need to be a major component of the overall skills development strategy and plan, recognising the needs of large numbers of young people who have dropped out from or missed out education and training opportunities. However, establishing and applying quality criteria must be given special attention to prevent these second chance programs from degenerating into "second class" programs for the poor.

- Related to second chance and non-formal skills development is the question of equivalency, assessment and recognition of skills and competencies acquired through diverse means, including recognition and credentials for prior experiential learning. Appropriate regulatory and assessment mechanisms have to be established for this purpose.

- The government plan to establish a technical education institute in each upazila offers an opportunity to recognise and deal with the problems and weaknesses in the existing formal vocational and technical education pattern. Instead of replicating what exists with small tinkering, there is the possibility of incorporating flexibility, quality enforcement, market relevance, equity in access, and opportunities for working children as well as partnership with employers and greater authority with accountability at institution level management. Many features and management model of UCEP's integrated general and vocational education and technical education programs indicate the kinds of adaptation required in the prevailing pattern.

3 Equity with Quality

- Skills development for the poor should be promoted with substantial expansion of effective apprenticeship and short courses (used more frequently by those with <$1 daily earning). Attention must be given to improving quality and market responsiveness of these so that earnings and working conditions can improve for the participants.

- The major challenge is creating "decent work" - moving from present average earning of less than or only close to average per capita income even for those with formal TVET to better wages and work conditions. International experience suggests steps to build stronger "foundational skills" through basic general education, "transferrable skills" through secondary education and TVET and "job specific skills" through high quality TVET and apprenticeship. These skills building measures need to be combined with complementary policy intervention in employment market and social protection for workers. Second chance basic education of high quality should be a key strategy, as noted above.

- Problems identified most frequently in infrastructures, learning facilities and instructional approach and practices both in TVET and general education have to be remedied ensuring a threshold of resources to guarantee the application of acceptable quality criteria. Establishing quality standards and applying them in programs remain conditions for success and cannot be neglected.

4 Overcoming gender-based disparity

- Formal and non-formal TVET participation of girls remains about half of boys (3.3% against 6.3%) in spite of girls' advantage in general education enrolment. Very substantial average earning disparities for workers to the disadvantage of female workers persist. Special policy and programmatic measures are needed in this area including working condition and social protection measures.

5 Costs and Resources

- A threshold of resources for maintaining acceptable quality have to be guaranteed – combining increased public resources with those from the beneficiaries, private sector, and communities. Resource mobilisation and allocation have to be guided by established criteria for quality with equity. Appropriate partnerships of major employment sub-sectors and government for enhancing resources for this purpose should be explored. Resources generated from payroll taxes and managed in partnership with employers have been effective in several countries, especially in Latin America.

- Appropriate policy measures are needed to remove or mitigate obstacles for the poor to skills development in the form of family cost per month for education and training ranging from Tk. 1,175 (general education), Tk. 1,928 for formal TVET and Tk. 694 for non-formal TVET, which add up to major share of the subsistence level income of at least 30 percent of the families below the poverty line.

- Willingness of potential participants to contribute, especially for short term and job-specific training, even if not adequate for full cost recovery, should be taken into account in equitable financing strategies.

6 Special Vulnerabilities

- The key lesson from the diagnostics derived from the case studies of special vulnerabilities is that mainstream programs offered as a standard pattern do not respond to the specific needs and conditions of the diverse vulnerabilities of the disadvantaged groups. The general programs of education and training either have to be adapted substantially for the particular circumstances or creative approaches have to be designed, developed and applied, being open to assessing and making use of lessons from experience.

- A related lesson for responding to the diverse disadvantages is that programs have to be designed and implemented at the local level with active participation of NGOs and the private sector and involvement of the intended beneficiaries. Government policy support, resources and encouragement for this collaboration is necessary from the central authorities and at the local government level.

Chapter 1

Background, Objectives and Research Methodology

The background and scope of the study; its purpose, objectives and focus; the research methodology and sampling procedure; instruments for data collection, the field data collection work; quality control measures; and strengths and limitations of the study are presented in this chapter.

1. Background

Skills, knowledge and innovation are driving forces of economic growth and social development in any country. Countries with higher levels of education and skills can respond effectively to challenges and opportunities in the global economy.

The political pledge of the Bangladesh government outlined in Vision 2021 to combat poverty, build Digital Bangladesh and move into the rank of middle income countries make strategies and action in education the fulcrum of change. A new education policy adopted in 2010 is intended to set the course for envisioned change. The Sixth Five Year Plan (2011- 15) proposes medium term priorities and strategies for education including skills development. A National Skills Development Policy has been approved by the government. A key element of the anticipated change is the development of skills and capacities of young people enabling them to respond effectively to the employment market in the country and the opportunities in the global economy.

The third EFA goal, "ensuring that the learning needs of all young people and adults are met through equitable access to appropriate learning and life-skills programs," embraces skills development for livelihood, economic production and improving income and employment opportunities, though quantified targets for 2015 for this goal was not set.

The Working Population. The share of working population (ages 15-64) has increased from 40 percent in 1970 to 62 percent in 2009, in part because of the lowering ratio of non-working population below 15 and over 64 in the total population, and the growing participation of women in the work force. However, close to 80 percent of the employment in Bangladesh is in the low-productivity and low-wage informal sector. Finding more productive and better paying jobs will require a faster expansion in high productivity and high earning manufacturing and organized services sectors.

With labor force growing by 3.2% per year and the high level of underemployment in the farm and informal services sectors, creation of new jobs in the productive formal sectors of the economy will be a major challenge during the time span of the Sixth Five Year Plan, 2011-15, and beyond. (SFYP, p.78)

Out of the working age population of some 75 million, age 15 years and over, around 50 percent has any formal education at the primary level or beyond. A little over half of the educated work force has an education level beyond primary education. These numbers encapsulate the nature of the education and skill development task for the country. The large proportion without any education and only a quarter with more than primary level education do limit the possibility of skill development through training programs and upgrading and adaptation of workers to changing skill demands.

TVET System. The Directorate of Technical Education offers 13 different types and levels of TVET through government institutions under the Directorate. At least 19 other ministries and agencies and private providers also offer various courses of different durations. The Bangladesh Technical Education Board (BTEB) is the statutory body responsible for regulating quality and standards of TVET. In 2010-11, in the formal TVET courses, approximately 350,000 students were enrolled in courses affiliated to BTEB (data from BTEB cited by Mia et al. 2012), Besides these, NGOs and the private sector offer courses which can be described as non-formal and which do not fall under

the regulatory authority of BTEB. There appears to be no oversight body or regulatory system regarding formal and informal apprenticeship.

Policy and Priority. A high level National Skill Development Council (NSDC), with the Prime Minister as the Chair has been set up as the apex body for policy formulation on skill development with representation from the government, employers, workers and civil society. A national skill development policy has been prepared under the auspices of the Council and has been approved recently by the government in 2011.

Stated government policies and goals are to increase substantially the proportion of post-primary students enrolling in TVET. The equity and quality effect of this intended expansion is dependent on three inter-connected questions: (a) the extent the clientele of the programs is the disadvantaged and poor segments of the population, (b) how effective the programs are in imparting sellable skills, and (c) whether there is an impact of the training programs on increasing employment opportunities and raising income of the poor.

2. Scope of the Study

Considering the critical need for an objective assessment of the skills development situation, the joint meeting of the Education Watch Advisory Group and Technical Committee recommended that the new Education Watch study should probe the status and prospects of skills development of youth, generally described as TVET, looking at the current status of skills development of young people, provisions for skills development and the nature of gaps and deficiencies, if any.

Skills development is broadly defined, for the purpose of this study, as *general and occupation-specific education and training* programmes and activities offered through formal, non-formal and informal means aimed at gainful employment in the formal and the informal economy. This definition is similar to that indicated in the National Skills Development Policy adopted in 2011. (See annex 2 about definitions.)

Although, generally TVET refers to education and training offered in a formal or non-formal institution or programme specifically linked to occupations and standards and requirements for employment in those occupations, a broader view is taken in this study focusing on the overall state of preparation, participation and efficacy of skills development for young people in the age range of 10-20. This is the period in human life-cycle when preparation of young people for the world of work is a special concern from the point of view of society and the individual. The premises underlying the broad concept of skills development are that:

- General competencies in language, communication, math and science offered in general education programmes (essentially in primary and post-primary education for the concerned age-group) are both generic occupation-related skills and pre-requisites for specialized occupational training. These skills may not be directly linked to specific occupations or jobs, but these are essential to enable young people to acquire job-specific skills, to perform effectively in jobs, and to adjust and adapt to changing requirements of jobs. These are described as *foundational and transferrable* skills, discussed further in chapter 2.

- Directly job-related or occupation-specific Skills are acquired in a variety of ways including formal and institutional courses offered through technical/vocational institutions, but also through various non-formal programmes, formal or informal apprenticeship, on-the-job experience, and self-learning.

- Young people may be engaged in different types of activities simultaneously which have skills development implications; e.g., they may be in a general education programmes but may be at the same time be involved in training, apprenticeship or employment.

- The large majority of young people in employment are in informal sector jobs. For most of these jobs in agriculture, construction, maintenance and repair, small manufacturing, trading and services of various kinds, there are no specified or recognized skill training arrangements, but the economy would grind to a halt if these jobs are not performed. A total picture of skills development must take into account formal and informal skill development for the informal economy.

Recognising the importance of various forms of skills development and the multiple ways young people acquire work-related skills, it was considered necessary to examine the nature of engagement of adolescents and youth in skills development.

3. Purpose and the General Objective

Taking the broad view of skills development, the study provides a comprehensive picture of access and participation of young people of age 10 to 24 years in general and occupational skills development activities including apprenticeship, and the status of engagement of young people in employment. Thus a profile of youth skills development including their engagement in education, training, apprenticeship and employment is constructed.

4. Specific Objectives and focus of the study

The Advisory Board and the Technical Committee of *Education Watch* decided, as mentioned earlier, that having devoted ten previous *Watch* studies to aspects of primary and secondary education and literacy, the present study should focus on the skills development in Bangladesh i.e. TVET in Bangladesh. Being the first *Watch* report on TVET, it was decided that the study should attempt to provide a comprehensive picture of access and participation of young people of age 10 to 24 in general and occupational skills development activities; and the status of engagement of young people in employment. This broad objective has been broken down into the following specific objectives:

1. To construct a skills profile of young people in the age range 10- 24 years which would include past and current participation in education and training activities of any form (TVET and general), involvement in apprenticeship, and participation in employment.

2. To ascertain demands for and expectation from skills development as expressed by youth (age 10- 24).

3. To provide a critical review of adequacy and efficacy of skills development policy, strategy and programs, based on the skills development profile, perceptions and expectations of youth about skills development in the context of national development and poverty reduction objectives for the next decade.

4. To offer policy recommendations regarding skills development based on the findings of the study.

It is worth noting that the specific objectives do not include a mapping of skills development provisions. A comparative analysis of youth engagement, expectations and perception and the supply-side provisions would provide a deeper understanding of the state of skills development. It was expected that through a complementary study a map could be created of skill development provisions including formal and non-formal TVET institutions and activities under public, private or NGO management, and formal and informal apprenticeship including their capacities, types and characteristics, and their enrolments and output. The findings of this mapping, based on Bangladesh Technical Education Board (BTEB) data and other government, non-government and private sector sources, was expected to be taken into account along with the youth skills profile in exploring skills development issues and challenges and in offering policy recommendations. This complementary study could not be carried out for reasons beyond the control of Education Watch. However, available information and analyses from secondary sources were considered in analyzing the survey-based youth skills profile and its policy implications.

5. Research Approach/Methods

As explained, the study comprised the construction of a youth (10-24 age group for the purposes of this study) skills profile including youth perceptions and expectations about skills development. To fulfill the objectives of the study, a nationwide sample survey of the households was planned to ascertain the status of skill-related engagement of young people in TVET, general education, apprenticeship or employment, and expectations and needs in skills development from the point of view of young people.

A stratified cluster sample survey was undertaken for the nationwide sample household survey which is further described below. Apart from the household survey, a few case studies on different disadvantaged and occupational groups, which the national sample household survey could not capture, were done to supplement the findings from survey.

6. The instrument

Data for this study was collected from households. An instrument was prepared for household survey by the research team based on the objectives of the study. It was shared with the Working Group members of Education Watch, seeking their observations. It was validated through field testing and undertaking a pilot study.

The piloting of the instrument was done in Gazipur Sadar upazila and Tongi both in rural and urban setting, in March 2012. Two villages of Pubail union of Gazipur Sadar upazila as rural locations

and two mahallahs of Tongi pourashova as urban locations were used in piloting the instrument. Twenty seven households from each of the four villages/mahallahs were surveyed, the number designed to be followed for each cluster in the national survey. Thus the piloting of the instrument was done with 108 (4X27) households. The piloting helped re-ordering the items in the instrument and identifying areas needing special emphasis during training of investigators for the national survey. It also helped in preparing code lists for responses to questions in different sections of the instrument. A final draft of the instrument was then prepared incorporating experiences gained through piloting. This final draft was again reviewed and suggestions were made by members of Education Watch group (Advisory and Technical Committees) before adopting the instrument. A brief description of the instrument is provided below.

The instrument, i.e., the household survey questionnaire has six sections. These are: a) identification of the household, b) socioeconomic profile of the household, c) basic profile of all members in the household and schooling status of the members aged 10- 24 years, d) past and current participation in education and training activities of any form (TVET and general), involvement in apprenticeship, and participation in employment of the members aged 10- 24 years, e) expressed demand of and expectations from skill development of the respondents aged 10- 24 years, and f) health status and attendance in class/training, repetition, performance in education and training of the sampled group aged 10- 24 years.

Identification of the household: This section of the instrument includes household identification information including an assigned number for the household, village/mahallah, union, upazila/thana/cluster and the stratum.

Socioeconomic profile of the household: This section includes household's economic condition in terms of land holding, monthly income and expenditure, household's main source of income, and food security status on an annual basis. It also includes household's access to safe drinking water and electricity, and household ownership of modern communication media items such as cell phone and television.

Basic profile of household members: This section of the instrument includes the names of all members, their relationship with household head, their age and sex, reported literacy status and number of years of schooling completed by each member. The participation status of the household members in TVET is also included. The adult respondent in a household was asked to report the literacy status of all members of his/her household. The respondent was asked to use a dichotomous criterion (literate or not) following the national census literacy definition which is whether *a person was able to read and write a letter.*

Participation of the household members in TVET was divided into four categories - no participation at all, participation in formal TVET, participation in non-formal TVET and participation in apprenticeship (formal or informal). These categories are based on the major approaches used in imparting skills development. This topic is further discussed in chapter 2.

Schooling status of the respondents aged 10- 24 years: This sub-section highlighted participation in schooling of household members aged 10- 24 years – their current school enrolment status; class of enrolment and school type of the currently enrolled individuals. For those no longer in school, the last grade level attended, type of school last attended and reason for dropping out were recorded. Causes of non-enrolment in the case of the never enrolled individuals were noted. In addition, years of schooling completed by the parents of the youth aged 10- 24 years, and their marital status, were also included in this sub-section.

Consolidated education, training and employment status of youth. This section is intended to place 10-24 year olds in a matrix comprising past and current participation in education and training activities of any form (TVET and general), involvement in apprenticeship, and participation in employment. The section starts with categorizing the 10- 24 year olds based on their past and current participation in education and training activities of any form and involvement in apprenticeship. Youth aged 10 -24 years have been placed under eight categories: past and current participation in formal general education, past and current participation in non-formal general education, past and current participation in formal TVET, past and current participation in non-formal TVET, past and current participation in formal apprenticeship, past and current participation in informal apprenticeship, currently participating in more than one of the above categories, and those falling in none of the above categories. Other items included in this section are: status and nature of participation including grade level, name of course/trade, type of institution, minimum level of education required for admission into the course/trade, duration of course/trade, reason for dropping out in cases of dropout, provision for certification, cost of course/trade for participants, sponsor for the cost if any, stipend provision for participation in the course/trade and reason for participating in the trade course. In addition, participation in employment, i.e., employment status, type of work engaged in, jobs-training course matching, and monthly earning from work were also included in this section.

Expressed demand of and expectations from skill development of the participants aged 10- 24 years: Specific types of information included in this section are: willingness of the respondents, who never participated in any TVET, to participate in a TVET course or apprenticeship; types of the course they are interested in; preferred duration of the course; and their willingness to pay for participating in the course or apprenticeship. In addition, respondents identified problems and made suggestions to overcome them in the general education course, TVET course and apprenticeship in which respondents participated.

Health status and attendance in class/training, repetition, performance in education and training of population aged 10- 24 years: This section includes information on health and disability status of the 10- 24 years old, (for those who participated/participate in any general course, TVET and apprenticeship) attendance in class/training, their performance in the course/training (in terms of their relative position in assessment) and whether the individual repeated course.

7. Sampling

The sampling strategy adopted for the Education Watch 2008 was followed in this study with minor modifications. Past and current enrolment status of the young population aged 10-24 years in schooling or training was the key variable in determining sample size for the household survey. Considering enrolment as a dichotomous variable the minimum sample size of a valid estimate was calculated to be 768. We arrived at such a figure adopting 95 percent confidence limit and 5 percent precision level, and doubling the sample size in order to reduce the design/cluster effects (Cochran, 1977; Kalton, 1983). This figure was extended to 787 for convenience of allocation and execution. Annex to this chapter (Annex 1.1) gives details of sample size determination.

As different studies on education highlighted variations in the educational attainment among the geographical regions in the country, 15 separate surveys were carried out, one in each of the following strata:

Rural Bangladesh:

Rural Barisal division
Rural Chittagong division
Rural Dhaka division
Rural Khulna division
Rural Rajshahi division
Rural Rangpur division
Rural Sylhet division

Urban Bangladesh:

Urban Barisal division
Urban Chittagong division
Urban Dhaka division
Urban Khulna division
Urban Rajshahi division
Urban Rangpur division
Urban Sylhet division

Statistical Metropolitan: Metropolitan cities

In order to derive separate estimates for boys and girls, it was necessary to double the above sample size. This meant that 1,574 (= 787 X 2) young people aged 10- 24 years were needed to be brought under the survey in each of the stratum indicated above, totaling (1,574 X 15 =) 23,610 including 11,805 boys 11,805 girls, for the whole study.

The study followed a multistage (four-stage) sampling procedure for survey in each of the stratum. At the first stage, in each rural stratum 15 upazilas, in each urban stratum 15 municipalities/ pouroshova and in Statistical Metropolitan 15 thanas were selected through simple random sampling technique. At the second stage, one union (ward for urban strata and Statistical Metropolitan) for each selected upazila/municipality/thana was selected through simple random sampling. At the third stage, four villages (mahallah for urban strata and Statistical Metropolitan) were randomly selected from each of the selected union/ward. This meant that 60 (= 15 X 4) villages/mahallahs were selected for each stratum, totaling 900 (= 60 X 15) for the whole of Bangladesh. Latest available census 2001 information produced by the Bangladesh Bureau of Statistics (BBS) was used for the purpose. It turned out that 59 out of 64 districts of the country were represented in the sample (Figure 1.1). The non-represented districts are: Narayanganj, Munshiganj, Tangail, Laxmipur and Chapainowabganj.

It was calculated that the survey of 1,620 households from each of the 15 stratum, a total of 24,300 households for the whole study, would allow having adequate samples for valid estimates. The sampling design is comparable in size and randomization technique to the Household Income and Expenditure Survey 2010 carried out by the Bangladesh Bureau of Statistics (BBS). The household survey in the present study was carried out in 27 households in each of the selected

village/mahallah. It was also calculated that the survey of such number of households in each village/mahallah could produce required numbers of young people for valid estimates at the stratum level. At the fourth stage of sampling, the households were selected through a systematic random sampling procedure moving anticlockwise and taking every nth households in the village/mahallah, starting from the northwest corner of the village/mahallah, where the value of n was calculated through dividing the total number household in the village/mahallah by the number of sample of households in a selected village/mahallah i.e. 27. In order to identify the northwest corner, a sketch of the village/mahallah was drawn with the help of knowledgeable informants in the community.

Thus a total of 24,300 households in 900 villages/mahallahs from 225 upazilas/ municipalities/ thanas with 15 strata throughout the country were covered under the household survey. The total population in these households was 119,232. Of them 38,752 were aged 10- 24 years and 4,254 of age 10-24 participated in TVET and/or apprenticeship. Table 1.1 provides the sampling details. The map of Bangladesh shows the distribution of the sample clusters. (Figure 1.1)

Figure 1.1
Map showing the sample locations

Table 1.1: Sample for the household survey

Strata/domain/ division	Upazila/ municipality/ thana	Village/ mahallah	No. of HHs	Population	Population aged 10 - 24	TVET participation
Rural Barisal	15	60	1,620	8,446	2,758	249
Rural Chittagong	15	60	1,620	8,557	2,745	221
Rural Dhaka	15	60	1,620	8,098	2,749	313
Rural Khulna	15	60	1,620	7,645	2,575	253
Rural Rajshahi	15	60	1,620	6,968	2,129	182
Rural Rangpur	15	60	1,620	7,336	2,298	161
Rural Sylhet	15	60	1,620	9,400	3,256	237
Urban Barisal	15	60	1,620	7,945	2,538	333
Urban Chittagong	15	60	1,620	8,652	2,835	278
Urban Dhaka	15	60	1,620	7,958	2,600	440
Urban Khulna	15	60	1620	7347	2232	319
Urban Rajshahi	15	60	1,620	6,903	2,195	261
Urban Rangpur	15	60	1,620	7,519	2,267	265
Urban Sylhet	15	60	1,620	8,807	2,896	223
Statistical Metropolitan	15	60	1,620	7,651	2,679	519
Total	225	900	24,300	119,232	38,752	4,254

8. Field work, investigators and their training

One hundred and thirty four people were recruited in early May 2012 for the implementation of the survey. All of them were university graduates and a significant number of them were experienced in doing similar work under different educational as well as other socioeconomic surveys. One hundred and five of them were finally selected for the fieldwork (75 males and 30 females) as they successfully completed the training workshops arranged for them and proved their competence in doing the survey during the training workshops.

Training workshops were arranged for the recruited persons in two batches from 13- 24 May 2012. Each training workshop continued for five days which included classroom discussion, role-play exercises and practical exercises in household survey. A detailed instruction manual describing all sections of the instrument was also used in the workshops. Education Watch 2011/12 research team members of the Institute of Educational Development, BRAC University conducted the training sessions. A representative from CAMPE also observed the training sessions in both classroom and practical exercises in the field.

9. The field operation

The fieldwork was done between the third week of May to mid-July 2012. Forty-five teams consisting of two Research Assistants in each conducted the fieldwork. There was a team of 15 supervisors to monitor and supervise the fieldwork, each of whom were given responsibility of three teams.

Each team of two Research Assistants spent two days in a village/mahallah for surveying the 27 households; in other words eight days in an upazila/municipality/thana were spent in order to survey 108 households from four selected village/mahallahs of that area. The survey was planned to be completed within one and a half month of its start. However, it took more time than planned initially for several reasons. Two Research Assistants had to be withdrawn from the fieldwork due to their weak performance based on the supervisors' report and investigation by the monitor. This was done within 10 days of the inception of the fieldwork. Other 13 Research Assistants withdrew themselves at various stages of the fieldwork due to various personal reasons such as own sickness, parents' sickness, loss of close relation and getting a permanent job elsewhere. These necessitated reorganization of the teams and reallocation of the field sites among the teams.

The data collection situation in urban areas was different from that of the rural areas. The household survey in urban areas took more time, because access for Research Assistants to households took longer negotiation and explanation due to security concerns. But in most cases, the Research Assistants convinced the respondents and completed the work successfully. This problem was more serious in sites under the stratum of statistical metropolitan, especially locations in Dhaka Metropolitan area. Research Assistants faced problems in gaining access to households in apartment buildings from the security guards of buildings-sometimes requiring change in selecting sample from nearby sites (for example, shifting sites from Dhanmandi to Mohammedpur).

The heads of the households were the principal respondents for the most part of household survey and the interviews were held at the premises of the households. However, for some specific questions the preferred respondents were the young people of the households aged 10- 24 years. The criterion of principal decision maker in the household was maintained in deciding the heads of the households. If s/he was not available the spouse was chosen for the purpose. If neither was available, any adult member of the household was asked to provide information. Sometimes the respondents took help from other members of the households in responding to selected questions. Help was also sought from the neighbours, especially in determining age. As in similar other studies, age determination was the hardest job in the household survey because of absence of a credible birth registration system and inability of parents to remember birth dates or age of the children. Events calendar and EPI cards were used in attempting to ascertain the age of the household members. On an average, a Research Assistant surveyed seven households a day. After completing the interview with a selected household, the Research Assistants carefully checked the filled up questionnaires to ensure that all the questions in the instrument were covered and the answers were recorded properly.

10. Data quality assurance

Several measures were taken to maintain the quality of data. A detailed supervision and quality control protocol was devised to ensure data quality. As mentioned earlier, each supervisor was given responsibility for three teams to supervise their work and ensure quality of the data. The supervisor's tasks included seeing whether the teams went to the right places (villages/mahallahs or unions/wards) and the Research Assistants worked as instructed. They rechecked the filled up questionnaire and also re-interviewed samples of the surveyed households on some selected indicators, and ensured the correction by the Research Assistants in the field in case of any discrepancy. Apart from this a monitor oversaw overall field data collection activities through

random visit to field sites. In addition, a representative from CAMPE also visited some of the locations during data collection in different parts of the country. Frequent contact was maintained by the research managers with the field teams over telephone from the headquarters in Dhaka.

In verifying the quality of data, the findings of other *Education Watch* studies were looked at to compare plausibility of variations in findings. Findings of Household Income and Expenditure Survey 2010 and census 2011were also consulted. It was observed that the distributions in key indicators found in the present study were consistent with those found in the above studies.

11. Data analysis

Bi-variate analysis was done in carrying out data analysis. This included estimation of rates and ratios, means and standard deviation for various sub-groups of the study population by socioeconomic characteristics. Logit regression analysis was also undertaken looking at the likelihood of getting involved in TVET by socioeconomic differentials.

12. Weighting

Since the size of the population and accordingly the number of young people aged 10- 24 years varied substantially by stratum, weights had to be used in pooling estimates for different stratum and for the national level. Weights were calculated using proportion of population by stratum in relation to population of the country. Information for estimating weights was found from community report series of population census 2011 produced by BBS. Standard statistical procedures were used in calculating the weights (Cochran, 1977). Annex A1.2 gives details on the procedure followed.

13. Strengths and limitations of the study

Like other survey based research, this *Education Watch* study also has its strengths and limitations.

Strengths. The study design and methodology drew extensively on past experience and tested approaches of *Education Watch* studies.

The study design, the sampling procedure and the sample size permitted valid estimates for participation and involvement of 10- 24 years old population in TVET and apprenticeship for the whole country as well as breakdowns for gender, urban and rural areas, metropolitan cities and municipal towns among urban areas, and seven administrative divisions.

Adherence to a careful, systematic and elaborate quality control protocol ensured the validity and reliability of the collected data, improved accuracy of analyses, and enhanced credibility of inferences drawn from the analyses.

Limitations

This is the first *Education Watch* report on skills development in Bangladesh focusing only on the access and participation of young people aged 10- 24 years in TVET, their involvement in apprenticeship and their participation in employment. Hence the scope of data collection and analyses did limit the areas in respect of supply side of skills development which are essential to derive a fuller picture of skills development situation and concerns in Bangladesh.

As noted earlier, the juxtaposition of the supply-side status and issues with youth engagement and expectations would have enriched the analysis to provide a firmer basis for policy and action recommendations. As it stands, the research team made an effort to draw on the primary data from the survey, and consider policy and strategy issues in the light of policy concerns and ideas that have emerged from considerable discussion and debate in this respect.

Latest census information was not available for sampling the clusters/upazilas/ municipalities/ thanas and villages/mahallahs for the household survey. Information from the 2001 census and Household Income and Expenditure Survey 2010 had to be used for sampling the clusters. However, latest census (census 2011) information was used in calculating the weighting factors for pooling the estimates at different levels including national level. As a result, minor errors in sampling may not be ruled out.

The survey design did not permit covering pockets of disadvantaged groups in relation to skills development. However, a small number of case studies helped shed light on this for the present study.

As in the case of other studies, analysis of the participation of targeted group in this study in TVET assumes correct reporting of age of the people aged 10- 24 years. As mentioned earlier, estimation of age was a difficult job in the household survey, though the standard devices and techniques were applied to overcome this limitation.

Chapter 2

Skills Development: Global and National Perspectives

Skills development, especially of young people, has become a focus of attention at the global and national level. Recent international research reports and reviews have attempted to address the issue of skills development from different perspectives. Notable among these are two recent reports - the EFA Global Monitoring Report 2012, **Youth and Skills – Putting Education to Work** ***and World Bank's World Development Report 2013 titled*** **Jobs.** ***Also of particular relevance for Bangladesh is World Bank's study*** **More and Better Jobs for South Asia,** ***published in 2011. In addition, the 3rd World Congress on TVET, was held in Shanghai in May 2012 in which the Shanghai Consensus on "Transforming TVET: Building skills for work and life" was adopted. In the same Congress, a report of UNESCO-INRULED titled*** **Education and Training for Rural Transformation – Skills, Jobs, Food and Green Future to Combat Poverty** ***was launched. ILO also published its annual Global Employment Trends and the World of Work reports.***

Bangladesh, struggling to shed its label of one of the least developed countries to join the ranks of the middle-income nations, has been concerned about turning its relatively large youth population into productive human resources. Political pledge expressed in Vision 2021 and the aim of building the Digital Bangladesh as well as recent policy statements on education and skills development provide a context for probing the obstacles and determining priorities and strategies for skills development action.

1. Recent Global Attention to Skills Development

A "lost generation" of 200 million young people globally leaves basic general education programmes without acquiring the skills and capacities they need to function in the world of work and earn a living wage, as noted in GMR 2012. (UNESCO-GMR 2012) As noted earlier, the juxtaposition of the supply-side status and issues with youth engagement and expectations would have enriched the analysis to provide a firmer basis for policy and action recommendations. As it stands, the research team made an effort to draw on the primary data from the survey, and consider policy and strategy issues in the light of policy concerns and ideas that have emerged from considerable discussion and debate in this respect.A majority of them, either in urban slums or rural communities, are unemployed and underemployed or they work for meagre wages. Young women, people in remote areas and in disadvantaged groups outside the mainstream are particularly vulnerable to the risks of skills deprivation and its consequences.

The EFA Global Monitoring Report 2012, focusing on life skills and learning skills for youth and adults, which is EFA Goal 3, suggests ways of giving young people a better start in life and enable them to enter the world of work with confidence. It indicates the roles of governments, donors and the private sector and points to the need for greater resources and their better use for this purpose. The report flags the challenge of offering second and alternative chances for skills development to youth to enable them to realize their potential (UNESCO-GMR 2012, Overview).

A third of Bangladesh's population, about 50 million, falls within the age group of 10-24 years. A significant proportion of them have not completed primary education. Others have not acquired basic skills and competencies essential to prepare themselves for their role as workers and citizens. A large proportion of this population is clearly vulnerable to the risks, and are faced with the challenges , noted in GMR 2012.

Turning skills into productive jobs. Skills and capacities are turned into production and wages resulting in economic growth and improved well-being of people through jobs that offer at least a living wage. Improved skills and better jobs help people move out of poverty; provide opportunities to women and others in disadvantage, who may be unemployed, under-employed or employed in low-productivity and low-wage jobs. The World Development Report 2013 of the World Bank points out that the majority of the young people are employed in farming and in self-employment, often in what is known as the informal sector. Most of them work long hours. Officially reported unemployment rates in poor countries, whether considered low or high, do not portray the true picture, because many people listed as employed cannot make ends meet. More important than just the number of jobs and the unemployment rate, the World Bank report points out, are jobs that offer a living wage and do not violate basic human rights, do not endanger safety of life and limbs, and do not undermine people's dignity as human beings. at the issues of skills development concepts, policies and practices related to education for rural transformation. The global and national factors include persistent and growing gaps between supply and demand for jobs and employment opportunities for young people, growing vulnerabilities and risks for poor people, threats to food security and the urgency of building a green future.

The report makes the case that there is a general problem of rural transformation-absence of a coordinated and pro-active agenda of change and development of rural communities in the context of national and global changes. The question of skills and capacity building of the rural poor, must be addressed as part of this much needed larger transformation. The focus needs to be on

recognising the stake of the rural people in the dynamic changes affecting economy, livelihoods, and wellbeing of all the people in a country.

Education in a broad sense is seen as a key instrument for shaping and fulfilling the goal of rural transformation. The rapidly changing rural and urban scenes and the dynamics of rural-urban interaction require flexibility and creativity in education and training programmes.

The report focuses on the links between education and rural transformation, seeking to underscore the inexorable forces of change that rural communities face in the context of urbanization. It also emphasizes how education and training, by equipping rural people with appropriate knowledge and skills and fostering values of "decent jobs" and human dignity, can expand people's choices and capabilities to exercise these choices.

The report argues that programs and strategies for skills development can be effective when they are nested in a supportive environment of broader development goals and policy that are consistent with the aims of rural transformation and poverty reduction.

A priority area of action is improving quality of primary level education followed by expanding secondary education of acceptable quality to equip rural youth with generic and transferrable skills and competencies essential for taking advantage of job-specific vocational training and on-the-job learning in a changing and globalizing market.

Multipurpose community learning centers with community ownership brought together into networks of technical support are suggested as a vehicle for learning with impact on skills development, which also can be building blocks for lifelong learning and the learning society.

The generic problems of linking and matching skills and jobs are more complex in the rural areas and the informal job market. Experience shows some helpful measures include decentralized local labor market information and matching service, expanding coverage of workers' social protection, and skills certification framework to recognize competencies and skills equivalencies.

The transforming society – rural, peri-urban and urban – creates demands for new kinds of jobs, and old jobs with new profiles. This dynamic perspective of changing jobs, labour markets and skills requirements must frame interventions to match skills and jobs.

To serve rural transformation, flexible and autonomous structures at local levels adapting to local circumstances, encouraging participatory practices, and promoting transparency in governance are particularly important. Stakeholders of rural development are many and diverse. Mobilising the poor to create and participate in their own organsiations and institutions need to be nurtured.

With 70 percent of the people being rural in Bangladesh, and poverty and deprivation from skills development higher in the rural areas, the messages regarding education and training for rural transformation are particularly relevant.

2. A spectrum of skills

GMR 2012 speaks of three types of skills which constitute a spectrum of capabilities all young people need to acquire and which enable them to enter adulthood and become productive workers

and citizens. These are described as foundational, transferable, and technical and vocational Skills (UNESCO-GMR 2012, pp. 14, 177-99).

Foundation skills: The foundation skills include functional literacy and numeracy skills generally acquired though primary education. These skills are prerequisites for continuing in further education and training, and for acquiring transferable and job-specific technical and vocational skills. It cannot be taken for granted that increased access and participation in primary and secondary education necessarily produce the foundation skills essential by themselves and as precondition for acquiring and upgrading job-specific skills.

Transferable skills: Transferable skills refer to competencies that enable learners to solve problems, communicate ideas and information effectively, learn to work in teams in a collaborative way, and conduct oneself with basic discipline in the work place. These skills also include being creative, taking initiatives when appropriate, show leadership and conscientiousness, and demonstrate entrepreneurial capabilities. Acquiring computer and basic information technology (IT) skills are also seen as essential transferrable skills. These skills enable young people to adapt to different work environments, take advantage of job-specific training, and improve chances of being gainfully employed.

The transferrable skills are generally acquired through general secondary education and formal vocational and technical education programs which are aimed at broad, rather than job-specific, vocational preparation. As in the case of foundation skills, the expansion of secondary education and formal vocational-technical education cannot be regarded as a guarantee of meeting the needs of transferrable skills. Deficiencies in the quality of programs, resource limitations and weak management and organistational capacities remain major obstacles to producing the quantum of transferrable skills of acceptable quality.

Technical and vocational skills: These refer to skills and technical know-how related to specific occupations and jobs. The training programs related to these skills are expected to prepare people to be directly employed in specific jobs or occupations. Training and skills development of this category are carried out through formal vocational and technical institutions offering relatively long-duration courses, as well as short training programme of various duration imparted through formal or non-formal programs, and through various on-the job-training programmes, including formal and informal apprenticeship.

Skills that are regarded as pertinent for work-related capabilities and the range of skills development arrangements including basic general education, secondary level general education, and various vocational and technical training programs as well as apprenticeship and on-the-job learning form a spectrum. This view clearly goes beyond the traditional notion of TVET. This broad view of skills development also calls for looking at it from a lifelong learning perspective, since skills upgrading and adapting to new occupational opportunities are more the rule than an exception for workers today. It is also necessary to offer what is called the second chance, often through non-formal programs, for those large numbers in most developing countries who miss out educational or training opportunities the first time, drop out before completing a programme, or need to go into remedial learning to compensate for the poor quality of education and training programs.

It will be seen later that the spectrum of skills, comprising foundation skills, transferrable skills and job-specific skills provides a useful conceptual framework for looking at skills development opportunities for young people in Bangladesh.

3. Cashing in the Demographic Dividend

Countries in South Asian including in Bangladesh are undergoing a process known as the "demographic transition" – a process through which high fertility and mortality rates are turning into lower rates. The pace of demographic transition affects the dependency ratio, which is the ratio of the non-working population, considered dependent, to working-age population in the age-range of 15-64. In the early phase of the demographic transition, there is an increase in the dependency ratio with the fall in infant and child mortality preceding decline in fertility and increase in longevity. The ratio eventually declines as the baby boomers from the lagged decline in the fertility rate join the working-age population. The fewer dependents to be supported by the working-age population and the resources thus saved is the "demographic dividend."

Average fertility rate in Bangladesh has declined by half in two decades to 2.3 per child bearing age woman for the years 2009-11 (National Institute of Population Research and Training, Bangladesh Demographic and Health Survey 2011). As pointed out in the South Asia jobs study of the World Bank, Bangladesh has a high potential to benefit from the demographic dividend. This potential can be realised only to the extent the necessary investments are made to improving the human capital by enhancing skills and capabilities of young people. Without implementing necessary policy reform the demographic dividend cannot be used to boost growth and living standards. The fact that the window of demographic opportunity will be open for only another two to three decades lends urgency to initiating pertinent policies and programs for skills development and related interventions leading to increased employment, productivity and earning. (World Bank 2011, p. 17)

Female labor participation rate in South Asia is particularly low. Although it has shown a slow rising trend in Bangladesh with opportunities created by micro-credit and in the ready made garments sector, two out of every three working age women are still not in the labour force. (This nonparticipation does not imply inactivity, because onerous household work of women are not officially counted as work.) An increased proportion of working-age women in officially recognised employment can reduce the dependency ratio and boost the demographic dividend further in Bangladesh (World Bank 2011, pp.17-18)

4. EFA Goal 3 and post-2015 discourse

EFA Goal 3 set at the Dakar EFA Forum was to ensure that the learning needs of all young people and adults are met through equitable access to appropriate learning and life skills programs. GMR 2012 points out:

> Twelve years after the EFA goals were established, the international community is only now coming closer to agreeing on a coherent set of internationally comparable indicators of skills development and the means to measure them. But recent developments will not produce sufficient data in time to measure goal 3 adequately before 2015. (UNESCO-GMR 2012, p. 80)

Monitoring access to appropriate learning and life skills development has been difficult because skills can be gained in many ways through the work of many actors and providers. Moreover, the reality of a rapidly changing world required a radical reconsideration of what skills are and how they are acquired. An approach is required that takes a lifelong learning perspective in linking skills to productivity. There is a need to recognise the spectrum of skills including cognitive, non-cognitive and technical skills provided through general basic, secondary, and vocational-technical education and various forms of on-the-job learning including apprenticeship. (UNESCO-GMR 2012, Panel 1.6, pp. 92-93)

GMR 2012 asserts that any post-2015 international goals for skills development need to be precisely defined, based on a realistic assessment of information that can be collected, in order to avoid the problems faced in monitoring goal 3. (UNESCO-GMR, 2012, Panel 1.6, p.93)

The discourse at the 3rd World Congress on TVET in May, 2012 in Shanghai drew attention to themes related to challenges and trends that are likely to mark new TVET frontiers post-2015. The issues which arose as recurring concerns are noted below as particularly important in the medium-term. These are seen as relevant for future policy development and are likely to apply across a range of national and local contexts. These issues include:

- Handling uncertainties and building resilience;
- Revising the scope and concept of TVET;
- Addressing the lifelong and life-wide possibilities of TVET;
- Increasing TVET responsiveness to new approaches to development;
- Nurturing informal and non-formal learning and TVET in the informal economy;
- Creating institutionally-neutral TVET systems (i.e., training not tied to specific institutions or institutional type);
- Revisiting public TVET policy;
- Enhancing multi-stakeholder partnerships through new approaches to governance;
- Sustainability and greening of TVET; and
- Strengthening the TVET knowledge base, including skills forecasting.

(UNESCO, 2012b. p. 223)

It will be seen below that Bangladesh, with its own aspiration and vision of combating poverty and enhancing skills and capabilities of its workforce, would look to appropriate strategies based on global experience and priorities to chart its course for education and skills development in the post-2015 era.

5. Performance and Challenges of Skills Development in Bangladesh

Political Commitment

The political pledge and commitment of the government regarding education and enhancement of skills and capabilities of people are expressed in documents Vision 2021, the National Education Policy adopted in 2010, and the Sixth Five Year Development Plan. A National Skills Development Policy also has been adopted in 2011.

Vision 2021

Vision 2021 was presented as an election pledge by the leading party, Awami League, in the coalition of political parties that won the parliamentary election at the end of 2008. It proclaims a vision of where Bangladesh wants to be at year 50 of its nationhood. It is yet to be fully elaborated, but the headline items related to education and human resource development include:

- Achievement of universal primary education, extending this stage to grade 8; elimination of illiteracy; creating a new generation skilled in and equipped with technical and scientific knowledge; better remunerations for teachers; and overall improvement of quality and equity in education. It also promised the formulation of an education policy fit for the contemporary age (emphasis added).

- There are other Vision 2021 goals pertinent for educational development – building the Digital Bangladesh through extensive use and capacity development in digital technology; creating gainful employment opportunities for at least 90 million skilled workers; and ensuring equal status for women in all spheres of society and the state.

- A key item relevant for educational development is the goal in governance and public administration, particularly, the idea that local government bodies would be at the centre of planning and management of development activities. With this end, local government authorities at the district and upazila (sub-district) levels would be empowered to become self-reliant and autonomous. This goal also happens to reflect a constitutional requirement under Articles 59 and 60 of the constitutions that elected representatives at each level of administration take responsibility for public services and development activities.

The Education Policy

The National Education Policy, approved by the National Parliament in December, 2010, provides a framework for fulfilling the role of the educational system in the nation's human resource development. The key relevant features include:

Universal education up to grade 8. One-year of pre-primary education and primary education (of five years at present), extended to grade 8 should become universal within the next decade. The historically evolved reality of the diversity of provisions in primary and secondary education – government, government-assisted, NGO and private sector schools, and the madrasa – is recognized. It is agreed that this diversity may continue, but all institutions will have to follow a common core curriculum and adopt minimum common standards regarding learning provisions.

Multiple delivery modes with common core curriculum and standards. The common core curriculum for all types of secondary level institutions (including madrasa) will include Bangla, English, mathematics, science, Bangladesh studies, and IT, and will be complemented by additional subjects pertinent for each major stream – general, vocational, and madrasa. In addition to the vocational stream in schools, there would be various forms of skill training activities according to graded national skill standards designed to meet skill needs in domestic and overseas employment markets. Instruction in science and IT would be given special attention.

Literacy and non-formal education. A literacy programme to eliminate adult illiteracy by 2014 is proposed. Non-formal education is seen as a means of providing a second chance to those who drop out of formal schools, complementing the "literacy campaign."

Quality improvement in tertiary education. Tertiary education institutions, both public and private, would be encouraged to take responsibility to establish and maintain quality standards within agreed framework. A four-year degree program should be acceptable higher education qualification for most professional level occupations except for those aiming for teaching, research and other jobs that call for specialized expertise. A three credit English course should be compulsory for all degree students. Various quality enhancing investments in facilities and teacher upgrading are proposed. Pedagogic technology such as internet and education television channels should be supported.

Student assessment to discourage rote learning. Assessment of learners' achievement should be based on public examinations and continuous evaluation by teachers, which should aim at assessing cognitive, affective and reasoning domains.

Teachers' status, incentives and training. Teachers' recruitment, training, professional support and remuneration should be key elements of the strategy for improving quality in education. A Teacher Recruitment and Development Commission should be established to recruit teachers and support their professional development.

Governance and management measures. A consolidated education law should be enacted providing a legal framework for educational governance and management in line with the purposes of the new policy.

Vocational and technical education policy objectives. Chapter 5 of the Education Policy on vocational and technical education lists the main objectives of such education and 25 strategic points for achieving these objectives. The objectives emphasize rapid expansion of the workforce that is equipped with appropriate skills in line with economic and employment opportunities at home and abroad. Maintaining standards in skills development, taking advantage of information technology, and promoting dignity of labor are also mentioned.

Among the strategies, the key points are:

- Introduction of prevocational education in grades 6-8.

- Flexible entry to higher levels of vocational and technical education at different stages based on formal education qualifications or acquiring national skills level certification; establishment of equivalency of skills levels for skills acquired in different ways.

- Various initiatives to improve quality including acceptable teacher-student ratio, provisions for IT and other equipment, compulsory IT training, production of learning materials in Bangla, and training of teachers emphasizing practical experience in industry.
- Major expansion of apprenticeship with updating of the 1962 Act on apprenticeship.
- Special attention to vocational and technical education for people with disabilities.
- Encouragement of public-private partnership to expand VTE.
- Establishment of a technical education institute in each upazila and expansion of capacity for polytechnics and specialised institutions.
- Bringing all technical and vocational education under the purview of the Bangladesh Technical Education Board (BTEB); strengthening BTEB with necessary human and financial resources.
- Stipends and incentives to bring into VTE those who do not continue formal education beyond grade 8 or secondary stages.
- Periodic revision and modification of VTE curricula considering national and overseas market demands.
- Utilization of VTE facilities in two shifts and for evening and part-time courses for dropout and adults according to local demands.

It can be seen that the policy recommendations are in the form of normative goals or preferences sometimes expressed in general terms. Implementation of the policy will require establishment of mechanisms and processes, preparation of phased operational plans, and reconciliation of differing views and making choices among options on certain issues.

The Sixth Five-Year Plan

The Sixth Five Year National Development Plan (2011 – 15) is expected to be an important mechanism for implementing the plan and program of the government with provision for adequate resources, appropriate coordination and necessary monitoring and adjustments of plans as needed.

The Sixth Plan document notes:

> Presently some 78 percent of the labor force is engaged in low-income, low productivity jobs in the informal sectors. The employment challenge for the Sixth Plan will be to create adequate number of high productivity, high income jobs not only for new entrants but also to allow a substantial transfer of labor from the informal sector to the formal sector (GOB Planning Commission 2011, p.8)

The implementation of Vision 2021 is expected to happen through two medium term plans, the first being the sixth plan. How effectively the challenge identified regarding skills development will be met through the Sixth Plan mechanism? It is said in the plan document that " in a market economy like Bangladesh where the bulk of the economy is privately owned and managed, the role of planning is essentially indicative in nature.... focus of the plans [being] on strategies, policies and institutions to help guide the private sector in helping Bangladesh achieve the goals set in Vision 2021" (GOB, Planning Commission 2011, p.8).

It is recognised that without proper government regulations and public spending in core areas, the social and economic results can be "devastating and unsustainable." A "proper" balance between

incentives to private sector and instituting regulatory policies for safeguarding public interest is seen as "a major guiding principle of the policy and institutional framework of the Sixth and the Seventh plans." But the "indicative" character of the plan - rather than being an operational document that is the basis for guiding and monitoring annual budgets, fiscal decisions and economic policies of the government - casts doubt about the plan's efficacy in guiding actions to achieve the Vision 2021 Goals (GOB, Planning Commission, 2011, p.8).

SFYP background document notes that a wider clientele including the poor can be served to the extent that skill development activities adopt more non-formal, flexible and variable-duration approaches with eligibility criteria not strictly tied to formal education. There are also many lingering questions about internal efficiency and external effectiveness of programs and their actual contribution to poverty alleviation (Ahmed, et al, 2010).

The operational part of the Sixth Plan (Chapter 5, Human Resources Development Strategy, pp. 111-123), states that the aim is to increase numbers of skilled workers including those in information technology at different levels of skills to meet growing demands both in the domestic and international markets. Key strategies include:

- In all institutions including Madrasas, prevocational and IT education will be introduced in grades 6 to 8.
- Equivalencies will be established between formal vocational education after grade 8 and four grades of national skill standards. Tertiary technical education will be open to vocational graduates from formal courses as well o those who achieve required skill standards.
- Apprenticeship programs will be encouraged and the 1962 Act for this purpose will be updated.
- Teacher training will be improved and teachers will have attachment in industries as part of training. A Technical Education Teacher Recruitment and Development Commission has been proposed.
- A vocational training institution will be established in each upazila. The range of courses offered in secondary and technical institutions will be expanded.
- All vocational technical education and training institutions will be brought under the jurisdiction of the Directorate of Technical Education. Consideration may be given to transforming the Directorate into an autonomous IT, Technical and Vocation Education Council.
- Public-private partnership will be encouraged in establishing and managing new institutions. Non-government institutions will be supported with MPO funds and grants for equipment.
- Part-time courses and use of facilities in second shifts will be encouraged.

The Sixth Plan proposals echo the education policy objectives. The policy recommendations regarding equivalency and apprenticeship, if implemented, will promote flexibility in the system through establishing equivalencies between formal courses and skill standards and by encouraging apprenticeship.

A major effort and investments in pre-vocational education are proposed in the education policy and the Sixth Plan. International experience in this respect signal caution, because such investments within formal general education have generally not paid off. These ideas need careful consideration before these are formulated into operational plans for implementation.

In addition, the emphasis on expansion, unless reforms focusing on quality, efficiency and responsiveness to market are effectively put in place, is likely to compounded further the present problems and deficiencies. The sixth plan proposals do appear to be in favor of reforms and improvement of quality within the existing structure of organization and management of TVET, rather that any basic change in planning, managing, establishing accountability in a decentralised way at the institutional level, and redefining roles of different actors and stakeholders which have been highlighted in policy discourse. Moreover, the question lingers if the Sixth Plan, officially called an indicative plan, will make any difference in practical and operational terms.

6. Shortage and Mismatch in Skills Development

The background paper for the Sixth Five Year Plan notes that skills development is characterized by paradoxes (Ahmed, et al, 2010). People with vocational/technical skills are in short supply, but there is evidence that there is a mismatch of jobs and skills. Those with training often remain unemployed or cannot find employment in their area of training – an evidence of mismatch and poor quality of training. The difference in remuneration for skilled and unskilled workers has narrowed which is an indication that the training content and quality are not valued highly in the market.

Projecting data from the last available Labor Force Survey (2005-6), it is estimated that of the working age population of some 75 million, age 15 years and over, around 50 percent has any formal education at the primary level or beyond. Of these with any education, about a half has education beyond the primary level. The fact that half of the work force is without education and only a quarter with education beyond the primary level limits the possibility of skill development through training programs and meeting the needs for upgrading and adaptation of workers to changing skill demands. These numbers encapsulate the nature of the education and skill development tasks for the country.

It has been estimated that for every single person in the labour force with a technical/vocational qualification there are more than 104 others who have completed SSC or HSC; and 34 others who have gone onto a university degree or higher. At the same time, employers' perception is that the products from the vocational system are not meeting their needs; that the system continues to produce graduates for old and marginal trades, which have no market demand, while skill needs for newer trades remain unmet (Ahmed, et al. Ibid.)

Informal Skill Development. Informal and traditional apprenticeship and on-the-job experience remain the means for creating much of the skills that keep the bulk of the economy and production of the country running.

> A master craftsman, himself inheriting the skill from his father or another "master," training his assistants in exchange for free labor or a reduced wage, produces such skills as welding, turning, bricklaying, carpentry, furniture making, electrical maintenance, plumbing, bicycle repair, motor repair and so on. Not enough is known about the system and its strength and weaknesses. An attempt to bring the system under official regulation may not be a good idea. However, maintaining an overview of the system and considering how the more formal training programs of the government and the private sector can complement and supplement the informal system can enhance the effectiveness of the total nationwide skill generation capacity (Ahmed, et al, 2010, p.30)

Formal skills development is offered by a wide range of public and non-government providers. More than nineteen Ministries operate technical training institutions. The Directorate of Technical Education (DTE), the Bureau for Manpower, Employment and Training (BMET), and the Ministry of Youth are the main public TVET providers. At least sixteen other ministries also provide skills training. Private providers make up 95% of total TVET institutions and enrol about 75% of the students. Over 3,000 private providers are accredited by BTEB, in contrast to some 200 public institutions. About one third private providers receives government support, covering basic teacher salaries. About 500,000 students are enrolled in formal TVET. A large number of the private ones are high schools offering business and a limited range of vocational courses of 2-year duration combined with general secondary education (leading to public credentials of secondary and higher secondary vocational stream certificate.) The Bureau for Manpower Employment (BMET) operates 38 technical training centers focusing on training workers for overseas. (Kashem, Alam and Shears, 2011)

Many courses range from a few weeks to six months. A popular one is the basic trade course of 360 hours over six months with recent intake of over 18,000 at a time. The Bangladesh Technical Education Board (BTEB) is responsible at present for quality assurance, curriculum, certification, examination and assessment, but it is not fully equipped and staffed to carry out these responsibilities.

Stated government policies and goals are to increase substantially the proportion of post-primary students enrolling in TVET. As a general proposition, this appears reasonable. But how this emphasis addresses the skills issues in the informal economy and the concerns about equity and poverty alleviation through skills development and job creation is not clear. In addition, as noted, the market responsiveness and quality of the vocational and technical education and training remain a problem.

It is pointed out that the equity effect of the stated aim of expanding TVET is dependent on three inter-connected questions: (a) the extent the clientele of the programs is the disadvantaged and poor segments of the population, (b) how effective the programs are in imparting sellable skills, and (c) whether there is an impact of the training programs on increasing employment opportunities and raising income of the poor (Ahmed, et al, 2010).

The impact of public sector TVET on poverty alleviation may be undermined in two ways. At present it mainly serves young males who have completed at least the eighth grade. This rules out those who do not survive in the education system up to grade 9, who are mostly the poor. Secondly, failure to diversify its clientele and to make the TVET programs more flexible, adaptable and responsive to market needs and geared to the informal economy would prevent TVET from helping the poor improve their employment and income.

7. New TVET Organisational and Policy Initiatives

The National Skill Development Council (NSDC) as the apex body for policy formulation on skill development with representation from the government, employers, workers and civil society has been established. A national skill development policy was drafted in 2009 under the auspices of the Council. The Policy (NSDP) received government approval in 2011. (See Box 1.)

The NSDP affirms that the tripartite National Skills Development Council (NSDC) is the apex skills development body which will oversee and monitor all activities of public and private training providers related to TVET and skills training. NSDP is chaired by the Prime Minister and has an Executive Committee and a secretariat.

This policy attempts to address the issues raised above and proposes to strengthen the Bangladesh Technical Education Board as a quality assurance mechanism. The new Skill Development Council will also consider strategic approaches in the medium term coinciding with the sixth plan.

Box 1. The National Skills Development Policy

"The National Skills Development Policy in Bangladesh will guide skill development strategies and facilitate improved coordination of all elements of skills training and the parties involved. The policy provides the vision and direction for skills development over coming years as its sets out the major commitments and key reforms that government will implement in partnership with industry, workers and civil society." (GoB, 2011)

The policy aims to address critical issues including provision of demand-driven, flexible and responsive training provision; nationally recognized qualifications; competency based training; quality assurance; accurate skills and labour market data; and competent TVET instructors and managers. Other elements in the policy are strengthened apprenticeships; recognition of prior learning; improved access for under-privileged groups; private training provision; industry training; TVET financing; and skills development for overseas employment.

A key feature of the policy is the engagement of industry through the establishment of Industry Skills Councils (ISCs). The TVET reform project has helped establish ISCs in five sectors – agro-food processing, transport equipment (e.g. ship-building), leather and leather products, information technology and tourism. Meanwhile, the Skill Development Project (SDP) funded by Asian Development Bank and the Swiss Agency for Cooperation and Development has established similar councils (called sector working groups) for construction, light engineering, ready made garments and the informal economy.

National Technical and Vocational Qualification Framework (NTVQF): The NTVQF being launched has levels from 1 to 6, as well as two pre-vocational levels to allow easier access to formal TVET for poor or disadvantaged groups who might not have sufficient formal schooling. At the top end, there is a pathway to the Bangladesh University of Engineering and Technology (BUET). The NTVQF will provide an exit point at each of the levels for learners to enter the workforce from full-time and part-time studies. Existing workers will benefit by being able to seek a qualification under the framework through training and/or by recognition of prior learning.

The quality assurance framework: A series of quality standards for TVET institutions covering internal QA management, teaching, facilities, etc. are being developed. TVET institution principals will complete a self-assessment instrument based on the quality standards. These ratings will be compared with those on the assessment form completed by an external quality auditor. Both parties will agree on institutional strengths and weaknesses and agree on an improvement action plan. TVET institutions will have to meet quality standards in order to offer NTVQF courses.

Measures to Increase Access: A number of innovations to increase access to TVET are being tested in various TVET pilots including: training for rural economic empowerment; removing Grade 8 bar for entry to TVET; reasonable accommodation in TVET for persons with disabilities; gender friendly courses and TVET environments; enhancing and increasing apprenticeship in informal and formal sectors; and recognition of prior learning (RPL).

Source: Kashem, A.; Chowdhury, K. A. and Shears, A.E. 2011, "TVET Developments in Bangladesh," Dhaka: ILO, 2011.

In the issues identified and actions proposed, the policy has underscored a number of major concerns:

- Re-thinking the role of public sector skill training in developing a strategy to expand and modernize VTE to meet market demands and extend greater benefits to the poor.
- Improving the link between training and job markets.
- Improving the positive effect on poverty reduction by targeting new clientele.
- Improving efficiency and quality of programs.

These general objectives appear to take cognizance of the problems and deficiencies in TVET programs and skills development in general. These have to be elaborated into operational plans and activities with implementation mechanisms specified and resources ensured. The international cooperation projects mentioned below, recognize these as policy challenges, but the adequacy of responses to address these strategic concerns remains problematic (see below).

It can be seen that the priorities and activities stated in the Sixth Plan strategies (mentioned earlier) do not quite match the emphases in the strategies listed above, especially in respect of redefining the role of the public sector and the link between training and job markets. These items are mentioned in the strategies indicated in the Sixth Plan and the chapter on vocational and technical education in the Education Policy, but how these are to be put into operation through appropriate steps remains open and undefined.

8. International Cooperation

With international cooperation, the government of Bangladesh launched three development projects aimed at reforming the TVET system and improving the quality of TVET outputs. The three projects are:

1. TVET Reform Project (2008 - 2012) – Implemented by GOB and ILO with EU support
2. Skills Development Project – SDP (2009-2013) – Funded by the ADB and SDC
3. Skills Training Enhancement Project – STEP (2010-2014) – Funded by the World Bank.

There is also a technical assistance project of ILO on migration issues initiated in 2011.

The cooperation projects have multiple inter-related agenda which include:

- Modification of TVET legislation
- Supporting national skills development policy
- Establishment of a National Technical and Vocational Qualifications Framework
- Developing a TVET quality assurance (QA) system
- Developing a TVET data system
- Promoting the Recognition of Prior Learning (RPL)
- Developing models for competency standards and new demand driven courses

- Developing new training programs for TVET teachers and principals, and
- Enhancing work based learning including apprenticeships

The Skills Development Project (2008-13) attempts to bridge the gap between the training in institutions and the requirements of the employers and the market. It is being Implemented by the Directorate of Technical Education (DTE) in partnership with industries and NGOs.

The project has attempted to develop competency standards, assessment tools, and curriculum involving industries in the ready-made garments (RMG), light engineering, construction and informal sub sectors. Through eight regional offices, teacher's training and training delivery are supported. A Gender Action Plan is designed to address barriers to women's equal participation in training and work.

The Components of World Bank funded STEP are:

a) Support for public and private institutions offering diploma-level and short-term technical and vocational education and training programmes. Reforms are aimed to improve private sector involvement in institutional management as well as administrative, academic and financial autonomy of institutions;

b) Piloting of Industry Skills Councils (ISC) and the most effective means of strengthening SSC(Voc) or equivalent programs;

c) Institutional capacity development of Directorate of Technical Education (DTE), Bangladesh Technical Education Board (BTEB)), and the Bureau of Manpower Employment and Training (BMET); and

d) Supporting project management, communications, and monitoring and evaluation.

A new and relatively large skills development project, for which project preparation has been initiated is Skills for Employment Project (SEP) to be funded by ADB. The aim of the project is to increase employability and income of TVET graduates by supporting the implementation of aspects of the National Education Policy (NEP, 2010), and the National Skills Development Policy (NSDP, 2011).

In respect of TVET, as noted earlier, NEP calls for an expansion of TVET and the apprenticeship system, and providing vertical mobility between TVET levels. It also supports private management of public TVET institutions to improve quality and access.

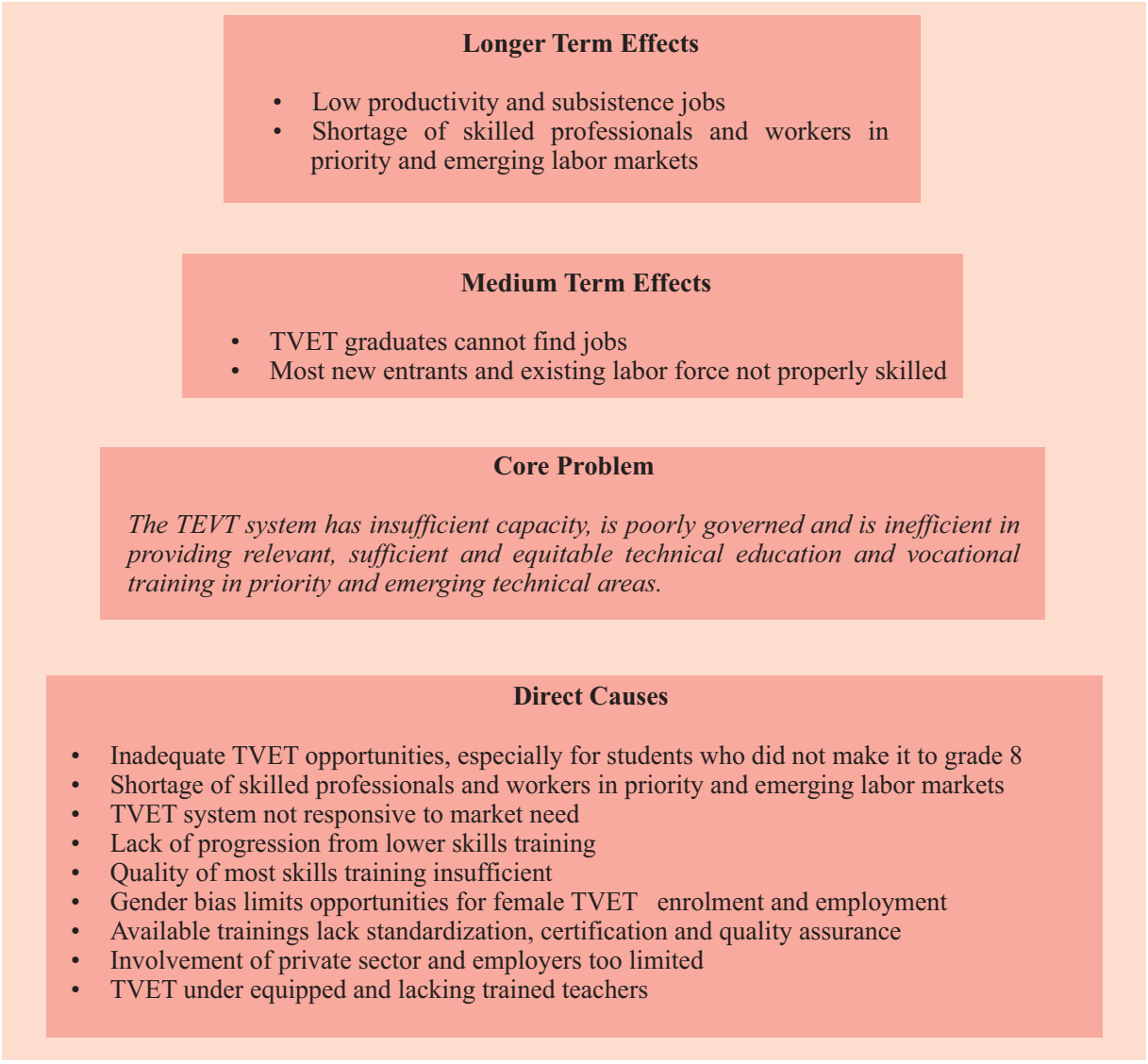
NSDP emphasizes flexible, demand-driven skills development and partnerships between government, industry, workers and civil society. It also stipulates the enforcement of standards and alignment of training programs within a qualifications framework.

The development cooperation projects, ongoing ones and the proposed new activities with ADB assistance, express the general intention of supporting the policy objectives of the government reflected in the National Education Policy and the National Skills Development Policy. On the whole, it appears that the emphasis is on improving the efficiency of the progmmes of activities and responsible agencies within the existing structures, strategies and organistaional mechanisms, rather than more basic change with a medium term and longer term perspective.

Each of the donor- supported project emphasizes certain aspects of the policy objectives. Such a division of labour may be appropriate and necessary. How effective this can be depends on ensuring coordination and mutual complementarity with the lead given by the government authorities. Equally important is how effectively the stated objectives and activities are implemented.

A concept paper of ADB in preparation for the Skills for Employment Project summarizes the causes of problems, the core problems and the medium term and longer term consequences unless the causes and problems can be addressed adequately (Figure 2.1.) It affirms some of the problems and issues identified in discourse and other analyses in this respect. In line with other external assistance projects, it ignores basic structural problems that arise from keeping the majority of workers and potential workers in the informal economy and self-employment outside the purview of policy and programmatic consideration.

Figure 2.1. THE SKILLS DEVELOPMENT PROBLEM TREE



Source: Asian Development Bank, Bangladesh Skills for Employment: Concept paper, 2011

SEP, building on reforms already initiated, will support the implementation strategy of the NSDP - strengthening the National Technical and Vocational Qualification Framework (NTVQF); competency-based curricula to address the skills needs of selected industries, instructor training, responsive training products to meet employer and student needs; and strengthening the Industry Sector Councils (ISC) in key economic sectors. The emphasis of the project, similar to ongoing external assistance projects, is on improving efficiency and quality within the existing structure of TVET. It may make a contribution towards addressing the neglected structural problems, if a significant component in it addresses one of the causes of problems mentioned, i.e., lack of skills development opportunities for young people who do not make it to grade 8.

Attention of external development partners to TVET, a neglected area in the last two decades, poses opportunities and challenges. It can be seen that the assisted projects largely emphasize the formal employment opportunities and skill needs. They do attempt to address critical deficiencies in the current TVET programmes, but venture beyond formal training only cautiously and tentatively, though the large majority of the young people who are deprived of skills development are in the informal economy and are not served by the existing TVET system. They are also subject to inherent limitations of "projectisiation," which face difficulties in improving capacities and integrating policies and strategies into national institutions and organisational structures in a sustainable way, despite rhetoric and proclaimed intentions to the contrary.

9. Concluding Points

In summing up, it can be said that greater national recognition of skills development and serious deficiencies in the TVET system and increased donor supports have prompted various reform initiatives. Challenges loom large within the traditionally defined TVET system and other aspects of skills development which require a broader and coordinated skills development approach backed up by political and policy vision and support at the highest tier of national decision-making.

- The international discourse and analyses have shown the need for a broader skills development vision beyond the traditional confines of TVET, recognising the essential role of formal general education, need to take a lifelong perspective of learning and capacity building, linking skills development with employment policies, a skills and jobs agenda linked to social protection and upholding human rights and human dignity of workers. The sectoralised and fragmented approach of government operations and policy making have so far limited the possibility of a comprehensive and coordinated approach to skill development.

- A broad definition of skills development as a part of human capability enhancement requires comprehensive and coordinated attention to the spectrum of skills comprising foundation skills, transferrable skills and job-specific skills. This broad view needs to be taken as the conceptual framework for exploring policies and actions in the TVET sub-sector.

- Within the TVET sub-sector, the analysis of problems and issue related to formulation of the various projects have diagnosed major problems, but further efforts are needed to work out adequate policy responses and actionable strategies regarding TVET financing, shortage of motivated and qualified TVET instructors, strengthening links to industry, and the capacity and determination to implement the planned activities effectively.

- The demographic transition characterised by declining fertility and population growth rates in Bangladesh has created the potential for a "demographic dividend." The window of opportunity arising from the low dependency ratio for non-working to working population will remain open for about two decades. The potential for reaping the demographic dividend depends on effective skills development, job creation and social protection of workers.

- While there is recognition of limitations of the present structures and practices in skills development, the policy and action priorities of NSDC, known as the apex body, remain largely focused on formal and institutional skills development linked to formal employment, ignoring the majority of workers and potential workers who are in the informal economy. To the extent this focus persists, the contribution of TVET to fighting poverty and promoting equity through skills development and job creation will remain compromised.

- The emphasis on expansion of TVET, which is the thrust of government policy objectives and donor support, is likely to compound further the present problems and deficiencies, unless reforms focusing on quality, efficiency and responsiveness to market are effectively put in place.

- The sixth plan proposals, as well as much of the Governmnet TVET development, supported by donor assistance, are for reforms and attempts to improve quality within the existing structure of organization and management of TVET. Due priority is lacking to action, rather than rhetoric, to basic change in planning, managing, establishing accountability in a decentralised way at the institutional level, and redefining roles of different actors and stakeholders which have been highlighted in policy discourse.

- Overall technical capacity to implement the various externally assisted projects, supported by different development partners, in a coordinated way establishing necessary links and complementarity for overcoming systemic weaknesses and thus achieving the desired outcomes remains a major challenge. The dilemma in this regard is that the goal of strengthening organisational capacities in the projects themselves suffers from the weak institutional capacities to plan, coordinate, and manage to take advantage of external assistance.

Where does this broad canvas painted above leave this present study on constructing a youth skills development profile in Bangladesh? This research, following the Education Watch methodology of collecting relevant evidence from the population at the household level, is intended to present primary data about engagement in skills development of youth in the 10-24 age range and their perception and expectations about skills development opportunities. These findings do not necessarily shed light directly on all the various issues discussed above. But they do highlight the situation from the perspective of, and attempts to present the views of, arguably the main stakeholders on the question of skills development – the young people themselves. This perspective from the point of view of young people is often neglected. In the following chapters, it will be seen that, besides providing pertinent insights about youth participation in skills development, the findings offer useful clues to considering and gaining a well-rounded understanding of critical skills development questions.

Chapter 3

Providing Foundation Skills

A view that puts general education and vocational/technical skills development in distinct and unrelated categories persists in public perception. A part of this view is to regard vocational and technical education and training as inferior to general education and that it is more appropriate for students with lower intellectual capabilities.

There is a growing recognition that this dichotomous view of skills and competencies is untenable. GMR 2012 has emphasized that general education at the primary and secondary level helps build a base of skills and competence. This is prerequisite for further learning, including occupation-related vocational and technical skills. Basic skills including literacy and numeracy and skills in reasoning and thinking as well as life-skills concerned with functioning in society are expected to be learned through general basic education. These are also important components of the repertoire of skills and capabilities necessary to perform well in the world of work.

The present study accepts the premise of the continuity of spectrum of skills including foundation, transferrable and occupation-specific skills. This chapter looks at various aspects of participation of young people (10-24 years) in general education and the opportunities to fulfil the precondition and build the foundation for employment-related skills development.

1. Acquiring foundation skills

Despite a global increase in the number of children enrolling in secondary school, the lower secondary gross enrolment ratio was just 52% in low income countries in 2010, leaving millions of young people to face life without the foundation skills they need to earn a decent living (UNESCO-GMR, 2012:80).

The 2012 EFA Global Monitoring Report has underscored the importance of the foundation skills as a precondition for improving the chances of "decent living" for today's youth by securing "decent jobs." Satisfying learning needs of all young people through equitable access to appropriate learning and life skills opportunities is seen as crucial, which was the third EFA goal adopted by the Dakar World Education Forum in 2000. The interface of general education and skills development determines how young people acquire necessary skills and how their probability of getting a decent job is affected. The present study has emphasized the status of foundation skills acquisition of young people aged 10-24 years as a part of their status and prospects of overall preparation for the world of work.

Educational provision for foundation skills comprises both primary and secondary schooling – access, participation and learning outcomes at these levels. Recent EFA emphasis on primary education has resulted in major expansion of primary provisions in Bangladesh reaching close to 100 percent intake in grade one, though major problems remain in ensuring completion of the primary stage of five years of schooling and acceptable learning outcomes of primary completers. By comparison, access and participation at the secondary level lag substantially behind. What can be achieved both in terms of access and learning outcomes at the secondary level also is dependent on and indicative of progress and outcomes of the primary stage. Moreover, this study has focused on the age range 10-24 years, the majority of whom are expected to be participants in secondary and higher secondary education. The data and analyses regarding foundation skills, therefore, have emphasized the secondary and higher secondary level.

2. Overall participation in foundation skills development

Data regarding current and past educational engagement of young people show that a little more than two thirds of the young people aged 10-24 years are continuing education in some type of schooling. The rest in this age group are not continuing in education. They have completed either the primary or the secondary stage, have dropped out of the system, or have never enrolled in any educational program (Table 3.1). An encouraging news is that the proportion of never enrolled is relatively small at 2.2%. There is no substantial difference in enrolment, dropout, and non-enrolment figures for rural and urban locations (Table 3.1).

Table 3.1: Present schooling status of the children aged 10-24 years by location

Location	Schooling status of 10-24 years old youth			All
	Ongoing	Out of school	Never enrolled	
Rural	68.6 (12,697)	29.3 (5,423)	2.1 (379)	100.0 (18,499)
Urban	68.1 (13,778)	29.7 (6,000)	2.2 (454)	100.0 (20,232)
All Bangladesh	68.4 (26,475)	29.4 (11,423)	2.2 (833)	100.0 (38,731)

Source: Education Watch: Youth Skills Profile Survey, 2012

Figures in parentheses show the numbers in the sample.

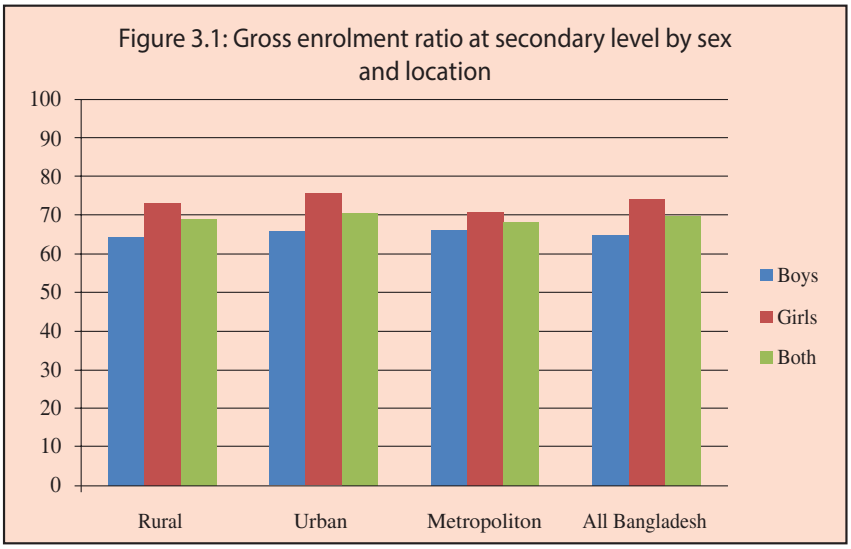
There is substantial geographical variation among regions in the country in educational participation of young people. For example, Rangpur division is performing better compared to other rural and urban divisions in respect of continuation of children and youth in education. Performance of rural Dhaka and urban Khulna in access and participation is found to be worst among all strata (Table A3.1). Female participation rate in education (69.4%) is higher all over the country compared to male participation (67.3%, Table A3.2) with the exception of Rajshahi division.

3. Gross and net enrolment at secondary and higher secondary level

Secondary level gross enrolment

The gross enrolment ratio for Bangladesh at secondary level is found to be 69.7 percent – an improvement over the ratio of 64.5 percent in 2005 (Ahmed et al. 2006). BANBEIS data collected from institutional records, rather than direct sampling, showed the gross enrolment ratio to be 57.0 percent in 2010 (BANBEIS, 2010). The gross enrolment ratio at secondary level is the number of children of any age currently enrolled in classes 6-10 against every 100 children of age 11-15 years. The estimates are sensitive to how the denominators (children in the age group), the numerators (students reported as enrolled) are defined, and how these data are collected.

The gross enrolment estimates show a widening gender gap in favour of girls at the secondary level which raises a concern about reverse gender discrimination and possibly increased child labour. Sampling for this study shows 9.1 percentage point gap in gross enrolment between boys and girls at secondary level (Figure 3.1). There are also urban-rural and regional differences in the pattern of gross enrolment. For example, there is an overall gap of 13.5 percentage points between highest and lowest performing areas; this difference is 8.2 percentage points among urban locations. The area-wise difference in gross enrolment ratio among boys is higher among urban areas (a gap of 11.6 percentage points between highest and lowest performing areas) compared to 10.0 percentage points among rural strata. (Table A3.3).

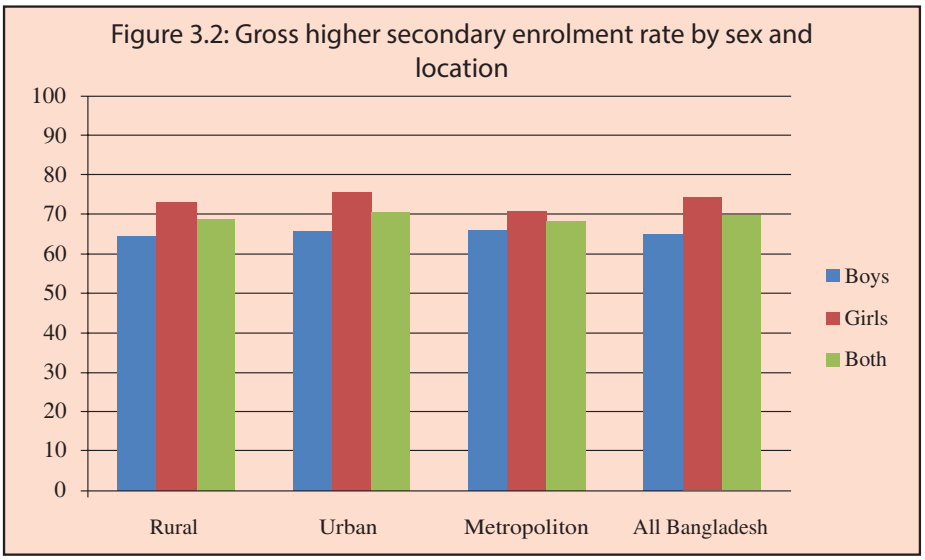


Source: Education Watch: Youth Skills Profile Survey, 2012

Gross enrolment rate at higher secondary level

Our sampling in 2012 shows that the gross enrolment rate at higher secondary level is 74.2 percent with girls again doing better (at 80.1% against 69.1% for boys). This gender difference was substantially higher in urban areas (by 17.8 percentage points) compared to rural areas at 4.0 percentage points (Figure 3.2). BANBEIS Statistical report (2009) also revealed a trend of higher girl's enrolment (with 50.6% of total enrolment) in 2009.

There is large geographical inequality in gross enrolment ratios; higher among urban areas than among rural regions. There was a difference of 29.6 percentage points for highest and lowest performing urban locations - urban Khulna and urban Rangpur respectively. This difference stood at 22.2 percentage point between highest (Rangpur) and lowest (Sylhet) performing rural regions (Table A3.4).



Source: Education Watch: Youth Skills Profile Survey, 2012

Reverse gender gaps in foundation skills

Bangladesh is one of the fifty-four countries with a gender disparity in favour of girls in secondary enrolment. The criterion applied is fewer than ninety boys enrolled for every hundred girls (UNESCO-GMR, 2012). Our sampling showed that 87 boys are enrolled at the secondary level for every 100 girls. Generally, urban boys are found more deprived in this regard (84 for 100 enrolled) in comparison with metropolitan at 94 and rural boys at 90 (Table 3.2). This disparity suggests that more boys of low-income families are being withdrawn from secondary education to join in employment including child labour for a proportion of these people.

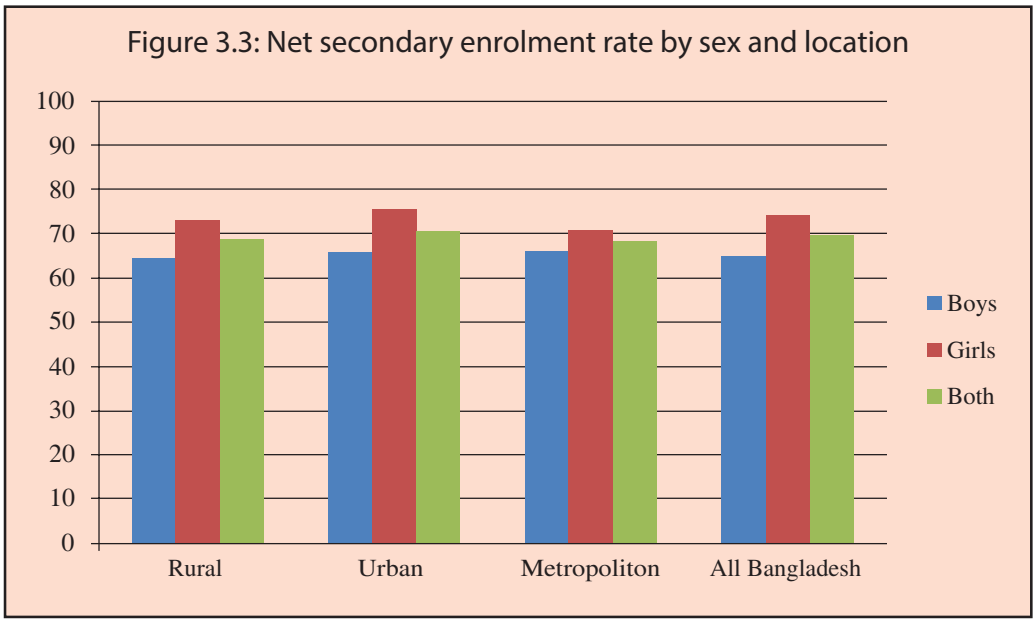
Table 3.2: Number of boys enrolled for every 100 girls in secondary education according to income groups

Income group	Rural	Urban	Metropolitan city	All Bangladesh
Less than $1 a day	85	77	86	82
Less than $2 a day	107	93	74	97
More than $2 a day	91	94	144	99
All	90	84	94	87

Source: Education Watch: Youth Skills Profile Survey, 2012

Secondary net enrolment

There is a large gap between gross and net school participation of the children aged 11-15. Net enrolment for secondary school was found to be 58.5 percent in 2012 (Figure 3.3). According to BANBEIS data, the net enrolment rate at secondary level was 49.7 percent in 2010 (BANBEIS, 2010). It may be in part an exigency of data collection method, noted above. It is possible that the difference in data with a gap of two years suggests an increasing enrolment trend at secondary level providing a growing number of youth with opportunity to acquire foundation skills.

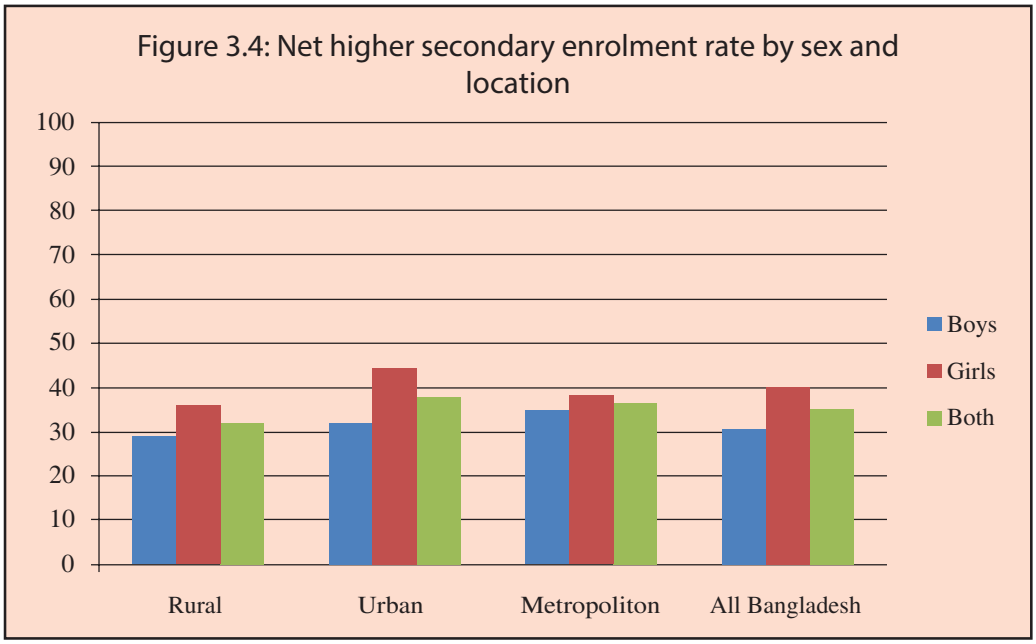


Source: Education Watch: Youth Skills Profile Survey, 2012

The highest net secondary enrolment rate was found in rural Rangpur (63.5%) and in Urban Barisal (65.2%). In both the cases, females were well ahead of the boys. Secondary net enrolment rate was the lowest in both rural and urban Sylhet; again, boys were significantly lagging behind the girls (Table A3.5). Net secondary enrolment rate was higher in urban areas compared to rural areas (Table A3.6).

Higher secondary net enrolment

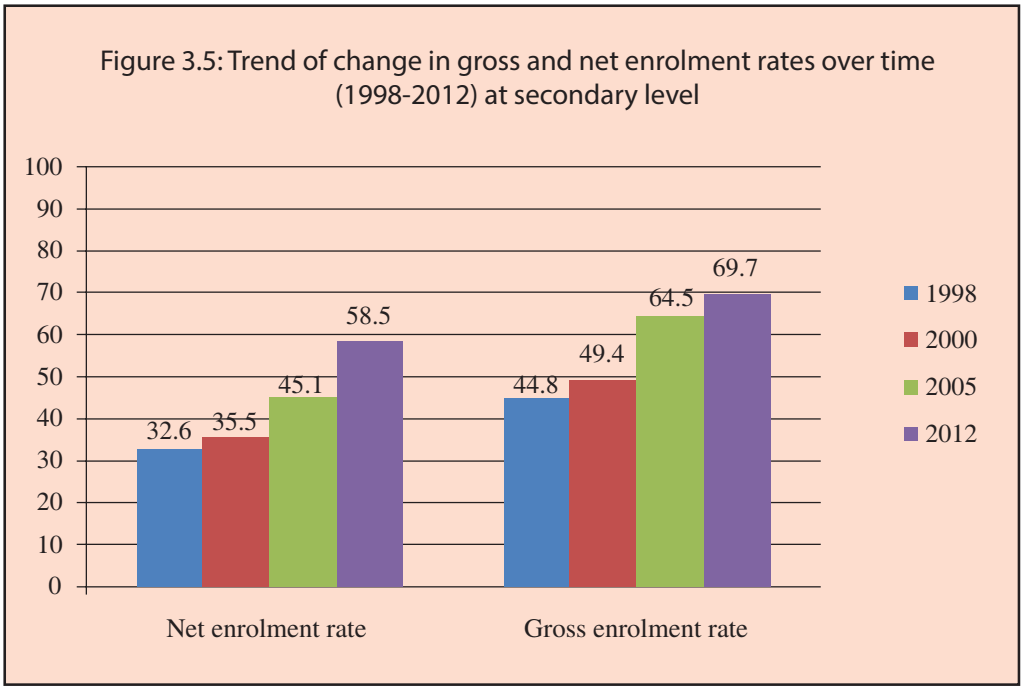
Net enrolment rate at higher secondary level was 34.6 percent (Figure 3.4) with a higher rate in urban areas (Table A3.7). The net enrolment rate at the higher secondary level is substantially lower than the net enrolment rate at secondary level. Moreover, the gap between gross and and net enrolment is conspicuously higher at this level compared to the secondary level (a gap of almost 40 percentage points against 11 percentage points at the secondary stage). One explanation is that school completion of higher secondary requires more than two years' time because of the failure to follow academic calendar and delay in holding examinations and announcing results. The majority of students passing the HSC examination are older, many by several years, than the official age of 17 years for higher secondary completion. Those who come through the Open University system, a growing number in recent years, are generally older than regular school students. Similar to the secondary level, girls had a higher net enrolment rate at the higher secondary level, though until recently boys had an advantage in this respect (Figure 3.4).



Source: Education Watch: Youth Skills Profile Survey, 2012

4. Trend of change in enrolment rate at secondary level (1998-2012)

Acquiring foundation skills depends on policy and political commitments of the country regarding objectives and priorities for the education system. Education policy 2010 has emphasised foundation skills by extending the primary stage up to the grade eight. This also is a consequence of progress made and pressures growing to expand opportunities for basic education beyond the primary level. Figure 3.5 shows the trend of change in both gross and net enrolment figures at the secondary level. The gross and net enrolment rates have gone up by 24.9 and 25.9 percentage points respectively from 1998 to date. This indicates the growth in the numbers of young people with required foundation skills and expectations and potentials regarding technical and vocational skills development in preparation for the world of work.



Source: Education Watch: Youth Skills Profile Survey, 2012

5. Income and age effects of enrolment

Two factors that affect adversely participation and performance of children in secondary education are not being enrolled in school at the right age and the poverty of the household reflected in their low earning (Hossain, 2011; Hossain and Zeitlyn, 2011). In fact, household economic condition is found one of the potent reasons for incongruent age in grade status of children. Percentage of children enrolled in appropriate grade matching with their age is higher among the higher income groups.

In the metropolitan cities, difference in net secondary enrolment rate is high at 12 percentage points between less-than-one-dollar and more-than-two-dollar income groups. Except for more than two-dollar income group in metropolitan cities, net enrolment rate for girls is found higher than that of the boys of respective income groups (Table A3.8).

6. Concluding points

Interface of foundation skills and work skills development

The third EFA goal emphasized youth skills development by focusing on the learning needs of all young people and adults. However, targets and indicators were not elaborated for this complex goal involving diverse actors and potential beneficiaries, which led to weak strategies and relatively low priority in this area. This is evident in the low access and participation of young people and inequities in opportunities at the secondary and higher secondary level. Young people who lack foundation skills offered through good quality primary and post-primary education are unlikely to benefit from technical and vocational training programme that require the ability to

access and process information and adopt new technologies for productive work (Deepak, 2012). Measuring foundation skills is therefore important to know and understand overall situation of the young people in relation to their ability to access to further transferable and other technical and vocational skills training. Therefore, it is important to look at the skills development process through a wider lens of inclusive skills development policy that includes improvement of employability skills of young people who have already possess foundation skills.

Low and inequitable access

The present study show that there has been major progress in respect of young people joining in the foundation skills development process through formal general education. However, data also show that there are inequity in access and participation among the youth in terms of gender, location, and economic status. Boys in general are getting less access to secondary and higher secondary education compared to girls. Young people from poor households are found to be more disadvantaged in acquiring foundation skills in general. Urban poor boys in particular are more vulnerable in this regard. Performance in certain regions of the country in acquiring foundation skills is still very low compared to the national average; the Sylhet division is a case in point. Needless to say, all these have implications for acquiring transferable skills relevant in varied contexts, and participation in occupation-specific technical and vocational education and training by young people.

Chapter 4

Access and Participation in TVET

This chapter focuses on participation in TVET of young people in the age range 10-24 years based on a nationwide household sample survey. The challenge and opportunity posed by the declining dependency ratio are noted. In line with the broad view of skills, the characteristics and scenario of participation in general education and diverse TVET provisions are presented. Inequities in access related to geography, economic status and gender are examined. Relative efficacy of forms of TVET is discussed. The concluding observations sum up key points about access and participation in and efficacy of forms of skills development.

1. Population dependency ratio

The population dependency ratio relates the number of children and older population to the working-age population and reflects the potential effects of changes in population age structures for social and economic development. It actually points out the broader trends in social support needs for different age groups in the population. A change in population dependency ratio implies the need for distribution and redistribution of national resources for economically active (working) and passive (children and older) population. A high dependency ratio indicates greater responsibility of the economically active population for supporting the children and older persons with social services. The population of working age increases when fertility level declines and the window of opportunity opens up while continuous declining fertility rate eventually increases dependency ratio by increasing the size of the older population (Table A4.1). Obviously, not every person below 15 and over 65 is a dependent and not every person between ages 15 and 65 is at work, but despite the "crudeness" of this indicator, it is the most common measure used to document broad trends in the age composition and dependency burden (Bongaarts, 1998).

The sample survey data show the population dependency ratio of Bangladesh to be 58 percent in 2012. According to an official estimate, this number was 66 percent in 2009 (GOB, 2011). The accuracy of such a sharp decline shown by the two estimates with a gap of three years may be debated, but the figures indicate the trend. Like other skills development parameters, the dependency ratio is not evenly distributed for the country. Our survey revealed a higher ratio (60.6%) for the rural population and considerably lower ratio for the metropolitan areas in Bangladesh (48.7%). These numbers indicate the higher population growth rate and different demographic distribution in family among rural people compared to urban populations. Female dependency ratio was found higher across the population irrespective of locations (Table 4.1).

Table 4.1: Population dependency ratio of Bangladesh

Sex	Rural	Urban	Metropolitan	All Bangladesh
Male	59.6	55.4	48.2	56.8
Female	61.8	57.5	49.4	59. 0
Both	**60.6**	**56.5**	**48.7**	**58.0**

Source: Education Watch: Youth Skills Profile, 2012

There is an area-wise difference in the population dependency phenomenon for different strata. The lowest dependency ratio was found in Rajshahi division, both for rural and urban areas (51.7% and 49.1% respectively) and it was the highest in Sylhet division with a higher ratio (by 9.4 percentage points) for the rural areas. (Table A4.2).

The low overall dependency ratio creates the opportunity for what is described as the "demographic dividend," the possibility of using relatively larger workforce contributing to higher per capita income and general wellbeing. However, this potential can be realised only by improving skills and capabilities of workers through effective and efficient programmes of technical and vocational education and training and by addressing related issues to ensure this outcome.

2. Characteristics of youth in relation to general education and TVET

Access to different forms of skills development

A recent report based on BTEB information indicates that there is a total of 4,898 government and privately owned TVET institutions in the country with an aggregate intake capacity of 437,574. The private sector institutions constitute 93.3% of all institutions with a total intake capacity 82.6%, while the remaining 6.7% public sector institutions had 17.4% of total intake capacity (Mia, et. al. 2012:5). It is worth-noting that secondary level general education institutions with a total of over 25,000 are five times of TVET institutions in number.

The present study attempted to probe the status and prospects of technical and vocational skills development of youth (10-24 years). In line with the broad concept of skills development, participation and opportunities in traditionally defined technical and vocational education as well as the prerequisites for TVET in the form of general education are considered. For this purpose, young people aged 10-24 years are distributed into eight mutually exclusive categories depending on their engagement with formal or non-formal general education, formal or non-formal technical and vocational education/training, formal or informal apprenticeship, simultaneous multiple engagements in these categories, or no engagement any of these categories. The presumption is that people in this age group have either participated in one or another education, training and apprenticeship programs (completing a stage or dropping out from it), or have never enrolled in these. This data would provide an overall picture of engagement or non-engagement of young people in education, training, and apprenticeship and indicate broadly the opportunities and prospects for skills development.

Data show that 87.2 percent of the young people were involved in formal or non-formal general education, which is regarded as the provider of foundation skills in this study. They were not involved in any type of technical or vocational education or training. Only 3 percent of the young people enrolled in some form of formal or non-formal technical and vocational skills development education/training, while 5.7 percent of the sample youth participated in mostly informal apprenticeship. At the same time, 2.0 percent of the young people were engaged both in general education and TVET; and 1.8 percent were not involved in any education and training activities (Table 4.2).

Data also reveal higher girls' participation in general education (90.5%) compared to boys (83.2%). Boys' representation was almost three times higher in formal TVET activities (3.3%) compared to girl's participation (1.2%). A significant proportion of young people went through informal apprenticeship process (5.7%) where girls' representation was around half of the boys (7.8% vs. 3.6%).

Table 4.2: Status of 10-24 year olds with general education and skills development involvement by gender

Types of education/training	10-24 year old participants in education/training					
	Boys		Girls		Both	
	n	%	n	%	n	%
Formal general education	16,345	83.2	17,290	90.5	33635	86.9
Non-formal general educa tion	83	0.4	51	0.3	134	0.3
Formal TVET	652	3.3	237	1.2	889	2.3
Non-Formal TVET	153	0.8	124	0.7	277	0.7
Formal Apprenticeship	78	0.4	48	0.3	126	0.3
Informal apprenticeship	1,523	7.8	685	3.6	2,208	5.7
More than one (gen + TVET)	413	2.1	343	1.8	756	2.0
Involved in none of above	396	2.0	298	1.6	694	1.8
All	19,643	100.0	19,076	100.0	38,719	100.0

Source: Education Watch: Youth Skills Profile, 2012

The nature and dimension of overall area-wise disparity in access to foundation skills was shown in chapter 3. The formal and non-formal TVET participation and informal apprenticeship data show an advantage for urban youth compared to their rural counterparts. As stated earlier, male access and participation are found higher than for females in this regard. Formal TVET participation in both rural and urban Sylhet and Chittagong divisions was the lowest among all regions. It was the highest among the youth of urban Rajshahi, Rangpur and Khulna (Table A4.3).

Current students and TVET

Data above (Table 4.2) showed the status of educational participation of all 10-24 year olds, including those currently employed and those not participating any longer in education and skills development. This section presents the situation of those who were currently engaged in education and skills development at the time of the survey. Total number in our sample of currently engaged in some form of education and training is 26,694, which is 70 percent of the total sample of 10-24 year olds of 38,719.

Data show that 93.6 percent of young people who are currently enrolled are involved in formal or non-formal general education. Only 6.4 percent currently enrolled youth are involved in formal or non-formal TVET or informal apprenticeship; and 1.1 percent had multiple involvements (both general and TVET). Involvement of girls in general education was 6.7 percentage points higher than that of the boys. Only 1.1 percent of the currently enrolled girls are found involved in formal technical and vocational skills development activities compared to 3.6 percent of boys (Table 4.3). Access of girls in informal apprenticeship is found even lower compared to boys (0.8% vs. 4.3% respectively). This means girls suffer a large disparity in access to TVET in contrast to girls' advantage in general education.

The survey data shows that young people's participation in TVET activities increases, as they grow older. The TVET (all types) participation of 10-14 years old children was 2.2 percent; it was 15.1 and 22.8 percent for the youth aged 15-19 and 20-24 years respectively. Age-wise participation rate was higher for boys of any age group compared to girls' participation (Table A4.4).

Table 4.3: Current participation of 10-24 year olds in general education and skills development by gender

Types of education/training	Percentage of youth continuing general education or/and TVET					
	Boys		Girls		Both	
	n	%	n	%	n	%
Formal general education	12,188	89.9	12,695	96.6	24,883	93.2
Non-formal general education	71	0.5	46	0.4	117	0.4
Formal TVET	483	3.6	146	1.1	629	2.4
Non-Formal TVET	13	0.1	8	0.1	21	0.1
Formal Apprenticeship	33	0.2	14	0.1	47	0.2
Informal apprenticeship	585	4.3	106	0.8	691	2.6
More than one (gen + TVET)	181	1.3	125	1.0	306	1.1
All	13,554	100.0	13140	100.0	26,694	100.0

Source: Education Watch: Youth Skills Profile, 2012

The survey data show that the enrolment figure in TVET as a proportion of total enrolment in secondary education has gone up to 1.1 percent in 2012 from 0.7 percent in 1999 (UNESCO, 1999). The ratio of TVET enrolment as a proportion of secondary enrolment is about double in metropolitan city areas compared to rural areas; boys in all locations were well ahead of the girl's in enrolment in TVET (Table 4.4).

Table 4.4: Percentage distribution of enrolment in TVET as a proportion of total enrolments in secondary education by sex and location

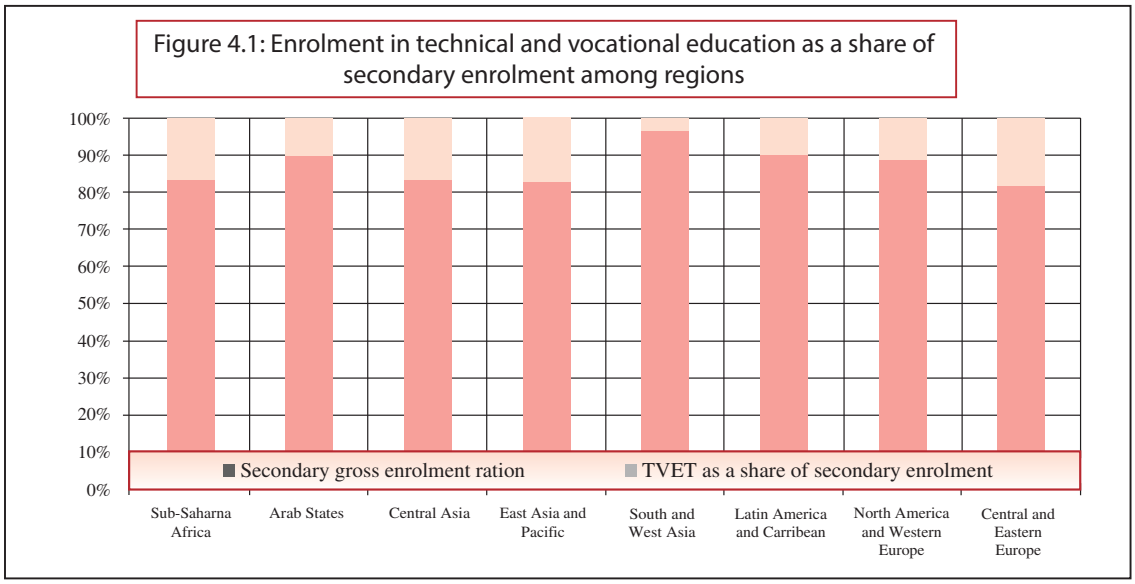
Location	Percentage of youth continuing general education and TVET by sex					
	Boys		Girls		Both	
	Non-TVET	TVET	Non-TVET	TVET	Non-TVET	TVET
Rural	98.9	1.1	99.1	0.9	99.0	1.0
Urban	98.3	1.7	99.3	0.7	98.9	1.1
Metropolitan city	97.2	2.8	98.7	1.3	97.9	2.1
All Bangladesh	98.5	1.5	99.1	0.9	98.9	1.1

Source: Education Watch: Youth Skills Profile, 2012

TVET participation compared to secondary gross enrolment

Global Monitoring Report (UNESCO-GMR, 2012) put forward the status of participation in TVET across the world to understand present status of TVET in skills development. The proportion of secondary school people enrolled in Skills development programs in 2010 was found 11 percent worldwide with huge regional variations. Share of secondary enrolment in Central Asia, East Asia and Pacific, and Central and Eastern Europe are17 to 20 percent. However, in South and West Asia, a UNESCO regional category to which Bangladesh belongs, the share of technical and vocational education enrolment as share of secondary level gross enrolment is only 2 percent,

lowest in the world (UNESCO-GMR, 2012). Within this lowest performing region, Bangladesh's performance in access to TVET is about half of the average (Figure 4.1).



Source: UNESCO-GMR 2012

TVET enrolment as a proportion of total enrolment in higher secondary education was found four times higher than secondary enrolment figures (4.7%, Table 4.5) although, girl's participation remained low for higher secondary level also. Data also show rural urban disparity has been relatively smaller for TVET enrolment as a proportion of higher secondary enrolment. This information indicates a higher level of interest of young people to enrol in TVET after completion of their secondary education; however, gender gap to the disadvantage of girls persisted.

Table 4.5: Enrolment percentage in TVET as a proportion of total enrolment in higher secondary education by gender and location

	Percentage of youth continuing general education and TVET by sex					
	Boys		**Girls**		**Both**	
	Non-TVET	**TVET**	**Non-TVET**	**TVET**	**Non-TVET**	**TVET**
Rural	94.1	5.9	97.4	2.6	95.6	4.4
Urban	93.2	6.8	96.4	3.6	95.0	5.0
Metropolitan city	94.4	5.6	94.7	5.3	94.6	5.4
All Bangladesh	**93.7**	**6.3**	**96.7**	**3.3**	**95.3**	**4.7**

Source: Education Watch: Youth Skills Profile, 2012

3. Correlates of access to TVET and foundation skills

Per capita income and access to TVET and apprenticeship

The survey data for this study show, contrary to intuitive expectations, that the lower income groups are sending higher proportions of their children to the general education and a lower proportion to the formal TVET (Table 4.6). Potent reasons for this situation may be the competitiveness and expenses of certain categories of TVET. These include medical, dental, engineering, law, agriculture, and physical education colleges, polytechnics and technical and vocational training centers, both in public and private sectors. Many of these technical and occupational education programs are accessible to relatively few young people coming from selected secondary and higher secondary institutions and who are more privileged in economic terms.

Table 4.6: Participation status of 10-24 year olds in general education and skills development activities by per capita income

Type of education/training	Percentage of students from different income groups (earning per person/day)			All
	<1$	<2$	>2$	
Formal general education	87.6	86.3	84.2	86.9
Non -formal general education	0.4	0.2	0.2	0.3
Formal TVET	1.4	3.1	5.3	2.3
Non -Formal TVET	0.7	0.8	0.9	0.7
Formal Apprenticeship	0.3	0.4	0.5	0.3
Informal apprenticeship	5.9	5.9	3.8	5.7
More than one (Gen+TVET)	1.3	2.4	4.5	2.0
None	2.4	0.9	0.6	1.8
Total	100.0 (24,325)	100.0 (10,117)	100.0 (4,242)	100.0 (38,684)

Source: Education Watch: Youth Skills Profile, 2012

Note: Numbers in parentheses show numbers of people in the sample

On the other hand, a significant number of young people are participating in informal apprenticeship by their own volition. Data show more young people from low income households are participating in informal apprenticeship compared to higher income groups. However, there is no government allocation of resources or support to promote and sustain these pro-poor activities for skills development. Participation of the proportion of young people from low income group in non-formal TVET is found lower compared to those from comparatively higher income groups, in contrast to the situation in general education. It means children from very poor families are disadvantaged in respect of getting access to even non-formal TVET programme. In addition, only 1.3 percent of the young people from less than one-dollar-a-day per person earning engaged in both general and TVET programmes simultaneously compared to 4.5 percent from over two-dollar income group.

It is obvious from the data that in Bangladesh TVET is more expensive than general education and remain relatively out of reach of the poor young people. In the case of informal apprenticeship, the level of access is related to household income for both rural and urban youth, showing young people from lower income groups participating more in informal apprenticeship (Table 4.7).

Table 4.7: Status of participation in general and skills development activities of youth by location and income per capita/day

Type of education/training	Percentage of youth (10-24 years)					
	Rural			Urban		
	<$1	<$2	>$2	<$1	<$2	>$2
Formal general education	89.4	89.0	85.3	85.4	84.5	83.7
Non-formal general education	0.5	0.2	0.1	0.4	0.1	0.3
Formal TVET	**1.3**	**2.7**	**4.9**	**1.6**	**3.3**	**5.5**
Non-Formal TVET	0.6	0.7	1.1	0.7	0.8	0.8
Formal apprenticeship	0.2	0.4	0.6	0.3	0.4	0.4
Informal apprenticeship	**4.8**	**4.6**	**4.4**	**7.2**	**6.8**	**3.6**
More than one (gen+TVET)	0.9	1.5	2.9	1.8	3.1	5.2
None	2.2	0.8	0.7	2.6	0.9	0.5
Total	100.0 (13,213)	100.0 (4,023)	100.0 (1,255)	100.0 (11,112)	100.0 (6,094)	100.0 (2,987)

Source: Education Watch: Youth Skills Profile, 2012
Note: Numbers in parentheses represent number in the sample.

Similar income effect - positive correlation with income for formal TVET and inverse correlation for informal apprenticeship and general education – is seen more strongly for overall estimates for the country (Table A4.5).

Gender and geographical difference

It has been reported earlier that a higher proportion of rural young people (89.5%) is participating in general education compared to urban youth (85.2%). In both rural and urban areas, girls' participation was found higher. Participation of urban girls was 8.2 percentage points higher than that of boys and this difference was 6.5 percentage points in the rural areas. It may be noted that since in the rural areas there are primary education stipend program for poor children and secondary female stipend programme for girls. On the other hand, it was found that more young people from urban areas participated in formal and non-formal TVET program (5.7%) than rural young groups (3.3%) and in both cases boys' participation was higher than that of girls (Table 4.8).

Table 4.8: General education and TVET participation by location and gender (10-24 years)

Name of programs	Rural	Urban	All Bangladesh
Bachelor/masters	5.9	7.0	6.6
Diploma courses	7.6	6.5	6.9
Formal certificate courses	3.1	2.2	2.5
HSC trade certificate/vocational	0.5	0.9	0.8
SSC trade certificate/vocational	2.2	2.1	2.2
Other short trade courses	24.2	30.5	28.0
Apprenticeship	56.5	50.8	53.0
All	100.0	100.0	100.0

Source: Education Watch: Youth Skills Profile, 2012

There are wide variations in stratum-wise participation in formal TVET and informal apprenticeship. Among the rural strata, formal TVET participation is found the highest in rural Khulna (5.3%) and it was the lowest for rural Chittagong divisions (1.5%). The performance of rural Sylhet was also low (1.8%). The rate of formal TVET participation in urban areas is found higher compared to rural areas in general, but there is a wide range among the urban areas too. The highest proportion of formal TVET participation was found in urban Barisal area (8.1%) which was equal to participation in metropolitan city areas (8.2%). It was the lowest in urban Sylhet division at 2.0% (Table A4.3).

As noted, informal apprenticeship is the single largest vehicle for skills development in Bangladesh. Similar to formal TVET, a higher proportion of urban young people were involved in informal apprenticeship compared to rural youth.

It was found that the highest proportion informal apprenticeship participants among young people were in urban Dhaka and metropolitan cities (10.5% and 11.2%). This proportion was lowest for urban Rangpur (5.4%) and urban Sylhet (5.7%). Among rural areas, Dhaka had the highest participation (7.5%) and the lowest was Rangpur (3.5%, Table A4.3).

4. Relative Efficacy of Types of Skills Development

If we look at the type of TVET participation, of some 13 percent of the 10-24 year olds, about half are involved in apprenticeship and the rest are engaged in different long-duration and shorter bachelors, diploma, certificate, vocational and trade courses. A higher proportion of rural young people is found to have participated in apprenticeship compared to the urban youth. In another calculation, every 4 out of 5 TVET participants are involved in either apprenticeship or other short trade courses. Data show that 6.6 percent of TVET participants are doing bachelor/masters level courses, 6.9 percent are involved in diploma courses, and 2.5 percent in formal certificate courses. Somewhat surprisingly, only 0.8 percent TVET participants are involved in HSC trade certificate courses and 2.2 percent in SSC trade/certificate courses. On the other hand, 28.0 percent of the TVET participants were involved in different types of short trade courses. It indicates that for young people SSC and HSC level certificate courses are not particularly attractive. The urban youth are participating more in formal TVET and other trade courses and the rural youth are gravitated more towards apprenticeship and diploma courses (Table 4.9).

Table 4.9: Percentage distribution of skills development participants (10-24 years) by programs and rural-urban breakdown

Geographical and gender distribution of participation	General and TVET participation				Total
	General education	Formal non-formal TVET	Apprentice-ship	None	
Rural	**89.5**	**3.3**	**5.4**	**1.8**	**100.0**
Male	86.3	4.4	7.2	2.1	100.0
Female	92.8	2.2	3.5	1.5	100.0
Urban	**85.2**	**5.7**	**7.3**	**1.8**	**100.0**
Male	81.0	7.2	9.8	2.0	100.0
female	89.2	4.3	4.8	1.7	100.0
All Bangladesh	**87.2**	**4.6**	**6.4**	**1.8**	**100.0**
Male	83.6	5.8	8.6	2.0	100.0
Female	90.9	3.3	4.2	1.6	100.0

Source: Education Watch: Youth Skills Profile, 2012

A closer look at formal TVET participation shows only 14.0 percent of the youth enrolled in formal TVET are enrolled in HSC and SSC level trade/vocational courses, which indicate low demand of these two courses, while diploma and other trade courses are in greater demand along with bachelor/masters level courses (Table A4.6). Costs of formal TVET and selection criteria for it are in part the cause of the low participation. The employment and earning prospects of graduates, which are related to quality and relevance of the training, also appear to be responsible factors. Young people from higher income groups are participating more in Bachelor or diploma or different trade courses and a lower proportion in SSC and HSC certificate courses. In relative terms, young people coming from less than one dollar a day income group are attracted more to informal apprenticeship (Table A4.7).

5. Rural disadvantage

Comparatively, a lower proportion of young people participate in formal, non-formal TVET, and informal apprenticeship from rural areas. In the metropolitan cities, the rate of TVET participation is the highest among the geographical strata. Most of formal government institutions are based in the urban areas and urban youth are obviously getting more access. There is also a relatively high participation of youth in informal apprenticeship in metropolitan city and urban areas. This may be related to the scale of both the formal and the informal economy in the urban areas compared to rural areas. This preference for informal apprenticeship of urban young people indicates a diminishing importance of agro-based economy compared to informal services and manufacturing. It is interesting that more of the youth in urban locations, especially in metropolitan cities, are being involved in TVET in lieu of general education (Table A4.8).

Formal skills development opportunities are not distributed evenly among the regions. Both rural and urban areas of Sylhet and Chittagong division are found to be the most deprived areas in terms of getting formal TVET participation (Table A4.3). Young people of rural areas in general lagged behind their urban counterpart in accessing formal TVET activities.

If we look into the relative efficiency of TVET and general education in terms of continuation, completion, and dropout, it appears to show relatively greater willingness of young peopleess to complete their TVET courses. The data show that 55.4 percent of those who have reported their involvement with formal TVET are continuing in training, 39.3 percent have already completed, and only 5.3 percent dropped out from formal TVET. While, around two thirds of the apprentices have completed the program, 28.7 percent are continuing and 5.9 percent have dropped out of the system (Table A4.9).

In general secondary educations, 74.0 percent of 10-24 years age group completed a stage or were continuing in school and 26 percent had dropped out. Dropout rate is found around five times higher for general education compared to technical and vocational education. This suggests most of the young people who enrol in TVET or apprenticeship try to complete, possibly due to short duration of courses and high direct and indirect private costs of the courses.

6. Responding to participation challenges

The present study, focusing on young people's engagement in skills development, did not undertake an assessment of appropriate institutional and organistaional provisions for skills development. This chapter regarding TVET participation has pointed to problems in provisions, which have been further noted in later chapters regarding youth perceptions and expectations about skills development.

A pragmatic and effective model that has developed over two decades and has been acclaimed for addressing participation of youth in skills development fulfilling criteria of quality with equity is worth-noting. This is known as the Underprivileged Children's Educational Programs (UCEP). UCEP in its educational approach has successfully combined basic general competencies, transferrable skills and job-specific skills launching disadvantaged children on a path to decent livelihood. The UCEP model is highlighted as an example that indicates the features and characteristics in educational content, pedagogy and management, which should be incorporated in expanding skills development in the country. (See Box 2.)

Box 2. Under-privileged Children's Education Program (UCEP)

Underprivileged Children's Educational Programs, UCEP-Bangladesh is working with the distressed urban working children. Starting in 1972 at the Dhaka University premises with only 60 students, it is now a hub of over 42 thousand working children striving to inculcate marketable skills and provide employment support service through general education and vocational training in close collaboration with industries and employers throughout Bangladesh.

The main objective of UCEP programs is to improve the socio-economic status of the urban poor and support industrial growth by generating skilled manpower. UCEP has global reputation for its unique model of human resource development. UCEP's success has enabled it to be listed twice in the UN ESCAP's "Compendium of Centers of Excellence in HRD Research and Training". UCEP has demonstrated a practical and effective way to tackle child labour and induct underprivileged children into livelihood skills and jobs in the context of large scale poverty.

UCEP currently operates 53 integrated general & vocational schools (IGVE feeder schools) in urban slums of Dhaka, Gazipur, Chittagong, Khulna, Rajshahi, Sylhet, Barisal and Rangpur. UCEP feeder schools follow the curriculum and textbooks prescribed by the National Curriculum and Textbook Board (NCTB) incorporating basic elements of technical education and provide basic education up to Grade VIII. The prime objective of the IGVE curriculum is to prepare the students to follow a high quality of technical education. A total of 40,530 students, 50% are girls attend the UCEP IGVE basic education.

The Children continue to work and earn while they attend school. UCEP schools operate 3 shifts a day, each of 3 hours duration having 4 lessons per day. This allows a child to choose a shift of his/her convenience in consultation with his/ her parents employer/guardian; so that economic loss for the children attending school is not regarded by their family as a prohibitive one.

Integrated general and vocational education (IGVE)

UCEP runs two academic sessions in a calendar year, each of six months, having 120 schooling days per session. In practical term, this means, a child can complete 2 grades in a given year enabling him/her to complete grade VIII in 4½ years, including six months' of pre-technical schooling after completing Grade-VIII.

The UCEP schools basically follow the NCTB curriculum both at primary and lower secondary level. However, the curriculum has been abridged in a careful manner so that it remains comparable with that of national mainstream curriculum. The curriculum consists of Bangla (mother tongue), English, mathematics, vocational, social environment and hygiene.

Technical education

To provide appropriate skills and thereby improve the employment prospects of IGVE graduates, UCEP provides technical education through its 10 Technical Schools in Dhaka, Chittagong, Khulna, Rajshahi, Barisal, Sylhet, Rangpur and Gazipur. Technical Schools are currently running training . Technical Schools are currently running training programs in 20 trades. Types of trades taught in the Technical Schools correspond to the demand of the employment market in the area where the school is located.

Technical schools run 2 shifts per day, each of 4.2 hours duration, so that working children can continue in their jobs while they acquire skills in the Technical Schools. Total enrolment in 10 technical schools is 5,176 (boys 3,112 and girls 2,064). Innovativeness of the Technical Schools approach is well demonstrated in the data that attendance and dropout rates are 95%+ and below 3% respectively. The underprivileged children of UCEP secured the top four positions (1st to 4th) in GPA-5 category along with 100% success rate in the SSC (Vocational) examination of 2012 held under the Bangladesh Technical Education Board (BTEB).

- Adapted from http://www.ucepbd.org

7. Concluding points

The trend of increase in working age population is related to the potential for economic growth. In the developed regions, the proportion of the population of working age increased steadily in the last century. However, this increase is over, and it has been declining steadily. Among the least developed countries, the proportion of working age population will rise with an opportunity for economic growth along with a challenge of creating gainful employment for the growing numbers of the working age population (UN Department of Economic and Social Affairs, 2009). The present study shows a potential for realizing "demographic dividends" with a relatively lower demographic dependency and higher working age population.

The present survey shows double the number of young people who participated in formal TVET were involved in informal apprenticeship. Informal apprenticeship continues throughout the country without public or institutional support and recognition. Many of these apprenticeships are happening in the family environment with a lifelong learning approach and traditional mentor-follower model of occupational skills transfer, such as in farming, crafts and making artefacts of all kinds as a cottage industry. A wide range of informal training is going on in workshops, factories, shops and service establishments through pairing of young people with experienced and skilled persons. These young people captured in the survey have been categorised as participants in informal apprenticeship.

It has surfaced from the study that girls' participation in formal TVET is very low – only around one third of the number for boys. Girl's participation in informal apprenticeship also did not surpass half of the boy's participation.

Overall TVET participation was found to be only 1.1 percent of the total enrolment at the secondary level which was about half of the South and West Asia's 2 percent average. TVET participation was higher among the comparatively higher income groups; more urban youth were participating in TVET than their rural counterparts. There was wide geographical inequality in TVET participation. It turned out that young people were not enthusiastic about SSC and HSC level trade courses in secondary and higher secondary schools irrespective of gender, though this program appears to be receiving high government patronage.

A creative and pragmatic approach of combining basic general education and vocational preparation followed by job-related technical education has been developed over more than two decades, especially for disadvantaged children, by UCEP. This home-grown model points to key features of educational content, pedagogic method and institutional management which should be considered in meeting challenges to TVET participation described in this chapter.

Chapter 5

Employability and Earning

The issues concerning employability and earning as these are influenced by skills development factors revealed by the survey are addressed in this chapter. The status of youth employment is presented first followed by information about how skills development contributes to employment and earning. Geography and gender affecting access to employment and earning are examined based on survey findings.

The purpose of production-related skills development of young people is to ensure that they will find gainful employment and earn an income to guarantee their and their families' sustenance and wellbeing. Employment can be fulltime or part-time; with an wage income, in self-employment, or in unpaid work in the household, contributing to family sustenance and wellbeing. Employment other than in fulltime wage category is largely in what is described as the informal economy.

The informal economy refers to economic activities which are generally unrecognised, unrecorded, unprotected, or unregulated by public authorities. The informal economy is expected to shrink and become marginal as the country achieves a higher level of economic growth and modern industrial development. However, evidence shows that in developing countries the informal economy remains large and the major source of employment and earning (Becker, 2004). In Bangladesh over 80 percent of total employment is estimated to be in the informal sector; thus deserving critical attention in analysing employment status, earnings and their connection with skills development.

1. Employment status of the youth

It is expected that people who have gone through a skills development experience will enhance their prospects for gainful employment compared to those who have not done so. Our survey reveals that 29.7 percent of the surveyed population (10-24 years), who have gone through informal apprenticeship, are in full time wage employment. This is the highest proportion of any category of skills development participants who are in fulltime employment. The next category with 27.3 percent in full time employment consists of those who have been formal TVET participants. Among only general education participants, 13.0 percent are in fulltime employment, followed by 10.4 percent among those who have not participated in any educational or training activities (Table 5.1).

In the case of part-time wage employment, the highest proportion is from formal TVET participants at 18.7 percent. This proportion is substantially lower at 7.2 percent for those who have participated in apprenticeship. Part time employment proportions for those who have gone through general education and those who have never enrolled in education or training are 3.0 percent and 2.5 percent respectively.

Self-employment figure, on the other hand, is found to be the highest with 44.4 percent among those with apprenticeship experience. This proportion is 17.3 percent for the general education participants. This proportion is the same at 22 percent for those with TVET and those who have never participated in education or training.

Table 5.1: Employment status of 10-24 year olds who are currently not in education or training

Employment status	% of youth went through general and TVET activities				All
	General education	Formal and non-formal TVET	Apprentice ship	No participation	
Full time service	13.0	27.3	29.7	10.4	15.8 (1,907)
Par time se rvice	2.5	18.7	7.2	3.0	3.7 (441)
Self employment	17.3	22.3	44.4	22.2	22.1 (2,654)
Household work	62.0	24.3	18.3	41.6	52.9 (6,367)
Unemployed	5.2	7.4	0.4	22.8	5.5 (662)
All	100.0	100.0	100.0	100.0	100.0 (12,031)

Source: Education Watch: Skills Survey, 2012.

Note: Numbers in parentheses represent numbers in the sample population.

Engagement in what is described as household work (work related to family subsistence and family business including work with generally modest cash earning instead of wages) represents the largest category of work engagement for young people included in the survey. It is 62.0 percent for those with only general education, 41.6 percent for those without any education and training, 24.3 percent for those with some form of TVET, and 18.3 percent for those with informal apprenticeship experience.

Not being without any kind of employment is the situation of a relatively few young people, except for those who have not benefited from any education and training. Unemployment is reported as 22.8 percent for those without any education or training, 7.4 percent for those with vocational and technical education, 5.2 percent among those with only general education, and 0.4 percent for those who have gone through informal apprenticeship. It is noteworthy that unemployment rate is higher for those with TVET than for those with only general education. It is likely that TVET participants look for specific employment opportunities related to their training, while those with only general education are less selective about their choice. Age segregated data show the unemployment rate among the young people aged 15-24 years (compared to 10-24 years) decreased from 5.5 percent to 4.3 percent and the rate of decrease was higher among the boys (Table A5.1).

The data above indicate that:

i. Apprenticeship increases the chances for fulltime wage employment compared to other categories of skills development. It also paved the way for self-employment at double the rate of TVET. Those with apprenticeship experience had the lowest rate of unemployment and a relatively low rate of part-time wage employment.

ii. TVET participation, on the other hand, led to a relatively even distribution in wage employment, self employment and household work. TVET and apprenticeship led to fulltime wage employment at approximately similar rate (27 and 30 percent respectively), but a higher rate of part-time wage employment for TVET participants (18 percent compared to 7 percent for apprenticeship).

iii. General education without the complement of occupational skills training led to almost two-thirds being in household work, which arguably is a low-earning and low- productivity segment of employment.

iv. Not having any education and training, expectedly, resulted in large proportions being in household work or self-employment and a high rate of unemployment.

As noted, apprenticeship increases by around three percentage points the chances for getting full time service than participation in TVET. The chances are doubled compared to only general education participation. More than half of the young people being in household work (presumably low remuneration subsistence related work, as noted), points to overall problems in respect of skills development and job creation. It is also a reflection of relatively low female participation in work outside home. (See below.)

TVET/apprenticeship and female employment

The survey data show major gender disparity in the way TVET and apprenticeship affect lives of young women (Table 5.2). Girls with TVET were in fulltime wage employment only at half the rate for boys and at less than half the rate in case of apprenticeship. In the case of only general education, the disparity was much larger at a ratio of 7 boys for each girl in fulltime wage employment. Employment rate among boys was found five times higher in the cases of those who never enrolled in education or training. Even in part-time wage employment, boys were employed at double the rate for girls, though it might be expected that girls could take greater advantage of part-time employment, given their customary family and household responsibilities.

In respect of self-employment, around 10 males were employed against one female who had only general education qualifications. The disparity decreased significantly, but did not disappear, as a result of TVET and apprenticeship. Given the overall low participation in TVET and apprenticeship, and especially so for girls, overall disparity in self-employment was one to five against girls. Gender disparity, on the whole, was less pronounced in fulltime, part-time, and self-employment in metropolitan city areas for TVET and apprenticeship participants compared to urban and rural areas (Table A5.4).

Table 5.2: Employment status of the young people aged 10-24 years

Employment categories	Currently employed % of youth who went through general education and TVET				All
	General education	Formal and non-formal TVET	Apprenticeship	No participation	
Full time service	**13.0**	**27.3**	**29.7**	**10.4**	**15.8**
Male	23.4	33.3	37.7	15.9	26.1
Female	3.4	19.7	15.2	3.1	5.1
Par time service	**2.5**	**18.7**	**7.2**	**3.0**	**3.7**
Male	3.6	20.8	8.9	3.3	5.1
Female	1.4	15.9	4.1	2.7	2.1
Self employment	**17.3**	**22.3**	**44.4**	**22.2**	**22.1**
Male	32.6	23.8	49.3	33.4	35.8
Female	3.4	20.5	35.5	7.1	7.7
Household work	**62.0**	**24.4**	**18.3**	**41.6**	**52.9**
Male	35.0	16.1	3.9	22.8	27.4
Female	86.7	34.8	44.6	66.8	79.8
Unemployed	**5.2**	**7.3**	**0.4**	**22.8**	**5.5**
Male	5.4	6.0	0.2	24.6	5.6
Female	5.1	9.1	0.6	20.3	5.3
All	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Source: Education Watch: Skills Survey, 2012

Matching training with job

It is expected that skills training for specific purpose would prepare young people to serve in occupations for which they were preparing and the matching between training and employment would be facilitated. The skills survey data show that overall over 80 percent of the participants in TVET and apprenticeship were in jobs related to their training. Non-formal training and apprenticeship had a slight edge in this respect. Boys did slightly better than girls. (See Tables A5.2 and A5.3)

A strict education-job link is not expected in the case of general post-secondary education. It was found that, overall, in three-fourths of the cases, employment did not match expectations people had or skills they acquired from participation in general education.

Participation in informal apprenticeship produced the best results in matching. training and jobs, though still a gap of 10-15 percent remained (Table A5.2). However, there was wide geographical disparity in matching of skills and jobs–showing a gap of 30 percentage points between the lowest performing rural Chittagong and the highest performance of rural Sylhet and urban Rajshahi (Table A5.3).

2. Income opportunity of TVET and apprenticeship participants

The study shows the positive impact of skills development investments on enhancing employment and income opportunities compared to investment only in general education or being deprived of any education or training. Data show that the mean monthly income of young people was the highest for those who had participated in formal or non-formal TVET courses at Tk. 6,760. Apprenticeship generated a monthly earning of TK. 5,374; only general education Tk. 5,161 and being never enrolled in education or training resulted in monthly earning of Tk. 3,493 (Table 5.3).

Table 5.3: Mean monthly income by participation in general education and skills development

Type of Skills Development	Mean monthly income of young people aged 10-24 years (Taka)
Gene ral Education	5,161
TVET	6,760
Apprenticeship	5,374
None	3,493

Source: Education Watch: Youth Skills Profile, 2012

Income over time

The study explored the longer-term effect of TVET and informal apprenticeship on income of youth. Age-segregated data showed expected higher earnings for the older youth in 20-24 year age group. Apprenticeship produced somewhat higher average earning compared to general education participation (Table 5.4.). It was found that the apprentices start with a lower income at an early age compared to general education participants, but as time goes by their technical knowhow turn into somewhat better income.

Table 5.4: Mean monthly income of young people by age and participation in general education and skills development

Participation in type of education and development	Mean monthly income of youth in different age groups			
	10-15 years	16-19 years	20-24 years	All age groups
General education	3,529	4,453	6,142	5,161
TVET	-	5,225	7,373	6,760
Apprenticeship	2,698	4,756	6,471	5,374
None	1,808	3,746	4,442	3,493
Total	3,121	4,542	6,280	5,222

Source: Education Watch: Youth Skills Profile, 2012

Rural urban gap in income opportunity

The survey data show that except for those deprived of any education and training, monthly income for general education participants, formal TVET participants, and apprentices is higher in urban areas with the metropolitan cities offering the highest earning advantage (Table 5.5). At the same time earnings vary dramatically depending on access to skills development in the same strata. For example, metropolitan cities have the highest average earning among all strata at Taka 8,313 for those with formal TVET qualification as well as the lowest earning at Taka 2,600 for those with no education or skill training background. It suggests unequal access to TVET provisions and supply side barriers for disadvantaged groups in urban and rural areas as well as reduced demand for workers with skills in the rural areas.

Table 5.5: Mean monthly income of 10-24 year olds with general education and TVET qualifications by location.

Location	Mean monthly income of 10 -24 olds				All
	General education	Formal TVET	Apprenticeship	None	
Rural	4788.04	5637.30	5476.11	4079.27	4971.45
Urban	5396.97	6930.21	5120.85	2933.90	5262.07
Metropolitan city	6403.30	8313.89	5946.07	2600.00	6277.49
All Bangladesh	5161.09	6759.65	5373.83	3492.54	5221.54

Source: Education Watch: Youth Skills Profile, 2012

Male-female income disparity

In all locations, income of girls is found to be around half the income of boys with some mitigation of the effects through general education and TVET. It was found that any kind of TVET participation increased income both for boys and girls, but not in same proportions. Girls with formal TVET qualifications, on average, earned Tk 46 against every 100 Taka earned by boys. This income gap is slightly lower among those with apprenticeship background at Tk. 51 for girls against Tk. 100

for boys. It is also lower for those with only a general education background (Tk. 58 for girls against Tk. 100 for boys), but highest among those without any education and training (Tk. 37 for girls against TK. 100 for boys).

To sum up, formal TVET participation is correlated with high income differential to the disadvantage of women against men. Informal apprenticeship contributes to a slight reduction of gender gap in income. In the urban and metropolitan city areas, gender related income difference was found higher compared to rural areas (Table 5.6).

Table 5.6: Mean monthly income of 10-24 year olds with general education and TVET background by locations and gender

Location	Mean monthly income of the youth aged 10-24				All
	General education	Formal TVET	Apprentices hip	None	
Rural	**4,788.04**	**5,637.30**	**5,476.11**	**4,079.27**	**4,971.45**
Male	5,133.67	6,693.73	6,416.63	4,464.81	5,476.05
Female	2,917.58	3,778.00	2,230.39	1,303.33	2,667.36
Urban	**5,396.97**	**6,930.21**	**5,120.85**	**2,933.90**	**5,262.07**
Male	5,728.66	9,221.44	5,932.54	3,294.79	5,809.51
Female	3,364.91	3,560.75	2,131.71	1,359.09	2,795.99
Metropolitan city	**6,403.30**	**8,313.89**	**5,946.07**	**2,600.00**	**6,277.49**
Male	7,261.54	10,142.86	5,740.16	2,666.67	6,801.66
Female	4,012.50	5,753.33	6,192.35	2,550.00	5,383.16
All Bangladesh	**5,161.09**	**6,759.65**	**5,373.83**	**3,492.54**	**5,221.54**
Male	5,522.64	8,565.23	6,116.04	3,896.14	5,724.01
Female	3,217.43	3,981.85	3,148.97	1,454.88	3,186.76

Source: Education Watch: Youth Skills Profile, 2012

3. Concluding Points

There is a positive role of skills development activities in enhancing employment and earning opportunities for young people. Any type of TVET involvement contributed to better chances for full and part time employment for both males and females, though a gender gap to the disadvantage of girls persists. Informal apprenticeship and formal TVET have increased self-employment opportunity for youth.

General education has also positive impact on income compared to the "never enrolled" group. This indicates, firstly, the importance and relevance of foundation skills and transferrable skills; and secondly, the need to explore the potential of self-employment and informal economy through innovative combination of basic general education and job-specific skills promotion. At the same time, the overwhelming proportion in self-employment and what is described as household work and the associated low earning has posed a major challenge to progress towards the overall goal of improving income and quality of life of people. The relatively low average earning of workers even with formal TVET qualifications point to problems about quality and relevance of education and training activities as well as the need for other macro-economic and regulatory interventions regarding employment creation, work environment and social protection of workers.

Chapter 6

Private cost of TVET

Costs and resources determine the character and effectiveness of skills development provisions as well as how the benefits are derived and shared. The household survey findings presented in this chapter provide a window into costs incurred by families for education and training and their consequences in quality and equity of skills development.

1. Household costs of general education and TVET

Private cost of education is an important issue from the point of view of investing in education and deriving benefits for individuals and society. Private cost of education is also seen as a mechanism for cost sharing from the government's point of view and is considered an avenue of augmenting educational resources. It has been noted earlier in this report that more than half of the TVET participants were involved in informal and formal apprenticeship. This is privately organised and managed and the government has little to do with this skills development avenue and has given scant attention to it so far.

There is a dual challenge of raising adequate resources for increasing investment in skills development and expanding opportunities by lowering private costs especially for the disadvantaged and marginalized groups. The present survey data show that people have to pay relatively high amounts for formal and non-formal TVET courses compared to general education. However, parents are spending more for their boys than for girls irrespective of type of education (Table A6.1). It was also found that various recurring costs other than the tuition charges of institutions are several times higher than the tuition fees (Table 6.1).

Data show that private cost of TVET is substantially higher than the general education costs, which is a likely disincentive to participation of young people from poor families. Provisions for private TVET and informal apprenticeship do not enjoy public subsidy; and so it is difficult for young people from poor households to access these opportunities. As a result, the relatively better off take greater advantage of both public and private sector TVET programmes.

Table 6.1: Household cost of education and training by location

Type of education and training	Monthly average cost of TVET and education (in Taka)	
	Monthly tuition fees for courses	Monthly other costs of courses
General education		
Rural	53.38	957.68
Urban	110.26	1382.77
All Bangladesh	**82.48**	**1175.07**
Formal TVET		
Rural	514.88	1911.93
Urban	771.85	1937.26
All Bangladesh	**682.54**	**1928.48**
Informal TVET		
Rural	197.38	709.33
Urban	144.45	691.60
All Bangladesh	**166.46**	**698.94**

Source: Education Watch: Youth Skills Profile, 2012

2. Coping with gender differences

The study shows that households are spending more money for their boys compared to the girls at all levels of education and skills development initiatives except for non-formal TVET and informal apprenticeship (Table 6.2). This glaring difference in private spending is indicative of social attitudes and norms which offer disproportionate advantages and opportunities to the male population.

Table 6.2: Monthly average cost of TVET and general education by gender

Type of participation	Private cost in Taka		Significance
	Monthly tuition	Monthly other costs	
Formal gene ral education	**82.61**	**1,177.60**	**p<0.000**
Male	101.96	1,230.49	
Female	64.19	1,127.23	
Non -formal general education	**53.73**	**626.89**	**p<0.000**
Male	81.83	823.52	
Female	11.28	336.04	
Formal TVET	**841.09**	**2,825.88**	**p<0.000**
Male	876.38	3,078.92	
Female	744 .30	2,120.74	
Non -Formal TVET	**223.13**	**763.04**	**p<0.000**
Male	192.82	949.84	
Female	261.92	521.41	
Formal Apprenticeship	**418.23**	**959.90**	**p<0.000**
Male	493.97	1,188.33	
Female	304.63	625.61	
Informal apprenticeship	**158.51**	**690.09**	**p<0.000**
Male	140.18	761.94	
Female	205.26	506.01	
More than one (general+TVET)	**532.96**	**999.85**	**p<0.000**
Male	605.79	1,155.69	
Female	443.94	810.34	
Total	**121.55**	**1,189.76**	**p<0.000**
Male	152.47	1267.26	
Female	89.42	1,109.16	
Significance	p<0.000	p<0.000	p<0.000

Source: Education Watch – Youth Skills Profile, 2012

The survey shows that spending for girls are lower as total household costs of TVET compared to that for boys even for similar courses. This may be due to less spending for transportation, accommodation and other discretionary family spending for girls besides tuition charges. The diploma courses are found to be the most expensive compared to all other courses - which are around four times greater than apprenticeship and more than three times higher than other trade courses (Table 6.3).

The private costs borne by households are not necessarily congruent with employability and income, as discussed in the previous chapter, due to labor market constraints, especially for girls.

Table 6.3: Course-wise total monthly household cost of TVET by gender

Name of course	Monthly cost in Taka		
	Male	Female	Both
Bachelor/masters	4,676	2,212	3,647
Diploma courses	4,603	3,637	4,389
Certificate courses	3,000	2,077	2,717
HSC trade courses	3,162	1,233	2,981
SSC trade courses	1,994	1,375	1,839
Other trade courses	1,484	1,148	1,348
Informal apprenticeships	1,097	842	1,020
All	1,856	1,273	1,664

Source: Education Watch: Youth Skills Profile, 2012

3. Inequity in cost sharing

Total private cost for participating in different type of education and training in terms of skills development varies by locations. Private cost of formal TVET is found to be highest in rural Rajshahi, and the lowest for urban Sylhet; the likely reason for the difference is the lack of enough TVET provisions in the former region. For informal TVET urban Barisal spends more than triple the amount of money compared to urban Khulna and double of urban Rajshahi and urban Dhaka – indication of a lack of standard and systematic approach. However, overall private cost of education was found highest in metropolitan cities (Table A6.2).

The skills development survey shows that households spend about one-tenths of their average monthly income for their children's education and training and the expenditure varies for different socioeconomic groups. In the present survey, the household food security status has been used as a proxy for household socio-economic status.

The data show that young people from "always food deficit" households spend about 13 percent of their average monthly income compared to about 7 percent for the "always surplus" group in general education. For formal TVET, poor households had to spend more than one-fourth of their household average monthly income; this proportion was about one-eighth of monthly income of the affluent group, indicating a barrier to participation of young people from poor families in TVET (Table 6.4).

Table 6.4: Total cost for education and training as proportion of household monthly income by type of participation and yearly food security status

Yearly food security status	Private cost as proportion of household income (%)			
	General education	Formal TVET	Informal TVET	All
Always deficit	12.64	28.22	8.36	13.09
Sometimes deficit	11.49	27.40	9.05	12.15
Breakeven	11.02	22.31	7.93	11.48
Sometimes surplus	9.35	16.75	6.44	9.55
Always surplus	6.62	12.67	3.96	6.92
All	9.13	18.75	6.24	9.51

Source: Education Watch: Skills Survey, 2012

4. Concluding Points

The private cost of TVET is relatively high for young people from low-income families and groups marginalised in other ways. For almost one-third of the families in the country below the poverty line, the costs can be a relatively high proportion of total monthly income. The private cost of TVET is considerably higher than the cost of general education which is a disincentive for youth who may consider taking the TVET route. Pro-poor policies and programmes are needed to support practical skills development which is short-duration, low cost, and effective for large numbers now deprived of such opportunities.

A lower household expenditure for general education and TVET for girls than for boys has been highlighted by the survey. The gender disparity in household expenditure in absolute amounts is higher for TVET and apprenticeship for these relatively high-cost skill development activities compared to general education.

A major expansion of skills development opportunities, especially for the disadvantaged segments of the population including females, leading to higher productivity and higher paying employment will depend on how the cost barrier to the poorer families are addressed. This concern is discussed again in chapter 7.

Chapter 7

Improving Skills Development: Participants' Perception

This chapter describes an attempt to engage current and potential participants of skills development in an interaction to probe the realities they face, perceptions they hold and views they have about skills development provisions. The aim was to seek clues about what may be done to make the provisions more effective in meeting the needs and expectations of young people.

> In order to make vocational education acceptable, we have to change our mentality because ordinary people believe that those who are not good at studies or those who repeatedly fail are the ones who pursue vocational education (Statement of a youth cited in Hossain, et al. 2012: 21).

1. Expectation of youth from TVET

For the present study, we asked young people who are not at present involved in TVET about their willingness to participate in skills development initiatives. It was found that 62.2 percent of the boys and girls of the sample in 10-24 age group surveyed were willing to participate in TVET. More girls were interested compared to boys (63.8% and 60.5% respectively) (Table 7.1).

The willingness to participate in TVET was influenced by educational background of the young people. Those with higher secondary level background were most interested to participate in TVET (76.4%) followed by those at the tertiary level (69.0%). In both cases, girls' willingness was higher than that of the boys (Table 7.1). The interest was somewhat lower among those at the secondary level and considerably lower among primary level students and those with only primary level qualification. This may be an indication of their desire to have at least secondary level education before entering into occupation-related technical and vocational skills development.

Table 7.1: Proportion of 10-24 year olds willing to participate in any kind of TVET activities (who are not currently involved in skills development)

Level of education	% of young people willing to participate in TVET					
	Boys		Girls		Both	
	n	%	n	%	n	%
Primary	3,744	44.3	3,657	46.2	7,401	45.2
Secondary	5,179	66.6	6,011	68.7	11,190	67.7
Higher secondary	1,703	75.0	1,825	77.8	3,528	76.4
Tertiary	1,043	65.3	1,022	72.7	2,065	69.0
Total	**11,669**	**60.5**	**12,515**	**63.8**	**24,184**	**62.2**

Source: Education Watch: Skills Survey, 2012

The study revealed that a higher proportion of urban population were interested in participating in TVET activities (Table 7.2). Weighted value (rural-urban) also reveals that more higher secondary school attendees are willing to participate in TVET and more girls showed their interest compared to boys in this regard (Table A 7.1). It indicates that young people recognise the importance of building foundation skills up to secondary or higher secondary level and then move to occupational skills training.

Table 7.2: Proportion of 10-24 year olds not currently involved in TVET willing to participation in TVET by gender and location.

Sex	% of young people willing to par ticipate in TVET		Significance
	Rural	Urban	
Male	51.1	52.8	P<0.02
Female	58.7	61.0	P<0.02
	P<0.000	P<0.000	
All Bangladesh	54.9	57.1	P<0.000

Source: Education Watch: Youth Skills Profile, 2012

2. Preference about type of skills development

The survey data show that around half of the young people who are willing to participate in TVET want to be involved in practical and short training, rather than longer duration formal courses. More than one third is willing to be involved in apprenticeship arranged by either public or private agencies. Altogether, 87 percent of the young people want to be involved in different types of trade and apprenticeship courses. Preferred apprenticeships are those arranged by the government ensuring quality and offered free of charge.

A little more than 10 percent of the young people wanted to be involved in Bachelor/Masters and Diploma level TVET. The demand for institutional certificate courses was low at only 2.1 percent (Table 7.3). More urban young people are willing to be enrolled in bachelors/masters level TVET (6.6%) compared to rural youth (4.9%). This choice was highest among the metropolitan residents (9.8%). A higher proportion of boys was interested in the degree and diploma courses compared to girls (9.6% and 3.9% respectively). More girls (56.4%) wanted to be enrolled in short trade courses compared to boys (37.1%).

Table 7.3: Preference of 10-24 years olds willing to participate in skills development activities by location and gender

Location	Preference of young people among types of skills development programmes (%)					All
	BA/MA in TVET	Diploma in TVET	Certificate courses	Short Trade courses	Apprentice	
Rural	**4.9**	**6.1**	**2.2**	**47.8**	**39.0**	100.0
Male	8.6	10.4	2.8	35.9	42.3	100.0
Female	2.6	3.4	1.9	55.3	36.8	100.0
Urban	**6.6**	**3.6**	**1.9**	**53.2**	**34.7**	100.0
Male	10.0	5.7	2.8	41.7	39.8	100.0
Female	4.8	2.4	1.4	59.4	32.0	100.0
Metropolitan city	**9.8**	**6.7**	**2.3**	**36.2**	**45.0**	100.0
Male	13.5	9.3	2.9	23.6	50.7	100.0
Female	7.1	4.7	1.8	45.6	40.8	100.0
All Bangladesh	**6.0**	**5.1**	**2.1**	**49.1**	**37.7**	100.0
Male	9.6	8.4	2.8	37.1	42.1	100.0
Female	3.9	3.1	1.7	56.3	35.0	100.0

Source: Education Watch – Youth Skills Profile, 2012

3. Expected duration of courses

Four out of five young people who were willing to participate in TVET showed their interest in short duration skills development courses (Table 7.4). It was found that a higher proportion of young people with relatively low general education were willing to be involved in longer than 6 months' course. This suggests young people who already have a certain level of education want to have short duration courses so that they can move on to a job as soon as possible. More girls showed interest in less than 6 months' courses compared to boys.

Table 7.4: Expected course duration by gender and level of education

Course duration Preference by males and females	Percentage of 10-24 year olds				
	Primary	Secondary	Higher secondary	Tertiary	All
Course duration >6 months	**40.0**	**32.2**	**21.3**	**13.5**	**20.6**
Male	52.9	37.6	22.0	17.8	23.7
Female	27.8	26.4	20.1	7.1	16.4
Course duration <6 months	**60.0**	**67.8**	**78.7**	**86.5**	**79.4**
Male	47.1	62.4	78.0	82.2	76.3
Female	72.2	73.6	79.9	92.9	83.6
Total	100.0	100.0	100.0	100.0	100.0

Source: Education Watch – Youth Skills Profile, 2012

4. Willingness to pay for TVET

A little over one-third of the young people (35.9%) who wanted to enrol in technical and vocational skills development were unable or unwilling to pay for their participation. More girls across locations expressed their inability to pay. About one third were willing to pay Tk. 100-300 per month. About a third of the respondents were willing to commit at least Tk. 400 per month for training courses (Table 7.5). Girls' participation in TVET appears to be more sensitive to private cost of education than that of the boys.

Table 7.5: Willingness/ability to pay for skills development-training courses by location and gender

Affordable amount per month (Taka)	Locations and Gender								
	Rural		Urban		Metropolitan city		All Bangladesh		
	Male	Female	Male	Female	Male	Female	Total male	Female total	All
No fee	30.7	38.6	34.9	41.0	22.9	31.1	32.0	39.1	35.9
100-300	33.5	36.4	27.1	28.8	26.2	25.5	30.1	32.1	31.2
400-500	18.9	14.5	20.4	18.2	19.2	14.5	19.6	16.2	17.7
>500	16.9	10.5	17.6	12.0	31.7	28.9	18.3	12.6	15.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Education Watch – Youth Skills Profile, 2012

5. Problems and limitations of TVET and general education

The study explored perceptions of young people about weaknesses and deficiencies in existing general education and TVET. Inadequate physical infrastructure was mentioned as a major concern across the board - in general education (mentioned by 39.0% of respondents), TVET (26.8%), and apprenticeship (22.1%).

Deficiency in basic facilities, teaching learning materials and aids and basic amenities was mentioned by one fourth of the respondents in case of general education, by 15.2% respondents regarding TVET, and by 13.6 percent for apprenticeship. Ineffective teaching-learning practices and style were mentioned in respect of apprenticeship by 34.3% of respondents, by 27.3% in the case of TVET, and by 18.0% for general education. Relevance of the curriculum content is often noted as a problem by experts and knowledgeable observers, though this did not figure high as a problem in the list of the respondents. This is presumably more a matter of the respondents' understanding or articulation of the issues, rather than absence of such a problem (Table 7.6).

Table 7.6: Inadequacy of different provisions perceived by 10-24 year olds

Weaknesses of general education and skills development program s	Views of young 10 -24 olds (%)		
	General education	TVET	Apprenti ceship
Inadequate infrastructure (physical)	39.0	26.8	22.1
Deficits in basic facilities (toilets, water, electricity, etc)	25.4	15.2	13.6
Inadequate teaching learning materials	4.0	9.8	8.2
Ineffective teaching -learning practices and style	18.0	27.3	34.3
Irrelevant curriculum	1.1	1.2	0.7
Deficiency in learning environment (noise, light, ventilation, cleanliness, etc.)	3.3	5.3	4.7
High cost of education	0.6	2.8	3.2
Inadequate attention to learners' specific problems from the institution	1.0	2.1	3.3
Others	7.6	9.5	9.9
All	100.0	100.0	100.0

Source: Education Watch – Youth Skills Profile, 2012

Who are affected most due to the facility deficits?

For skills development training inadequate physical infrastructure surfaced as one of the major barrier to participation. Rural young people (31.1%) were facing the problem more than the urban youth (24.4%, Table 7.7). Girls in both rural and urban areas were suffering more compared to the boys. Lack of basic amenities, like drinking water, toilet facilities and electricity etc., in the training institutions/centres equally affected both rural and urban boys' and girls' participation in TVET. Ineffective classroom teaching learning cropped up as frequently mentioned weakness of TVET courses; 30 percent of the urban and 22.6 percent of the rural young people mentioned the problem. More boys from both rural and urban areas than girls reported the problem along with lack of good learning environment in the centres/institutions. Lack of teaching material was reported as another potent barrier to TVET course effectiveness - around one tenth of the young people mentioned the problem, and rural girls complained more about it.

Table 7.7: Inadequacy of TVET provisions perceived by 10-24 year olds by location and gender

Weaknesses of TVET courses	% of young people expressing weakness of TVET programmes					
	Rural			Urban		
	Boys	Girls	Both	Boys	Girls	Both
Inadequate infrastructure (physical)	28.5	37.0	31.1	23.0	26.9	24.4
Lack of basic facilities/amenities	15.4	15.6	15.6	13.7	17.7	15.1
Lack of teaching learning materials	10.6	11.1	10.7	8.7	10.2	9.3
Ineffective teaching practices and style	25.0	17.0	22.6	32.3	25.8	30.0
Irrelevant curriculum	1.9	0.0	1.3	1.6	0.4	1.1
Deficiency in learning environment	5.8	3.0	4.9	5.4	5.7	5.5
High cost of education	1.3	0.7	1.1	4.2	3.2	3.8
Inadequate attention to learners' specific problems from the institution	1.9	3.7	2.4	2.6	0.6	1.9
Others	9.6	11.9	10.3	8.5	9.5	8.9
All	100.0	100.0	100.0	100.0	100.0	100.0

Source: Education Watch – Youth Skills Profile, 2012

Improving infrastructure, basic amenities, learning materials and teaching practices

Improving pedagogic culture and effective learner-teacher interaction by adopting effective teaching learning methods was the priority to the young people from rural (24.5%), urban (30.6%), and metropolitan cities (32.2%, Table 7.8). Around one fourth of the young people suggested infrastructure development as one of the best ways for improving TVET participation; rural young people were more vocal in this demand. Use of adequate teaching learning materials was suggested by one tenth of the young people and improving learning environment in TVET centres was demanded by 15.9 percent of respondents. Leaning environment referred to student common room facilities, noise-free and quiet premises, and safe and secure facility especially for girls.

Table 7.8: Suggestions for improvement of skills development by locations

Suggestions for improvement	Locations			All Bangladesh
	Rural	Urban	Metropolitan city	
Infrastructure development	25.5	24.0	20.3	24.2
Improvement of facilities/amenities	22.1	17.2	10.2	18.4
Using adequate learning materials	9.8	9.7	6.8	9.5
Improving teaching practices	24.5	30.6	32.2	28.4
Improving learning environment	15.9	14.7	22.9	15.9
Reducing cost and improving student benefits	1.8	1.6	5.1	2.0
Others	0.4	2.2	2.5	1.6
All	100.0	100.0	100.0	100.0

Source: Education Watch – Youth Skills Profile, 2012

Specific suggestions regarding apprenticeship

As noted earlier, among all forms of occupation-related vocational and technical skills development, apprenticeship accounted for about half of total participation and served more of the disadvantaged populations. However, apprenticeship has remained mostly as informal initiatives without policy support, regulatory provisions for quality and general encouragement from the government.

More than one third of children and youth aged 10-24 years who were involved in apprenticeship suggested for improving pedagogic culture and teacher/mentor and learner interaction to improve the effectiveness of apprenticeship (Table 7.9). Suggestion for infrastructure development, providing basic amenities and ensuring congenial leaning environment were also given priority by young people for skills development through apprenticeship.

It is clear from the views of the young people who are involved or have gone through apprenticeship have dissatisfaction which they wished to be remedied. All of these suggest that there are opportunities for attracting more youth into apprenticeship programmes if the necessary policy, regulatory and quality assurance support are given due attention.

Table 7.9: Suggestions for improvement of apprenticeship training by locations

Suggestions for improvement	Locations			All Bangladesh
	Rural	Urban	Metropolitan city	
Infrastructure development	17.4	18.3	12.0	17.3
Improvement of facilities/amenities	14.6	10.5	7.5	11.7
Using adequate teaching materials	12.5	8.0	3.7	9.3
Improving teaching -mentoring practices	34.0	34.9	48.5	36.0
Improving learning environment	13.0	17.9	17.0	15.9
Reducing cost and improving benefits	5.7	5.9	9.5	6.2
Others	2.8	4.5	1.8	3.6
All	100.0 (879)	100.0 (1,136)	100.0 (241)	100.0 (2,256)

Source: Education Watch – Youth Skills Profile, 2012

Note: Numbers in parentheses show numbers of people in the sample.

6. Concluding points

The ideas emanating from the young people indicate their enthusiasm and eagerness to take full advantage of TVET. More than two thirds of the youth with secondary, higher secondary and tertiary level education expressed their willingness to participate in TVET. More girls than boys were anxious to join TVET and apprenticeship if a benign environment is created. The degree of willingness of urban youth indicates that greater demand exits in the urban areas compared to rural areas.

An overwhelming majority of youth showed interest to participate in short-duration trade courses and 1 in 3 among youth wanted to participate in formal or government supported apprenticeships. Course duration was an important concern for girls, the majority of whom demanded short courses. Among the youth interested to participate in skills development, one third was unable to pay for it and more girls than boys expressed this inability.

Inadequacy of physical infrastructure was found across the system. More of the participants from rural areas were facing this challenge, whereas the urban youth were more concerned about teaching learning process and teaching environment. Improvement of physical facilities, basic amenities (like electricity), and recruitment of instructors are also suggestions by the young people for quality improvement of TVET.

Given the fact that almost one-third of the households are below poverty line, skills development policy and programs must put high priority on pro-poor strategies to bring high quality and market responsive skills development opportunities to the groups who remain deprived of access to such opportunities.

Chapter 8

Special Vulnerabilities

A nationwide sample survey helps to paint the big picture, but does not necessarily capture the diversities and nuances of the situations that affect people in important ways in relatively small numbers in their different circumstances, but which all add up to a substantial proportion of the total population. This chapter will provide glimpses of the vulnerabilities of specially disadvantaged groups in respect of their skills and capacity development opportunities, obstacles they have to overcome, and their status and prospects regarding occupations, employment and income. The analysis is based on case studies of the situation of seven disadvantaged groups contributed by individual researchers.

There are special vulnerabilities of people because of their socio-economic situation, ethnic and linguistics status, geographical locations and personal traits such as special needs and disabilities, which determine the opportunities they may have for education and acquiring productive skills and their prospects for employment and livelihood. The focus, in line with the scope of this report, is on children and youth in the 10-24 years age range.

Based on a number of studies, contributed by researchers from IED at BRACU, the situation of special vulnerabilities for groups of young people from some of the disadvantaged segments of society is highlighted. Selection of these cases does not necessarily represent a judgment about the significance of these groups in respect of their numbers or nature of their difficulties. These cases were purposively chosen by the researchers because of their own interest and convenience in undertaking the studies. However, the selected groups comprise sizeable numbers and do represent a variety of disadvantages and a geographical spread within the country. Brief summaries of the case are given below and policy-relevant conclusions are attempted to be drawn.

i. Skills development, expectations and challenges for the Santal youth by Shahidullah Sharif
ii. Developing and recognizing technical skills of workers at Dholai Khal by Somnath Saha and AK M Badrul Alam
iii. Situation of the urban domestic help by Syeda Fareha Shaheeda Islam and Trishna Sagar
iv. The bidi industry - unrecognised skills and the silent killer by Sydur Mur Salin
v. Handloom weavers – prospects for young workers by Shaheen Akter
vi. Skills and livelihood for adolescent girls by Mamunur Rashid and Sadia Ritu
vii. Skills and jobs for people with disabilities by A. H. M. Noman Khan et al.

1. The Santal Youth

Background

There are about 45 indigenous ethnic minority groups in Bangladesh comprising a population of 1.6 million, which is 1.10 percent of the national population, according to 2011 population census. Among them the large majority lives in the Chittagong Hill Tracts districts and others live in a few other parts of the country. About one-thirds are residents of the plains in the north-western Rajshahi Division (Roy, 2010). The socio-economic status of the indigenous communities in the plains is known generally to be even worse than that of indigenous communities in the CHT. Among them Santals is the most numerous in the plains and the second-most numerous in the country after the Chakma from the Hill Tracts (BBS, 1991).

A study shows “Almost 92 percent Adivasis (indigenous peoples) of the North Bengal, most of them are Santals, work as day laborers either throughout the year or part of it” (Samad, 2006, p. 9). Apart from farming, non-farm activities, e.g., forestry & fishery, mining and quarrying, manufacturing, and different kinds of services have been the most dynamic sectors contributing to

creation of better-paying jobs and alleviating poverty. However, the Santals are dependent mostly on low-yield and low-earning farming as day laborers.

Even though the new generations of the Santals are enthusiastic to be educated for improving their socio-economic condition, major barriers prevent their participation in education. These includes: different language for instruction in primary school from language at home, absence of Santal teachers in school, neglect of students by non-ethnic/ Bengali teachers, lack of guidance and supervision by parents, need to take care of younger siblings at home, and engagement of children in family activities due to poverty (Kamal, Chakrabarty, and Nasreen, 2001; Badshah, 2003; Samad, 2006).

Historically and socio-culturally the Santals have been alienated and excluded from the mainstream society (Kamal, Chakrabarty and Nasreen, 2001). They lack the spirit and confidence to explore new initiatives and lack access to information about opportunities for technical and vocational education and training (TVET) and the prospects for improving livelihood.

The situation of the young Santals (age 10-24 years) is not better than the community as a whole. The Santal youth are deprived from formal skills development because of their generally deficient basic education achievements. There has been little attention or diagnostics of their educational and skill development needs, expectations and challenges.

Evidence and analysis

A study revealed that the "entire Santal community is mainly dependent on agriculture. But only a negligible portion cultivates their own land while others are involved in non-farm activities such as, non-agricultural labor, small trade, service etc." (Samad, 2006 p. 10). The Santal youth do not have the skills and training to be employed in occupations except subsistence farming and daily labor as farm-hands. They are also not involved in small trading, business and services in the informal economy due to social exclusion and isolation. Between planting and harvesting time, they become unemployed, facing severe seasonal economic hardship. In this situation, many sell their labor in advance at low price (i.e., they borrow against promise of labor in the busy season) (Samad, 2006; Kamal, Chakrabarty, Nasreen, 2001).

Studies show that the Santal community feels illiteracy is one of the main obstacles for development (Kamal, Chakrabarty, Nasreen, 2001). However, they do not have access to mother-tongue- based education necessary in elementary stage. The result is low enrolment, poor performance in school, and high drop out from primary education of Santal children.

The Santal youth population (age 10 to 24 years) wants to go forward educationally. But they do not have access to satisfactory vocational opportunities. They have few options but to continue with traditional low-yield farming and daily laborer's work on the farm.

The case study found that Santal youth populations want to shift from traditional occupation to new income generating options. To be emancipated from the present backward situation prevailing in the Santal community, they youth would like to acquire alternative skills, and join TVET and other training opportunities by which they might be employed in different jobs beyond subsistence farming and casual farming labour. Their Expected TVETs are: poultry, fishery, electronics, mobile

servicing, sewing, handicrafts, small business, carpentry, masonry, diesel engineering, computer training, driving, paramedics, diploma in mechanics, agriculture, veterinary medicine, and so on.

The Santal youth lack financial stability and support for undertaking TVET and in building their own entrepreneurship. Besides, being a minority group in society, there are some social barriers which deprive them from access to information about given TVET facilities and keep them away from appropriate human resource development opportunities.

Recommendations

The major challenge for the Santal community and the nation is to help the community overcome their social isolation and the absence of appropriate policy and resource support with a strategy of affirmative action by the state. Discussion with Santal informants and analysis of secondary data suggest ideas and actions that may be of help to Santal youth.

- Awareness building in society at large for creating empathetic and harmonious outlook towards the Santals and other Adivasis/ethinc minority groups should be initiated.
- Effective measures should be taken by government policy-makers and functionaries, human rights agencies and civil society members for stopping harassment, social discrimination, land-grabbing and eviction and other human indignity to which the Santhal people are subjected.
- Steps should be taken to ensure participation of the Santals in planning and policy making bodies of the development agencies.

Specific skill and capacity building measures suggested are:

- Appropriate TVET combined with low interest credit support for SME.
- Affirmative action for Santal children and youth including special scholarship programme for Santal and other ethnic minority youth to encourage participation in general education and technical and vocational education and training.
- In Santal inhabited areas, the medium of instruction should be Santali language up to class V with gradual transition to Bangla. More Santal-speaking teachers should be employed in preschool and primary school.
- Expansion of adult education for Santal community for making them aware of their rights and potential and importance of education of their children.

2. Apprenticeship in Dholaikhal

Background

Dholaikhal in the old city of Dhaka is known for small manufacturing shops of machinery parts, automobile parts and spare parts for all kinds of electrical and mechanical appliances. It is a bee-hive of activity with about 5,000 shops packed in an area of only half-a-square kilometre where some 10,000 people work. About a third of the workers are children. The area is named after a drainage canal *Dholaikhal*, excavated in the Mughal period, but now encroached upon and half-filled by shops and residences. (Andrew, 2010; Quadir & Mahmud, 2010; Banglapedia, 2006).

Workers at Dholaikhal come from different parts of Bangladesh – few with education beyond the primary and lower secondary level. Poor parents send their children here with the hope that they will learn a skill to support themselves and their families. The young workers learn the skills through an informal apprenticeship system. They begin under a master/mentor at no pay, sometimes receiving only a shelter and subsistence. After two or three years, the young workers begin to receive a wage depending on their skills and proficiency. Typically, they work long hours, up to 17 hours a day and earn 70-100 taka per day ($1- $1.40) after they pass the initial training phase. (Andrew, 2010; Quadir & Mahmud, 2010).

The entrepreneurs at Dholaikhal operate their shops as individual owners. According to Quadir and Mahmud (2010), the skills transfer also occurs informally according to individual style and preferences of the shop owner.

Evidence and Discussion

Usually the young workers, some under age 10, join in the work at Dholaikhal through their relatives or persons they know. They live in shared accommodation with other workers (called a "mess"). The accommodations are crowded and unhygienic.

The work environment at Dholaikhal area does not follow safety and health standards. The workshops are tiny and narrow, often with insufficient light and ventilation. The workers deal with heavy and sharp metal parts, electricity, fire, chemicals and other risky items. The enterprises do not have proper physical infrastructure and protective measures to reduce health and safety hazards. The workers work in a hazardous environment. Generally, the workers are responsible to take care of medical treatment if any accident occurs.

The workers at Dholaikhal are paid on a daily or weekly basis. Their salary depends on their years of experience and skills. The owners usually prefer to have children as workers, because the children can learn fast and also they can be paid low. The children ages between 10- 12 are preferred to be recruited as novice child workers. The novices do not receive a wage, but may get 10-15 taka per day as pocket money. A 17 year old worker in an automobile repair workshop said:

> We are assigned hard work and do it for long hours, but we are paid very low wages. We cannot maintain the family properly with the money paid. I dream that after learning the work, I myself will operate a small business that will give me the capacity to support my family.

Workers of Dholaikhal recognize the importance of basic education in language, math and basic science. Basic education can help the workers to identify and read the names of different parts of machine. It also can help them to write the bill and vouchers and keep accounts. They, beside their practical work, would like some training and education that can give them insights about their applied work and their own life prospects beyond the given situation. They can make new machines seeing the original one, but they cannot interpret the logic of how and why they work.

Some of the owners also spoke of the value of formal education and training that can enhance the knowledge and skills of the workers. The nature of training and education should meet the workers' need of both basic education and related skills for the respective areas of their work. In order to provide such opportunity, the governments and non-government organisations can play a role. Directorate of Youth Development, for example, can design training programs considering the specific needs. The training program can be developed combining theoretical and practical aspects.

The skills of Dholaikhal workers are not institutionally recognized. Therefore, they have no opportunity to find employment anywhere beyond Dholaikhal, which limits the workers' prospects in life. All the employees in Dholaikhal area are full-time workers. They work long hours and at present have no opportunity to go to school or join in any training. Owners take no responsibility for providing any type of educational support to the workers. A 20 years old worker at an electronic goods repairing workshop said:

> I work here from morning till night for providing financial help to my family. I have no option other than work. I feel that education is needed for me, but I have no time for it….There is no option of night school at Dholaikhal. We want education but who will provide it?

Conclusion and Recommendation

Workers at Dholaikhal learn to do technical work by following the learning by doing approach under the guidance of skilled senior workers. Although workers are interested to get basic education and training related to their work, there is no such educational opportunity at Dholaikhal.

Workers at Dholaikhal are contributing to the national economy and offering necessary useful products and services. The workers as well as some of the owners would like to see the experience and skills of the workers formally recognized. They also like to see that mutually complementary basic education and technical training is offered to make the workers improve their productivity and chances for advancement. Concerned government agencies, non-government organizations and shop owners could work together to identify needs for skills development and design education and training opportunities.

Given the working and living conditions, long hours and remunerations which appear to be exploitative, there should be discussion among stakeholders about application of basic safety and health protection as well as social protection of children and young workers in Dholaikhal.

3. Hazards of *bidi* workers

Background

About 2.4 million people, majority of them women and children, are estimated to be engaged in producing *bidi* (indigenous cigarettes) directly or indirectly in 95 factories. An amount of Taka 216.50 crores was paid to the government as excise tax and vat by the factories in 2011 (Bangladesh Bidi Sromik Federation, 2012). The number of workers engaged in this industry and the sizeable government revenue from it complicate handling of the issues of health, safety and welfare of workers as well as the effects on consumers of this product.

This case study looks at the skills, working conditions and livelihood situation of the bidi workers, especially children and youth, who are a sizeable proportion of the workers in this industry. Information was gathered from two largest *bidi* producing areas - Allardarga in Kushtia and Haragachh in Rangpur districts. Interviews were conducted with 12 *bidi* workers, 6 heads of households with *bidi* workers, and 2 trade union leaders.

Evidence and discussion

Generally *bidi* is produced in different stages for which different skills are required and different workers are engaged. At the first stage, a small piece of paper is rolled with a thin iron rod to make

a *bidi* stick, locally called *"thosh*." The *thosh*-maker tied 2,000 *thosh* with a cloth belt, which looked like a beehive. This work is mainly done by women and children at home. At a second stage, the *thosh*-packets are collected and taken to the factory for tobacco filling. After filling tobacco into the sticks, these are sealed at one end. The workers then make bundles of 25 sticks packed in a polythene packet. The skilled workers do not count the sticks but end up having packets of precisely 25 sticks by the grasp of their hand. At the final stage, different workers are involved in labeling and making big packets with 20 small packets. Other than *thosh*-making the other stages are carried out in the factory. Women and children generally work at home, whereas men in larger numbers are employed in the factory.

The *bidi*-making skills are acquired from on-the-job experience at home or in the factory - the novices guided and assisted by parents, family members and neighbors. They do not have any institutional training or any formal recognition of the skills. A *thosh*-maker with average skills can roll 6 to 8 thousands *bidi* sticks in a day. In the factory, an expert worker can pack, seal, bundle and label 7,000 to10,000 *bidi* in a day.

Bidi-making is a low-skill and repetitive work that provides workers a low wage at a piece rate. Extreme poverty and hardship in families often compelled people to enter *bidi*-making, though the wages for *bidi* producing are very low. The piece rate is Taka 24 to 26.50 (US$0.26 to 0.27) for making 1,000 bidis from start to finish. This adds up to a daily earning of Tk 175 to 250 for a full-time worker, of which a quarter is paid to the *thosh*-maker.

There are different arrangements for employing the workers. Some factories employ the workers directly and the wages mentioned are paid to the workers. Others contract the work out and the contractors supervise the production. In such cases about a quarter of the wages are retained by the contractor. A small proportion of the manufacturing is done totally at home by family members on contract with manufacturing companies.

Bidi-making is hazardous work on several grounds. *Bidi* laborers involved in *thosh* making, tobacco filling, or packing and labeling have to spend long hours sitting on the floor in one position. Due to this, they develop pain in heap, neck and wrist. When the worker fills tobacco in *thosh*, tobacco dust is ingested by nose and mouth. A lamp or a firing rope is used to seal the polythene packets, which produces heat and noxious smoke. The factories rarely have sufficient ventilation and airflow. The temperature often is unbearable in the summer.

The working environment causes the workers to have headache, stomach pain, gastric acidity, asthma, and tuberculosis. The workers cannot afford to go for medical check-up or treatment. They rarely go to a doctor. They may go to a pharmacy and buy medicine suggested by the pharmacist based on symptoms. In case of serious illness, they borrow from the *mahajan* (loan shark) to visit a doctor or hospital, which pushes them into deeper poverty.

The market for *bidi* is shrinking because of the availability of cheap brands of cigarettes and greater public awareness about the health risks of tobacco. This means that the workers may not have full-time employment and they are in no position to bargain for better wages or working conditions. Some of the workers try to supplement their income by taking up other work when this is available. These activities are also low-paying and low-skill.

Conclusion

It is a buyer's market as far as the *bidi* workers' employment is concerned. The market forces alone are unlikely to lead to improvement in the earning and working condition of the workers. In such a situation, the labor laws and social protection laws must come into play to ensure basic safety and health standards for work sites, protection of workers, and application of minimum wage provisions. To the extent work at home and family labor based on a piece rate are applied, bidi-making can be seen as a supplementary source of income for the household.

However, even in these circumstances - perhaps especially because of these circumstances, unscrupulous exploitation of child labour and women workers should be prevented by applying social and labor protection measures through enforcement of law, negotiation with factory owners and encouraging the organistaion of worker's (even if they are part-time and home-based) to be formed to represent their interest. A part of the tax revenue derived from *bidi* production can be used legitimately for worker's welfare and protection in the *bidi* industry.

4. Young workers in handloom weaving

Background

Handloom weaving is part of ancient and rich cultural heritage of Bangladesh. By one estimate, almost a quarter of the clothing needs of the country is met by handloom and small power looms and 18 million people are dependent fully or partially on it for livelihood (Chowdhury, 1989). Whatever these numbers are, handloom weaving is a unique asset in terms of economic potential and cultural significance.

Bangladesh Handloom Board was established in 1977 under the ministry of textiles and jute. The board has the responsibility for developing the handloom sector and ensuring wellbeing of handloom weavers. According to the Board, there are over 300,000 looms in operation, while almost 200,000 remain non-operational. The number of weavers is estimated to be over 800,000, almost equally divided by gender. Traditionally, men were involved in weaving and women in spinning and casing the yarn in the bobbin. This traditional division of work does not apply any longer, in part because, machine-made yarn is used often, instead of carrying out the whole process by the weavers.

Different types of looms, dyeing and raw materials are used in weaving. Natural fibres form cotton, silk and jute, but increasingly yarn form synthetic fibres, are used in weaving. There are three main types of looms used - pit, jacquard and frame looms. These various kinds of looms were used in different areas for different kinds of weaving productions. At present, jacquard looms are widely used, which replace the traditional pit looms. The process has been modernised by the use of unched designs on rolls of hard paper that controls the loom. This technology has improved productivity and performance of weavers.

Handloom weaving is concentrated in parts of the country with their distinctive style and tradition, such as Narsingdi, Narayanganj, Dhaka, Tangail, Sirajganj and Pabna as well as Rajshahi and Chapainawabganj known for silk weaving. This case study collected information from Narayanganj and Tangail, known respectively for jamdani and Tangail sarees.

Narayanganj Jamdani. Narayanganj, about 50 kilometres east of Dhaka city is well-known for its textiles and cottage industry, and as the home of the distinctive Jamdani weavers. Approximately 150 villages are involved in producing Jamdani sarees in Rupganj, Sonargaon and Siddhirganj areas in the Narayanganj district. These areas are popularly known as Jamdani villages. Information for this study was collected from Rupganj.

Jamdani is a traditional celebrated fabric of the subcontinent with a history of that goes back centuries. Jamdani refers to a distinctive design used with silk muslin fabric favoured by the aristocracy in the Indian sub-continent during the Mughal period. Muslin fabric with Jmadani design was exported in the 18th and the 19th century to and highly prized in Spain, Italy and France (Datta & Streefkerk, 1985).

Tangail saree. Tangail, 80 kilometres west of Dhaka, is reputed for its special kind of weaving of clothes and sarees. Pathrail village, in the suburb of Tangail district town was visited for this study. Sarees are produced in Pathrail using cotton, jute-cotton, tasar raw slik, and khadi (hand-made cotton0 yarn. Traditional Tangail cotton sarees, which are moderately priced, are popular with women for daily use as well as formal occasions.

Evidence and discussion

The weavers (*tantis*) come from the poor segment of society. A large proportion of them is in the age range of 10-30 years. Most are illiterate or semi literate, not having participated in formal education for long. The young workers have to engage in hard work to contribute to their families' meagre income. The majority of workers do not own the looms, but work in looms in small factories, usually receiving a wage based on piece rate for finished products.

Owners of looms are marginally in a better position, because they inherited the looms from their parents. For example, one owner said that they had 22 looms in his joint family in the past. After his father died the looms were divided among his uncles and himself. He now owns 7 looms, only two of which were in operation. The others are not in operation because of multiple problems - intense competition with power looms and mills, increase of raw material prices, not enough skilled workers and scarcity of working capital at an affordable interest rate. It appears that the economics and market did not favour either the loom owner or the worker.

One of the loom owners said, *"Handloom is hard work, but a low paid job. At present, there is no respect of this occupation; it lowers people's position in society. Thus, it can be called poor people's work".* It is noticeable that most of the loom owners did not involve their own children in this occupation and hired workers to run their looms.

Weaving was traditionally a distinct occupation based on caste (in the Hindu community) or socially ascribed category among Muslims. They lived in an area of the village called the "Tantipara" or weavers' neighborhood. They belonged to both Muslim and Hindu communities. In the Tangail area, most of the loom owners are from the Hindu community, inheriting their looms, and the workers are from the poor Muslim communities.

Generally, new workers are brought to the weaving industry by the already engaged skilled and experienced workers from his/her locality. The new workers' parents give their young children to the old workers as they know and trust the latter as persons of their own community. It was found

that a 10 year old boy came with his neighbor (an old worker) from the northern district of Rangpur to Narshindi in the south of the country. The ten year old said:

> I am poor. I do not have money to go to school. I think education is for only rich, not for us (the poor). I need to help my family. We are altogether six brothers and sisters. My father cannot bear family expenditures alone. He works in other people's lands as a laborer. I can send 400-500 taka per month for my family from working in this job.

Skill acquisition for jamdani and other weaving happens through informal apprenticeship. The weaving shop owners take the comparatively young people as workers and put them under the mentorship of skilled workers. The young ones help the skilled worker as an assistant for at least two years. During the training period, they do not get a fixed remuneration, but small amounts are paid periodically by the owner of the factory. In some cases, the owners also bear the lodging and food costs of the trainees. When they are able to demonstrate skills, the trainees are designated as workers or *karigor* and get the remuneration on the basis of their production. They get 400-800 hundred taka per saree as remuneration, depending on the saree's patterns and complexity. It takes three to five days' work to finish a saree.

Work environment. It was observed that weaving rooms do not have sufficient light, ventilation and air flow. The rooms are always noisy because of the rattling of the shuttles carrying the colorful yarns back and forth. The workers need to sit whole day in front of the looms with careful attention and coordination of their eyes, hands and feet.

Weavers' associations. The weavers have associations but the workers and the owners of the looms have somewhat conflicting interests and in the face of competition of textile mills, they are not sure how they can protect their interest and improve their situation.

Story of Sanowar Hossain. Sanowar's story illustrates the situation and challenges for the young weavers. Sanwar Hossain is 23 years old. He works in a handloom weaving factory from dawn to dusk as a skilled worker. He studied up to grade three. He lives in the village with his four children and wife. He has been working in handloom weaving for almost 14 years. After two years of working as a helper, he has been working as a full-fledged worker (karigor). During the training period he did not receive any money. At present, he gets paid on the basis of production of sarees (type and number of sarees). He has to work hard to manage his family expenditures from his meagre income. He thinks if he can run a small business along with his weaving job, he can better serve his family. However, he does not have time and money to run any side business. He does not own any farming land that could give him some extra income.

Sanwar is paid Taka 400-800 per saree. In a week, he can make three to four sarees with a design of average intricacy. Sanwar appears to be resigned to his situation and does not see prospects for improving it significantly.

The weaving loom owners highlighted the difficulties of their business in the face of limited market demands of their products, the costs of production and returns for their outputs. It is said that Indian handloom products are cheaper compared to local products, in part due to incentives given by the government to the handloom industry (Ghosh & Akter, 2005).

Weaving as an occupation is not attractive to young people because it is a hard work, low wage, monotonous and a hazardous job. Many who came into it as apprentices left it to become rickshaw pullers, hawkers, and petty traders. It is not an occupation of choice for young people.

Conclusion

Handloom weaving is not a growth industry. In has been in decline since the colonial days, when it is said that the Manchester textile mills dumped cheap machine made cloth in India and, for good measure, chopped off the fingers of the muslin master craftsmen of Bengal.

The way forward can be in promoting handloom as specialty and novelty products ensuring design and quality and invoking the heritage and cultural tradition behind it. In this manner it can find both a domestic and international market with proper marketing and promotion. Government agencies such as the Handloom Board and the Small and Cottage Industries Corporation, as well as NGOs promoting skills and crafts need to work together for this purpose. International market can be explored with specialty buying houses and on-line portals for marketing and distributing products.

Appropriate adoption of technologies, training of workers and provisions for capital to factory owners should be part of the collaborative government and private sector effort.

At the same time it is necessary to ensure the application of safety and health standards, minimum wage provisions and protection of apprentices. These measures have to be taken through collaborative efforts of government authorities, marketers and whole-sellers of products, and employers and owners of small factories.

There may be greater prospects for making handloom weaving a supplementary source of employment and income for the family, rather than as the principal occupation. It can be attractive to young workers, especially women, if the working arrangements and environment in the factory or at home allow the workers to be engaged in work in addition to other income-earning and domestic work.

5. Urban Domestic Help

Background

UNICEF defines Child labour as work that deprives children of their childhood, their potential and dignity and that is harmful to physical and mental development (Adam-Badr, 2010). The vast majority of children employed as domestic helps in Bangladesh fall into this category. Many children belonging to about 30 percent of the families estimated to be below the “poverty line” have no option but to enter the work force as unskilled “domestic help” in a relatively better-off urban household. This choice may provide a child food and shelter and a small wage which could be added to the meagre income of the child’s family.

The purpose of this study is to try to find out what kind of skills if any these domestics have acquired and what future job or career prospects they have.

The skills required for domestic work are mostly learned on the job with instruction from the mistress of the house or from an experienced domestic worker. Although the remuneration is low,

this job does provide food and shelter, which is valuable for the poorest people in the country. And until that time when better paying career options become available, domestic work will remain a job, not a desired career perhaps, but a job nonetheless.

Demand for labor in other sectors of the economy will continue to reduce the supply of labour for domestic worker. A case in point is the demand for labour in the ready-made garments factories, which has reduced the availability of domestic workers and thus increased the remuneration of domestic workers.

This case study probed into the current status, prospects and expectations of the domestic helps aged between ten and twenty-four years in Dhaka city. In this case study we attempted to represent the personal and financial status, causes behind this occupation, daily work schedule, length of service, work experience, attainment of skills and expertise, expectations and aspirations from the occupation of the domestic workers.

We selected employers of four socio- economic strata: Elite Class (monthly income Taka 3 lac and above), Upper Middle Class (monthly income Taka 1.5 to 3 lacs), Middle Class (Taka 80,000 to 1.5lac) and Lower Middle Class (Less than Taka 80,000). The purposive sample, based on convenience and personal contacts consisted of 22 domestic workers from Bashundhara, Dhanmondi, Gulshan, Kathalbagan, Kolabagan, Maghbazar, Mirpur, Mohammadpur, Shere Bangla Nagar and Uttara areas of Dhaka city. The sample comprised 5 males and 17 females which represented the dominance of females in this occupation (Table 8.1). The subjects were interviewed in the homes where they were employed or in the part-time school which some attended. A number of the employers were also interviewed.

Table 8.1 Sample for the case study of domestic helps in Dhaka city

Area	Number of cases	Gender of the domestic help	
		Male	Female
Bashundhara	2	1	1
Dhanmondi	3	2	1
Gulshan	1		1
Kathalbagan	3	1	2
Kolabagan	3		3
Maghb azar	1		1
Mirpur	1		1
Mohammadpur	2		2
Shere -bangla nagar	1		1
Uttara	5	1	4
Total	**22**	**5**	**17**

Evidence and Analysis

Personal information. All domestic workers whom we interviewed have come from poverty stricken families from different parts of Bangladesh to earn an income in order to support financially their respective families. Five of the subjects were part-time (live out) domestics who were also attending schools. The remaining 17 were full-time (live in) domestic helps.

It was evident that the domestics' financial support was essential for their families subsistence and hence they all saved their earnings and sent a large part of it regularly to their families. The customary remuneration included the necessities such as, food, clothing, and toiletries being met by the employer. In addition, they receive clothes during Eid or other festivals and medicines if they fell ill. Whether this relatively benign scenario regarding remuneration holds true generally can be determined with more extensive study with a larger representative sample.

Working Condition and Skills Developed. Shaju, a full-time domestic help, said:

> I wake up by 6 am. Make breakfast and then make the children's and bhaiya and bhabi's tiffin ready. After everyone leaves I do the other household chores; washing, cleaning, dusting and mopping mainly. When the children come back from school I give them shower, feed them and play with them. In the evening, I cut the vegetables and prepare things ready for dinner. Bhabi comes back from office and cooks. Afterwards, I clean up everything and go to bed by 11 pm. (Statement to research team.)

In our small sample, Shaju and one other, were exceptions as the single domestic worker in the house, so they had to everything and worked long hours. In the other cases, there were more than one workers who shared the duties. The long list of duties included:

- Sweeping, cleaning dusting, mopping, washing windows and other fixture
- Washing and ironing clothes
- Washing dishes
- Preparing, cooking and serving meals and refreshments
- Taking care of children: feeding, giving shower, playing etc.
- Taking care of sick people
- Taking care of elderly people
- Purchasing food and other household related items
- Supervising other helpers
- Performing other tasks as asked by the employers

We had the opportunity to observe 12 subjects at their places of work. It was apparent from the interviews as well as from our observations that all the domestic helps have had adequate time to relax, watch television, study or spend some time of their own. However, it was also evident that the employers have control over all aspects of their life, from how the tasks would be performed to the type of clothes they will wear and how they will wear them to their sleeping and so on. Even though very few have separate room for sleeping; nonetheless, the living conditions of all the interviewed subjects appeared good.

When asked if they are happy staying and working for the particular household, 80 per cent domestics' notion was positive. And some of the reasons they mentioned were: good food, good shelter, behaves well, can take rest, can watch TV, can study etc. The 20 per cent who expressed negatively either mostly because they miss home and their family or they have some other reason. This picture of good working and living conditions contradict frequent stories in the media about torture and cruelty to domestic child and female workers. Again, a general conclusion cannot be reached without an objective larger scale investigation with a random sample.

As one of the purposes of the study was to find out the expectations and demands of the young domestics in respect of skills development, some of the skills they have learned as well as interested in learning further include:

- Driving
- *Katha* stitching
- Work of a caregiver
- Cooking
- Catering
- Small business
- Flower making
- Computer skills
- Special training on physiotherapy
- Sewing
- Tailoring
- Electrical work
- Beauty parlor
- To open a grocery shop
- Embroidery work
- Taking care of elderly people
- Garment factory related work

Employers' Point of View. We also asked the employers about some of the skills that their domestic helpers have learned which could be useful for their future. This was done basically to know whether the employers are aware and concerned about their skills development. Moreover, while taking interview of the domestics we found that some were unable to answer or understand some of the tasks as learning something new based on prerequisites. According to the employers some of the skills the workers developed include:

- Ironing
- Cooking
- Making bed in a professional way
- Good manners
- Professional catering
- Serving the guests
- Setting the tables
- Good caregiver
- Basic electrical work
- Can organize, prioritize and maintain time
- Can use domestic and electrical appliances
- Understands simple English
- Can make food for the babies
- Taking care of elderly people

Discussion and Conclusion

The problems concerning domestic work are not unique to Bangladesh. Studies undertaken by the Human Rights Watch over the years in countries as varied as Indonesia, Saudi Arabia, the United States, Morocco, Guinea, Malaysia and El Salvador have documented persistent abuses and labour exploitation, including extremely long working hours without rest; unpaid wages for months or years; forced confinement in the workplace; food deprivation; verbal, physical and sexual abuse; and forced labour including debt bondage and trafficking (Human Rights Watch, 2009).

Domestic helps clearly play an important role in day-to-day functioning of the urban households and meet a large market demand. The domestic workers come from the marginalized sections of the society. Many are also migrants into the city, sometimes victims of floods, cyclones and river erosion, for whom employment as a domestic help can be a lifeline for the whole family. The challenge is to reconcile the needs and demands of both the employers and the workers within a framework of the human and workers' rights of the domestic workers, protecting especially the young workers from violence and exploitation, and not shutting off the prospects for further development and life prospects of young workers.

Of particular concern is the situation of young workers who may be as young as 5 or 6 years old, their denial of child and human rights, their deprivation from the right to education, and subjecting them to cruelty and exploitation, taking advantage of the extreme poverty of their families. There is a collusion, deliberate or unconscious, of the employers, the concerned official agencies and authorities, and the impoverished families of the children themselves in tolerating the violation of rights and laws and not addressing the situation with seriousness and a sense of urgency.

One indication of the lack of seriousness about the situation is that there is no reliable estimate of the numbers and characteristics of the domestic child and women workers in the country. The periodic labour force surveys have kept it out of their purview. The present case study of a small sample drawn from relatively affluent categories of households, as noted, sheds light on some of the issues, and indicates the need for more elaborate investigation with representative samples.

Recognizing the need for enacting a law on domestic workers, the chairman of the parliamentary standing committee for the Ministry of Labor and Employment said in a recent public dialogue that he had suggested to the government the adoption of such a law in 2009. In the same dialogue rights activists urged that domestic workers, 80 per cent of whom are women, should be brought under the provision of the Labor Law, 2006 (Daily Star, October 25, 2012).

There is a growing awareness about the problem in the civil society. Domestic workers and advocates for their cause, under the banner of Domestic Workers' Rights Network, staged a demonstration in Dhaka on 23 October, 2012. They called for framing a law to protect their rights with provisions to punish employers who would break that law and indulge in violence against workers. They also made the case for applying to domestic work labor laws for formal work, establishing a minimum wage, working hours and making the employers liable for torture and verbal, physical and sexual abuse of domestic helps.

The occupation of domestic help is dominated by female child and adult workers. In respect of expectations about skills development and further advancement and livelihood prospects, diverging perspectives for males and females are likely. Recognising the overwhelming presence of females in this important service sector occupation, skills development possibilities and needs and social protection and workers' rights protection need to be considered in this light. Employer's

obligations and public authorities' responsibilities regarding child labour, right to education and opportunities for skills development from the point of view individual workers' interests and benefits to society have not received due attention.

Many countries including Bangladesh segregate domestic helps from labour laws partially or totally, denying them basic labour protections that most other categories of workers enjoy. Such segregation along with pervasive gender discrimination and the undermining of domestic work associated with traditional, unpaid female role has created a general acceptance of an extensive array of abuses of domestic workers around the world, large proportions of whom are children.

A new dimension of employment in domestic work is the overseas market for female domestic workers. Bangladesh has joined recently other Asian countries such as the Philippines, Indonesia and Sri Lanka in sending domestic workers to the Middle East and the opportunities may open in East Asia. This prospect calls for attention to safeguarding the safety and rights of the domestic workers as well as improving their skills and capabilities to take full advantage of the new employment market. With appropriate planning and training initiatives, domestic work skills in the country can be a foundation for improving skills and employability in the overseas market.

Recommendations

The issue of domestic helps' rights and the violence and exploitation they are subject to have been raised in the international labour rights forums. The ILO adopted in 2011 the Domestics Workers' Convention and Recommendation, urging governments worldwide to recognize the urgency of the problem and take necessary measures (Daily Star, 25 October, 2012).

In line with the international consensus, it is necessary to consider legal provisions, strategies for skills and capability development, social protection of workers, and change in attitudes and values, adapting these to the circumstances of Bangladesh. These measures include:

- Specific terms and conditions ensuring their right in every aspect such as minimum wages, minimum working age, hours of work, type of tasks, food and shelter etc.;
- Right to access to their wages for financial security and decision making;
- Preventing cruelty and violence against domestic helps;
- Recognition of the domestic work and workers to be included in national statistics;
- Legal provisions to make employers liable for violation of workers' rights including torture and verbal, physical and sexual abuse;
- Right to weekly and yearly holidays;
- Ensure acceptable living condition and leisure time;
- Provision for education particularly for the child domestics;
- Set out measures for effective monitoring and enforcement;
- Opportunity for skills development and training according to the preference of the domestic help in the employer's residence or in an institution in the same locality in the convenient time.

Gender differences in the dynamics of the labor market need to be analyzed taking into consideration the differences and links between male and female labor force characteristics, with special attention to domestic workers with a high prevalence of girls and women among them.

An affirmative action approach is needed to create opportunities for skills development, access to general basic and further education, and social protection and workers' rights protection especially for the neglected domestic workers.

6. Skills and Livelihood for Adolescent Girls

Background

There are 34 million people in Bangladesh between the ages of 10 and 19, almost one fourth of the total population. They face challenges relating to health, child labor, forced early marriage and education (UNICEF, 2011). BRAC started an adolescent-focused initiative in Bangladesh in 1993 under BRAC Education Program (BEP). It was observed that female BRAC Primary School (BPS) graduates, who did not continue in secondary education, tended to relapse into illiteracy and lose self-confidence and positive attitudes seen among children in BRAC primary school. BRAC decided to establish reading centers which also could be a safe place for the adolescent girls to interact with each other on their own concerns. Some of these reading centers evolved further by 2000 into adolescent development centers under the Adolescent Development Program (ADP).

It was soon realized that only social awareness is not enough to fully empower the adolescent girls. Financial independence was considered a key factor. BRAC incorporated youth financial service, livelihood and skill development training into ADP, turning it into a menu of activities with slight variations for young girls known as Employment and Livelihood for Adolescents (ELA), Social and Financial Empowerment of Adolescents (SoFEA) and Skills Training for Advancing Resource (STAR).

A. Adolescent Development Program (ADP)

In 1993 BRAC started Reading Centers for rural adolescent girls which were later renamed as 'Kishori Club' (adolescent girls' club). The initial purpose of those centers was to create a space for the girls completing BRAC non-formal school, so that the girls could retain literacy skills, have a safe place to socialize and participate in skills development activities.

In 1998 BRAC started working on specific issues affecting young girls through Adolescent Peer Organized Network (APON). This initiative was to provide knowledge to the adolescents about life skills and make them aware about their adolescent age related issues. This activity was developed into the Adolescent Development Program (ADP) in 2000 with an emphasis on livelihood skills. The program signed an agreement with the Ministry of Women and Children Affairs as a technical partner and also worked in cooperation with the Department of Youth Development under the Ministry of Youth and Sports.

ADP designed a number of activities in response to various needs and circumstances of adolescents, especially girls. These included Adolescents Centers, APON (Adolescent Peer Organized Network), Sports for Development, Safe Swimming Program, Meghe Dhaka Tara, Stimulating Theatre for Adolescent Girls Empowerment, Special Network of Adolescent Photographer (SNAP), Livelihood Training, and Community Participation.

Kishori Club-Adolescents center. Kishori Club (KC) is the key component of the ADP. KCs are safe places near the adolescent's community where adolescent girls can read, socialize, play games, take part in cultural activities and have open discussions on personal and social issues. Each club has 25-30 members aged 10-18 including married adolescents with at least 25% male members. One trained adolescent girl is responsible for managing the club.

APON. It consists of a menu of life skills course which are offered to members of Kishori Clubs and other interested adolescents in the community. The course content covers different social issues such as child rights, child marriage, gender, dowry, sexual harassment, substance abuse and health related issues such as reproductive health, personal hygiene, STDs, HIV/AIDS and family planning. Some cross cutting issues are also addressed in those courses like negotiation skills, inclusiveness, and effective communication.

Livelihood Training. The aim of livelihood training is to engage adolescent girls in income generating activities through skill based training in different trades. ADP introduced livelihood training for adolescents early in 2004 offering its own courses as well as government agencies' livelihood training. ADPs own training included beauty care, computer, photography, and handicrafts training. Training in different trades is provided by the Directorate of Youth Development (DYD) like Poultry and livestock, Sewing and embroidery etc. Bangladesh Industrial Institute of Technical Assistance Center (BITAC) offered training in electrical, electronics, mechanical, welding, etc.

Meghe Dhaka Tara. It is one of the new ADP initiatives. The title means "the stars underneath the cloud." This initiative is to help achieve intellectual and social development of the adolescents through cultural activities. It also provides the opportunity to girls from poor and disadvantaged families to demonstrate their creative and artistic capabilities to the wider community. ADP provides the required training to improve their ability to perform and hold competitions at local and national levels to showcase the talents of the participants.

An innovative activity is SNAP, a network of adolescent female photographers who received training on digital photography. The adolescents found an opportunity to show their creativity, earn social recognition, and some even took photography as a profession.

Community Participation. Due to the social structure of rural Bangladesh it is difficult to involve girls in non-traditional activities without parents' and community's approval. These obstacles are attempted to be overcome with community participation in the programme. The community participation activities include: Organising "Forums" with mothers and fathers and with community leaders. There is a child marriage and dowry prevention committee, which works to revent child marriage and dowry payment.

B. Employment and Livelihood for Adolescents (ELA)

Some training in financial management was offered in ADP since 2000. In 2003, Employment and Livelihood for Adolescents (ELA) was launched to offer adolescent girls with financial services and access to small credit.

ELA targets girls and young women within the age group of 14 to 25 years living in rural areas. Most come from relatively poor families with some so poor that they cannot afford to go to school. ELA included three streams of activities - Financial Service, Livelihood Training, and the Issues Discussion Forum.

Financial service includes credit and savings. Credit or loan is the core service of ELA. The range of loan is from Taka 3,000 to 30,000 which have to be paid back within one year with 15% service charge. To be eligible for loan, members must save money for four consecutive weeks. The program requires family involvement and family consent to get a loan and start an enterprise as a process of empowerment.

ELA provides training on different trades to encourage income generating activities (IGA). Courses included tailoring, horticulture nursery, vegetable cultivation and poultry.

BRAC's adult microfinance operates through Village Organizations (VO) consisting of loan recipients. This concept has been adapted to ELA and members join VOs. In the weekly VO meeting, ELA staff take care of administrative matters related to the loans and facilitate a discussion of different issues of concern to adolescent girls, such as, reproductive health, early marriage, dowry and so on. This discussion helps the girls to raise their social awareness and to have a better understanding about themselves.

The targeted age group and relatively small loan size in ELA is a challenge for the sustainability of the program. The loan size is small because adolescent girls are more mobile than the adults, they are more risk-averse and their capacity to mange and absorb larger loans is low. Another challenge is convincing the community, parents of the girls and the girls themselves that they too can borrow and save like adults and manage a business.

ELA is currently operating the credit operation with the help of the microcredit unit of BRAC. ELA experience in Bangladesh was so impressive and exemplary that BRAC has introduced the program in Tanzania and Uganda in Africa. A further innovation based on ELA experience is SoFEA, described next.

C. Social and Financial Empowerment of Adolescents (SoFEA)

With financial support from Nike Foundation, SoFEA is an intervention of BRAC for the girls in rural Bangladesh started in 2009. The special feature of BRAC is the integration of financial and non financial components to empower girls both socially and financially.

The main components of SoFEA includes a secure place for adolescent girls to socialize and learn life skills, and be involved in livelihood training, financial literacy, savings and credit facility, and social sensitisation.

SoFEA is now working in five sub districts under five districts of Bangladesh. They are Dhamrai (Manikganj), Barrura (Comilla), Sathiya (Pabna), Puthiya (Rajshahi), and Magura sadar (Magura). A total of 360 clubs with a membership of 30-35 in each operate in these locations. The age group of the club members is 11 to 23 years. The club is guided by a club leader, a married girl, who receives a modest allowance of Taka 300 per month.

A special feature of SOFEA is apprenticeship arranged locally. Each employer takes the responsibility for two girl apprentices and receives Taka 1,000 for each to provide mentorship for the trainee for a period of six months. The apprentice girl gets 800 taka as a lump sum from BRAC. It is compulsory to start a saving program from a part of this amount as capital for her future venture and the rest is usually spent as transport cost.

The SoFEA program has benefited the adolescent girls in a range of areas. Their social awareness and awareness about themselves are heightened. Their confidence level is increased, more of them continue in school, marriage of girls is being delayed, and the girls' voices on family and social issues are raised strongly. Besides all these things, financial independence of girls, on which independence in other matters depends, is emphasized in SoFEA. Livelihood training, financial literacy training, credit support and follow up of the adolescent girls reflect this emphasis.

D. Skills Training for Advancing Resource (STAR)

Skill Training for Advancing Resources (STAR) funded by UNICEF is a new initiative taken by BRAC Education Program with the aim of helping adolescents to participate in Technical and Vocational Education and Training (TVET), acquire decent employment and be associated with socio-cultural reform. The model involves providing enterprise-based on-the-job training to the adolescents in the informal market while also offering theoretical and "soft-skills" development training.

STAR targets adolescent learners aged between 14 to 18 years and among the learners 58% are female. Training participants should have at least 5 years of primary education, who have dropped out from formal schooling.

It is currently reaching 1,000 learners through five divisions of Bangladesh, focusing initially on six urban locations in Barisal, Chittagong, Dhaka, Khulna, Rajshahi and Sylhet. This is a six-month course where each learner gets five days of practical training and one class of theoretical training per week on the trade they are specializing in. The project has been started in January, 2012. The learner is receiving practical training from master crafts-persons (shop/enterprise owner) and theoretical training from technical trainers (instructors from different vocational training institutes). Soft skills and life skills training are also provided by specially recruited teachers.

STAR is a model of apprenticeship based on-the-job training. A three days refresher and six months of follow up have been incorporated in this intervention. This project has a staff of 6 District Managers and around 50 program organizers working in the field and working directly with the beneficiaries. There is a network of 500 master crafts-persons, and about 130 technical trainers serving 1,000 trainees. After the six-month training, every trainee is assisted to find a job. A model such as this, with a strong in-built follow-up system, is estimated to cost US$69 per participant per month.

Conclusions and Recommendations

The range of activities focused on adolescents, especially rural girls, was initiated to provide a bridge between BRAC's non-formal basic education (equivalent to primary education) and assumption by the young people of adult roles in family, community and the world of work.

About a million adolescents, the large majority being girls, benefited from various ADP activities since 2000. Over 8,000 Kishori Centres have been established in 58 districts, out of 64 in the country. About 14 thousand girls have played the role of Adolescent Leaders in different projects and have developed their leadership skills and self-esteem benefiting themselves and their communities. Expansion of opportunities of continuing education, delay of marriage, leadership development, participation of girls in income generating and livelihood activities and general empowerment of

adolescent and young girls are some of the direct achievements of ADP. More of the girls involved in ADP continue their formal education beyond the primary level. According to a Population Council Report, in years 2003 to 2004, the average marriage age of women has increased by 1-2 years in the ADP intervention communities.

A lesson from early ADP activities was the realisation that skills and capacity building of rural young girls called for a combination of education and training related to general confidence building and social and life skills, income-earning skills and access to credit and financial management support. This lesson led to the addition to ADP of specific courses in productive skills, and small credits and financial service support through ELA, SoFEA and STAR. In the short time since the introduction of these activities, positive outcomes have been found in respect of girls' and young women's participation in income generating activities, as well as in enhanced management skills, socialization, mobility, awareness on health and sanitation, decision making within family, and aspirations in life.

It would be advisable to evaluate the common features and the differences among the innovative models and combinations for skills and capacity development of rural girls, determine what worked in which circumstances and conditions, and how these can be replicated and scaled up in a sustainable way.

7. Skills and Jobs for People with Disabilities

Background

Access to economic opportunities for people with disabilities is scarce in Bangladesh. Lack of opportunity for practical experiences and vocational skills development prevents their access to income generation options. A majority of the people with disabilities, including many with a severe level of disability, has the ambition and confidence to acquire education and engage in financially gainful activities enabling them to be effective contributors to their family and society, if they are given the opportunity.

National policies concerning disability espouse the aim to promote employment for people with disabilities. The Government declared a quota of 10% for people with disabilities along with the orphans in Government jobs. But this has not been adequately applied in most recruitments.

A study with a purposive sample of people with disabilities in employment or with suitable skills or education essential for employment highlighted problems and possibilities in this respect. In a sample of 452 people with disabilities, 65% were male. The disabilities were grouped into six categories. Besides the four major groups - physical, visual, speech and hearing, and intellectual - disabilities under 'Multiple' and 'Others' were also considered. The maximum respondents were under physical disability (44%) followed by visual impairment (23%). The other two groups of speech and hearing and intellectual disability were recorded at 16% and 9%, respectively.

Findings

Two thirds (64%) of the respondents had some form of special work specific skills. These work skills were very diverse including handicrafts (cane work, sewing, rope making, etc), chalk making, sweets preparation, painting, goldsmith, dairy and poultry rearing, etc. 79% of the

respondents of the study were involved in some form of employment (78% in rural areas and 79% in urban areas). It must again be mentioned that the survey sample included mainly the employed people with disabilities. But it also showed the potential if appropriate support is given and opportunities are created.

Out of the employed respondents the maximum (66%) were self-employed. Among the self-employed, 44% had physical disabilities, 20% had visual impairment, 19% had speech and hearing problems, and 8% of the people were intellectually disabled.

The government was the source of employment for only 5% of the employed respondents while the non-government sector provides such employment options to only 17% of people with disabilities. Overall employment scopes were higher in the urban areas, but alternative sources of self-employment was higher in the rural areas. The single largest group, 21% of the respondents, were involved in different small businesses. This was followed by agriculture related employment at 15 %. Many of the respondents (12%) were employed in different service oriented institutions both in the government and non-government sectors.

More than a quarter, 27% of the people, had changed their employment recently. The major causes cited for changing employments were low salary, negative attitude of the employers, disability unfriendly working environment, rigid organizational rules and accessibility problems out-side and inside the organization. It should be noted, with regard to this data, that 66% of the employed people with disabilities were self-employed and basically would not change employment unless it was out of their own desire. It appears that employment other than in self-employment was subject to high turn-over, with little job security.

Some 39% of the respondents mentioned that they had faced problems in their employment. Problems mentioned include lack of cooperation, negative attitude, lack of accessibility and adaptability, lack of opportunities for further development of skills, lack of sensitivity of employers about difficulties encountered, and barriers and problems that employees with disability could face.

With regard to equal opportunity in workplace, 46% respondents informed that they considered that they were receiving equal privileges. In a similar query on attitude of others towards them with regard to their employment in their workplace and at home most had indicated that it was fairly positive. One of the reasons for high percentage of positive response was that most (66%) were self-employed and so did not have to face any hierarchy in their employment or much interactions with others. For the others who were employed by the Government, or other employers, the situation was less positive.

In the area of accessibility, 70% were either not or only partially satisfied. As mentioned earlier accessibility outside and inside the workplace is an essential ingredient for effective inclusion of people with disabilities into employment and establishment of equal rights. But according to the respondents, in 94% cases, no changes were made to improve the situation (accessibility features) in their respective workplaces.

A significant number (24%) of respondents were earning less than Taka five hundred per month (current prices in 2002). The level of contribution of the employed people with disabilities towards the family depends on their income. But regardless of the level of their income, almost all the employed people with disabilities were contributing to some extent to their family's upkeep.

Most opined that it is imperative to have pro-disability laws and policies. Efforts must be taken to disseminate the provisions of Acts and policies that exist at all levels and also to ensure their effective and efficient enforcement. The respondents also stated that more opportunities must be created for skill development and professional training for people with disabilities to generate scopes of employment. Negative attitude was found as a major barrier that needs to be addressed.

People with disabilities identified adequate and timely availability of financial resources for skills development as a critically needed support. Eighty percent of the respondents had received some form of education at some stage of their life in the special sample under the study. This percentage is high, because the target group selected for the study is either skilled or educated.

Many of the learners with disabilities expressed the need for education programs which complement and adapt traditional formal education to serve people with disabilities But in Bangladesh the availability of programs with adaptation for disabled learners are very limited. This is generally much worse outside the metropolitan areas. Many disabled learners can benefit from the regular formal education approach if there were disability friendly environment with essential accessibility features, skilled teachers, and disability sensitized school actors including management committee, teachers and peer students. There are very limited opportunities in the education institutions of the country to update ones' skills on vocational and technical areas side by side the attainment of regular education.

Recommendations

It can be seen that, though Bangladesh had enacted legislation on disability related issues and formulated the National Disability Policy, the interventions to promote employment have not been addressed properly. There are deficiencies related to provisions for literacy, technical skills, job options, self-employment and other basic facets of life and livelihood of people with disabilities.

A set of strategic action targets should be set for job placement and increase of employment options for persons with disabilities in the public and private sectors. A national action strategy should be formulated to promote the achievement of set targets, such as, mandatory reservation quotas, employer incentives, awareness-raising campaigns, debriefing employers and employees, and extending technical support to the employers.

A collaborative body may be formed comprising of the representatives of the public and private sectors, disabled people's organizations and other NGOs to compile, up-date information and promote new employment and self-employment opportunities in the formal and informal sectors.

Joint action needs to be planned and facilitated on training and job placement by all agencies (both government and non-government) concerned with employment and human resources development. Government has to take the lead to bring together employers and workers, mainstream organizations and organizations of people with disabilities. This national action plan may be coordinated by a National Coordination Council in association with the National Federation of Organizations Working on Disability (NFOWD). The national plan should include appropriate training and employment opportunities for people with extensive disabilities and those who require a supportive environment like provision of support services and assistive devices for self-employment and supported employment and where necessary, arrangement of accommodation.

National and local level dialogues could be organized with concerned actors/stakeholders to facilitate inclusion of persons with disabilities in all rural and urban schemes aiming at poverty alleviation, and income-generation in both government and non-government sectors. National plans on poverty alleviation, micro-credit operations, skills development etc. should include specific strategies to promote employment, (self-employment in particular) to facilitate access to income for people with disabilities. The national and private banks along with NGOs should be encouraged to initiate schemes to include people with disabilities in their mainstream credit operation programs.

A database can be established and updated regularly to identify disabled people in order to place them on job or to assist them in self-employment in rural and urban areas, through appropriate public and private agencies and NGOs.

National level initiatives should be undertaken by NFOWD or National Foundation for Development of Disabled People (NFDDP) to protect the rights of the disabled workers in all laws, policies and collective agreements relating to employment (including provisions on recruitment, promotion, and dismissal). They need to identify and work with institutions to carry out research/studies in the areas of ergonomics, workplace adaptations, safety devices and other topics relevant to the training and employment of people with disabilities.

A monitoring and evaluation mechanism should be developed under the care of National Coordination Council, with the active participation of representatives of disabled persons, to ensure that the policies and legislations relating to training and employment are effectively enforced. National media including electronic, print and others could be urged to include sensitization programs on the possible potentialities and scope for employment of people with disabilities.

The district committees concerning disability issues should adopt measures to identify eligible people with disabilities and develop plans to include them in job and employment.

Local level sensitization workshops and seminars may be organized under the initiative of NGOs, self-help groups and other concerned agencies. Local level lobbying and advocacy for job placement can be initiated and strengthened to promote such scope. The public awareness program of the development agencies should include sensitization on attitude towards people with disabilities with focus on their potentialities and abilities. Development agencies concerned with human resource development should systematically include skill development effort for the people with disabilities.

Conclusion

In many cases, people with disabilities have been able to establish themselves successfully through their work and show that they too can be as productive as others in pro-disability working environments. Till date virtually no systematic and adequate effort has been undertaken to explore the potentialities of people with disabilities and to create opportunities to place them in appropriate work in accordance to their different abilities and nature of skills.

It is expected that the findings of this study and greater awareness in general would contribute in the modification and development of appropriate policies, plans, interventions and above all the "positive and open mind" to improve the condition of people with disabilities in respect of employment and livelihood.

Adapted from "Employment Situation of People with Disabilities in Bangladesh," by A.H.M. Noman Khan, et al. Published by Center for Services and Information on Disability (CSID) in association with ActionAid Bangladesh (AAB), December 2002.

8. Concluding Observations on Special Vulnerabilities

The case studies illustrate various special vulnerabilities that affect significant proportions of the population. Poverty is a common feature of the disadvantaged and vulnerable groups which interacts with other characteristics of the affected population. Special circumstance of geographical locations; ethnic and language attributes; and traditional socio-cultural disadvantage of populations determine opportunities and prospects for skills development. A combination of social and economic situation and gender norms affect adolescents and youth of vulnerable groups as described in the case studies included in this chapter.

The case studies are not an adequate and representative portrayal of major vulnerabilities. The condition of extreme poverty affects some 15 percent of the population who face special obstacles to participation in education and skills development. Youth from marginalized groups known as dalits (oppressed), belonging to communities engaged in traditionally "disdained" occupations such as those related to urban sanitation and street cleaning, work with animal hide and leather, and sex work (legally and socially tolerated prostitution) cannot fully access services available to the mainstream. Children, who are orphaned, abandoned or without a family or home, known as street children, are in need of special education, skills development as well as social support. Education and training programs in the main stream are not generally inclusive of children and youth with physical and mental disabilities and special provisions for those with severe disabilities hardly exist.

The case studies on the Santal ethnic community, bidi workers, domestic helps, and handloom weaving describe the problems in relation to skills and employment. These also suggest approaches to improving the prospects for the young workers through a collaborative effort to apply regulations and social protection measures. A similar approach is proposed for the participants in informal apprenticeship in Dholaikhal for jobs related to small-scale manufacturing and repair of electrical and mechanical machines, tools and appliances.

The adolescent development program of BRAC, on the other hand, is a proactive effort to address a generic problem of a large proportion of young people in the country, especially girls, not continuing after the primary stage in formal secondary and further education and for whom few opportunities exist to prepare for the world of work and their adult roles in society. A combination of activities that helps young people consolidate basic general education, acquire life skills and work skills, and learn entrepreneurial and financial managements through a flexible menu of learning is offered.

The key lesson from the diagnostics derived from the case studies and the solutions applied or suggested is that mainstream programs offered as a standard pattern do not fully respond to the specific needs and conditions of the diverse vulnerabilities of the disadvantaged groups. The general programs of education and training either have to be adapted substantially for the particular circumstances or creative approaches have to be designed, developed and applied, being open to assessing and making use of lessons from experience.

A related lesson for responding to the diverse disadvantages is that programs have to be designed and implemented at the local level with active participation of NGOs and the private sector and the involvement of intended beneficiaries. Government policy support, resources and encouragement for this collaboration is necessary from the central authorities and at the local government level.

Chapter 9

Conclusions and Recommendations

This final chapter recapitulates the key conclusions derived from the findings of the youth skills profile survey, analyses and discussion of the findings using where appropriate other relevant research findings, and a brief review of the global and national perspectives on skills development presented earlier. Recommendations regarding policy implications and action priorities based on the conclusions are also presented. This is in keeping with the Education Watch aim of contributing to policy dialogue among stakeholders and promoting policy formulation informed by research.

The present research report, following the Education Watch methodology of collecting relevant evidence from the population at the household level, is intended to present primary data about engagement in skills development of youth in the 10-24 age group and their perception and expectations about skills development opportunities. The purpose and scope of the study is limited to this extent. The findings do not necessarily shed light directly on all the various issues which may be regarded as critical for a comprehensive analysis of the skills development situation in Bangladesh and to develop a skills and jobs agenda for the country. But it does offer a perspective so far not given due attention and is necessary to formulate adequately the policy and action agenda.

The distinctive feature of the study is that it focuses on the situation and views arguably of the principal stakeholder in respect of skills development – the young people who are at the threshold of entering the world of work or just have entered that world. This important perspective from the point of view of young people is often neglected. The sample household survey provides pertinent insights about youth participation in skills development, which is defined broadly, and youth expectations and views about skills development opportunities. The findings offer valuable clues to considering and gaining a well-rounded understanding of critical skills development questions. To this end, other relevant research findings have been brought selectively into the discussion of the findings of the present survey.

Recent international attention to youth employment and skills development in the context of global economic problems and the discourse about the post-MDG agenda beyond 2015 has generated several important studies. Messages particularly relevant for the Bangladesh context from this discourse have been noted. The outcome of policy and strategy discussion in the country concerned with formulation of externally assisted projects in different aspects of skills development also has been considered.

1. Key Conclusions

i. A Global Perspective

- The international discourse and analyses have shown the need for a broader skills development vision beyond the traditional confines of TVET, recognising the essential role of formal general education, need to take a lifelong perspective of learning and capacity building, linking skills development with employment policies, and a skills and jobs agenda linked to social protection and upholding human rights and human dignity of workers. However, the conventional sectoralised and fragmented approach of government operations and policy making have so far limited the possibility of a comprehensive and coordinated approach to skills development in Bangladesh.

- A broad definition of skills development as a part of human capability enhancement requires comprehensive and coordinated attention to the spectrum of skills comprising foundation skills, transferrable skills and job-specific skills. These are provided by formal and non-formal modes of learning through basic and general education institutions and occupation related training institutions and programmes. This broad view of provisions and providers needs to be taken as the conceptual framework for exploring policies and actions for the TVET sub-sector.

- Monitoring access to appropriate learning and life skills development (EFA goal 3) has been neglected, in part because skills are gained in diverse ways and through the work of many actors and providers. Moreover, the reality of a rapidly changing world required a radical reconsideration of what skills are and how they are acquired. Reflecting these uncertainties, a consensus is still lacking on internationally comparable indicators of skills development, their national adaptation, and the means to measure them.

- In looking at post-2015 agenda for new versions of MDG and EFA and the agenda for skills development in the larger context, there is increased recognition of the pertinence of a lifelong learning perspective in linking skills to productivity. A prominent part of this perspective is the reality of the spectrum of skills including cognitive, non-cognitive and technical skills acquired through general basic, secondary, and vocational-technical education and various forms of on-the-job learning including apprenticeship. Other recurring themes for the new post-2015 skills development frontiers include: revisiting the scope and concept of TVET, nurturing informal and non-formal learning and TVET in the informal economy, increasing TVET responsiveness to new development priorities, promoting multi-stakeholder partnerships through new approaches to governance, sustainability and "greening" of TVET, and handling uncertainties and building resilience in the face of rapid change in society and economy.

ii. National Policy and Strategy Discourse

- A greater national recognition of the importance of skills development and serious deficiencies in the TVET system as well as increased donor support in this area have prompted various reform initiatives. However, challenges loom large within the traditionally defined TVET system and other aspects of skills development in respect of effective access, quality, equity and relevance. Dealing with these challenges require a broader and coordinated skills development approach backed up by political and policy vision and support at the highest tier of national decision-making. Resistances have to be overcome against a broader vision and acting on stated political commitment.

- Within the TVET sub-sector, the analysis of problems and issues undertaken to formulate various externally assisted projects have helped the diagnosis of major problems in general terms. However, commensurate policy responses and implementation of strategies have not emerged regarding important concerns, such as, adequate TVET financing, shortage of motivated and qualified TVET instructors, strengthening links to industry, enforcing standards in TVET delivery, credible assessment including establishing and recognising equivalence, and determination to implement the planned activities effectively. The actions and assistance planned in these areas are not proportionate to the magnitude of the problems. Moreover, effective implementation of even those actions envisaged remains problematic.

- There are serious limitations in the present structures and practices in skills development. The policy and action priorities of the National Skills development Council (NSDC), proclaimed as the apex body, remain focused on formal and institutional skills development linked to formal employment, giving less attention to the majority of workers and potential workers who are in the informal economy, a large part of which lie in the agriculture sector.

To the extent this skewed focus persists, the contribution of TVET to fighting poverty and promoting equity through skills development and job creation will remain compromised.

- NEP 2010 objectives, the sixth five year plan (2011-15) proposals, as well as much of the Government TVET development, supported by donor assistance, are for reforms and attempts to improve quality within the existing structure of organization and management of TVET. Due priority is lacking to policy and action, despite rhetoric in this regard, on basic change in planning, managing, establishing accountability in a decentralised way at the institutional level, and redefining roles of different actors and stakeholders, including the private sector and providers of non-formal and informal skills development. This concern has been highlighted often in policy discourse.

- The emphasis on expansion of TVET, which is the thrust of government policy objectives and donor support, is likely to compound the present problems and deficiencies, unless reforms focusing on quality, efficiency and responsiveness to market are designed and effectively put in place.

- Overall technical capacity to implement the various externally assisted projects, supported by different development partners, in a coordinated way by establishing necessary links and complimentarily appears to be a major challenge. This coordination is necessary horizontally and vertically across the sub-sector reflecting a broad view of it, as emphasized in this study. Attention to build this capacity is critical to overcome systemic weaknesses and thus achieve the desired outcomes. The dilemma in this regard is that the goal of strengthening organisational capacities in the projects themselves suffers from the weak institutional capacities to plan, coordinate, and manage to take full advantage of external assistance.

iii. Exploiting the demographic dividend

- The demographic transition characterised by declining fertility and population growth rates in Bangladesh has created the potential for a "demographic dividend." The window of opportunity arising from the low dependency ratio for non-working to working population will remain open for about two decades. The potential for reaping the demographic dividend depends on effective skills development, job creation and social protection of workers.

- The survey confirms a declining dependency ratio – overall 58 % in 2012, with almost 10 percentage points lower for metropolitan areas and generally lower for all urban areas and significant differences among regions (Table 4.1). This ranges from a low of 51 percent for rural Rajshahi to 70 percent for rural Sylhet (Table A4.2).

iv. Foundation Skills and Transferrable Skills

- In the 10-24 age-group, just over two-thirds (68%) were found to be current participants in some form of education and training; 29 percent not current participants and over 2 percent never took part in education or training (Table 3.1). Compared to findings of last labour force survey of 2005-6, when half of the workforce (15-59 age range) was found without any education, the new cohorts of workers generally possess a higher level of education. Major urban-rural and male-female disparities were not observed in terms of educational participation; though

somewhat greater differences were found between geographical regions (Table A3.1). The implications for TVET planning of these disparities have to be examined for considering appropriate remedial measures.

- Age-specific net enrolment in education/training at the secondary and higher secondary levels, showed a sharp decline from 58.5 percent to 34.6 percent for 11-15 and 16-17, respectively. There were significant disadvantage for rural areas in this respect. However, girls were ahead of boys by almost 10 percentage points at both levels (Figures 3.3 and 3.4).

v. Participation in TVET and Apprenticeship

- In the 10-24 age group, the large majority (87 percent) benefited from formal general education of different lengths. In contrast, only 3 percent participated in formal and non-formal TVET (2.3 + 0.7). Participation in apprenticeship was 6 percent – predominantly, in informal apprenticeship (5.7 percent). Reported participation in non-formal general education was small at 0.3 percent. Two percent reported to be engaged in multiple education and training activities, while just under 2 percent were not involved in any training or education (Table 4.2). These numbers add up to total participation in TVET and apprenticeship of 11 percent of the population in 10-24 age group with informal apprenticeship accounting for about half of the total. The desirable direction of change clearly is larger participation in various skills development opportunities which may be combined with or complementary to general education through flexible programming, illustrated by some NGO initiatives such as those of UCEP. There is also a need to expand systematically apprenticeship opportunities.

- A bimodal distribution is observed in TVET participation with peaks for degree and diploma level courses (13.5% of TVET/apprenticeship participants) and short courses under six months duration (28% of TVET/Apprenticeship participants.) Formal certificate courses and SSC and HSC vocational courses together accounted for just over 5 percent of the participants in the sample population. Among all forms of skills development, apprenticeship (mostly under informal arrangement) attracted most participants serving 53% of TVET/apprenticeship beneficiaries (Table 4.9). Yet there is little scope for accreditation of apprenticeship and prior experience which could expand and encourage apprenticeship and short courses.

- In TVET participation, urban areas had an edge - the metropolitan areas had more than double the combined participation rate in formal and non-formal TVET at 5.4 percent compared to 2.4 percent in rural areas, and 3.3 % in municipalities (Table A4.8). There is a need to expand services to bridge the gap.

- In respect of gender, girls' participation in TVET, was about one-third of boys (1.2% against 3.3%). Similarly, in informal apprenticeship, girls' engagement was less than half of boys' (3.6% and 7.8%), whereas it was equally low in formal apprenticeship for both boys and girls (0.4 and 0.3% respectively). This disadvantage for girls in TVET and apprenticeship contrasts with girls' favourable position in general education (Table 4.2). Persistent gender gap in skills development clearly demands priority attention.

- At the secondary level (grades 6 to 10), overall participation in TVET was 1.1 percent of the total secondary enrolment – half of average for Asian countries. At the higher secondary level (grades 11-12), participation improves to an overall rate of 4.7 percent. There is again

an advantage for urban areas and a substantial disadvantage for girls at both secondary and higher secondary levels (Tables 4.4 and 4.5).

vi. Equity with Quality

- Participation in education and training was affected by family economic status. In the 10-24 age group, those from families with per capita earning of less than a dollar a day, the rate of continuing in some form of education and training was 13 percentage points less than for those earning more than two dollars (65.3 percent and 78.1 percent respectively). Those never enrolled in school were more than three times among the poorer families (2.8% against 0.8% for others).

- Income level of families influenced participation in TVET and apprenticeship in distinct ways. Formal longer duration TVET at degree and diploma level was patronised in almost double the percentages by those with more than 2 dollars a day earning compared to those with less than a dollar of daily earning. SSC and HSC vocational courses within the secondary system, on the other hand, had a substantially higher participation from the poorer families. There was higher participation by almost double the rate by young people from poorer families in apprenticeship. Short duration trade courses, offered often by private providers, were largely patronised by those with more than two-dollars-a-day earning. All of the differences in participation appear to be a matter of cost of participation – higher tuition and other costs for degree and diploma courses and the short courses by private providers and relatively less private costs for participants in SSC and HSC courses and apprenticeship (Table A4.7). The exception was the gender factor, with girls participating less than boys in different TVET programmes irrespective of income.

- Direct evidence regarding quality of general education and TVET was not available or intended to be collected from the household survey. Indications of low earning and productivity of workers who have passed through education and training programmes compared against the benchmarks of per capita income and poverty level (see below) raise questions about the outcome for learners in terms of their competencies and skills.

- Other evidences from research and evaluation have underscored the general problems of quality of education and training programmes and their learning outcomes. For example, National Student Assessment (NSA) of a representative sample of grades 3 and 5 Students was carried out by the Directorate of Primary Education, in 2006, 2008 and 2011.The Monitoring and Evaluation Wing of the Directorate of Secondary and Higher Education also conducted an assessment of learning in 2012 of a sample of students for grade 8, which showed that a very small proportion of students could perform at the expected level for grade 8. The following information about learning outcome at primary level is particularly disturbing:

  - According to 2011 primary level assessment, only one of four students at the end of grade 5 acquired competencies in Bangla and one in three mastered the competencies in math specified in the primary curriculum.

  - The test items used in NSA to test the specified competencies and the criteria for acceptable performance are considerably below the internationally defined standards such as those for Progress in International Reading and Literacy Study (PIRLS).

- The NSA and grade eight assessment results were remarkably inconsistent with high rates of pass and year-to-year reported improvement in student performance in public examinations, such as the primary completion examination, the Junior Secondary examination and SSC and HSC examinations.

vii. Household Costs of Education and Training

- Monthly average household cost per participants for general education was Tk. 1,257 and for TVET Tk 2,577. Out of this, tuition charges were about 7 percent of the total cost for general education and about a quarter of the cost for TVET. For general education, the costs in urban areas were significantly higher, but for TVET, the costs in rural areas were slightly higher (Table 6.1and 6.2). This may be due to transportation and accommodation costs for more dispersed TVET provisions in rural areas.

- Girls were subject to substantial disadvantage in household spending in all categories of education and TVET as indicated by reported costs. For general education household spending for girls on average was about 10 percent less than for boys, but it was 30 percent less in TVET and about half in non-formal TVET and apprenticeship. (Table 6.2)

viii. Employment and earnings of young people after education/training

- In the 10-24 age group, the large majority (53 percent) were engaged in household work without a cash earning. The next highest category was self-employment (22 percent), followed by full-time wage employment (15.8 percent), unemployed (5.5 percent) and part-time employment (3.7 percent) (Table 5.1).

- In the age-group 15-24, when more are expected to be in jobs rather than in education/training, the pattern did not change significantly from the 10-24 age range and the percentages changed only slightly – 54 percent in household work, 22 percent in self-employment, 16 percent in full wage employment, 3 percent in part-time jobs and 4 percent unemployed. The total for household work, self-employment and part-time employment add up to 80 percent, which presumably largely coincides with informal sector employment (Table A5.1).

- The mean monthly income for young people in the age group 20-24 was Tk. 6,280, which is about the same as per capita annual income of Tk. 75,000 (US$850). Monthly earning varies according to individual education and training accomplishments – i.e., no education/training, apprenticeship, TVET and only general education. The highest monthly earning is of those with TVET at Tk. 7,373 and the lowest is of those without any education and training at TK4,442, which is more than 40 percent lower (Table 5.4). The difference in earning for those with some form of education and training of different types is not pronounced. The return from apprenticeship is higher than average return for general education, but somewhat lower than that of TVET.

- Expectedly, average earnings are higher in all categories in urban areas than in villages – the highest in metropolitan locations of workers with TVET at Tk 8,313, which is more than double of that for rural workers with no education or training at Tk 4,079 (Table 5.5).

- Monthly average earning for females (10-24 years) was less than half at Tk. 2,667 against Tk 5,476 for males in rural areas. TVET qualifications of women slightly raised their earning

to 56 percent of average for males. Women without any education/training or with apprenticeship experience were worse off, earning about one-third of male remuneration. (Table 5.6). However, the gaps are slightly lower in urban and metropolitan areas.

- Two important points about earnings of workers worth noting are: first, the fact that per capita average earning of workers in the 20-24 age group with TVET qualifications is about the same as per capita national income indicates that workers even with skills are stuck in a low-productivity and low-earning trap. The average of course hides the fact that over 60 percent of the workers survive on less than US$ 1.25 per day – an international poverty line benchmark. Secondly, the relatively narrow differential in earnings of workers with different TVET qualifications indicates general quality problems and mismatch of skills and jobs in TVET. The causal factors for both of these related phenomena point to problems in quality of education and training as well as deficiencies in labour market and workers' social protection policies and their implementation.

ix. Preferences and expectations of youth

- Overall two-thirds of the young people were interested in participating in TVET. Interest varied by educational level. Almost three quarters of those who are currently in secondary or higher secondary level or have acquired such qualifications were interested in TVET opportunities. A lesser proportion, about half of those in primary education or have completed primary education, were interested in further TVET; presumably they felt a greater need for further general education (Table 7.1).

- Regarding types of TVET, the preference overwhelmingly was for short trade courses and apprenticeship opportunities compared to formal diploma or certificate courses, or even degree level TVET. Similar views were expressed by about 80 percent of the respondents in favour of course duration of less than six months, when a question was posed about preferred length of courses (Tables 7.3 and 7.4).

- While existing short trade course are generally popular, girls expressed much greater preference for these at 56.4 percent compared to 37.1 percent in the case of boys. A similar pattern was observed in both urban and rural areas. On the other hand, more boys (42.1 percent) expressed the desire to join apprenticeship than girls (35.0 percent) (Table 7.3).

- Asked about willingness to pay for TVET courses, about one-third would like the courses to be free, another third would be willing to pay Tk 100-300 per month, and a third were willing to spend Tk 400 or more per month (Table 7.5). The degree of willingness to pay appears to be a function of the low income level and general poverty of most of the potential TVET participants.

- Regarding inadequacies in education and skills development provisions, the problems that topped the list were similar for general education, TVET and apprenticeship. Ineffective teaching-learning practices and style were mentioned frequently (34.3 percent in apprenticeship, 27.3 percent in TVET and 18.0 percent in general education, respectively). Other frequent mentions were inadequate physical infrastructures (22.1 percent for apprenticeship, 26.8 percent in TVET and 39.0 percent for general education); and deficiencies in basic facilities, such as toilets, water and electricity (13.6 percent in apprenticeship, 15.2 percent in TVET and 25.4

percent in general education.)(See Table 7.6) The suggestions for improvement of education and skills development mirrored the respondent's views about identified areas of inadequacies in their urging for improvements in the same areas to remove the deficiencies.

x. Conditions of special vulnerabilities

- The situation regarding pockets of disadvantaged groups has not been captured in the present general national sample survey. These pockets add up to a large proportion of the total population. Attention to the disadvantaged groups is needed both to diagnose situations and develop appropriate measures. A small number of case studies shed light on this question in the present study. (See chapter 8.)

- The case studies illustrate various special vulnerabilities that affect significant proportions of the population. Poverty is a common feature of the disadvantaged and vulnerable groups which interacts with other characteristics of the affected population. Special circumstance of geographical locations; ethnic and language attributes; and traditional socio-cultural disadvantage of populations determine opportunities and prospects for skills development. A combination of social and economic situation and gender norms affect adolescents and youth of vulnerable groups as described in the case studies included in this report. Personal attributes of people such as disabilities and special needs add to the disadvantage and deprivation from opportunities in the absence of proactive affirmative action.

2. Recommendations

The recommendations below are based on the findings of the survey and their analysis in the context of other relevant research evidence. The research team's judgement and feedback from the Education Watch advisory and technical committee members at different stages of the study about policy concerns have guided the emphases and propositions included in the recommendations.

The research team considered suggestions about grouping the policy and action priorities in terms of the responsibilities of the major actors – such as, the government, the private sector, NGOs and the academic and research community. The research team came to the conclusion that a collaborative and coordinated approach to bring the major stakeholders together, guided and encouraged by the government and political authorities adopting a holistic vision, was necessary in all major areas of action. This collaborative and holistic approach was considered more appropriate than the suggestion for separate efforts by different key actors. Hence, the recommendations are listed thematically.

The recommendations are clustered under six thematic areas – upstream policy environment, expansion strategy for skills development, ensuring equity with quality, persistent disadvantage of girls and women, costs and resources, and addressing special vulnerabilities.

i. Creating an upstream policy environment

- A broad skills development vision beyond the traditional confines of TVET, encompassing roles of formal general education, non-formal and second chance education and occupational, including on-the-job training, is needed that would emphasize:

a) a lifelong perspective of learning and capacity building,

b) linking skills development with employment policies, and

c) adopting a skills and jobs agenda linked to social protection and upholding human rights and human dignity of workers.

Leadership and commitment on the part of national policy and decision-makers are needed to overcome the conventional sectoralised and fragmented approach of government operations and policy making to enhance the possibility of a comprehensive and coordinated approach to skills development. The National Skills Development Council, with its mandate of helping implement the National Skills Development Policy, has a special role in this respect.

- A broad definition of skills development as a part of human capability enhancement requires comprehensive and coordinated attention to the spectrum of skills comprising foundation skills, transferrable skills and job-specific skills. These are provided by formal and non-formal modes of learning through basic and general education institutions and occupation related training institutions and programmes. This broad view of provisions and providers needs to be taken as the conceptual framework for exploring policies and actions for the TVET sub-sector.

- The discourse on post-2015 agenda for skills development should be guided by the reality of the spectrum of skills including cognitive, non-cognitive and technical skills acquired through general basic, secondary, and vocational-technical education and various forms of on-the-job learning including apprenticeship, guided by a lifelong perspective of learning. The related and pertinent themes for the post-2015 agenda include: revisiting the scope and concept of TVET, nurturing informal and non-formal learning and TVET in the informal economy, increasing TVET responsiveness to new development priorities, promoting multi-stakeholder partnerships through new approaches to governance, sustainability and "greening" of TVET, and handling uncertainties and building resilience.

- The discourse and policy advocacy in relation to the National Skills Development Policy (NSDP) can be used to promote a holistic approach to skills and capability development, even though the National Skills Development Council does not have directly within its remit general basic education. (See below.)

- The National Skills Development Council (NSDC), proclaimed as the apex body, should enlarge its focus beyond formal and institutional skills development linked to formal employment. The majority of workers and potential workers who are in the informal economy must come under the policy and action purview of NSDC. Effective policy responses and actionable strategies are needed on important concerns, such as, adequate TVET financing, shortage of motivated and qualified TVET instructors, strengthening links to industry, applying quality standards in TVET delivery, effective assessment of competencies and establishing equivalencies and the capacity and determination to implement the planned activities effectively.

- The elaboration and implementation of government TVET development, in line with NEP 2010 objectives, including that under the sixth five year plan (2011-15), supported by donor assistance, need to go beyond reforms strictly within the existing structure of organization

and management. Due priority in policy and action is needed to basic change in planning, managing, establishing accountability in a decentralised way at the institutional level, and redefining roles of different actors and stakeholders, including the private sector and providers of non-formal training and apprenticeship, highlighted often in policy discourse.

- A low-productivity and low wage trap created through self employment and household work for more than three quarters of youth is indicative of poor learning quality and outcome in both general education and TVET. Escaping from this trap requires attention in quality, relevance and efficiency of general education and TVET, with non-formal and second chance remedial measures to overcome deficiencies in general education quality and relevance. These steps need to be combined with labour market measures and social protection of workers guided by a national skills and jobs agenda consistent with human rights and human dignity.

- The demographic transition characterised by declining fertility and population growth rates in Bangladesh has created the potential for a "demographic dividend." The window of opportunity arising from the low dependency ratio for non-working to working population will remain open for about two decades. The potential for reaping the demographic dividend depends on effective skills development, job creation and social protection of workers leading to "decent work."

ii. Expanding Skills Development – What kind?

- Expansion of formal and non-formal TVET is essential. However, policies and programmes must focus on quality, efficiency, responsiveness to market and effectively implementing these priorities to avoid compounding further the present problems and deficiencies through expansion without effective reform.

- About eleven percent participation of young people (10-24 years) in all kinds of TVET including apprenticeship must be increased substantially – especially, through relevant and flexible short courses and formal and informal apprenticeship (currently 6 percent) based on preference expressed by young people.

- The low TVET participation of 1.1 percent out of secondary level enrolment must be raised substantially, but through reformed programs to ensure better quality and market responsiveness, rather than mere expansion of the current programs.

- Second chance non-formal general education and skills development need to be a major component of the overall skills development strategy and plan, recognising the needs of large numbers of young people who have dropped out from or missed out education and training opportunities. However, establishing and applying quality criteria must be given special attention to prevent these second chance programs from degenerating into "second class" programs for the poor.

- Related to second chance and non-formal skills development is the question of equivalency, assessment and recognition of skills and competencies acquired through diverse means, including recognition and credentials for prior experiential learning. Appropriate regulatory and assessment mechanisms have to be established for this purpose.

- The government plan to establish a technical education institute in each upazila offers an

opportunity to recognise and deal with the problems and weaknesses in the existing formal vocational and technical education pattern. Instead of replicating what exists with small tinkering, there is the possibility of incorporating flexibility, quality enforcement, market relevance, equity in access, and opportunities for working children as well as partnership with employers and greater authority with accountability at institution level management. Many features and management model of UCEP's integrated general and vocational education and technical education programs indicate the kinds of adaptation required in the prevailing pattern.

iii. Equity with Quality

- Skills development for the poor should be promoted with substantial expansion of effective apprenticeship and short courses (used more frequently by those with <$1 daily earning). Attention must be given to improving quality and market responsiveness of these so that earnings and working conditions can improve for the participants.

- The major challenge is creating "decent work" - moving from present average earning of less than or only close to average per capita income even for those with formal TVET to better wages and work conditions. International experience suggests steps to build stronger "foundational skills" through basic general education, "transferrable skills" through secondary education and TVET and "job specific skills" through high quality TVET and apprenticeship. These skills building measures need to be combined with complementary policy intervention in employment market and social protection for workers. Second chance basic education of high quality should be a key strategy, as noted above.

- Problems identified most frequently in infrastructures, learning facilities and instructional approach and practices both in TVET and general education have to be remedied ensuring a threshold of resources to guarantee the application of acceptable quality criteria. Establishing quality standards and applying them in programs remain conditions for success and cannot be neglected.

- Various forms and conditions of special disadvantages and vulnerabilities that add up to large proportion of the population need to be addressed by pro-active and affirmative policy and strategies (see below).

iv. Overcoming gender-based disparity

- Formal and non-formal TVET participation of girls remains about half of boys (3.3% against 6.3%) in spite of girls' advantage in general education enrolment. Very substantial average earning disparities for workers to the disadvantage of female workers persist. Special policy and programmatic measures are needed in this area including working condition and social protection measures.

v. Costs and Resources

- A threshold of resources for maintaining acceptable quality have to be guaranteed – combining increased public resources with those from the beneficiaries, private sector, and communities. Resource mobilisation and allocation have to be guided by established criteria for quality with equity. Appropriate partnerships of major employment sub-sectors and

government for enhancing resources for this purpose should be explored. Resources generated from payroll taxes and managed in partnership with employers have been effective in several countries, especially in Latin America.

- Appropriate policy measures are needed to remove or mitigate obstacles for the poor to skills development in the form of family cost per month for education and training ranging from Tk. 1,175 (general education), Tk. 1,928 for formal TVET and Tk. 694 for non-formal TVET, which add up to major share of the subsistence level income of at least 30 percent of the families below the poverty line.

- Willingness of potential participants to contribute, especially for short term and job-specific training, even if not adequate for full cost recovery, should be taken into account in equitable financing strategies.

vi. Special Vulnerabilities

- The key lesson from the diagnostics derived from the case studies of special vulnerabilities is that mainstream programs offered as a standard pattern do not respond to the specific needs and conditions of the diverse vulnerabilities of the disadvantaged groups. The general programs of education and training either have to be adapted substantially for the particular circumstances or creative approaches have to be designed, developed and applied, being open to assessing and making use of lessons from experience.

- A related lesson for responding to the diverse disadvantages is that programs have to be designed and implemented at the local level with active participation of NGOs and the private sector and involvement of the intended beneficiaries. Government policy support, resources and encouragement for this collaboration is necessary from the central authorities and at the local government level.

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ANNEXES

Education Watch 2012

Lvbv Rwic ckcÎ

MYmv¶iZv Awfhvb (CAMPE)

(mKj Z_¨ †Kejgv Î M‡elYvi Kv‡R e¨envi n‡e)

†mKkb 1: kbv³KiY:

Lvbv b¤i:

Lvbvi cav‡bi bvg:----------

Lvbv cav‡bi wcZvi/¯vgxi bvg:----------

DËi `vZvi bvg:----------

MvgwfwËK Lvbvi b¤i:

Mvg/gnjv:----------†KvW BDwbqb/IqvW:----------

Dc‡Rjv/Kv÷vi wfwËK Lvbvi b¤i

Dc‡Rjv/Kv÷vi:----------†KvW †Rjv:----------

Lvbvi Ae¯vb:----------

÷¨vUvg/W‡gBb:

MvgxY ewikvj 1 MvgxY PÆMvg 2 MvgxY XvKv 3 MvgxY Ljbv 4

MvgxY ivRkvnx 5 MvgxY isci 6 MvgxY wm‡jU 7 ewikvj knivÂj 8

PÆMvg knivÂj 9 XvKv knivÂj 10 Ljbv knivÂj 11

ivRkvnx knivÂj 12 isci knivÂj 13 wm‡jU knivÂj 14

†g‡UvcwjUb 15

WvUv ivDÛ 1

---

mv¶vrKvi MnYKvix:----------†KvW

mv¶vrKvi Mn‡Yi ZwiL:

mcvifvBRvi:----------†KvW

mcviwfk‡bi ZwiL:

†mKkb **2:** Lvbvi Av_-mvgwRK Z_¨

µwgK bs	ck	DËi/†KvW	
1	Lvbvi †gvU Rwgi cwigvY (kZvsk)		
2	Lvbvi wbR¯ emZwfUvi cwigvY (kZvsk)		
3	Lvbvi gwmK Avq (mKj Drm, mKj m`‡m¨i)		
4	Lvbvi Av‡qi cavb Drm Kx? †KvW:		
5	Lvbvi gwmK e¨q (mKj Lv‡Z, mKj m`‡m¨i)		
6	MZ GK erm‡i GB Lvbvi Aww_K Ae¯v †Kgb wQj? (Lvbv cavb‡K wR‡Ám Ki“b †h, MZ GK eQ‡i wewfb LvZ †_‡K GB Lvbvq hZ UvKv Avq n‡q‡Q Ges wewfb Lv‡Z hZ UvKv e¨q n‡q‡Q Zvi ZviZ‡g¨i wfwË‡Z MZ eQi Lvbvi AwaK Ae¯v †Kgb wQj?)	me mgq NvUwZ	1
		mgv‡S gv‡S NvUwZ	2
		mgvb mgvb	3
		gv‡S gv‡S DØË	4
		me mgq DØË	5
7	Lvbvi cvbxqR‡ji e¨e¯v †Kgb?	wbR¯ wUDel‡qj	1
		A‡b¨i wUDel‡qj	2
		mvcvB	3
		Ab¨vb¨	4
8	LvbwU‡Z we`¨r Av‡Q wK?	n¨v	1
		bv	2
9	Lvbvq †gvevBj †dvb Av‡Q wK?	n¨v	1
		bv	2
10	G Lvbv‡Z †Uwjwfkb Av‡Q wK?	n¨v	1
		bv	2

†mKkb 3: Lvbvi wk¶v msµvš Z_¨

jvBb bs	Lvbvi m`‡m¨i bvg	m¤úK	wj½	eqm	†kªY cvm	mv¶iZv	†UKwb‡Kj/ f‡Kkbvj †Uwbs	ïagvÎ 10 †_‡K 24 ermi eqmx‡`i Rb¨ c‡hvR¨											
								m`m¨e¯'v	¯‹zj Mgbe¯'v	hviv eZ©gv‡b ¯‹zj Mgx		hviv S‡i c‡o‡Q			fiZ bv n Iqvi KviY	wcZvi wk¶v	gvZvi wk¶v	^eevwnK Ae¯'v	AvBwW bs
										†kªY	¯‹z‡ji aib	†kªY	¯‹z‡ji aib	S‡i covi KviY					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

3. m¤úK
Lvbv cavb= 1
¯¿x/¯^vgx= 2
†Q‡j= 3
†g‡q= 4
fvB= 5
†evb= 6
gv= 7
evev= 8
bvZx= 9
bvZbx= 10
fvwZRv= 11
fvwZRx= 12
†Q‡j i eD= 13
`v`v/`vw`= 14
Ab¨vb¨= 15

4. wj½
cyi"l= 1
gwnjv= 2

6, 17, 18. †kªY/†kªY cvm
¯‹z‡j †h‡Z cv‡iwb/†kªY †kªY cvm K‡iwb= 0
bvmvwi/†cøcvivUwi/cÖv°-cÖv_wgK/wKÛvi Mv‡Wb=33
Kvm 1= 1
Kvm 2= 2
ÑÑÑÑÑÑÑÑÑÑÑÑÑÑÑÑÑÑÑÑÑ
Kvm 9= 9
GmGmwm/`vwLj= 10
GBPGmwm/Avwjg= 12
weG/dvwRj= 15

GgG/Kvwgj= 17
agxq wk¶v= 50
Rvbv bvB= 88
KL‡bv fwZ nqwb= 99

7. mv¶iZv
mv¶i= 1
mv¶i bq= 2

8. †UKwb‡Kj/f‡Kkbvj †Uwbs
AvbôvwbK= 1
DcvbôvwbK= 2

AvbôvwbK/wk¶vbweik= 3
†KvbwUB bq= 4

10. ¯‹zj Mgbe¯'v
QvÎ/eZ©gv‡b hv‡"Q= 1
S‡i c‡o‡Q= 2
KL‡bv hvqwb/fwZ nqwb= 3

12, 14. ¯‹z‡ji aib
wRcGm= 1
AviGbwRcGm= 2
GbAviGbwRcGm= 3
GbGdwc/GbwR I ¯‹zj= 4

KvgDbwbU ¯‹zj= 5
Ge‡Z`vqx gv`ivmv= 6
`vwLj gv`ivmv= 7
Avwjg/dvwRj/Kvwgj gv`ivmv= 8
nvwdwR/K¡IwgI/L‡vwiRx gv`ivmv= 9
wKÛviMv‡Ub ¯‹zj= 10
Rvbqvi †m‡KÛvwi ¯‹zj= 11
†emiKvwi †m‡KÛvwi ¯‹zj= 12
miKvwi †m‡KÛvwi ¯‹zj= 13
¯‹zj I K‡jR= 14

K‡jR= 15
wekwe`¨vjq= 16
TVET= 17, Ab¨vb¨= 18
Rvbv bvB= 88, bb-UvbRkb= 19

15, 16. S‡i covi I fiZ bv n Iqvi KviY
Aw_K Afve= 1
Avf fveK wk¶vi gj¨ †`qbv= 2
cvZôvb †bqbv= 3
wkï kvgK= 4
ewo‡Z KvR= 5

cov‡kvbvq fvj bv= 6
cvZôvb `‡i= 7
we‡q= 8
Ab¨vb¨= **9**, ev"Pvi covïbv fvj j‡Mbv = **10**

19. ^eevwnK Ae¯'v
weevwnZ= 1
AweevwnZ= **2**

9. m`m¨e¯'v
vbv †‡K ¯'vbvšÍwiZ n‡q‡Q= 1
Lvbv‡Z ¯'vbvšÍwiZ n‡q G‡m‡Q= 2
¯'vqx m`m¨= 3

†mKkb 4: Lvbvi 10- 24 eQi eqmx‡`i mvaviY wk¶v, f‡Kkbvj †Uwbs I Kgms¯vb m¤úwK©Z Z_¨

jvBb bs	bvg	wk¶v I †Uwbs-G AskMn‡Yi aib	AskMn‡Yi Ae¯v	AskMn‡Yi cKwZ	chvq	†Kvm/†U‡Wi bvg	cwZôv‡bi aib	fwZ n‡qi Rb¨ bb¨Zg wk¶v	†Kvm/†U‡Wi †gqv` (gvm)	KZw`b mgvß K‡i‡Q (gvm)	S‡i co‡j KZw`b ci S‡i c‡o‡Q (gvm)	†Kvm/‡Uwbs †_‡K S‡i covi KviY	mb` †c‡j mb‡`i bvg
21	22	23	24	25	26	27	28	29	30	31	32	33	34

23. wk¶v/†Uwbs-G AskMn‡Yi aib

AvbôwbK mvavaiY wk¶v= 1

DcvbôwbK mvavaiY wk¶v= 2

AvbôwbK ‡UKwb‡Kj/f‡Kkbvj †Uwbs= 3

DcvbôwbK ‡Ukwb‡Kj/ f‡Kkbvj †Uwbs= 4

AvbôwbK wk¶vbwewk= 5

AbvbôwbK wk¶vbwewk= 6

Dc‡ii GKwaKwU‡Z= 7

†KvbwKQyZB AskMnb K‡iwb= 8

25. AskMn‡Yi cKwZ

cYKvjxb= 1

LÛKvjxb= 2

c‡hvR¨ bq= 9

26. chvq

cv_wgK= 1

gva¨wgK= 2

D"P gva¨wgK= 3

D"P wk¶v= 4

wW‡cøvgv/mvwU©wd‡KU= 5

wk¶vbwewk= 6

øvZK (BwÄ, GwM, †gwW‡Kj)= 7

Ab¨vb¨= 8

c‡hvR¨ bq= 9

24. AskMn‡Yi Ae¯v

GLb AskMnY Ki‡Q= 1

†kl bv K‡i S‡i c‡o‡Q= 2

†kl K‡i‡Q= 3

c‡hvR¨ bq= 9

28. cwZôv‡bi aib

miKvwi= 1

†emiKvwi= 2

GbwRI= 3

mvnvh¨ ms¯v= 4

¯vqËkvmZ= 5, e¨w³MZ cwZôvb= 6

KIgx gv`ivmv= 7, Ab¨vb¨= 8

c‡hvR¨ bq= 9

33. †Kvm/†Uwbs †_‡K S‡i covi KviY

A_vfve= 1

covïbv KwVb= 2

A_Kix Kv‡R wjß= 3

†Kv‡mi Pvwn`v Kg= 4

ewo‡Z KvR= 5

Ab¨vb¨= 6

c‡hvR¨ bq= 9

34. mb‡`i bvg

wW‡cøvgv=1

mwUwd‡KU= 2

AskMnb= 3

¯§vZK (BwÄ, GwM, †gwW‡Kj)=4

Ab¨vb¨ = 5

wKQB †` Iqv nq bv= 6

c‡hvR¨ bq= 9 (mvaviY wk¶vi Rb¨ ?)

29, 30, 31, 32, 33, 34 bs Kjvg mvaviY wk¶vi Rb¨ c‡hvR¨ bq Ges Avi Kjvg 29-32 G †KvW n‡e= 99

(Section 4 Continued)

jvBb bs	bvg	†Kvm/†U‡Wi gwmK wd (UvKv)	†Kvm/†U‡Wi Ab¨vb¨ gwmK LiP (UvKv)	†Kvm/†U‡Wi ¯úÝi †K?	†Kvm/†U‡W AskMn‡Yi Rb¨ †Kvb UvKv †c‡q‡Q wK?	KZ UvKv †c‡q‡Q? (gwmK)	†Kb †Kvm/†U‡W fvZ n‡q‡Q /n‡qwQj?	K‡g wb‡qvM Ae¯v	Kv‡Ri aib/ †ckv (KvW)	†Kvm †k‡li KZw`b c‡i Kv‡R wb‡qvwRZ n‡q‡Q? (gwm)	KZw`b a‡i G Kv‡R wb‡qvwRZ? (gwm)	KvRwU †Kvm/†U‡Wi mv‡_ m¤úKxZ wK bv?	gwmK †eZb/Avq KZ UvKv?
35	36	37	38	39	40	41	42	43	44	45	46	47	48

39. †Kvm/†U‡Wi ¯úÝi

miKvi/miKwi cwZôvb= 1

†emiKwi cwZôvb= 2

e¨w³= 3

GbwRI= 4

mvnvh¨ ms¯v= 5

wb‡R/wbR cwievi= 6

Ab¨vb¨= 7

c‡hvR¨ bq= 9

37, 38 bs Kjvg eZgv‡b hviv †h †Kvb wK¶vq AskMnY Ki‡Q Zv‡`i Rb¨ c‡hvR¨| Ab¨‡`i †¶‡Î c‡hvR¨ bq †KvW 99999n‡e

41 bs Kjv‡g c‡hvR¨ bq †¶‡Î †KvW n‡e 0

40. AskMn‡Yi Rb¨ UvKv cvq wK?

eïË wn‡m‡e cvq=1, _vKv Lvlqv wd= 2

†Kvb wKQB cvq bv= 3

c‡hvR¨ bq= 9

42. †Kvm/†U‡W fwZ nlqvi KviY

PvKwi cvlqvi Rb¨= 1

PvKwi‡Z c‡`vbwZ= 2

PvKwi‡Z †eZb ew×= 3

fvj PvKwi cvlqvi Rb¨= 4

we‡`‡k PvKwi cvlqvi Rb¨= 5

wK¶vbwewk/¯úÝ‡ii cwZôv‡b PvKwi cvlqvi Rb¨= 6

e¨emv/¯wb‡qvwRZ nlqvi Rb¨= 7

Ab¨vb¨= 8

c‡hvR¨ bq= 9

43. K‡g wb‡qvM Ae¯v

cYKvjxb PvKwi‡Z wb‡qvwRZ= 1

LÛKvjxb PvKwi‡Z wb‡qvwRZ= 2

cYKvjxb ¯wb‡qvwRZ= 3

LÛKvjxb ¯wb‡qvwRZ= 4

ewoi (A‰eZwbK) KvR= 5

†eKvi= 6

cwk¶YvjxQvÎ/QvÎx= 7

wKQB K‡ibv= 8

45, 46 bs Kjv‡g c‡hvR¨ bq †¶‡Î †KvW n‡e 999

47. KvRwU †Kvm/†U‡Wi mv‡_ m¤úKxZ wK bv? (†Kejgv Î TVET- G AskMnYKvix‡`i Rb¨ c‡hvR¨)

c‡ivcwi m¤úwKZ= 1

wKQUv m¤úwKZ= 2

†gv‡UB m¤úwKZ bq= 3

c‡hvR¨ bq= 9

†mKkb **5: 10- 24** eQi eqmx‡`i `¶Zv Dbqb Pvwn`v I cZ¨vkv

µwgK bs	ck	wk¶v_xi bvg jvBb bs			
49	KvR/PvKwi cvIqv ev †h Kv‡R wb‡qwRZ Zv‡Z Av‡iv Dbœwgi Rb¨ †Kvb `¶Zv Dbqb †Kvm/‡U‡W fwZ n‡Z AvMnx wK? †KvW:n¨v= 1, bv= 2, c‡hvR¨ bq= 9				
50	Avcwb †Kvb ai‡bi `¶Zv Dbqb wel‡q †Kv‡m AskMnY Ki‡Z AvMnx? (cQ‡›`i µgvbmv‡i wZbwU D‡jøL Ki"b), †KvW:				
51	KZw`‡bi †Kvm/†U‡W fwZ n‡Z AvMnx? (gvm)				
52	Avcwb GB †Kv‡m wd w`‡q AskMnY Ki‡Z AvMnx Av‡Qb wK? †KvW: †Kvb wdB bv= 1, gvmK 100 UvKv ch¯= 2, gvmK 200 UvKv chš= 3, gvmK 300 UvKv chš= 4, gvmK 400 UvKv chš= 5, gvmK 500 UvKv chš= 6, gvmK 1000UvKv chš= 7, gvmK 1000- 2000 UvKv= 8, gvmK 2000- 3000 UvKv= 9, gvmK 3000 UvKvi †ekx= 10, c‡hvR¨ bq= 99				
53	Avcwb `¶Zv Dbq‡bi (KwiMwi/eËgjK) †h †Kvm/KgmwP‡Z AskMnY K‡i‡Qb/Ki‡Qb †mUvi cavb wZbwU `ejZv/mgm¨v D‡jøL Ki"b| †KvW:				
54	Avcwb †h wk¶vbœwk‡Z AskMnY K‡i‡Qb/Ki‡Qb †mUvi cavb wZbwU `ejZv/mgm¨v D‡jøL Ki"b| †KvW:				
55	Avcwb mvaviY wk¶vi AvbôwbK/DcvbôwbK †h †KvmwU‡Z AskMnY K‡i‡Qb/Ki‡Qb †mUvi cavb wZbwU `ejZv/mgm¨v D‡jøL Ki"b| †KvW:				
56	Avcwb `¶Zv Dbq‡bi (KwiMwi/eËgjK) †h †Kvm/KgmwP‡Z AskMnY K‡i‡Qb/Ki‡Qb †mUvi cwieZb/Dbq‡bi cavb wZbwU welq/w`K D‡jøL Ki"b| †KvW:				
57	Avcwb wk¶vbœwki †h KgmwP‡Z AskMnY K‡i‡Qb/Ki‡Qb †mUvi cwieZb/Dbq‡bi cavb wZbwU welq/w`K D‡jøL Ki"b| †KvW:				
58	Avcwb mvaviY wk¶vi AvbôwbK/DcvbôwbK †h †KvmwU‡Z AskMnY K‡i‡Qb/Ki‡Qb †mUvi cwieZb/Dbq‡bi cavb wZbwU welq/w`K D‡jøL Ki"b| †KvW:				

‡mKkb **6**: **10- 24** eQi eqmx‡`i ¯^v¯^¨ Ges Kv‡k/cwk¶‡Y Dcw¯wZ, cÖwkÿY I cvwiev‡gÝ

µwgK bs	ck	wk¶v_x©i bvg			
		jvBb bs			
59	m`m¨wUi ¯^v¯^¨ †Kgb? †KvW: Le fvj = 1, fvj = 2, †gvUvgywU = 3, gv‡S gv‡S Am¯^v_¨‡K = 4, memgqB Am¯^v_¨‡K = 5				
60	m`m¨wUi ‡Kvb iKg cÖwZeÜxZv Av‡Q wK? †KvW: `„ó cÖwZeÜx = 1, keY cÖwZeÜx = 2, evK cÖwZeÜx = 3, kvixwiK cÖwZeÜx = 4, wKLb cÖwZeÜx = 5, Ab¨vb¨ = 6, †Kvb cÖwZeÜxZv †bB = 7				
61	m`m¨wUi Kv‡k/cwk¶‡Y Dcw¯wZ †Kgb? †KvW: wbqwgZ = 1, gv‡S gv‡S Abcw¯Z _v‡K = 2, cÖvqB Abcw¯Z _v‡K = 3, c‡hvR¨ bq = 9				
62	m`m¨wU Kv‡k/cwk¶‡Y KLbI cÖwkÿY K‡i‡Q wK? †KvW: n¨v = 1, bv = 2, c‡hvR¨ bq = 9				
63	Kv‡k/cwk¶‡Y m`m¨wUi cvwiev‡gÝ †Kgb? †KvW: m‡ev©"P 25%-Gi g‡a¨ = 1, Avcvi wgWj = 2, †jvqvi wgWj = 3, mewbæ 25%-Gi g‡a¨ = 4, c‡hvR¨ bq = 9				

Annex 1.1: Determination of sample size

Past and current enrolment status of the targeted young population was the key variable in determining sample size for the household survey. The variable enrolment in the skill development activities was considered as dichotomously categorized as past and currently enrolled or not. Following formula was used in determining sample size (Cochran, 1977; Kalton, 1983).

$$n = \frac{z^2 (p \times q)}{a^2} \times d$$

Where,

- n is the estimated sample size
- p is the probability of a young people of targeted age past and /or currently enrolled in TVET
- q (1- p) is the probability of a young people of targeted age did not participate in TVET
- z is the area of the standard normal curve under certain confidence limit
- a is the desired level of precision, and
- d is the design/cluster effect

Taking a value of 0.5 for both p and q (because such a value maximizes the sample size) and considering the confidence limit as 95% (of which the value of z is 1.96) with 5% error level it was calculated that the required sample size for an estimate stands at 384. This estimate was true if random sampling procedure is applied. However, a stratified cluster sampling approach was followed in this study. Thus, to reduce cluster effect it was decided to double the size, this means sample size stands at 768 which was again extended to 787 for convenience of allocation and execution.

The study intended 30 separate estimates (15 strata x 2 gender), and thus total sample required for estimation of young people of targeted age group's participation in TVET was 787 x 30 = 23610 which needed some 24300 households to be surveyed in order to get the required number of sample young people based on the information from HIES 2010 produced by BBS.

Annex 1.2: Calculating of weighting factor

As the population size in different stratum was not equal, sample size for each stratum in the household survey required the use of weighting factors in order to derive rural, urban and national level as well as stratum level estimates. The following formula was used for the purpose.

$$P = \sum Si \times Wi$$

Where, P is the polled estimate, Sis are the estimates for different strata and Wis are the weights calculated from the respective population size. Here the weights are the proportion of population in different strata. Latest available information on the population from community report series of population census 2011 produced by BBS was considered for this purpose. The following table provides the summary information on the weighting procedure.

Stratum	Proportion of Population			Weights		
	National	Rural	Urban	National	Rural	Urban
Rural Barisal Division	0.048	0.063	--	0.720	0.441	--
Rural Chittagong	0.149	0.195	--	2.235	1.365	--
Rural Dhaka	0.221	0.288	--	3.315	2.016	--
Rural Khulna	0.089	0.116	--	1.335	0.812	--
Rural Rajshahi	0.105	0.137	--	1.575	0.959	--
Rural Rangpur	0.095	0.124	--	1.425	0.868	--
Rural Sylhet	0.059	0.077	--	0.885	0.539	--
Urban Barisal Division	0.007	--	0.031	0.105	--	0.248
Urban Chittagong	0.030	--	0.129	0.450	--	1.032
Urban Dhaka	0.046	--	0.199	0.690	--	1.592
Urban Khulna	0.015	--	0.064	0.225	--	0.512
Urban Rajshahi	0.020	--	0.085	0.300	--	0.680
Urban Rangpur	0.015	--	0.063	0.225	--	0.504
Urban Sylhet	0.007	--	0.028	0.105	--	0.224
Statistical Metropolitan	0.094	--	0.401	1.410	--	3.208
Total	1.000	1.000	1.000	15.000	7.000	8.000

Annexes for Chapter 2

Annex 2: Key definitions

1. Skills Development

Skills development is defined as the full range of formal and non-formal vocational,

technical and skills based education and training for employment and or self-employment. In keeping with international trends, skills development thus includes:

a. Pre-employment and livelihood skills training, including TVET, apprenticeships and school based TVET;

b. Education and training for employed workers, including workplace training; and

c. Employment oriented and job-related short courses not currently affiliated with BTEB servicing both domestic and international markets.

(Source: National Skills Development Policy, 2011.}

For the purpose of this study, skills development is broadly defined as general and occupation-specific education and training programmes and activities offered through formal, non-formal and informal means aimed at gainful employment in the formal and the informal economy.

2. Foundation, Transferrable and Job-specific Skills

Foundation skills: The foundation skills include functional literacy and numeracy skills generally acquired though primary education. These skills are prerequisites for continuing in further education and training, and for acquiring transferable and job-specific technical and vocational skills.

Transferable skills: Transferable skills refer to competencies that enable learners to solve problems, communicate ideas and information effectively, learn to work in teams in a collaborative way, and conduct oneself with basic discipline in the work place. These skills also include being creative, taking initiatives when appropriate, show leadership and conscientiousness, and demonstrate entrepreneurial capabilities. Acquiring computer and basic information technology (IT) skills are also seen as essential transferrable skills. These skills enable young people to adapt to different work environments, take advantage of job-specific training, and improve chances of being gainfully employed. The transferrable skills are generally acquired through general secondary education and formal vocational and technical education programmes which are aimed at broad, rather than job-specific, vocational preparation.

Technical and vocational skills: These refer to skills and technical know-how related to specific occupations and jobs. The training programs related to these skills are expected to prepare people to be directly employed in specific jobs or occupations. Training and skills development of this category are carried out through formal vocational and technical institutions offering relatively long-duration courses, short training programme of various duration imparted through formal or non-formal programmes, and through various on-the job-training programmes, including formal and informal apprenticeship.

Based on UNESCO, GMR 2012.

3. Decent Work

The concept was broached as a part of the Global Employment Agenda in ILO's tripartite International Labour Conference in 2003. In 2008, in the context of discussion about promoting rural employment for poverty reduction, the decent work theme was re-emphasised as an out of poverty.

The concept of decent work emphasises shaping of policies and actions to reduce poverty by generation more and better jobs. It calls for the integration of economic and social objectives and for a well-orchestrated combination of measures in the areas of employment promotion, rights at work, social protection and social dialogue. Decent work is thus a productive factor, and social policies based on decent work have a dynamic role to play in promoting a healthy economy and a just society.

Source: ILO 2003. The Global Employment Agenda; ILO 2008, 97th Session of International Labour Conference, Report IV, pp. 7-8.

4. Informal Economy

The informal economy is largely characterised by:

– Low entry requirements in terms of capital and professional qualifications.

– A small scale of operations.

– Skills often acquired outside of formal education.

– Labour-intensive methods of production and adapted technology

The Informal Economy consists of units engaged in the production of goods and services with the primary objective of generating employment and incomes to the persons involved. These units typically operate at a low level of organisation, with little or no division between labour and capital as factors of production and on a small scale. Labour relations – where they exist – are based mostly on casual employment, kinship or personal and social relations rather than contractual arrangements with formal guarantees. An informal economy unit may be a family enterprise or a micro-enterprise with a small number of workers.

Source: Becker, K.F.(2004). *The Informal Economy (A fact finding study).* Stockholm: Swedish International Development Agency. Pp. 11-12.

5. Formal and non-formal TVET

In parallel to the definition of formal and non-formal education in general, TVET also may be characterised as formal and non-formal. Formal TVET is part of the system under the regulation and control of designated government authorities, leading to recognised credentials and certification, with prescribed educational and other prerequisites for entry and may itself be a prerequisite for further formal education and training.

Non-formal TVET consists of activities organised to offer training to meet specific skill needs, upgrade educational and occupational standards, raise efficiency and improve performance at work, as well as facilitate career change, without necessarily leading to a credential or certification, without formal educational prerequisite for entry or being a prerequisite for further education and training . It can be offered by any organisation or agency in the private sector, NGO, employer or a government to meet specific demand. Non-formal TVET is more numerous, with diverse providers, and serves a much larger clientele than served by formal TVET.

The role of non-formal TVET in the total skills development of a country can be strengthened by establishing a framework for accreditation , licensing and quality control and better linking with formal TVET allowing for mobility within the TVET system. The dilemma is that such measures may undermine the advantage, flexibility and special strength of non-formal TVET.

6. Formal and informal apprenticeship

Informal apprenticeship refers to the system by which a young apprentice acquires the skills for a trade or craft in a micro or small enterprise learning and working side by side with an experienced practitioner. This may happen in a family setting, especially in the case of traditional occupations and skills including subsistence farming, where younger members of the family learn from the older ones through hands-on experience. The relationship between the mentor and the trainee and induction into occupational roles and responsibilities are guided by traditional norms and custom.

Formal apprenticeship, also happens in an work setting through hands-on experience, but this is organised under the auspices of government agencies or formal sector employers with objectives, standards, duration and mutual obligations of the providers of apprenticeship and the trainee specified by law, regulations and/or mutual agreement between the two parties. It is regarded as an efficient and effective approach to job-specific occupational skills development with the direct involvement and contribution of employers. The growth of the formal economy will increase its importance and prevalence. Due to the dominant position of the informal economy and the overwhelming proportion of workers being in the informal sector in developing countries like Bangladesh, informal apprenticeship is widely prevalent. However, because of the characteristics of the informal economy and informal employment, reliable quantification of informal apprenticeship is difficult.

Annexes for Chapter 3

Table A3.1: Schooling status of 10- 24 year olds by stratum

Stratum	Locations					
	Rural			Urban		
	Ongoing	Dropout	Never enrolled	Ongoing	Dropout	Never enrolled
Barisal	67.4	30.8	1.8	71.1	27.4	1.5
Chittagong	70.3	27.5	2.2	68.9	28.6	2.5
Dhaka	64.0	33.8	2.2	67.0	29.7	3.3
Khulna	67.8	30.6	1.6	64.8	33.3	1.9
Rajshahi	70.9	27.9	1.2	68.7	29.2	2.1
Rangpur	76.2	22.0	1.8	71.7	27.0	1.3
Sylhet	66.2	30.8	3.0	65.4	31.1	3.5
Metropolitan				67.6	30.8	1.6
All Bangladesh				68.4	29.4	2.2

Source: Education Watch: Youth Skills Profile Survey, 2012

Table A3.2: Schooling status of the young people aged 10-24 years by location and sex

Stratum	% of children aged 10-24 years					
	Rural			Urban		
	Ongoing	Dropout	Never enrolled	Ongoig	Dropout	Never enrolled
Barisal	**67.4**	**30.8**	**1.8**	**71.1**	**27.4**	**1.5**
Male	67.0	30.7	2.3	69.1	29.2	1.7
Female	67.8	31.0	1.2	73.2	25.6	1.2
Chittagong	**70.3**	**27.5**	**2.2**	**68.9**	**28.6**	**2.5**
Male	68.9	28.7	2.4	65.6	31.6	2.8
Female	71.8	26.1	2.1	72.6	25.4	2.0
Dhaka	**64.0**	**33.8**	**2.2**	**67.0**	**29.7**	**3.3**
Male	63.4	34.1	2.5	65.5	30.8	3.7
Female	64.6	33.6	1.8	68.3	28.7	3.0
Khulna	**67.8**	**30.6**	**1.6**	**64.8**	**33.3**	**1.9**
Male	68.4	30.0	1.6	63.2	34.3	2.5
Female	67.2	31.2	1.6	66.4	32.3	1.3
Rajshahi	**70.9**	**27.9**	**1.2**	**68.7**	**29.2**	**2.1**
Male	74.8	23.9	1.3	69.5	28.0	2.5
Female	66.4	32.5	1.1	68.0	30.4	1.6
Rangpur	**76.2**	**22.0**	**1.8**	**71.7**	**27.0**	**1.3**
Male	74.4	23.4	2.2	71.2	28.0	0.8
Female	78.0	20.5	1.5	72.2	26.1	1.7
Sylhet	**66.2**	**30.8**	**3.0**	**65.4**	**31.1**	**3.5**
Male	61.8	34.6	3.6	62.8	33.2	4.0
Female	71.3	26.3	2.4	68.2	28.9	2.9
Metropolitan				**67.6**	**30.8**	**1.6**
Male				68.9	29.8	1.3
Female				66.3	31.7	2.0
All Bangladesh				**68.4**	**29.4**	**2.2**
Male				67.3	30.3	2.4
Female				69.4	28.7	1.9

Source: Education Watch: Youth Skills Profile Survey, 2012

Table A3.3 : Gross enrolment ratio in secondary education by stratum and sex

Stratum	Gross enrolment ratio by sex					
	Male		Female		Both	
	n	%	n	%	n	%
Rural Barisal	603	62.5	605	68.1	1208	65.3
Rural Chittagong	648	63.6	609	73.6	1257	68.4
Rural Dhaka	574	69.9	563	77.3	1137	73.5
Rural Khulna	530	65.3	578	71.6	1108	68.6
Rural Rajshahi	462	65.8	429	75.3	891	70.4
Rural Rangpur	527	67.0	510	81.6	1037	74.2
Rural Sylhet	777	59.9	734	68.9	1511	64.3
Urban Barisal	548	70.3	544	79.2	1092	74.7
Urban Chittagong	623	58.8	608	78.5	1231	72.1
Urban Dhaka	495	62.4	567	76.4	1062	69.9
Urban Khulna	466	64.8	473	72.3	939	68.6
Urban Rajshahi	418	62.0	458	74.0	876	68.3
Urban Rangpur	433	71.4	491	75.0	924	73.3
Urban Sylhet	628	63.2	616	73.0	1244	68.0
Statistical Metropolitan	547	66.0	544	71.0	1091	68.5
All Bangladesh	8279	65.1	8329	74.2	16608	69.7

Source: Education Watch: Youth Skills Profile Survey, 2012

Table A3.4: Gross enrolment ratio in higher secondary education by stratum and sex

Stratum	Gross enrolment ratio by sex					
	Male		Female		Both	
	n	%	n	%	n	%
Rural Barisal	209	71.3	168	81.6	377	75.9
Rural Chittagong	192	60.4	170	63.5	362	61.9
Rural Dhaka	190	70.5	164	74.4	354	72.3
Rural Khulna	170	73.5	139	78.4	309	75.7
Rural Rajshahi	177	84.2	125	65.6	302	76.5
Rural Rangpur	164	78.7	141	82.3	305	80.3
Rural Sylhet	244	50.8	210	66.2	454	57.9
Urban Barisal	167	65.9	173	88.4	340	77.4
Urban Chittagong	196	70.4	189	76.2	385	73.3
Urban Dhaka	176	67.6	154	85.1	330	75.8
Urban Khulna	163	50.9	159	74.8	322	62.7
Urban Rajshahi	142	73.9	122	84.4	264	78.8
Urban Rangpur	168	74.4	131	115.3	299	92.3
Urban Sylhet	177	76.3	196	86.2	373	81.5
Statistical Metropolitan	184	74.5	167	86.8	351	80.3
All Bangladesh	2719	69.1	2408	80.1	5127	74.2

Source: Education Watch: Youth Skills Profile Survey, 2012

Table A3.5: Net enrolment rate among children aged 11-15 years by stratum and sex

Stratum	Enrolment rate						Level of significance
	Boys		Girls		Both		
	n	%	n	%	n	%	
Rural Barisal	603	51.9	604	60.4	1207	56.2	p<0.003
Rural Chittagong	648	50.5	609	59.8	1257	55.0	p<0.001
Rural Dhaka	574	55.9	563	64.7	1137	60.2	p<0.003
Rural Khulna	530	53.2	578	63.5	1108	58.6	p<0.001
Rural Rajshahi	462	52.6	429	65.3	891	58.7	p<0.000
Rural Rangpur	527	55.8	510	71.6	1037	63.5	p<0.000
Rural Sylhet	777	44.7	734	57.1	1511	50.7	p<0.000
Urban Barisal	548	61.5	544	68.9	1092	65.2	p<0.01
Urban Chittagong	622	54.2	609	65.7	1231	59.9	p<0.000
Urban Dhaka	495	54.3	568	64.1	1063	59.5	p<0.001
Urban Khulna	466	52.8	473	61.7	939	57.3	p<0.006
Urban Rajshahi	418	51.4	458	67.2	876	59.7	p<0.000
Urban Rangpur	433	57.0	491	66.6	924	62.1	p<0.003
Urban Sylhet	628	51.3	616	60.4	1244	55.8	p<0.001
Metropolitan city	547	57.2	544	61.9	1091	59.6	ns
All Bangladesh	8278	53.3	8330	63.6	16608	58.5	p<0.001

Source: Education Watch: Youth Skills Profile Survey, 2012

Table A3.6: Net enrolment rate among children aged 11-15 years for urban and rural areas and by gender

Stratum	Net secondary enrolment rate					
	Boys		Girls		Both	
	n	%	n	%	n	%
Rural	4121	51.5	4027	62.7	8148	57.1
Urban	3610	54.7	3759	64.9	7369	59.9
Metropolitan	547	57.2	544	61.9	1091	59.6
All Bangladesh	8278	53.3	8330	63.6	16608	58.5

Source: Education Watch: Youth Skills Profile Survey, 2012

Table A3.7: Net enrolment rate among children aged 16-17 (higher secondary) years by stratum and gender

Stratum	Net enrolment rate in higher secondary					
	Boys		Girls		Both	
	n	%	n	%	n	%
Rural	1346	28.4	1117	35.5	2463	31.6
Urban	1189	31.5	1123	43.9	2312	37.5
Metropolitan	184	34.2	167	37.7	351	35.9
All Bangladesh	2719	30.2	2407	39.6	5127	34.6

Source: Education Watch: Youth Skills Profile Survey, 2012

Table A3.8: Net enrolment rate among children aged 11-15 years by location, income and gender

Stratum	Secondary enrolment rate					
	Boys		Girls		Both	
	n	%	n	%	n	%
Rural						
Income <1 $ per capita/day	3079	47.5	3062	59.9	6141	53.5
Income <2 $ per capita/day	816	63.2	746	70.1	1562	66.5
Income >2 $ per capita/day	224	66.1	219	75.8	443	70.9
Urban						
Income <1 $ per capita/day	2236	46.6	2400	59.9	4636	53.5
Income <2 $ per capita/day	948	65.6	907	73.3	1855	69.4
Income >2 $ per capita/day	424	72.4	448	74.8	872	73.6
Metropolitan						
Income <1 $ per capita/day	201	50.7	223	52.9	424	51.8
Income < 2 $ per capita/day	214	51.4	215	67.0	429	59.2
Income >2 $ per capita/day	128	76.6	105	70.5	233	73.8
All Bangladesh						
Income <1 $ per capita/day	5516	47.2	5685	59.6	11201	53.5
Income <2 $ per capita/day	1978	63.1	1868	71.3	3846	67.1
Income > 2 $ per capita/day	776	71.3	772	74.5	1548	72.9

Source: Education Watch: Youth Skills Profile Survey, 2012

Annexes for Chapter 4

Table A4.1: Definition and Measurement of Dependency Ratio

The dependency ratio refers to the number of children aged 0 to 14 years and the number of persons aged 65 years or over per 100 persons aged 15 to 64 years. This ratio aims to measure the number of "dependents" for each person in the "working" age (Bongaarts, 1998).

Dependency Ratio = 100 x (Population (0 -14) + Population (65+)) / Population (15-64)
The Population Dependency Ratio (PDR) shows that how many young people under 15 and older people over 64 depend on people of working age (15 through 64). The dependency ratio is calculated using the following formula:

$$\text{Dependency Ratio} = \frac{(\%\ \text{under 15}) + (\%\ \text{over 64})}{(\%\ 15\ \text{through 64})} \times 100$$

Table A4.2: Division wise population dependency ratio by locations

Stratum/ Divisions	Rural	Urban	All
Barisal	63.2	58.5	
Chittagong	62.8	58.0	
Dhaka	60.0	58.9	
Khulna	56.0	51.7	
Rajshahi	51.7	49.1	
Rangpur	59.0	52.9	
Sylhet	70.1	60.7	
Metropolitan City	48.7		
All Bangladesh			58.0

Source: Education Watch: Youth Skills Profile, 2012

Table A4.3: Participation of 10-24 years old youth and children in general and TVET by stratum (Rural and Urban alongside)

Stratum	General education and TVET participation				
	General education	Formal TVET	Apprenticeship	No participation	All
Rural Barisal	89.4	4.0	5.1	1.5	100.0
Urban Barisal	85.5	8.1	5.0	1.4	100.0
Rural Chittagong	90.3	1.5	6.5	1.7	100.0
Urban Chittag ong	88.6	3.1	6.7	1.6	100.0
Rural Dhaka	86.5	4.0	7.5	2.0	100.0
Urban Dhaka	80.5	6.4	10.5	2.6	100.0
Rural Khulna	88.6	5.3	4.6	1.5	100.0
Urban Khulna	84.2	7.1	7.2	1.5	100.0
Rural Rajshahi	90.4	3.6	5.0	1.0	100.0
Urban Rajshahi	86.5	5.6	6.3	1.6	100.0
Rural Rangpur	91.2	3.5	3.5	1.8	100.0
Urban Rangpur	87.2	6.3	5.4	1.1	100.0
Rural Sylhet	90.0	1.8	5.4	2.8	100.0
Urban Sylhet	89.2	2.0	5.7	3.1	100.0
Metropolital city	79.4	8.2	11.2	1.2	100.0
All Bangladesh	87.2	4.6	6.4	1.8	100.0

Source: Education Watch: Youth Skills Profile, 2012

Table A 4.4: Proportion of young people in general and skills development activities by sex and age group

Participation status	Proportion of young people								
	10 - 14 years old			15 - 19 years old			20 - 24 years old		
	Boys	Girls	Both	Boys	Girls	Both	Boys	Girls	Both
Formal GE	94.7	97.4	96.1	77.9	88.1	82.8	68.7	80.1	74.3
Non -formal GE	0.7	0.5	0.6	0.2	0.1	0.1	0.2	0.0	0.1
Formal TVET	0.3	0.2	0.3	5.0	1.9	3.5	6.7	2.5	4.6
Non -formal TVET	0.1	0.1	0.1	0.9	0.7	0.8	2.0	1.8	1.9
Formal Apprenticeship	0.0	0.0	0.0	0.5	0.3	0.4	1.0	0.6	0.8
Informal Apprenticeship	2.5	0.6	1.6	10.0	4.7	7.5	14.6	8.2	11.5
More than one (gen + TVET)	0.2	0.3	0.2	3.1	2.7	2.9	4.3	3.6	4.0
Involved none of the above	1.5	0.9	1.1	2.4	1.5	2.0	2.5	3.2	2.8
All	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Education Watch: Youth Skills Profile, 2012

Table A4.5: Economic status (income per capita/day) of general education and TVET participants

Per capita income/day	% of TVET and general educatio n participants				All
	General education	Formal TVET	Apprentice ship	No participation	
Income <1 $ per capita/day	88.0	3.0	6.6	2.4	100.0
Income <2 $ per capita/day	86.5	5.9	6.7	0.9	100.0
Income >2 $ per capita/day	84.4	10.3	4.7	0.6	100.0
All income grou p	87.2	4.6	6.4	1.8	100.0

Source: Education Watch: Youth Skills Profile, 2012

Table A4.6: Distribution of youth involved in formal technical and vocational skills development training

Name of trade/course	Rural	Urban	All Bangladesh
Bachelor/masters	8.2	14.6	12.1
Diploma courses	37.3	31.0	33.4
Certificate courses	5.7	8.2	7.3
HSC trade certificate/vocational	2.1	4.3	3.5
SSC trade certificate/vocational	11.1	10.1	10.5
Other trade courses	24.4	24.3	24.3
Formal apprenticeship	11.2	7.5	8.9
All	100.0	100.0	100.0

Source: Education Watch: Youth Skills Profile, 2012

Table A4.7: Participation of young people aged 10-24 years in different trade courses (who were involved in any type of skills development activities) by per capita income.

Name of t rade/course	Per capita income		
	Income <1 $ per capita/day	Income <2 $ per capita/day	Income >2 $ per capita/day
Bachelor/masters	6.0	5.4	11.4
Diploma courses	5.0	9.2	10.1
Certificate courses	2.6	2.6	3.0
HSC trade certificate/vocational	2.6	3.5	1.1
SSC trade certificate/vocational	24.4	31.1	2.4
Other trade courses	0.0	0.1	41.0
Apprenticeship	59.4	48.1	31.0
All	100.0	100.0	100.0

Source: Education Watch: Youth Skills Profile, 2012

Table A4.8: Education and training participation of the 10-24 years old youths and children

Location	Percentage of youth								
	General education	NFE-general	Formal TVET	Non-formal TVET	Formal apprentice	Informal apprentice	More than one	None	All
Rural	89.1	0.4	1.8	0.6	0.3	4.8	1.2	1.8	47.8
Urban	85.7	0.3	2.6	0.7	0.3	6.1	2.4	1.9	45.3
Metropolitan	79.2	0.2	3.6	1.8	0.3	9.5	4.2	1.2	6.9
All Bangladesh	86.9 (33635)	0.3 (134)	2.3 (889)	0.7 (277)	0.3 (126)	5.7 (2208)	2.0 (756)	1.8 (694)	100.0 (38719)

Source: Education Watch: Youth Skills Profile, 2012

Note: Number in the parenthesis indicates the number of young people

Table A4.9: Current participation status of the children aged 10-24 years in general and technical and vocation education and training

Participation type	Participation status			All
	Now par ticipating	Dropped out	Completed	
General education	74.0	25.8	0.2	100.0
Formal TVET	55.4	5.3	39.3	100.0
Apprenticeship	28.7	5.9	65.4	100.0
Total	70.2	23.6	6.2	100.0

Source: Education Watch: Youth Skills Profile, 2012

Annexes for Chapter 5

Table A5.1: Employment status of 15-24 year olds by location and sex.

Location	Employment status of the 1524 year olds (in percentage)					Total
	Full time employment	Par time employment	Self employed	Household work	Unemployed	
Rural	**14.8**	**2.6**	**22.2**	**57.0**	**3.4**	**100.0 (5008)**
Male	25.4	4.1	37.9	29.9	2.7	100.0
Female	4.0	1.1	6.1	84.7	4.1	100.0
Urban	**14.9**	**4.0**	**23.1**	**52.5**	**5.5**	**100.0 (4758)**
Male	27.3	6.1	38.3	22.2	6.1	100.0
Female	2.7	2.0	8.2	82.2	4.9	100.0
Metro-city	**32.7**	**3.1**	**18.3**	**42.9**	**3.0**	**100.0 (776)**
Male	50.6	3.4	26.6	16.9	2.5	100.0
Female	18.1	2.8	11.5	64.3	3.3	100.0
All Bangladesh	**16.2**	**3.3**	**22.3**	**53.9**	**4.3**	**100.0 (10542)**
Male	27.9	4.9	37.4	25.6	4.2	100.0
Female	4.5	1.7	7.4	81.9	4.5	100.0

Source: Education Watch - Youth Skills Profile, 2012

Table A5.2: Proportion of 10-24 year olds with general education and skill development currently in jobs congruent with expectations and training content (by gender)

Participation status	Percentage employed in jobs congruent with training content and expectations		
	Boys	Girls	Both
Formal GE	23.4	28.3	25.1
Formal TVET	83.8	86.0	84.3
Non -formal TVET	90.7	77.4	86.5
Formal Apprenticeship	83.8	85.2	84.4
Informal Apprenticeship	91.7	82.6	89.3
More than one of the above	63.6	66.7	65.2
All	81.7	73.1	79.2

Source; Education Watch -Youth Skills Profile, 2012

Table A5.3: Proportion of 10-24 year olds with general education and skill development currently in jobs congruent with expectations and training content (by location)

Stratum	Percentage employed in jobs cong ruent with training and expectations						
	Formal GE	Formal TVET	Non-formal TVET	Formal Apprentices hip	Informal Apprentic eship	More than one	All
Rural Barisal	18.8	88.9	73.7	100.0	88.8	63.6	64.2
Rural Chittagong	3.3	0.0	41.7	----	81.9	100.0	61.4
Rural Dhaka	16.7	54.5	100.0	81.8	87.8	60.0	75.6
Rural Khulna	27.8	83.3	100.0	66.7	90.5	77.8	79.4
Rural Rajshahi	42.9	87.5	100.0	100.0	91.9	----	87.7
Rural Rangpur	20.0	75.0	100.0	100.0	93.8	0.0	81.9
Rural Sylhet	61.5	100.0	96.2	100.0	91.9	80.0	89.5
Urban Barisal	26.7	97.1	86.7	83.3	86.5	58.3	79.3
Urban Chittagong	26.1	87.5	50.0	66.7	77.2	50.0	68.8
Urban Dhaka	46.2	81.0	95.2	100.0	93.0	75.0	88.5
Urban Khulna	33.3	92.9	100.0	100.0	90.9	48.0	79.1
Urban Rajshahi	40.0	91.3	88.9	100.0	93.4	100.0	90.8
Urban Rangpur	0.0	72.7	100.0	57.1	87.0	66.7	75.2
Urban Sylhet	37.5	66.7	100.0	100.0	93.5	60.0	85.6
Metropolitan City	31.8	81.0	83.1	87.5	94.4	81.5	86.1
All Bangladesh	25.1	84.3	86.5	84.4	89.3	65.2	79.2

Source; Education Watch -Youth Skills Profile, 2012

Table A5.4: Status of current employment of 10-24 year olds by location and gender

Location	Employment status of the 10 -24 years old youth (in percentage)					Total
	Full time employment	Par time employment	Self employed	Household work	Unemployed	
Rural	**14.5**	**2.9**	**21.8**	**56.3**	**4.5.**	**100.0 (5,708)**
Male	23.6	4.3	35.9	32.1	4.1	100.0
Female	4.5	1.3	6.3	83.0	4.9	100.0
Urban	**14.5**	**4.6**	**23.0**	**51.3**	**6.6**	**100.0 (5,448)**
Male	25.4	6.2	37.1	23.8	7.5	100.0
Female	3.2	2.9	8.5	79.4	6.0	100.0
Metro - city	**33.1**	**3.2**	**18.1**	**41.4**	**4.2**	**100.0 (875)**
Male	49.6	4.0	25.8	17.4	3.2	100.0
Female	19.1	2.5	11.4	61.9	5.1	100.0
All Bangladesh	**15.9**	**3.7**	**22.1**	**52.8**	**5.5**	**100.0 (12,031)**
Male	26.1	5.1	35.8	27.4	5.6	100.0 (6,157)
Female	5.1	2.1	7.7	79.7	5.4	100.0 (5,874)

Source: Education Watch – Youth Skills Profile, 2012. Note: Numbers in parentheses indicate numbers in the sample.

Annexes to Chapter 6

Table A6.1: Mean of total monthly household cost for education and training by type of programme and gender

Type of programme	Mean cost by gender (Tk.)			Level of significance
	Boys	Girls	Both	
General education	1329.30	1188.05	1257.00	P<0.000
Formal TVET	2988.56	1830.90	2577.31	P<0.000
Informal TVET	914.01	725.42	857.47	P<0.01
All	1414.74	1179.80	1308.34	P<0.000

Source: Education Watch: Youth Skills Profile, 2012

Table A6.2: Mean of total monthly household cost for education and training by type of programme and location

Location/Stratum	Mean cost by type of programme (Tk.)			All
	General education	Formal TVET	Informal TVET	
Rural Barisal	1134.74	2606.20	1298.23	1214.44
Rural Chittagong	998.34	2204.15	773.44	1009.15
Rural Dhaka	958.60	2315.89	811.69	1015.62
Rural Khulna	900.97	1801.72	982.33	965.93
Rural Rajshahi	966.18	3328.00	866.08	1062.32
Rural Rangpur	882.58	2620.34	1004.76	960.69
Rural Sylhet	1167.08	2220.33	770.83	1169.43
Urban Barisal	1580.40	2809.84	846.17	1662.33
Urban Chittagong	1512.37	2482.20	1031.49	1552.32
Urban Dhaka	1630.64	2296.29	671.18	1594.78
Urban Khulna	1346.03	3175.08	473.53	1438.27
Urban Rajs hahi	1085.68	2385.31	608.73	1154.60
Urban Rangpur	1239.03	2477.35	816.72	1313.25
Urban Sylhet	1208.94	1495.48	1288.41	1220.99
Statistical metropolitan	2303.76	3192.54	840.76	2257.09
All Bangladesh	1257.00	2577.31	857.47	1308.34

Source: Education Watch: Youth Skills Profile, 2012

Annexes for Chapter 7

Table A7.1: Proportion of 10-24 year olds (not currently involved in skills development) who are willing to participate in any kind of TVET activities, by location and level of education (weighted rural and urban)

	% of children willing to participate in TVET				
	Primary	**Secondary**	**Higher secondary**	**Tertiary**	**Total**
Rural					
Male	44.4	67.9	81.2	64.1	61.9
Female	47.9	69.0	80.0	74.3	64.2
Urban					
Male	43.6	64.4	69.5	62.8	58.6
Female	41.4	67.2	75.1	70.7	61.6
Metropolitan city					
Male	63.3	81.9	69.3	63.7	72.4
Female	70.7	80.3	80.0	64.4	75.7
All Bangladesh					
Male	47.8	69.9	75.0	63.6	**63.2**
Female	50.3	70.6	78.5	69.9	65.8

Source: Education Watch –Youth Skills Profile, 2012.