Evaluation of Technical Training Centers/IGA Institutes in the Districts of Bangladesh under Different ADP funded Projects of Various Ministries


Carried out by

Evaluation Sector
Implementation Monitoring and Evaluation Division (IMED)
Ministry of Planning, Government of the People's Republic of Bangladesh

Conducted by

Bangladesh Institute of Development Studies (BIDS)

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FOREWORD

In Bangladesh there are about 3290 formal technical and vocational training institutes of which 519 are training institutes affiliated with different Ministries. These training institutes/centers have been implemented by different ministries (Ministry of Expatriates' Welfare and Overseas Employment, Ministry of Youth & Sports, Ministry of Women and Children Affairs, Ministry of Agriculture, Ministry of Textile and Jute, Ministry of Industries, Ministry of Health and Family Welfare, Ministry of Civil Aviation and Tourism, Ministry of Social Welfare, and Ministry of Education) funded through different Annual Development Programme (ADP) of the Government of Bangladesh.

It has become a prime necessity to see whether the facilities at the technical training centers as well as the training courses are adequate, need-based and more productive and commercially gainful. Upon request from the Implementation Monitoring and Evaluation Division (IMED) of the Ministry of Planning (MoP), the current evaluation study was undertaken by the Bangladesh Institute of Development Studies (BIDS).

Findings from the impact evaluation exercise indicate that despite several compelling bottlenecks in implementing the training activities, the training centers have been successful in creating significant positive impacts upon their target beneficiaries in terms of employment and income generation and providing market relevant skills to the youth and disadvantaged women of the society.

I sincerely congratulate BIDS team for conducting the evaluation of training and successfully completing the report in time. I also thank Ms. Salma Mahmud, DG (Evaluation Sector) along with her colleagues to provide necessary support and cooperation to the BIDS team members.

I am very hopeful that the recommendations of the study would be much helpful to everyone involved in the design and implementation of similar training projects in the future for higher efficiency, effectiveness and sustainability.

(Suraiya Begum ndc)
Secretary
IMED, Ministry of Planning

PREFACE

Implementing Monitoring and Evaluation Division (IMED) of the Ministry of Planning has been assigned the task of monitoring the implementation of ongoing as well as evaluating the completed development projects of the Government of Bangladesh (GoB). The evaluation sector of IMED under took to evaluate the project "Evaluation of Technical Training Centers/IGA Institutes in the Districts of Bangladesh under Different ADP funded Projects of Various Ministries" and the Impact Evaluation Study has been completed by the Bangladesh Institute of Development Studies (BIDS).

Findings from the impact evaluation indicate that despite several bottlenecks in implementing the training activities, the training centers have been successful in creating significant positive impacts upon their target beneficiaries in terms of increasing employment and income, and providing market relevant skills to the youth, both male and female of the country.

I would like to thank BIDS team for conducting the evaluation work and concerned IMED officials to complete the report in time, also the officials of all the five Departments of five study ministries for their kind cooperation. Thanks are also due to all members of Technical and Steering Committees, especially to the Secretary, IMED, for providing us useful advice and guidance. I hope that the lessons learnt and recommendations would contribute to improve the quality and effectiveness of the similar training projects to be implemented by different ministries.

Salma Mahmud
Director General
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C O N T E N T S

Acknowledgements

This research project was initiated and financed by the IMED, Ministry of Planning, to assess the impact of the technical training centers (TTCs) under different ministries funded through Annual Development Programme (ADP) of the Government of Bangladesh. It also looks at whether the training courses offered by these TTCs are relevant, adequate, need-based and more productive and commercially gainful.

The designation and presentation of materials in this report do not imply the expression of any opinion whatsoever on the part of IMED nor of the Government of Bangladesh, and reflect the sole opinions and views of the authors, who are fully responsible for the contents, findings and recommendations of this report.

We are grateful to the Members of the Technical Assistance Team and other experts of IMED for their helpful comments at various phases of the research.

The authors are thankful to the trainees, trainers and Principals of different training institutes who willingly expressed their opinion that are the building blocks of this research. Our hearty thanks goes to the staffs of different departments of the respective five ministries who helped to get all secondary information for this report.

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Executive Summary

There are about 3290 formal technical and vocational training institutes of which 519 are training institutes affiliated with different Ministries and rest 2771 training institutes within the purview of basic educational program in which the SSC (vocational), HSC (vocational) and business administration course are implemented.

These training institutes/centers have been implemented by different ministries (Ministry of Expatriates Welfare and Overseas Employment, Ministry of Youth & Sports, Ministry of Women and Children Affairs, Ministry of Agriculture, Ministry of Textile and Jute, Ministry of Industries, Ministry of Health and Family Welfare, Ministry of Civil Aviation and Tourism, Ministry of Social Welfare, and Ministry of Education). These training centers are funded through different Annual Development Programme (ADP) programmes of the Government of Bangladesh (GOB).

After successful completion of these courses, the trainees are exposed to the market, and able to engage themselves in different income generating activities (IGA) as well as national development works. But in comparison with total population, the number of these types of training centers is not adequate to cope with the growing demands of skilled human power both at home and abroad. So, it has become a prime necessity to see whether the facilities at the technical training centers as well as the training courses are adequate, need-based and more productive and commercially gainful etc.

In order to achieve the objectives of this evaluation assignment, a number of survey units were interviewed. These are technical training institutes (mainly the principles or in-charge of the institutions), training beneficiaries (graduates during 2008-09 to 2012-13), trainers, concerned officials of the study ministries and departments in the headquarters and the districts, and local stakeholders and the elite. As suggested by the TOR and based on the subsequent discussions with IMED, a sample of 58 training centers under 33 districts from 7 divisions was drawn.

The present exercise primarily focuses on the skills acquired by the project beneficiaries through training and their employment impact. However, this exercise involved considerable time to trace down the beneficiaries. Thus a sample of 406 training beneficiaries (graduates) – both male and female – has been purposively adopted for the survey depending upon the availability of the beneficiaries for interview. In order to maximize the chances of tracing, first-hand information on the graduates was collected from the training centers – the point of departure. Key informants, such as teachers/trainers, and community leaders were also be approached to this end. In interviewing the graduates who were difficult to locate, snowball or chain referral sampling was followed. In addition, a sample of 59 trainers representing leading training courses was selected for in-depth interview.

The study is based on both qualitative and quantitative data and information. The survey of the training beneficiaries represents an exercise of tracer studies on the effectiveness of the skills training as a factor to promote employability. Key informants were interviewed with a pre-

designed checklist. Other stakeholders and were interviewed through focus group discussions (FGDs).

Key Findings

Survey findings show that the employment outcome of training across all training centres except those under the MOH&FW is remarkable. Among the employed graduates on average 59.83 percent are self-employed while the remaining 40.17 percent are paid employed. Such high level of self-employment indicates the great fragility of the labour market, and is mostly the outcome of limited wage employment opportunities. They reflect a survival strategy for the graduates forced to take up small-scale own-account informal activities.

Distribution of employed graduates by sectors and trades is illuminating. The income impact of training conducted by the five study ministries is respectable. About half of the employed graduates (49.75%) earn a monthly income of more than Tk.10,000, while only 19.21 percent of earn less than Tk.5,000/month. However, there is considerable difference of monthly income by gender. Only 27.87 percent of female employed graduates as against 59.15 percent of male employed graduates earn more than Tk.10,000/month, while as high as 40.98 percent of female employed graduates as against 9.86 percent of male employed graduates earn less than Tk.5,000/month. It means that female graduates are employed in low-paying occupations.

The study found that the predominant method used by graduates in finding employment was responding to media advertisements (39.9%). The main difficulty in getting a job was identified as limited job opportunities in the geographical area where the graduate resided, which was identified by 32.57% of the respondents However, where jobs were available, it took relatively little effort to secure one, with 64.34% of the respondents making at most 5 contacts with potential employers before securing a job usually within the first year of graduation.

There is limited mobility of graduates across areas of specialization. This could be indicative of that the programmes are highly specialized. There may be a need to offer programmes to equip graduates with multiple skills.

Recommendations for More Improved Policy Directions

It is recommended that the training institutions keep databases of their graduation on completion and work to establish alumni associations that could assist in updating the database. In updating databases, departments should liaise with the District offices.

An up-to-date and reliable labour market information on which to base decisions on current and future skills needs and strategies for meeting them needs to be put in place.

In order to maximize the credibility of training and skills acquired, it is recommended that training institutions and their training courses are accredited by BTEB.

The existing training systems in the five study ministries call for better adaptation to the needs of the labour market and employment system. There exists acute shortage of trainers across the board suggesting the pressing need for increasing the number of existing trainers.

New demands for trainers: none of this can be put into practice through simply using traditional teacher's presentation and textbook based methods. It is important that trainers also help students to develop basic competency skills, e.g. initiative taking and teamwork abilities, as well as communication, decision-making, and problem solving capabilities, amongst others. In order to do this, trainers must have a complete "methodological toolkit" at their disposal to be used in the transmission of wide ranging areas of competency.

Policymakers should carefully weigh the efficacy of class-size policy against other potential uses of funds. While lower class size has a demonstrable cost, it may prove the more cost-effective policy overall.

Training programmes need to be designed to ensure that the trainees attain pre-specified levels of competence in a given field or training activity. This calls for strengthening the training of the trainers (TOT). Emphasis should be put on the achievement of specified objectives relating to the quality and effectiveness of training courses in terms of increasing the number and quality of trainers and introducing modern training, machinery, equipment and toolkits.

In the existing traditional training system, the unit of progression is time and it is teacher-centered. In a competency based training (CBT) system, the unit of progression is mastery of specific knowledge and skills and is learner- or participant-centered. Two key terms used in competency-based training are: skill and competency. Skill is a task or group of tasks performed to a specific level of competency or proficiency which often use motor functions and typically require the manipulation of instruments and equipment. Some skills (e.g. counseling), however, are knowledge- and attitude-based. Competency is a skill performed to a specific standard under specific conditions.

Different training centers of various ministries are providing the same training on more than three trades. This points to the pressing need for inter-ministerial coordination, cooperation and regular interaction in order to deliver better quality of training.

Regular payment of salary of the trainers should be ensured to maintain the spirit, tempo and quality of training.

Additional and adequate fund should be allocated to purchase new and sufficient number of training equipment and toolkits.

Bangladesh is a country characterized by low labour demand and high rates of youth unemployment. Entrepreneurship training has the potential to enable youth to gain skills and create their own jobs as well as jobs for others. The distinction between entrepreneurship and self-employment revolves around the existence of an innovative business concept or idea.

Entrepreneurs usually attempt to develop something new in creating job opportunities. A course on entrepreneurship development may be introduced at least in the MYS and MoWCA.

In the skills training programs of the ministries PPP should be introduced and promoted in order to reduce training cost and bring about greater effectiveness of training. Public–private collaboration can occur at many levels, including the macro (policy) level, the meso (sector) level, and the micro (enterprise) level.
To further enhance graduate employment, employers and employer organization should form linkages with VTI institutions that are intended to recruit graduates upon completion of their studies.

Institutions should also conduct career fairs where they could sensitize the employers of the skills offered by their graduates.

It is highly recommended that there should be an audit of skills required by the employment sector and VTI programmes and enrolment rates be tailored to match the required skills.

Abbreviations and Acronyms

ADP	: Annual Development Programme
ALMP	: Active Labour Market Program
ATI	: Agriculture Training Institute
BMET	: Bureau of Manpower, Employment and Training
BTEB	: Bangladesh Technical Education Board
CBT	: Competency Based Training
FGDs	: Focus Group Discussions
GOB	: Government of Bangladesh
HRD	: Human Resource Development
HSC	: Higher Secondary Certificate
IHT	: Institute of Health Technology
KIIs	: Key Informant Interviews
MOA	: Ministry of Agriculture
MEWOE	: Ministry of Expatriates' Welfare and Overseas Employment
MOH&FW	: Ministry of Health and Family Welfare
MoWCA	: Ministry of Women and Children Affairs
MYS	: Ministry of Youth and Sports
NEP	: Bangladesh National Education Policy 2010
NGOs	: Nongovernmental Organizations
NSDP	: National Skills Development Policy-2011
PCB	: The Pharmacy Council of Bangladesh
PPP	: Public-Private Partnership
SMFB	: The State Medical Faculty of Bangladesh
SSC	: Secondary School Certificate
SWOC	: Strengths, weaknesses, opportunities and constraints
TTCs	: Technical Training Centres
TVET	: Technical and Vocational Education and Training
VTIs	: Vocational Training Institutes
WTCs	: Women Training Centres
YTCs	: Youth Training Centres

I. Introduction

It is widely recognized that the training system in Bangladesh is totally out of sync with its economy and the labour market. This requires that the linkage between the economy and labour market should be understood and requirements of industries should be communicated to Government to enable it to assist in the development of future skills and career development policies. To ascertain the importance of training to the economy and the labour market, evaluation studies are necessary. When rising demand for skills is not met by supply, the result is a persistent shortage of skilled labour and constrained growth. The root of the shortage of skilled labour can be traced to persistence of antiquated and unresponsive training mechanisms not relevant to market demand. Available evidence reveals that existing vocational and technical systems in Bangladesh are not providing new entrants with marketable skills. The proposed study aims to reexamine this issue with updated evidence.

There are about 3290 formal technical and vocational training institutes of which 519 are training institutes affiliated with different Ministries and rest 2771 training institutes within the purview of basic educational program in which the SSC (vocational), HSC (vocational) and business administration course are implemented.

These training institutes/centers have been implemented by different ministries (Ministry of Expatriates Welfare and Overseas Employment, Ministry of Youth & Sports, Ministry of Women and Children Affairs, Ministry of Agriculture, Ministry of Textile and Jute, Ministry of Industries, Ministry of Health and Family Welfare, Ministry of Civil Aviation and Tourism, Ministry of Social Welfare, and Ministry of Education). These training centers are funded through different Annual Development Programme (ADP) programmes of the Government of Bangladesh (GOB).

After successful completion of these courses, the trainees are exposed to the market, and able to engage themselves in different income generating activities (IGA) as well as national development works. But in comparison with total population, the number of these types of training centers is not adequate to cope with the growing demands of skilled human power both at home and abroad. To face real situation and to expedite the process of transformation of vast population into skilled human power, creation of more opportunity for technical training is essential. Demand for skilled human power is increasing with investment, increase of production and high speed of technological development. To cope with the ongoing technological and socioeconomic development of the country, productive and skillful human power has become a pre-requisite. In reality, these training centers being operated by different GOB departments are not adequately equipped with required number of skilled teachers/instructors, equipment/workshops for practical demos, library facilities, residential facilities for teachers and students etc. Moreover, training curriculum is found not to be need-based or practicable as per need of local demand or of international standard. Moreover, due to lack of clear-cut policies, with regard to vocational training and skill development, duplication of efforts as well as low standard of imparted training are not uncommon in these institutions. So, it has become a prime necessity to see whether the facilities at the technical training centers as well as the training courses are adequate, need-based and more productive and commercially gainful etc.

I.1 Literature Review

Global Experience

Technical and vocational education and training (TVET) and skills development have recently returned to the international policy agenda. UNESCO launched a TVET and skills strategy reflecting a growing interest in the skills agenda (King, 2009). The 2012 Education for All Global Monitoring Report focuses on skills development, emphasizing strategies that increase employment opportunities for marginalized groups (UNESCO 2011).

Globally, the number of secondary students at the age group from 10 to 18 years enrolled in TVET increased from 46.6 million in 1999 to around 54 million in 2007 with the share of females remaining around 45 percent. The 16 percent increase in TVET was slightly lower than the 19 percent increase in total secondary enrolment (including both lower and upper secondary enrolment). During the same period the World's youth unemployment fell slightly from 73.5 million in 1999 to 72.5 million in 2007, after which it rebounded due to the global crisis. This fall is equivalent to a fall in the World's youth unemployment rate from 12.6 percent in 1999 to 11.8 percent in 2007 (ILO, 2011, 2010).

This world-wide growth in TVET enrolment has fuelled economic growth in some countries and fallen short of expectations in others. Globalization is prompting governments to take renewed interest in this branch of education according to Maclean and Wilson (2009), which is considered as an indispensable means to tackle the many challenges that the rapidly increasing number of unemployed youth are confronted with when it comes to their integration in the labour markets. Accountability has become a hallmark of educational reform initiatives in the United States. Federal Legislation requires that states develop evaluation systems to assess student performance, including: vocational achievement; and successful transition from school to post-secondary education/or employment (Rojewski 2009).

The most common type of intervention for youth is skills training. This category accounts for 39 percent of all interventions and is significant in all regions, but is especially popular in Latin America and the Caribbean where it represents 56 percent of the programs included in the inventory. Comprehensive multiple-service interventions – for instance, combining vocational and on-the-job training with wage subsidies and public works, or classroom and on-the-job training with paid work experience and job search assistance – account for 32 percent of the total. One-half of these multiple-service programs are in OECD countries. Making the labour market work better for young people (especially through wage subsidies), and improving chances for young entrepreneurs each accounting for 12 percent of the total. The largest number of interventions is in the OECD area but Latin America and the Caribbean also has good coverage (Betcherman, Godfrey et al. 2007).

UNESCO has published a series of reports evaluating the impact of vocationalization in education in SSA (Lauglo and Maclean, 2005), which refers to a curriculum structure in which students devote a minor share of their class time to vocational or practical subjects, without by so doing closing their prospects for higher education (Lauglo, 2004; UIS/UNESCO-UNEVOC, 2006).

Youth unemployment in Latin America is exceptionally high (15.7% in 2009 (ILO, 2011)), as much as 50 percent among the poor (Attanasio, Kugler et al. 2008). Consequently, among active labour market programs (ALMP), job training is popular in Latin America as an attempt to help the labour market insertion of disadvantaged youth, and also as a way of providing skills to low-income groups to enable them to deal with the challenges of globalization (Ibarrarán and Shady 2008). Ibarrarán and Shady (2008) summarize the findings from the first rigorous set of evaluations to job training programs in Latin America. This research was complemented by two independent impact evaluations of similar training programs in Chile and Colombia. They report the results of two evaluations with an experimental design (the Dominican Republic and Colombia), one with a natural experiment (Panama) and four non-experimental evaluations (Argentina, Chile, Peru and Mexico). Overall, the results suggest that employment effects range from modest to meaningful – increasing the employment rate by about 0 to 5 percentage points – although higher and significant for some groups e.g. women in Colombia and Panama – with impact of 6 to 12 percentage points in the employment rate. In most cases there is a larger and significant impact on job quality, measured by getting a formal job, having a contract and/or receiving health insurance as a benefit.

TVET links skill development policies to employment needs and labour market requirement, especially because the majority of new work opportunities are increasingly found in productive self-employment and work in the informal economy rather than in formal employment (UNICEF-WBI, 2008). The amount and type of TVET varies widely across countries, and this is not necessarily linked to a country's state of economic development. For example, MartÍnez, Levie et al. (2010) argue that the impact of such training does vary according to the level of economic development. It appears to have greatest effect on early-stage entrepreneurial activity in countries with favourable institutional contexts. Training appears to be particularly effective in western European countries with low rates of early-stage entrepreneurial activity, e.g. Belgium, France, Germany and the United Kingdom. General measure of the environment for entrepreneurship from a National Expert Survey (NES) survey shows a higher average score for western Europe (3.0 on a scale of 1 to 5), compared with 2.8 for eastern Europe and 2.7 for Latin American and Caribbean countries. In Republic of Korea and Japan, institutional barriers, as well as cultural perceptions, may also prevent the gains in awareness and attitudes from translating into intention and action (Martínez, 2010). This finding fits the so-called Global Entrepreneurship Monitor (GEM) model, which predicts that training in starting a business is most effective and relevant in innovation-driven countries. According to MartÍnez, Levie et al. (2010), it supports the argument that factor-driven countries in particular should not invest large-scale resources in training programs if basic level of entrepreneurial framework conditions are not adequate. An alternative explanation for the findings is that the quality of training may vary by country context, and that less-developed economies have lower quality forms of training. Renaud (2009) concludes that these sorts of indicators do not get to the central question of learners outcomes. Rauner (2009) argues that future research ought to focus less on institutional characteristics and more on learner outcomes.

There is a huge body of literature, which seeks to evaluate the outcomes of individual programs. Martin (2000) divides these evaluations into two main types: (i) First type seeks to measure the impact of program participation on individuals' employment and earnings after they have left the

program, judging the outcomes against the experiences of a benchmark or control group of similar individuals who did not participate in the program. This type of evaluation makes sense for those active programs which attempt to make participants more productive and competitive in the open labour market, e.g. training and job-search assistance. (ii) Second type attempts to measure the net effects of programs on aggregate employment and unemployment by estimating what are called dead-weight, substitution and displacement effects. These evaluations are mostly relevant for employment programs that attempt to stimulate job creation in the private sector (including self-employment), as well as direct job creation in the public sector (Martin 2000). Based on micro evaluations involving comparing labour market outcomes for individuals who have gone through a particular program with those of a control group of their peers Dar and Tzannatos (1999) suggest that the programs should be tightly targeted at those for whom they are found to be the most cost-effective, or, if the evaluations point towards these programs being ineffective, they should be amended or discarded.

Much of the evaluation literature relates to the United States and Canada where there is a long-standing tradition of evaluating labour market programs due to the mandatory requirement on the public authorities to evaluate their programs. Few European countries have carried out rigorous evaluations until recently. As a result, some European countries (e.g. Norway, Sweden, United Kingdom; Germany and France (AfD)) and Australia are undertaking rigorous evaluations of their labour market programs. In order to make effective use of TVET to equalize economic outcomes among different groups, policy-makers first have to estimate the impact of various types of TVET on employment and incomes. These estimates do not necessarily assume that employability and income differences reflect productivity differences (i.e. that market prices – wages, in this case – are good estimates of the real economic value of education and training). Employability and incomes are assumed merely to reflect the value that society places on certain education and training certificates – whatever the social or economic reason (Carnoy, 1994). The model generally used to make such estimates relates employment (including self-employment) and individual income or wages to education, training, experience (age) and, if data are available, ability and socio-economic background. Because labour markets are usually different in the rural and urban areas of developing countries and because women and men are differentially treated by employers in both labour markets, separate estimates are generally made for urban and rural workers and for men and women (Carnoy, 1994).

The international empirical literature on whether labour market training has a positive impact on employment is extensive. Most of the studies are based on non-experimental methods. A study by Zweimuller and Winter-Ebmer(1991) found an insignificant effect when using a single equation model of employment effect of manpower training schemes. After correction for selection into training by simultaneous estimation of a two-equation model, the employment effect of training emerges as positive and significant (Torp, 1994). Concerning the macroeconomic evaluations of the active policies in terms of what works and what does not Martin (2000) concludes that the jury is still out on the matter: The results of the various econometric analyses are inconclusive, some studies appearing to show robust effects of active policies in terms of lowering the natural or equilibrium rate of unemployment or real wage pressures, others appearing to show zero or insignificant correlations. This literature is bedeviled by a number of data and technical difficulties, notably simultaneity bias since cross-country comparisons reveal that the amount of spending on active programs is positively related to the

unemployment rate. Betcherman, Olivas et al. (2004) agree with this caution by stressing that it is increasingly difficult to isolate impacts of particular types of programs because of a trend towards integrated service provision. Nevertheless, their review leads to a number of general conclusions:

Training for the unemployed. Participants often benefit from these programs in terms of higher employment rates but not in terms of higher earnings. Programs seem to work best with on-the-job training and active employer involvement. Results are more positive for women than men.
Retraining for workers in mass layoffs. These programs most often have no positive impacts, although there are exceptions. Few successful cases typically include a comprehensive package of employment services to accompany the retraining. However, these are generally expensive.
Training for youth. These programs are almost always unsuccessful in improving labour market outcomes, at least in developed countries. It makes much more sense to invest earlier in the education system to reduce drop-outs and other schooling problems. While there are few studies in developing countries, evaluations in Latin America do find positive impacts for programs that integrate training with remedial education, job search assistance, and social services.
Public works. This can be an effective short-term safety net but public works do not improve future labour market prospects for participants.
Micro-enterprise development/self-employment assistance. There is some evidence of positive impacts for older and better-educated workers. However, take-up is low.

Betcherman, Olivas et al. (2004) suggest that many findings from industrialized countries do seem to apply broadly to transition countries but – on the basis of what is still a small sample of studies – this is not always true in the case of developing countries. The much larger informal labour markets and weaker capacity to implement programs may limit what some programs can achieve in terms of creating formal employment or increasing wages. The few evaluations in these countries for employment services and training programs for the unemployed are less positive than the (much larger) body of evidence in the OECD and transition countries. On the other hand, some youth training programs in developing countries have much more positive impacts than are seen in OECD countries. It may be that such programs in these low-income labour markets have more potential because abundant supplies of skilled workers are not available according to Betcherman, Olivas et al. (2004). For example the World Bank (2008) finds that rising levels of education are producing higher earnings in the informal sector. In Ghana, using household data from the 2005 Ghana Living Standards Survey, the comparison of earning gains estimated with multiple regression analysis showed returns by level of schooling for self-employed workers in the urban non-agriculture sector that approach or match those of wage workers in the urban non-agriculture sector (Adams 2008, 2009).

Betcherman, Godfrey et al. (2007) seek to identify the determinants of positive program impacts systematically. The results suggest that there are no major differences across categories of interventions in terms of impact or cost-effectiveness. Three categories of interventions – making the labour market work better for young people (primarily wage subsidies, public works, and job search assistance), skills training, and comprehensive programs – each had similar percentages of programs with positive impacts. Although entrepreneurship programs had the highest positive impact rating, the number of these interventions in the inventory is too small to draw firm conclusions. The meta-analysis found no statistically significant differences in the impact of the

different program types (Betcherman et al 2007). Betcherman et al (2007) warn that the absence of rigorous evaluations almost certainly leads to an overestimation of program impacts by policy-makers. Properly evaluated programs are less likely to lead to positive assessments of impact and effectiveness than judgments based on non-scientific methodologies. In the absence of such evaluations, policy-makers are likely to overestimate the benefit of their interventions and, as a result, allocate resources inefficiently. This is a particular concern in developing countries where resources are scarce and evaluations are uncommon. The majority of interventions appear to have positive labour market impacts for participants. Two specific performance indicators post-program – employment and earnings – are considered in assessing program "impact". An assessment of impact could be made for 172 interventions, where an assessment could be made regarding employment and/or earning outcomes; these include both programs where only gross outcomes are available and those where impact evaluation have been carried out. Of these 172 programs, 132 (78%) were rated as having had a positive impact in terms of the employment and/or earnings of participants. When only programs with net impact evaluations were considered, the share with demonstrably positive labour market impacts for participants was 60 percent (44 of 73 programs). In the case of many of these programs, the assessment has been made on the basis of gross-outcome data alone. But once cost-effectiveness is taken into account along with labour market impacts, less than half of the programs in the inventory could be judged as successful. However, of the 134 programs assessed to have positive employment impact, only 25 have a cost-benefit analysis. Of these, 14 were cost-effective (56%) while 11 (44%) were not.

An article by Carnoy (1994) addresses the question of how to determine the overall effect of the TVET system on efficiency and equity. The main part of the paper sets out a methodology for this purpose. The aim is to suggest criteria to guide the allocation of public resources for education and training, to meet both efficiency and equity goals. Carnoy (1994) argues that the value of additional vocational education and training in (a) equalizing opportunity and (b) equalizing outcomes in a particular society needs to be measured. An analysis of data from eleven countries in Latin America by Psacharopoulos in 1994 showed that half of these countries (six) "show that the rate of return for vocational secondary education is higher than that for secondary general education." It was also reported from this study that, "in seven out of eleven countries, the private return to secondary education does not differ between general and vocational education (Yamada, 2002)."

Earnings differentials are the commonest measure of the economic value of education and training. Even though a lot of years have passed since Jacob Mincer (1962) used income curves and some assumptions about the payoff to education to estimate the value of training associated with different levels of schooling, his analysis is still useful. In effect, Mincer measured the "extra" income earned over and above a fixed return to education to measure the value of post-schooling training of workers in the labour force with different levels of formal education. He concluded that the steeper income curve of workers with secondary education, for example (as compared with those with primary schooling) was due to the greater investment in training made once they began working. Mincer's method is useful because it addresses the difficulty of separating education and training; it measures the value of training as the discounted additional income workers get because of the learning opportunities that follow from their educational and

occupational choices; and it provides an overall methodology for valuing TVET as the discounted earnings stream realized by those who take it (Carnoy, 1994).

Psacharopoulos & Patrinos (2002) provide a comprehensive review of four decades of estimating Mincerian equation across 98 countries. They find that: (i) the rates of return are generally falling by level of education and level of economic development; (ii) the average private rate of return to a year of schooling is 19 percent; (iii) the average returns are highest in Latin America and Sub-Saharan Africa; and (iv) while average years of schooling have increased, the rate of return is declining. While one can debate the precise estimates (they might be biased for a number of reasons) the basic finding is that more education raises wages and thus likely also economic performance. Other findings summarized in te Velde (2005) include: (a) Barro (1997) finds that one year of additional education raises growth by 1.2 percent per annum. He also suggests that education is important in catch-up of low-income countries in terms of growth and productivity. (b) Benhabib & Spiegel (1994) find low to negligible rates of returns to investment in education. (c) Krueger & Lindahl (1999) find a statistically significant relationship between education and growth for countries with low-income levels. (d) Wolff & Gittleman (1993) find that tertiary education is the only level of education that is statistically significant for output per person for richer countries; primary education is statistically significant in poorer countries.

Thus, while it is clear that higher educated workers earn more, it is less clear whether all types of education raise growth in all type of countries. The effect of education appears larger for low-income countries, and this might be consistent with the hypothesis that education is important for catch-up. Generally it is important to distinguish between education that contributes to scientific advance and education that aims to create an absorptive capacity to foster the adoption and benefits from best practice technology. For example, Borensztein et al (1998) suggest that education is important to benefit from inward FDI. Education for scientific advance seems most relevant for the high-income countries, as around 90 percent of R&D is done in the five richest countries (te Velde, 2005). More recent studies have used a more flexible specification than the standard Mincer model. Ryan(2002) interprets his results to imply that the return to a Level II TVET qualification for those who have completed Year 12 is zero. The same result is obtained in a more explicit form in Leigh (2008). Given that the most common path to a level III qualification is via an apprenticeship, the results imply that four years of post-school vocational education and training is a waste of time (Stromback, 2009).

In contrast to previous studies Stromback (2009) uses the treatment-effect approach that is commonly applied in the field of policy evaluation. Thus, young persons are viewed as obtaining one or both of two treatments – completing Year 12 and obtaining a vocational qualification – or no treatment, leaving school before completion. Stromback (2009) concludes that the main implication is that the return/effect to completing Year 12 is a long time coming and the benefits can be obtained in more than one way. Carnoy (1994) also discusses models of estimating TVET equity effects, which involve comparing what individuals from certain groups gain from their investment in TVET, corrected for the additional taxes they pay to the public sector, and the value to society of public spending on TVET.

Dar & Tzannatos (1999) have examined about 100 evaluations. They suggest that the evidence points to some generalizations about ALMPs, which they summarize programmatically: (i)

Public works can help the more disadvantaged groups (older workers, the long-term unemployed, those in distressed regions) as a poverty/safety net program. However, they are ineffective instruments as an escape route from permanent unemployment. (ii) Training for the long-term unemployed can help when the economy is improving. (iii) Small-scale, tightly targeted on-the-job training programs, often aimed at women and older groups, offer the best returns. However, the cost-effectiveness of these programs is generally disappointing. The real rate of return is rarely positive, and they are no more successful than job search assistance programs in terms of post-program placement and wages. (iv) Retraining for those laid off en masse usually has little positive impact and, as in case for the long-term unemployed, it is more expensive and no more effective than job-search assistance. Again, job search assistance may not be a direct substitute for retraining, as the target groups may be somewhat different. (v) Training for youth generally has no positive impact on employment prospects or post-training earnings – it clearly cannot make up for the failures of the education system. Taking costs into account, the real rate of return of these programs in both the short- and long-run is usually negative.

A very broad generalization on the effectiveness of these ALMPs leads Dar & Tzannatos (1999) to conclude that: (a) Some of these programs e.g. wage subsidies or training for youth – are unlikely to be cost-effective instruments in reducing unemployment. (b) Some programs e.g. job search assistance – are likely to have positive impacts on the probability of finding employment if they are well-designed and implemented. However, the impact and cost-effectiveness of most of the ALMPs depends not only on their design, but also on the overall macro and labour market framework in which they are designed. A wide range of results can still be found with some programs demonstrating positive labour market effects for participants and others showing either no impact or even negative effects. Obviously, program design and the context in which the program operates matters a great deal. While it can be argued that the lessons from the OECD countries on the effectiveness of these programs may not be directly applicable to developing countries, it is unlikely that these programs will be more successful in developing countries given the scarcity of administrative capacity to implement these programs and the paucity of monitoring and evaluation experience to study their effectiveness.

Johanson & Adams (2004) argue that getting the macroeconomic context right remains the essential first step in focusing on skills development. Training does not create jobs. Skills are a derived demand and that demand depends on policies for growth and employment creation. Evidence shows that success in getting more children into primary school leads to increased demand for secondary education. More attention is being given to diversified approaches to education which includes vocational and skills development (Levesque 2007). Some countries adopt an enterprise-based model through apprenticeships. Education and training alternate between theoretical education in a school context and practical training in an enterprise (which account for about 50-70 percent of the pupils' time). In other countries, the delivery systems combine school-based vocational education and apprenticeship. This model attempts to combine advantages of the school-based model and of the enterprise-based model (OECD 2008). Seventeen countries in SSA have presented draft comprehensive sector-wide education plans for 2015.

The joint OECD-AfDB AEO review of the successful African countries' experiences suggested eight necessary conditions for formulating and implementing successful TVET strategies: (1)

Adopting a clear vision and leadership at the highest political level; (2) Improving forecasting and planning for skill needs; (3) Improving the quality of TVET; (4) Addressing the skill needs of the informal sector; (5) Facilitating the growth of the productive sector through technological learning and innovation; (6) Fostering partnership with all stakeholders (i.e. the government, social partners, business associations, and various stakeholder groups in the formal and informal sectors of the economy); (7) Involving the local communities; and (8) Strengthening local management of TVET through the delegation of responsibilities to regional authorities.

TVET systems in a growing number of African countries are undergoing or have undergone promising reforms that are designed to build on the inherent strengths of the system. The major reforms concern: (i) Adopting national policies and Strategies for TVET – Burkina Faso, Senegal, Mali, Ghana, Gambia, Niger, and Nigeria. (ii) Have or are in the process of setting up of national TVET bodies: Gambia, Ghana, and Nigeria. (iii) Have or are in the process of developing National Qualification Frameworks (NQF) – National Vocational Qualification Frameworks (NVQF) in Nigeria; National Skills Qualifications Framework (NSQF) in Gambia. (iv) Adopting updated competency based curricula more aligned with the labour market needs: Nigeria, Gambia, Senegal, and Burkina Faso. (v) Linking training to employment (either self or paid employment) (Abdul-Wahab and Afeti 2009). World Bank (2006) argues that for reforms to succeed, close involvement of the private sector at all levels – from policymaking to being involved in running institutions, is critical and the Government is working closely with the private sector to move forward in transforming this vision into reality.

A long-standing debate within Western countries, but also evident in practice elsewhere (e.g. Brazil and China), is the degree to which education should be focused on developing specific vocational knowledge and skills, or comprise a form of education that generally serves as a foundation for paid vocations; i.e. whether workplace competences or general education should be the primary goal of education. Billet (2009) suggests that the emphases on specific occupational outcomes will probably fluctuate over time as economic circumstances change. As global economic competition has increased, many Western-style countries have intensified the focus on workplace competences within vocational education provisions rather than on more general educational outcomes. Where they exist, these more general purposes are sometimes manifested as more generic workplace competencies suitable for several occupations (Billet, 2009). In many Asian countries, the provision of vocational education is that of technology education undertaken within schools by school-teachers with limited experience outside the school classroom. Here, the educational processes and goals are developed through and enacted within the educational sector that is primarily concerned with general education. Yet, in a different way, in Russia and China there are levels of vocational education that are masked by activities across educational sectors more institutionally distinct than in other countries (e.g. colleges, polytechnics, universities).

Basic education is seen as the essential tool for breaking the cycle of disadvantage (Hughes, 2009). A radical change of approach is necessary to deal with this reality. An approach that provides skills for work can help transform attitudes. The priority in Nepal and other developing countries is to meet the current needs for primary education while also providing help for those currently missing out. It is urgent to help the most vulnerable groups, including skills development for those who are currently restricted in opportunity. Basic education prepares for

both life and work. This new breath for EFA requires a necessary relationship with TVET, given its commitment to linkages with the world of work. Thus, in the mid-2000s, recognising that UPE entails the need for coherent pathways to further education and to skills for employment and self-employment, an international consensus was reached on the need for a holistic, integrated, inter-sectoral approach to education, including TVET.

Bangladesh Experience

In Bangladesh, a number of studies look at the role and impact of TVET on the economy. A baseline study (Rahman et al, 2012) reveals that off-the-job training accounts for only 3.9 percent of total number of trainees in the manufacturing sector illustrating a very poor role of TVET in Bangladesh. According to Mohiuzzaman & Johanson (2011), in total about 19 ministries and departments deliver some type of skills development. The Bangladesh Technical Education Board (BTEB) in the MOE is the apex body responsible for quality assurance through accreditation of training providers, curricula development, examinations and certification. Almost 500,000 students are enrolled in formal TVET programs. Private provides make up about 95 percent of total TVET institutions and about three-fourths of total enrollments. At the secondary level vocational programs (both SSC and HSC) enroll only about 3.3 percent in comparison to general secondary education. About one-third of the 3000+ accredited private training institutions receive "monthly payment orders" (MPOs) that cover 100 percent of basic teacher salaries.

Main strengths of TVET in Bangladesh include: (i) The system of examinations for formal TVET qualifications is well developed and entrenched, particularly in terms of theoretical coverage. (ii) TTCs under BMET tend to be flexible in adopting new programs, following graduates, and in devolution of authority to center managers for raising revenue. (iii) Several excellent quality private providers exist, mainly oriented to disadvantaged youth and adults, such as UCEP and MAWTS. (iv) Excellent examples exist of industry initiatives in training – public-private partnerships in skills provision, including the Chittagong Skills Development Center, and various textile training institutions (BIFT, BKMEA, NITTRAD).

A TVET system can be evaluated according to three criteria: (a) relevance, or external efficiency – does the system meet external economic and social requirements? (b) effectiveness – to what extent does the TVET system reach its objectives in terms of quality of training produced as well as performance of its management and administration? (c) internal efficiency – how well does the TVET system mobilize resources and use them economically?

The weaknesses of the TVET system in Bangladesh include: (i) Economic Relevance: 1. Lack of linkages with employers, (a) centrally employers do not participate in setting training policies or content, or evaluating results; (b) and at institutional level public training institutions do not have mechanisms for consultation with employers and no incentives (authority, accountability) are given to managers or instructors to establish them. 2. Lack of mechanisms for labor market analysis, such as tracer studies. 3. Rigid training supply response – inability to change curricula quickly owing to administrative bureaucracy and lengthy training programs. 4. Improper targeting – a large proportion of students in vocational courses have no intention of practicing the occupations they are studying, and intend to proceed to further education.

Social Relevance – equity and access: 1. Lack of impact by TVET on poverty reduction, including lack of attention to the informal sector. 2. The main barriers to access for disadvantaged are (a) Grade 8 entry requirement (only 60% of students complete grade 5, including those from disadvantaged groups), and (b) lengthy training programs of 2-4 years (lack of short or flexible training that does not interfere with work). 3. Inadequate attention to females, who make up only about one-fifth of formal enrollments. Gender bias exists since more than 90 percent of female students are enrolled in private institutions, paying fees, while male students are relatively more enrolled in public institutions and pay little in fees.

Quality and effectiveness of training delivery: 1. Lack of trained teachers because of (a) low output from teacher training institutions; (b) lack of in-service training opportunities, (c) low salary structure. 2. High incidence (about 50%) of teacher vacancies in public training institutions owing to bureaucratic red tape. It takes at least two years for the Public Service Commission to appoint new teachers. 3. Over-emphasis in testing on theory at expense of practical instruction. 4. Ineffective teaching methods, e.g. lack of competency-based training, and teaching materials. 5. Inadequate facilities, equipment and consumable supplies owing to under financing.

Organizational effectiveness: 1. The National Skills Development Policy (NSDP) and various TVET plans are inconsistent in some respects. None has been analyzed for financial implications and feasibility. In short, a national TVET sector development program has yet to be devised. 2. Weak governance structure – the NSDC meets infrequently and has an unwieldy structure. Central institutions lack clear mandates and sufficient qualified professionals. 3. Lack of statistical information about performance of TVET system. 4. Insufficient quality assurance over non-government provision owing to political interference and understaffing of BTEB. 5. Lack of delegation of authority to training institutions for administration, training programs, budgets.

Finance and internal efficiency: 1. Inadequate financing by government in relation to requirements; insufficient cost recovery from trainees and income-generation activities. 2. Even though the system is underfunded, substantial resources are wasted through high failure and dropout rates, low employment rates and low capacity utilization. Lack of institutional autonomy and accountability is a major factor.

Bangladesh has at least four plans and policies with prescriptions and implications for TVET, including Vision 2021, Education Policy 2010, NSDP 2011 and the Sixth Five Year Plan. The two most important are the TVET strategies in the Education Policy 2010 and the National Skills Development Policy 2011. The TVET section of the Education Policy 2010 makes 23 proposals for TVET. The twenty-three ‘strategies’ tend to concentrate on expansion, access and vertical mobility. The recommendations call for a massive expansion of TVET through adding pre-vocational and vocational education in general and secondary education; new institutions in each sub-district, expansion of technical-vocational teacher capacity, creation of a technical university and extensive introduction of apprenticeship. Several recommendations focus on ensuring vertical mobility from one level of TVET to another. A strong concern for equity is also apparent in ensuring access for handicapped students, ensuring that students in TVET get proportional

allocations, opportunities for underprivileged in privately owned or run institutions, access of adults and dropouts to evening and part-time courses, and financial assistance to enable those who cannot continue studies after Class 8 to pursue technical-vocational education. Two recommendations seek encouragement of private providers for delivery or management of training institutions, including public financial support. One recommendation aims at more efficient use of resources through double shifts. These are positive elements. However, for all the positive elements, the TVET strategies seem to be lacking in other respects: First, there appears to be little concern for instilling a demand orientation into the TVET system – ensuring that it responds to employer and labor market requirements. Instead, the weight of recommendations is supply sided – stresses expansion of TVET enrollments. Second, the recommendations are made without the discipline imposed by financial limits. It is not clear what the various elements would cost and whether the total would be financially feasible. Third, some of the recommendations would seem to contradict those recently adopted in the NSDP. Specifically, specification of levels and standards based on time spent in training is inconsistent with the aim of implementing competency-based training. The shift of all TVET providers under the purview of DTE does not appear in the Skills Policy; in fact, DTE is not even mentioned in the NSDP.

The NSDP was approved by the NSDC chaired by the Prime Minister. It advocates a flexible, demand orientation for skills development and spells out the role of industries as well as training in the workplace. It calls for the imposition of standards and structure for skills development through a qualifications framework and competency-based training rooted in workplace skill requirements. It calls for better use of data in sectoral planning and better institutional management. It makes several key prescriptions to mobilize more resources for skills development and to use resources more effectively. The NSDP is extensive and comprehensive. It has many points to recommend it. These include the move to (1) standardize national qualifications and introduce competency-based training, (2) decentralization of institutional administration (the move towards devolution of teacher recruitment, financial, administrative and academic autonomy), accountability measures and performance monitoring, boards of management including employer representatives, (3) measures to raise quality and relevance (incentives to respond to industry demands, requirement for instructor training and licensing, (4) financing, including performance or output based financing. Still, the NSDP presents myriad prescriptions without indicating priorities. Everything cannot be done at once, so it will be necessary to become more selective in identification of priorities in elaboration of the Action Plan. Second, the Policy was developed without the discipline imposed by financial limits. It is not clear what the various measures would cost, whether they are financially feasible. Third, some of the proposed measures contradict prescriptions in the Education Policy 2010 and the Sixth Five Year Plan. This includes time-based rather than competency-based qualifications, and consolidation of all TVET under DTE. Fourth, many prescriptions are vague, to be worked out later.

Bangladesh is the beneficiary of three major donor-assisted projects in TVET, including the EU/ILO TVET Reform Project (2008-2012, EUR 16 million), the ADB Skills Development Project (SDP- 2008-2013, $67 million) and the World Bank assisted Skills and Training Enhancement Project (STEP – 2010, $88 million). These projects are in the process of addressing many of the chronic issues listed above. Several successes can be noted: the NSDP

has been formulated and approved by the NSDC, including the National Technical and Vocational Qualifications Framework. Eight industry sector councils or sector working committees have been established. Competency-based curricula are being developed and instructors are being trained. Better coordination is needed among donors, in particular, to harmonize approaches. Several donors are working on industrial skills committees (or "sector working groups"), development of competency-based curricula and teacher training. Yet terminology, terms of reference, composition of groups, and formats have not been standardized across projects. Many of the issues are being addressed in the three current investment projects. For example, development of standards, competency-based curricula and in-service teacher training are being undertaken. Many products now being developed under the three projects will need to be extended. The list below suggests some additional areas for reform and investment.

1. Preparation of a sub-sector development program. The existing policies and plans have not yet been elaborated into a sub-sector development program. The NSDP calls for preparation of an Action Plan which could form the basis for a development program. Priority should be given to working out the costs for implementation of the various current policies and plans. The resulting totals are doubtless going to exceed the capacity of government to finance them. The next step is to determine priorities and phasing. Then a national skills development program could be prepared under the auspices of the NSDC.

2. Organizational reform. The NSDP calls attention to the limitations imposed by the present organization and management of TVET. Unfortunately, the Policy does not address the current unwieldy number and level of members of the NSDC, its imbalance on the side of government. Much greater industry and employer participation is necessary in governance of TVET. A study should be undertaken to "to determine whether the Council should be restructured as an autonomous body to maximize its effectiveness". (NSDP 20.5).

3. Reform of teacher recruitment practices. Current levels of teacher shortages hobble quality of instruction and prohibit institutions from releasing staff for in-service upgrading. All signs point to an urgent need to relax the way teachers are hired, both in criteria and procedures. The NSDP includes a two-tier hiring system where technically qualified personnel, and short-term replacements can be hired to fill vacancies. Proposals are well taken in the NSDP and the Education Policy 2010 to create a technical teacher service commission to replace the Public Service Commission in the TVET sub-sector.

4. Devolution and a move to performance-based funding. At present government financing, limited as it is, flows to public and MPO-supported private institutions regardless of their performance in enrollment, examination success rates or employment rates of graduates. Much greater output could be achieved from the existing training infrastructure, both in quantity and quality, by attaching performance conditions to payments. A change to performance-based budgeting would have to be accompanied by greater devolution of authority to training institutions, so their managements could hire staff as needed, take decisions on content to be taught and direct resources to the highest priority expenditures.

5. Support flexible training provision. One must question the economic value of the lengthy SSC (Vocational) program, only 4 percent of whose graduates were found employed in a 2006

tracer study. HSC programs were somewhat better at producing for the labor market, but these institutions are constrained in ability to respond to market needs. A better alternative would be to support expansion of TVET provision outside the formal school system. After students finish their general education and formal schooling, they could enroll for intensive skills development that is shorter and better related to immediate market needs. The TTC model under BMET seems better suited to this approach. Given the extensive support provided at present for development of public sector institutions, including DTE, BTEB and BMET as well as for public providers, a strong case can be made to focus the support on the private sector. This would also tend to avoid chronically slow implementation that occurs through the public sector. A proposed investment project could address two groups: enterprises and private providers.

6. Support for enterprise-based training (EBT). A new investment project in the development phase could support studies on alternative financial means to stimulate enterprise-based training, and during implementation could help contribute to the National Fund for Skills Development. This fund could provide financing to help support apprenticeships as well as direct worker training.

7. Raising skills in the informal sector. Just as enterprises in the formal sector employ skills to produce goods and services, so do enterprises in the informal sector. However, current training efforts tend to neglect the informal economy even though the informal sector accounts for about 80 percent of the labor force, and about 65 percent of all employment outside agriculture. The objective would be to raise productivity and incomes of informal sector workers and enterprises in key non-farm economic sectors. In particular, the proposed investment could finance upgrading of skills of master craftspersons through various means to be defined.

8. Support public-private partnerships (PPP) in training. First, investments could finance PPP arrangements between public institutions and private enterprises, i.e. to provide seed money for PPPs in sub-sectors that wish to establish and operate their own training institutions, e.g. Chittagong Skills Development Center or BKMEA. Second, investments could finance the startup costs of private management of public institutions. A separate fund could be created for this purpose.

According to Kashem et al (2012), Bangladesh like many other countries has a mismatch between the programs run TVET institutions and the skill sets required by industry. TVET programs are mostly supply-driven rather than demand-driven and lack sufficient hands-on practice and industry attachment. To begin to address these issues, the Government of Bangladesh has initiated a number of reforms to the TVET system through its own initiatives and with the help of development partners. Reforms range from new legislation and policies to the establishment of a National Technical and Vocational Qualifications Framework, and a Quality Assurance System and new competency-based training courses. The reforms also involve closer cooperation with industry including the establishment of Industry Skills Councils. Reformed TVET is expected to contribute to national development through more employment and productivity at work, as well as larger numbers of skilled workers going abroad.

I.2 Objectives, Scope and Methodology of the Study

I.2.1 Objectives of the Study

The objectives of the present study include the following:

 To review the implementation status of construction and rehabilitation works of training centers/institutes or similar type of IGAs related training centers under different ministries during the periods 2008-09 through 2012-13.
 To provide information on investment cost of those ADP funded training centers, period of implementation, objectives of training and scope of its works.
 To examine whether the training courses/curriculum are practicable, adequate and economically gainful.
 To see whether there is redundancy in training courses and duplication of training courses being offered by different training centers under different ministries.
 To assess whether the teachers/trade instructors are effectively and adequately trained to impart proper learning and skills to the trainees/students.
 To assess the skills as well as use of skills by number of trainees/students in their practical life.
 To review the present set of human power/instructors/teachers and infrastructural facilities in the sample training centers.
 To assess how far the objectives of training have been achieved in terms of human resource development and overall employment opportunities of male and female youth force of the country.
 To assess the contributions of private technical and vocational training institutes that receive monthly subvention from the government towards human resource development.
 To examine the strengths as well as the present flaws, difficulties subsisting in the selected technical training centers.
 To provide recommendations for more improved policy directions towards quality and effective training courses as well as well-coordinated management and sustainable operation of these training centers.

I.2.2 Scope of the Study

The present study covers only the government technical training institutes as shown by Table-1. As evident, technical training institutes under the Ministry of Education, Ministry of Industries, Ministry of Textiles and Jute, Ministry of Civil Aviation and Tourism and the Ministry of Social Welfare remain outside the purview of the present exercise. A sample of 58 training institutes, 406 training beneficiaries and 59 trainers under five study ministries (Table-1.1) was selected from 33 districts under 7 divisions for the present evaluation study.

Table-1.1: List of Selected Government Training Institutions for the Current Assignment						
Ministry	Directorate	Institution	Total Number of Training Institutes	Sample of Training Institutes	Sample of Graduates	Sample of Trainers
1. Ministry of Expatriates Welfare and Overseas Employment	Bureau of Manpower Employment & Training	Technical Training Center	40	14	43	17
2. Ministry of Youth & Sports	Department of Youth Development	Youth Training Center and others	304[1]	19	224	17
3. Ministry of Women and Children Affairs	Department of Women Affairs	Women Training Centers	64	11	74	13
4. Ministry of Agriculture	Department of Agricultural Extension	Agricultural Training Center	13	8	33	8
5. Ministry of Health and Family Welfare	Directorate of Health Services	Institute of Health Technology	8	6	32	4
Total			**370**	**58**	**406**	**59**

I.2.3 Approach of the Study

The literature on evaluation is extensive and varied. Despite subtle differences, most definitions of evaluation emphasize the need to verify the achievement of objectives, as well as the systematic, ongoing and comprehensive nature of the evaluation processes. In short, evaluation is the systematic and objective assessment of an ongoing or completed project, program or policy, its design, implementation and results. The aim is to determine the relevance and fulfillment of objectives, development efficiency, effectiveness, impact and sustainability. In the present

[1] MYS has 53 residential and 64 non-residential training centers in 64 districts in Bangladesh. In addition to these centers the four training projects (initially funded from ADP and then from Block Allocation) have been evaluated in this study encompassing (26+120+151+7) 304 training centers. These training centers were established in rented houses at the beginning of the projects at district and upazila level, then (after completion of project period) some of them were shifted to residential complex based on the availability of rooms over there. After long discussion with the project directors and administrative officers of those projects, it has been agreed that the number of training centers would be 304 against the number of trainers, trainees and total investment costs related to those projects. Otherwise the cost would be higher or inflated against training centers.

context, the impact evaluation will be based on the contrast between the original situation and what happens once the training has taken place. This contrast will reveal changes that can be attributed to the intervention under evaluation. Information generated by present evaluation exercise will support the decision-making process which will help to adjust, extend, reduce or replace interventions. The present exercise is an ex-post evaluation of technical training centers/IGA institutes in the districts of Bangladesh under different ADP funded projects of selected Ministries.

In recent years, paradigms (examples/patterns) and underlying purposes and assumptions for evaluation of training programmes in Bangladesh have undergone a considerable shift. To complement developing measures of harder outcomes from training, there is a greater awareness of a less mechanistic, more holistic (integrated) training process that emphasizes alignments between individual and national objectives of employment generation and poverty alleviation. To this end, the present study covers the following areas of work: (i) reviewing functional status of training components of the sample institutions; (ii) interviewing passed-out trainees and students; (iii) conducting in-depth discussions and consultative meetings with key persons of relevant Ministries, Principals, teachers of training institutes and Education Officers at district level; and (iv) FGD meetings with public representatives, local administration, community leaders, local elite, students, women leaders, teachers, and concerned stakeholders etc.

For the first component of the work, BIDS had no access to Project documents (PP/DPP), Project Completion Report, Project Evaluation Reports etc., although they were scheduled to be provided by IMED. For the second, third and the fourth components of the work, a field survey was conducted. Since the second component is central to the whole evaluation exercise, a few words may be in order here.

Skills development is critical to unlocking the employment potential of growth, yet skills shortages are becoming an obstacle in realizing this potential in Bangladesh. Bangladesh already has a skills development system, but it is hampered by inadequate links with industry and outdated curriculum, obsolete training equipment/toolkits and ineffective delivery strategies. The overall aim of the ongoing TVET Reform Project in Bangladesh is to reduce poverty by enabling more people to acquire employable skills through wage-earning jobs and self-employment.

Equipping the workforce with the skills required for the jobs of today and tomorrow is a strategic concern in the national growth and development outlooks of Bangladesh. GOB has pledged to support robust training strategies to meet the challenges of fostering strong, sustainable and balanced growth in the country. GOB has identified skills development as a strategic objective and is stepping up investments in skills development. The globalization of markets is accelerating the diffusion of technology and the pace of innovation. New occupations are emerging and replacing others. Within each occupation, required skills and competencies are evolving, as the knowledge content of production processes and services is rising. A major challenge in Bangladesh is simultaneously to enhance the responsiveness of education and training systems to these changes in skill requirements and to improve access to training and skills development. Ultimately, the country's prosperity depends on how many of its people are at work and how productive they are, which in turn rests on the skills they have and how effectively those skills are used. For all practical purposes, marketable skills constitute the

foundation of decent work/employment. One of the premises on which the proposed study will rest is to explore the extent to which the existing training institutes are capable of generating marketable skills.

Basic education gives each individual a basis for the development of their potential, laying the foundation for employability. Initial training provides the core work skills, general knowledge, and industry-based and professional competencies that facilitate the transition from education into the world of work. Lifelong learning maintains individuals' skills and competencies as work, technology and skill requirements change.

Establishing solid bridges between vocational education, training and skills development, and the world of work makes it more likely that workers will learn the "right" skills, namely those required by the evolving demands of labour markets, enterprises and workplaces in different economic sectors and industries. Effective partnerships between government, employers' and workers' organizations, and training institutions and providers are critical to anchor the world of learning in the world of work. Broad and continued access to training and skills development opens up the opportunities for and benefits of both initial and lifelong learning to all, enabling women and men of all ages, in both urban and rural areas, and to fulfil their aspirations. Dedicated policies and measures are required to facilitate access to training and skills development by individuals and groups hindered by various barriers, including poverty and low income, ethnic origin, disability and migrant status. Education and skills policies are more effective when well coordinated with employment, social protection, industrial investment and trade policies. By using up-do-date information, those working in education and training can assess the match between the skills they are teaching and those in demand in the workplace. When that information is put at the disposal of young people and workers by employment and vocational guidance services, it can help them to make better-informed choices about education and training. It is critically important to bridge skills training and the world of work by creating an enabling environment to do away with mismatch between skills created and skills in demand.

By and large, there are three fundamental issues involved in the skills training programmes in Bangladesh: First, preponderance of the informal economy (87.55% of total employment and 43% of total value added in 2010) points to the need for prioritizing skills development for poverty reduction which works very poorly in synergy with productivity and growth. Second, respectable economic growth rates of Bangladesh combined with changing nature of work and challenges and opportunities globalizations presents, means that skills development requirements are ever shifting and increasing the need for both skills upgrading and skills for competitiveness. Thus poverty reduction approach to skills development is not sufficient *albeit* necessary. The third complicating factor regarding skills development in Bangladesh is the issue of migration and mobility (both within the country and overseas) which is driving the need for increased portability (transferability between different occupations and jobs) and recognition (visibility and credibility) of skills (general, vocational and technical skills and core skills). There has been an increased international policy debate on the portability of skills. The topic is discussed in different contexts, e.g. individual employability, efficiency of labour markets, adaptability of enterprises and economies to technological change. Be that as it may, there is a pressing need for responding to this emerging debate. The present study contextualizes these broad issues in order to place the subject-matter of the study in its proper perspective.

I.2.4 Methodology of the Study and Sampling

In order to achieve the objectives of this evaluation assignment, a number of survey units were interviewed. These are technical training institutes, training beneficiaries (graduates during 2008-09 to 2012-13), trainers, concerned officials of the study ministries and departments in the headquarters and the districts, and local stakeholders and the elite. As suggested by the TOR and based on the subsequent discussions with IMED, a sample of 58 training centers (as shown in Table-1.2) under 33 districts from 7 divisions was drawn.

Sample size determination

There are several approaches to determining the sample size. However, probably the most suitable and widely used sample size determination process considers a simple but efficient way. In this approach, one first specifies two critical considerations: (i) desired width of a confidence interval; and (ii) the level of certainty with which inference can be drawn about the population characteristics.

Based on the above, the sample size (n) can be determined using the following formula:

$$n = \frac{Z^2 * (p) * (1 - p)}{d^2} \qquad (1)$$

where,
Z = Z value (e.g. with a normal distribution the value is 1.96 for the 95% confidence interval)
p = target parameters (50% in this case).
d = level of precision.

Now, given that the 95 percent confidence interval is most widely used and given that the 5% level of precision is recognized as fairly precise, we proposed to work with a sample of 384 respondents from the selected districts. But actually we could cover 406 respondents. Non-response was excluded from the list so that we could achieve the complete interviews of 406 respondents. In addition one national workshop will also be carried out to obtain the feedback on the preliminary findings of the study.

Selection of the Respondents

In the first place, a total of 58 training centers have been selected purposively from five Ministries identified earlier. District-wise distribution of the training centers have also been taken into consideration so that they cover 33 districts under 7 divisions as mentioned in Table-1.2 below. In the next stage, desired number of trainees (i.e. the respondents) have been chosen from the list of trainees obtained from the respective training centers. Mainly the principals or head of the training centers were interviewed at the time of questionnaire administration.

The present exercise primarily focuses on the skills acquired by the project beneficiaries through training and their employment impact. However, this exercise involved considerable time to trace down the beneficiaries. Thus a sample of 406 training beneficiaries (graduates) – both male and female – has been adopted for the survey depending upon the availability of the beneficiaries

for interview. In order to maximize the chances of tracing, first-hand information on the graduates was collected from the training centers – the point of departure. Snowball sampling also was used in tracing the graduates for interview. Key informants, such as teachers/trainers, and community leaders were also be approached to this end. In interviewing the graduates who were difficult to locate, snowball or chain referral sampling was followed. In addition, a sample of 59 trainers representing leading training courses was selected for in-depth interview (Table-1.2). In order for the samples of the survey units to be representative of seven administrative divisions and five study ministries, the geographic distribution of the survey units across districts happen to be heterogeneous. This is particularly because during the time of the survey some graduate respondents were located in districts other than the district of his/her training center. Besides, MOA has 15 ATIs in 15 districts under 7 divisions (Appenmdix-1 Table-2.4), MOH&FW has only 8 IHTs in 8 districts under 7 divisions (Appendix-1 Table-2.5) and MEWOE has 38 TTCs in 31 districts which contribute to the wider geographic dispersion of graduate respondents. Finally, availability of the graduate respondents mattered.

Table-1.2: Selection of Survey Districts with Survey Units and Samples

Division	District	Sample of Trainers	Sample of Training Centers	Sample of Graduates	Sample of Graduates by Five Study Ministries				
					MEWOE	MYS	MoWCA	MOA	MOH&FW
Dhaka	Dhaka	14	12	76	10	43	13	5	5
	Narayanganj	3	3	14	2	9	3	-	-
	Narshingdhi	-	-	1	-	-	-	1	-
	Gazipur	1	1	-	-	-	-	-	-
	Manikgonj	-	-	1	-	1	-	-	-
	Kishoregonj	-	-	1	-	-	-	1	-
Chittagong	Chittagong	7	7	45	4	25	8	3	5
	Feni	2	2	16	1	11	4	-	-
	Noakhali	1	1	4	2	-	-	2	-
Khulna	Khulna	4	5	23	1	13	4	4	1
	Jhinadha	2	3	21	-	12	5	-	4
	Bagerhat	-	-	1	-	1	-	-	-
	Jessore	-	-	3	2	1	-	-	-
	Chuadanga	-	-	1	1	-	-	-	-
	Satkhira	-	-	1	-	-	-	1	-
	Meherpur	-	-	2	-	1	-		1
	Kustia	-	-	1	-	-	-	1	-
Rajshahi	Rajshahi	4	3	21	2	11	4	-	4
	Pabna	3	2	16	1	10	4	1	-
	Sirajgonj	-	-	3	-	1	-	1	1
	Natore	-	-	4	-	2	-	1	1
	Chapainawabgonj	-	-	1	1	-	-	-	-
	Bogra	-	-	2	-	-	-	2	-
Rangpur	Rangpur	4	4	25	3	13	6	3	-
	Gaibandha	3	2	16	-	11	4	-	1
	Nilphamari	-	-	2	1	1	-	-	-
	Kurigram	-	-	1	-	1	-	-	-
	Dinajpur	-	-	3	2	-	-	-	1
Barisal	Barisal	4	4	32	4	19	4	2	3
	Patuakhali	2	2	18	2	11	5	-	-

	Jhalakathi	-	-	2	-	-	-	1	1
Sylhet	Sylhet	3	5	31	4	14	5	3	5
	Moulovibazar	2	2	18	-	13	5	-	-
Total		59	58	406	43	224	74	33	32

The study is based on both qualitative and quantitative data and information. Since the purpose of the assignment was to assess the implementation status of the project as well as the impact of the project on the life of beneficiaries, it was also necessary to closely interview the concerned project personnel in order to draw upon their experiences. In a similar vein, in order to capture the changes that occurred due to interventions of the major components of the project it was critically important to personally interview the key informants and discuss with other stakeholders and the local elite.

A number of survey instruments were applied in conducting the field survey. For the training institutes, a questionnaire was pre-designed to elicit information primarily on the training courses – curricula and duration including occupational profile they fit in, program functioning, effectiveness and efficacy of the training institutes. The training center questionnaire comprised fundamental details to identify and characterize each training center, including staff, curricula, disciplines of courses, participants and graduates, payment for training and quality assurance framework of the training centers. It allowed the calculation of the internal success rate (number of graduates out of participants) of the different training courses implemented by the assessed institutions, and the establishment of associations between those results and other organizational aspects of the training centers like the composition and qualifications of its staff, the curricula used, the duration of the courses, work experience etc. Similarly, for the trainers a separate questionnaire was prepared in order to draw upon their training experiences. For the training beneficiaries, five sets of questionnaire for trainees under five ministries were prepared covering primarily their age, sex and educational qualifications, pre-training employment and income status, training courses received by them, their post-training status in terms of wage and self-employment, their current income, whether unemployed including reasons for being unemployed, whether employment services are received, and the like. The graduate questionnaires also assessed the opinion and impression of the former trainees on the training center, including the aspects related with the training contents (theoretical and practical components) and the quality of trainers and facilities. This established direct links between graduates, training centers and courses, allowing the definition of the external success rate (number of people working in their field of training out of the number of graduates of the respective courses) of those institutions and training programmes. Thus the survey of the training beneficiaries represents an exercise of tracer studies on the effectiveness of the skills training as a factor to promote employability. Key informants were interviewed with a pre-designed checklist. Other stakeholders and the local elite were interviewed through focus group discussions (FGDs).

II. Overview of Technical Training Centers/IGA Institutes of the Five Study Ministries

II.1 Ministry of Expatriates' Welfare and Overseas Employment

In order to provide renewed emphasis to the promotion of overseas employment, the Ministry of Expatriates' Welfare and Overseas Employment (MEWOE) was established on 20 December 2001. The main objective of the MEWOE is to ensure welfare of the expatriate workers and enhancement of the overseas employment. The MEWOE is rendering ceaseless efforts in enhancing the flow of remittance and to provide equal opportunity for the people of all areas of the country for overseas employment and ensuring overall welfare of the migrant workers. To this end, Bureau of Manpower, Employment and Training (BMET) under the MEWOE has as many as 38 Technical Training Centres (TTCs) and one Bangladesh Institute of Marine Technology (BIMT) to train young people in order to make them employable for overseas jobs. One TTC provides training in a number of trades. Trade-wise training statistics of TTCs and BIMT are presented in Appendix-1 Table-2.1. Training courses in the trades related to marine technology are presented in Appendix-1 Table-2.2.

II.2 Ministry of Youth and Sports

Ministry of Youth, later named as the Ministry of Youth and Sports (MYS), was established in 1978 with a view to converting the unproductive youth force into a productive workforce of the country. For all practical purposes, the youth provide the country's human resource pool and leadership base that is needed for social transformation and sustainable development. For the implementation of the youth development programs at the field level Department of Youth Development (DYD) was created in 1981. DYD provides training mostly in basic skills through 53 national Youth Training Centers (YTCs) and mobile training facilities. In order to place the unemployed youth in self-employment and paid employment DYD provides formal training in 33 trades and informal training in 41 trades. DYD training program targets male and female secondary school dropouts and the unemployed youth aged 18-35 years. It provides training in technical trades, secretarial courses, dressmaking, block and boutique, printing, pisci-culture, livestock rearing, poultry, etc. As of June 2013, DYD has trained as many as 40,46,159 male and female youths in modern agriculture and technology[2]. Training in one or more trades is provided in several training centers spread over 64 districts and 490 Upazilas of the country. These courses are often provided in partnership with some NGOs, such as BRAC. However, these courses are not affiliated with Bangladesh Technical Education Board (BTEB). DYD is also operating self-employment schemes for youth by offering training in a variety of skills, such as welding, electrical wiring, radio and TV repair, garment making, dairy farming and poultry. In this evaluation study four ADP funded training projects have been studied namely 'Establishment of Twenty Six New Youth Training Centre,' 'Teaching Training Project for Unemployed Youth (Phase-II),' 'Expansion of Training Programme on Electrical and House wiring in 41, Electronics in 55 and Air-Conditioning & Refrigeration in 55 of the remaining District' and 'Establishment of Eighteen New Youth Training Center (1st Phase-8 Centers).' The

[2] DYD, Training Annual Almanac, 2013-2014.

first project started on 1 July 1997 and completed on 30 June 2006. After completion of project duration the activities were run from the Block Allocation of the government. Second one was also run by Block Allocation after 30 June 2006, the third one after 30 June 2011 and the fourth after 30 June 2007. These four projects were initially started in rented houses with 304 centers all over Bangladesh. After the project duration some of the centers were transferred to permanent building of the YTC depending upon availability of the rooms over there. Even in 2012-13 fiscal year 18,754 trainees completed their graduation from the training courses under these four projects.

II.3 Ministry of Women and Children Affairs

Ministry of Women and Children Affairs (MoWCA) through its Department of Women Affairs (DWA) is involved in skill development of the unemployed women for self-employment through its several training centers. Women training centers (WTCs) are spread over 64 district sadars and 136 Upazilas. One training center provides training in a number of courses. Details of the DWA training courses are presented in Appendix-1 Table-2.3.

II.4 Ministry of Agriculture

Department of Agricultural Extension under the MOA conducts pre-service training. Under training division there are 15 ATIs. Under the supervision of Agriculture Training Institutes (ATIs) diploma training course in agriculture is offered. This training course is BTEB approved. During 2009-13 number of admitted students were 11,564 and the number of passed students were 9807. In addition to in-service foundation and induction training and farmers' training there are two other training courses: (i) Diploma Course in Agriculture in 15 institutions (intake capacity of 2,480 annually); and (ii) Diploma distance courses for more than 20,000 in-service block supervisors (BTEB affiliated). Details of 15 ATIs and their intake capacity are presented in Appendix-1 Table-2.4.

II.5 Ministry of Health and Family Welfare

Ministry of Health is responsible for training of medical specialists. Medical colleges produce some 2500 medical graduates and dental surgeons annually. Training facilities exists for paramedics: x-ray technicians, radiographers, dressers, dental technicians, health assistants, midwives, physiotherapist, dental assistant, dietitian, laboratory technician, etc. Since 2005, new private hospitals and clinics have emerged with increased training facilities for health care workers. Institute of Health Technology (IHT) awards 4-year diploma (B.Sc.) in medical technology in eight courses and certificate in two courses (ophthalmic assistance, community health work). To establish a new IHT introduction of at least two courses is mandatory. Total number of seats in the eight IHTs is 2422 as detailed in Appendix-1 Table-2.5. The training courses of IHTs are approved and controlled by State Medical Faculty of Bangladesh and Pharmacy Council of Bangladesh.

III. Evaluation of Technical Training Centers/IGA Institutes during the Periods 2008-09 through 2012-13

III.1 Implementation Status of Construction and Rehabilitation Works of Training Centers/Institutes or IGAs Related Training Centers

From Appendix-1 Table-3.1 it is clear that for the MEWOE, no construction and rehabilitation works of Technical Training Centres (TTCs) are reported for 2008-09/2009-10 period. For the remaining three years these works are ongoing partly due to involved process and delay in fund release. For MYS, progress of implementation of construction and rehabilitation works of Youth Training Centres (YTCs) looks so far so good. Construction and rehabilitation works of the Women Training Centres (WTCs) of the MoWCA are still ongoing. However, for the MOA, all the construction and rehabilitation works of the Agricultural Training Institutes (ATIs) are complete indicating high achievement. Similar is the achievement of the MOH&FW in the implementation of construction and rehabilitation works of the IHTs.

Currently, MEWOE has as many as 38 technical training centres (TTCs) conducting 48 training courses. These training centres enrolled 327,827 trainees and produced 317,265 graduates accounting for on average 96.78 percent achievement of training during 2008-09/2012-13 (Table-3.1). MYS has 304 training centres with 20 courses under four projects which targeted 128,417 trainees and produced 125,381 graduates accounting for on average 97.64 percent achievement of the target during the same period (Table-3.2). FGDs with the trainers of the YTCs, however, reveal that fail to pass rate of the trainees varies from 1.64 percent in computer training to 2.5 percent in other trades. MoWCA has 64 training centres with 5 courses and enrolled 28,800 trainees and produced 28,747 graduates accounting for on average 99.82 percent success of training during 2010-11/2012-13 (Table-3.3). MOA has 15 training centres with only one course (4 years Diploma Course in Agriculture) and targeted 12069 trainees and produced 11698 graduates with an average 96.93 percent success rate during the study period (Table-3.4). MOH&FW has eight IHTs with ten training courses and enrolled 10802 trainees and produced 8951 graduates with an average pass rate of 82.86 percent (Table-3.5).

Table-3.1: Total Number of Training Institutes, Courses, Enrolment and Achievement of Training (MEWOE)

Year	Total number of training centres	Total number of courses	Total number of trainees enrolled	Total trainees passed		Total number of trainers	Trainees trainer ratio
				Number	%		
2008-09	38	42	49025	47140	96.16	1118	44
2009-10	38	43	51186	49456	96.62	1110	46
2010-11	38	45	67863	65569	96.62	1101	62
2011-12	38	48	76941	74700	97.09	1084	71
2012-13	38	48	82812	80400	97.09	1079	77

Source: Data collected from MEWOE.

Table-3.2: Total Number of Training Institutes, Courses, Enrolment and Achievement of Training (MYS)							
Year	Total number of training centres	Total number of courses	Total number of trainees enrolled (target)	Total trainees passed		Total number of trainers	Trainees trainer ratio
				Number	%		
2008-09	304	20	30248*	28273	93.5	807	35
2009-10	304	20	24726*	26093	105.52	807	32.33
2010-11	304	20	27020*	27381	101.34	805	34.01
2011-12	304	20	25457*	22668	89.04	805	28.16
2012-13	304	20	20966*	18754	89.45	805	23.3

Source: Data collected from DYD

Table-3.3: Total Number of Training Institutes, Courses, Enrolment and Achievement of Training (MoWCA)							
Year	Total number of training centres	Total number of courses	Total number of trainees enrolled	Total trainees passed		Total number of trainers	Trainees trainer ratio
				Number	%		
2008-09	-	-	-	-	-	-	-
2009-10	-	-	-	-	-	-	-
2010-11	64	5	3200	3147	98.34	320	10
2011-12	64	5	12800	12800	100.00	320	40
2012-13	64	5	12800	12800	100.00	320	40

Source: Data collected from (MoWCA)

Table-3.4: Total Number of Training Institutes, Courses, Enrolment and Achievement of Training (MOA)							
Year	Total number of training centres	Total number of courses	Total number of trainees enrolled	Total trainees passed		Total number of trainers	Trainees trainer ratio
2008-09	14	1	2682	2593	96.68	161	17
2009-10	14	1	2175	2407	110.67	161	14
2010-11	14	1	2436	2309	94.79	161	15
2011-12	14	1	2371	2023	85.32	161	15
2012-13	15	1	2405	2366	98.38	172	14

Source: Data collected from DAE.

Table-3.5: Total Number of Training Institutes, Courses, Enrolment and Achievement of Training (MOH&FW)							
Year	Total number of training centres	Total number of courses	Total number of trainees enrolled	Total trainees passed		Total number of trainers	Trainees trainer ratio
				Number	%		
2008-09	6	5	1800	1440	80.00	111	16
2009-10	6	5	1800	1458	81.00	111	16
2010-11	7	8	2100	1743	83.00	117	18
2011-12	8	10	2500	2125	85.00	132	19
2012-13	8	10	2602	2185	83.97	132	20

Source: Data collected from (MOH&FW)

III.2 Investment Cost of the ADP Funded Training Centers, Period of Implementation, Objectives of Training and Scope of its Works

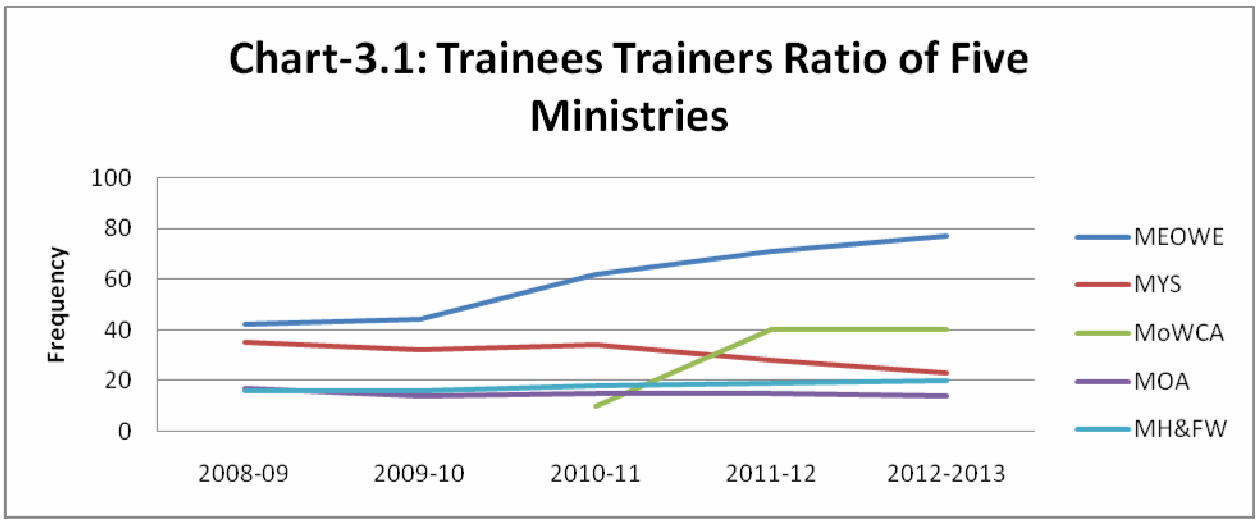
Appendix-1 Table-3.2 presents information on investment cost of the ADP funded training centers and period of implementation for the five study ministries. In the case of MEWOE the relative share of training cost increased sharply from 1.7 percent in 2011-12 to 11.1 percent in 2012-13. Key objective of the training is human resources development primarily for overseas employment. Training courses offered encompasses: marine engineering, ship building engineering, marine diesel engine artificer, ship fabrication, civil drafting, mechanical drafting, refrigeration & air-conditioning, general electronics, automotive/automechanics, carpentry/wood works, plumbing, construction/civil construction, general mechanics, dress making/garments, consumer electronics, computer operation, troubleshooting & networking, pattern making, marker making & cutting, electrical machine maintenance, welding & fabrication, architectural drafting with Auto CAD, electrical house wiring, arc & gas welding auto CAD 2D & 3D, machine tools operation, auto-mechanics with drioing, ship building & mechanical drafting, building & architectural drafting, welding (6G), housekeeping, graphics & design, fruit & food processing, plastic technology, catering, shuttering, boutique/block, rod binding, tiles fixture, masonry, mechanical fitting, sewing machine operation, mid level garments supervision, English Language, Korean Language, TIG/MIG welding, duct fabrication, quality control management (garments), sewing machine maintenance.

For the MYS, infrastructure cost on training institutes has increased dramatically from Tk. 281.01 lakh in 2010-11 to Tk.5941.08 lakh in 2012-13, while the relative share of training cost steadily declines sharply from 100 percent during 2008-10 to 22.73 percent in 2012-13 despite increasing fund allocation (Appendix-1 Table-3.2). Key objective of training provided by the MYS is the paid and self-employment for the unemployed youth force and poverty alleviation of the country. Scope of training includes courses on: refrigeration and air-conditioning, electrical and house-wearing, electronics, computer, and livestock, fishery and agriculture as well as overall morale and health care. Similarly, for the MoWCA also, the relative share of training cost steadily declines sharply from 100 percent during 2010-11 to 37.77 percent in 2012-13 despite increasing fund allocation (Appendix-1 Table-3.2). Key objective of training provided by the

MoWCA is the self-employment for the unemployed women youth force and poverty alleviation of the country. Scope of training includes courses on: modern tailoring, candle making, mobile phone servicing, nursery/kitchen gardening and paper packet making. For the MOA, however, the relative share of training cost tends to increase sharply from 30.21 percent in 2008-09 to 85.75 percent in 2012-13 despite erratic trend in fund allocation (Appendix-1 Table-3.2). Key objective of training provided by the MOA is the human resources development (HRD) of the country. Scope of training includes four-year diploma course in agriculture. In the case of MOH&FW the relative share of training cost increased sharply from 13.89 percent in 2008-09 to 48.5 percent in 2012-13. Key objective of the training is human resources development in the health services of the country.

III.3 Practicability, Adequacy and Economic Gainfulness of the Training Courses/ Curriculum

As for the MEWOE, the training courses are practicable in terms of adequacy of finance as well as the spontaneous participation of the trainees, but not in terms of availability of trainers, training equipment and teaching materials. Chart-3.1 indicates that the number of trainers steadily decreases with steady increase in enrolment. Consequently, trainee-trainer ratio increases steadily indicating continuously increasing training class size. Same is the case with the training courses of the WTCs under the MoWCA. YTCs and ATIs are faring much better in delivering courses while IHTs lie in between. Numerous studies have investigated the influence of class size on trainee attitudes, behaviours, and outcomes. The conventional wisdom among



Source: Calculated from Table-3.1, Table-3.2, Table-3.3, Table-3.4 & Table-3.5.

parents, teachers, school administrators, and policy makers is that smaller class sizes translate to improvements in trainees' learning and outcomes. This conventional wisdom is supported by the present empirical evidence. In fact, both class size and trainees' load negatively impact trainees' assessments of courses and instructors. Individual trainee learning and outcomes decline as class size increases. Large classes (more trainees) may allow trainees to be more disruptive, allow them to "hide" from participation, engagement, or even attendance, while small classes may more easily lend themselves to pedagogical activities that improve learning, such as hands-on

activities and trainee-faculty classroom interaction. Large classes and heavy trainees' loads appear to prompt training faculty to alter their courses in ways deleterious to trainees. The field survey reveals that these training courses are not adequate in imparting marketable skills for employment and hence not so economically gainful for the training beneficiaries as expected. Government tries to ensure that the course curriculum should be relevant to students' interest and aspirations while at the same time it should address the needs of the job market.

For the MYS, the problem of management of training figures most prominently. KIIs and FGDs with the trainers reveal that the trainers have to go without salary consecutively for 3 – 15 months telling heavily upon the subsistence, commitment and teaching quality of the trainers. As for the ATIs, according to the IFDC report (2014)[3], the Syllabus Preparation subcommittee of the BTEB approved the inclusion of fertilizer deep placement (FDP) technology in the Plant Nutrition and Fertilizer Management course in the Agriculture Diploma Course Syllabus. The sub-committee's decision validates the relevance and value of the technology and will help sustain and diffuse FDP in Bangladesh. Plant Nutrition and Fertilizer Management is taught to fourth semester agriculture diploma students. Current students are being taught about FDP technology from both theoretical and practical perspectives during the May-September 2013 semester of the current session. As a result, agriculture diploma students from 14 government ATIs and 142 private ATIs will gain understanding and knowledge of the yield-increasing, cost-saving and environmentally friendly FDP technology. The first group of these students will enter the job market in 2015. They will begin impacting Bangladesh's agriculture sector in a similar manner to the nearly 6,100 students who received diplomas in the 2011-2012 session.

ATI diploma graduates' knowledge of FDP will contribute significantly to sustaining and diffusing the technology. The graduates typically join the DAE as sub-assistant agriculture officers (SAAOs) and as field officers in many agriculture projects and programmes implemented by donors, the government and local nongovernmental organizations (NGOs). The SAAOs implement and monitor agriculture programmes with farmers at the block level. Their education, knowledge and cooperation are important to the success of government and development organizations' agricultural activities. To assist FDP education sustainability at the ATIs, Accelerating Agriculture Productivity Improvement (AAPI) project of IFDC has initiated training of trainers (TOT) programmes for the instructors of both government and private ATIs. The TOT programmes included 310 instructors at 155 ATIs as of May 2013. The fourth semester diploma students of the current session are being taught FDP technology under the Plant Nutrition and Fertilizer Management course by these trained instructors.

[3] Accelerating Agriculture Productivity Improvement (AAPI), Quarterly Progress Report (October-December 2013), Submitted to USAID-Bangladesh Cooperative Agreement Number AID-388-A-10-00002 by IFDC, Alabama, USA, www.ifdc.org, January 2014.

III.4 Redundancy in Training Courses and Duplication of Training Courses being Offered by Different Training Centers under Different Ministries

Field survey reveals that the training courses are need-based and there is no redundancy in training courses conducted by the training centers under the five study ministries. Generally, the training courses are found to be market relevant but they have very little or no correspondence to the acquisition of competence by the trainees. However, the sample training centers are providing the same training in several trades. Computer, refrigeration and air-conditioning, electronics, housekeeping and garments are the trades which are common in the TTCs and YTCs. This duplication of training courses, however, does not seem to matter because the training centers are differently located. Instead, this provides greater access to training in these trades which demonstrate large existing and potential market demand both at home and abroad.

III.5 Effectiveness and Adequacy of Trained Teachers/Trade Instructors to Impart Proper Learning and Skills to the Trainees

The study finds that the training centers do not have adequate capacity (teacher experience of the workplace, the equipment, or resources) to deliver the training that the industry requires. Several FGDs have been conducted to assess the adequacy and quality of the instructors/teachers. One with the trainers of the MYS, one with the trainers of the MEWOE and the other with the teachers of IHT. Almost 15 trainers participated in the first FGD, 10 in the second and 7 in the third . FGD with the MYS trainers shows that the teachers are in most cases bachelor or master degree holders in their respective areas of training. But they agreed that their own training is outdated and they need on-the-job training to learn about the new technologies and techniques. This points to the pressing need for recruiting competent trainers. In contrast, TTCs and IHTs have serious shortage of teachers. Currently, IHTs are depending mostly on part-time teachers from different medical colleges. As noted earlier, TTCs and WTCs also suffer from shortage of trained teachers. ATIs present lone case of adequate and effective trained teachers.

III.6 Review of the Present Set of Human Power/Instructors/Teachers and Infrastructural Facilities in the Sample Training Centers

On the basis of available evidence and FGDs findings, one can safely conclude that there is dearth of qualified and adequately trained teachers in all the training centers under five study ministries. Training centers of the MYS have teaching faculty that needs updated and additional training both at home and abroad. These trainers need competency based training to deliver modern training for the trainees. The field survey finds that inadequacy of infrastructural facilities, including insufficiency of training instruments and fund for purchasing new equipment for training, prevails in all the sample training centers.

IV. Achievement of the Objectives of Training in terms of Human Resource Development and Overall Employment Opportunities of Male and Female Youth Force

IV.1 Acquisition and Use of Skills by Trainees in their Practical Life

The field survey finds that the largest proportion of the sample graduates (36.45%) who acquired skills through training were between the ages of 25 and 29 years followed in order by 20-24 age group (29.31%) and 30-34 age group (18.97%). Thus youth sample graduates (15-29 years) account for 73.89% of the total sample. This shows that vocational training interests the youth force including school/college/university leavers and the dropouts at various education levels. The distribution of graduates by gender shows the same pattern. Table-4.1 shows the distribution of sample training beneficiaries (graduates) by age group and gender.

Table-4.1: Distribution of Training Beneficiaries (Graduates) by Age Group

Age Group (Years)	Male	Female	Total	%
15-19	20	13	33	8.13
20-24	88	31	119	29.31
25-29	104	44	148	36.45
30-34	60	17	77	18.97
35-39	9	14	23	5.67
40-44	2	1	3	0.74
45-49	1	2	3	0.74
All Groups	284	122	406	100.00

Source: Field survey data.

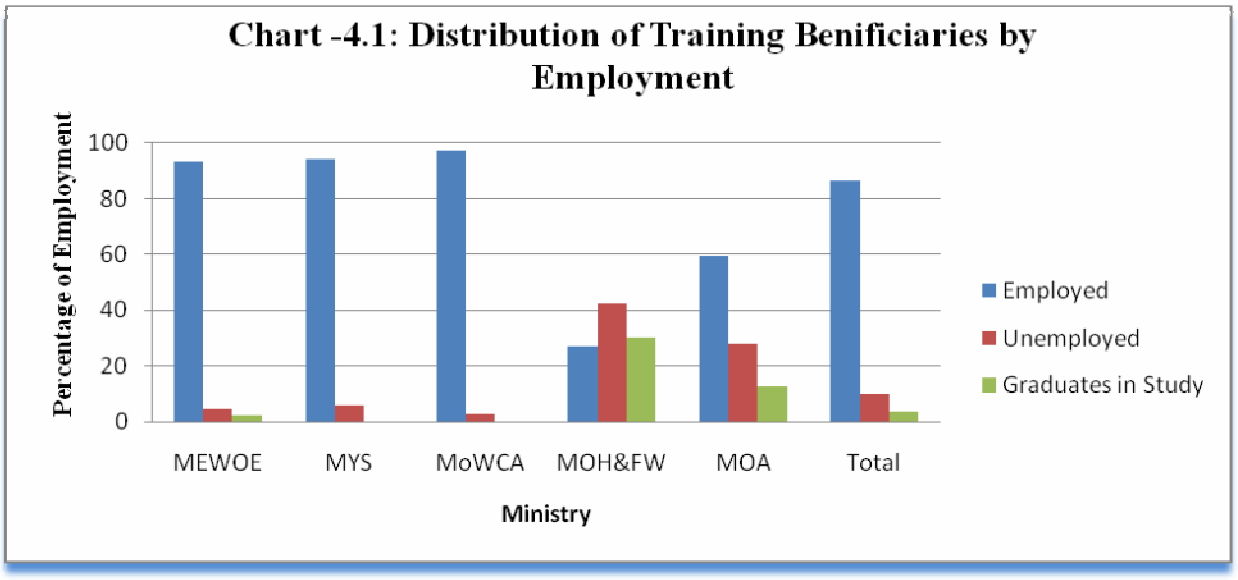
IV.2 Employment and Unemployment Status of Graduates

Employment outcome of training across all training centres except those under the MOH&FW is remarkable. Highest achievers are the training institutes under the MoWCA (97.3%) followed in order by MYS (94.2%) and MEWOE (93.02%). As regards the employment status of the graduates trained by BMET under MEWOE, a few words are in order here. Although these graduates are targeted for overseas employment many of them do not find a job overseas readily. These graduates are recorded in the BMET data base. On the placement of demand letter by the overseas employers, most competent of the graduates are sent abroad in the first lot in accordance with the requirements of the foreign employers. The rest are maintained in the data base and are sent abroad when fresh demand letters are placed by foreign employers. Meanwhile, these graduates get employed inside the country or remain unemployed. The present study covers only those BMET graduates who stayed inside the country during the field survey.

Surprisingly, the share of unemployed graduates is the highest in the case of training centres under the MOH&FW (42.42%) followed by those under the MOA (28.13%). This can be explained partly by the largest share of the graduates pursuing higher studies in the case of MOH&FW followed by MOA (Table-4.2 and Chart-4.1) and partly by little and less relevance of skills training to market demand.

Table-4.2: Distribution of Training Beneficiaries by Employment and Unemployment								
Ministry	Total Employed Graduates		Total Unemployed Graduates		Graduates in Higher Studies		Total Number of Graduates	
	Number	%	Number	%	Number	%	Number	%
MEWOE	40	93.02	2	4.65	1	2.33	43	100.00
MYS	211	94.20	13	5.80	-	-	224	100.00
MoWCA	72	97.30	2	2.70	-	-	74	100.00
MOH&FW	9	27.27	14	42.42	10	30.30	33	100.00
MOA	19	59.38	9	28.13	4	12.50	32	100.00
All Ministries	351	86.45	40	9.85	15	3.69	406	100.00

Source: Field survey data.

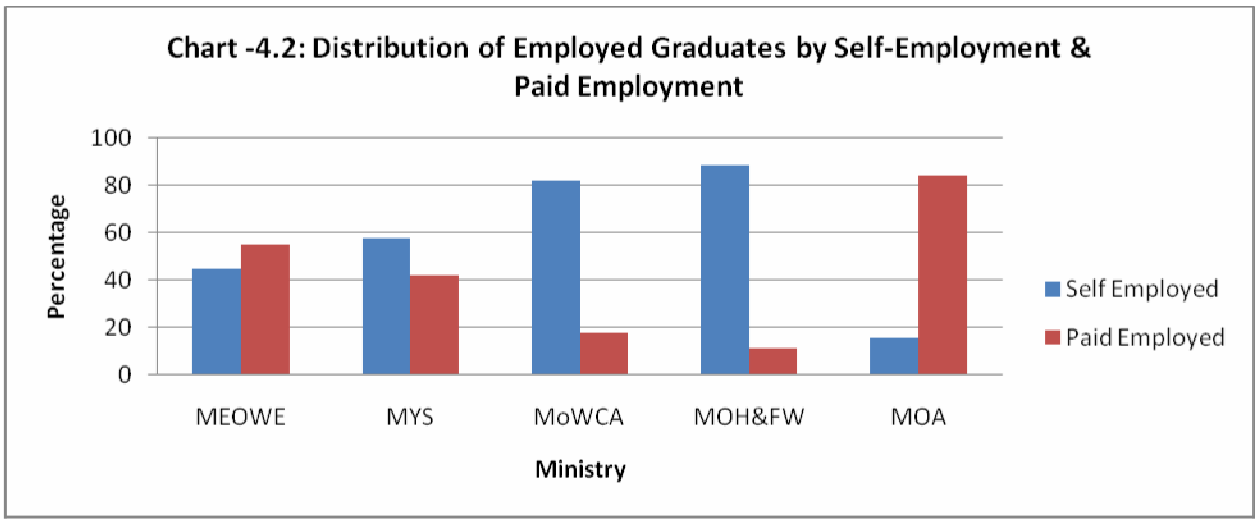


Source: Calculated from Table-4.2.

Among the employed graduates on average 59.83 percent are self-employed while the remaining 40.17 percent are paid employed. As expected, Table-4.3 and Chart-4.2 show that the incidence of self-employment is the highest in the case of graduates under MOH&FW (88.89%) followed by MoWCA (81.94%). Such high level of self-employment indicates the great fragility of the labour market, and is mostly the outcome of limited wage employment opportunities. They reflect a survival strategy for the graduates forced to take up small-scale own-account informal activities.

Table-4.3: Distribution of Employed Graduates by Self and Paid Employment										
Ministry	Self-employed				Paid employed				Total Employed	
	Male	Female	Total	%	Male	Female	Total	%	Number	%
MEWOE	12	6	18	45.00	19	3	22	55.00	40	100.00
MYS	115	7	122	57.82	73	16	89	42.18	211	100.00
MoWCA	-	59	59	81.94	-	13	13	18.06	72	100.00
MOH&FW	7	1	8	88.89	1	-	1	11.11	9	100.00
MOA	3	-	3	15.79	16	-	16	84.21	19	100.00
All Ministries	137	73	210	59.83	109	32	141	40.17	351	100.00

Source: Field survey data.



Source: Calculated from Table-4.3.

Distribution of employed graduates by sectors and trades is illuminating. Professional, scientific and technical services account for the largest share (29.1%) of the employed graduates followed in order by electricity, gas, water & related services (26.8%) and information and communication technology (17.7%) indicating their high market demand because these trades impart cross-cutting skills portable across sectors and feed back newly emerging occupations. Agriculture, forestry and fishery (7.1%) and educational services (6.8%) also reveal moderate demand because they represent conventional trades. Besides, the economy is fast transforming from agriculture to services. Hospitality & tourism, transport, storage & communication, and readymade garment (RMG) are found to be least in demand (Table-4.4) because of their low profile and less prospects. Besides, in the RMG sector, there are several showcase examples of private training institutes managed by BGMEA and BKMEA in addition to on-the-job training.

Table-4.4: Distribution of Employed Graduates by Sectors/Trades

	Employed Graduates	
	Number	%
Agricultural, forestry & fishery	25	7.1
Manufacturing including RMG	1	0.6
Electricity, gas, water & related services	94	26.8
Wholesale & retail trade, repair of motor vehicles & related services	8	2.3
Hospitality & tourism services (hotels & restaurants, travel)	1	0.3
Information and communication Technology (ICT)	62	17.7
Transport, storage & communication	1	0.3
Professional, scientific & technical services	102	29.1
Public administration & supporting services	4	1.1
Education services	24	6.8
Health & social work	6	1.7
Modern Tailoring and Embroidery	9	2.6
Other services not elsewhere classified	13	3.7
Total	351	100.0

Source: Field survey data.

This study also intended to establish graduates mobility across area of specialisation, between jobs within the same area of specialisation and reasons for such movement. In doing so, the study

established that graduates are still employed in their areas of specialisation in training. Table-4.5 shows percentages of a cross tabulation of area of specialisation at a Vocational Training Institute (VTI) against area of specialisation at current employment. The table shows that 71.43 percent of graduates from the professional, scientific & technical services trades remain employed in their area of specialisation and similarly, 58.24% of those who specialised in ICT and 53.93% of those who specialised in electricity, gas, water and related services are employed in their area of specialisation. This shows that there is limited mobility in employment and limited portability of skills across these areas of specialization. This could indicate that the skills obtained from areas of specialization at a VTI are unique and highly specialised. However, Table-4.5 further shows that 55.55 percent of graduates in health and social services were employed in other services not elsewhere classified. This shows commonality and portability of skills among several areas of specialization reflecting greater access of graduates in health and social services to employment.

Table-4.5: Comparison of Area of Specialization in Training of the Graduates with their Area of Specialization in the Current Job

Area of Specialization in Training		Area of Specialization in the Current Job							Total
		Agriculture, forestry & fishery	Electricity, gas, water & related services	Hospitality & tourism services (hotels & restaurants, travel)	Information and communication Technology (ICT)	Professional, scientific & technical services	Health & social work	Other services (including public administration & supporting services) n.e.c.	
Agriculture, forestry & fishery	Count	16	-	-	-	7	1	17	41
	%	39.02	-	-	-	17.07	2.44	41.47	100.00
Electricity, gas, water & related services	Count	-	48	-	1	29	1	10	89
	%	-	53.93	-	1.12	32.58	1.12	11.24	100.00
Hospitality & tourism services (hotels & restaurants, travel)	Count	-	-	1	-	-	1	1	3
	%	-	-	33.33	-	-	33.33	33.33	100.00
Information and communication Technology (ICT)	Count	-	-	-	53	5	-	33	91
	%	-	-	-	58.24	5.49	-	36.26	100.00
Professional, scientific & technical services	Count	-	5	-	3	35	-	6	49
	%	-	10.20	-	6.12	71.43	-	12.24	100.00
Health & social work	Count	-	-	-	-	4	-	5	9
	%	-	-	-	-	44.44	-	55.55	100.00
Other services not elsewhere classified (n.e.c.)	Count	-	1	-	3	5	-	60	69
	%	-	1.45	-	4.35	7.25	-	86.96	100.00
Total	Count	**16**	**54**	**1**	**60**	**85**	**3**	**132**	**351**
	%	4.56	15.38	0.28	17.09	24.22	0.85	37.61	**100.00**

Source: Field survey data.

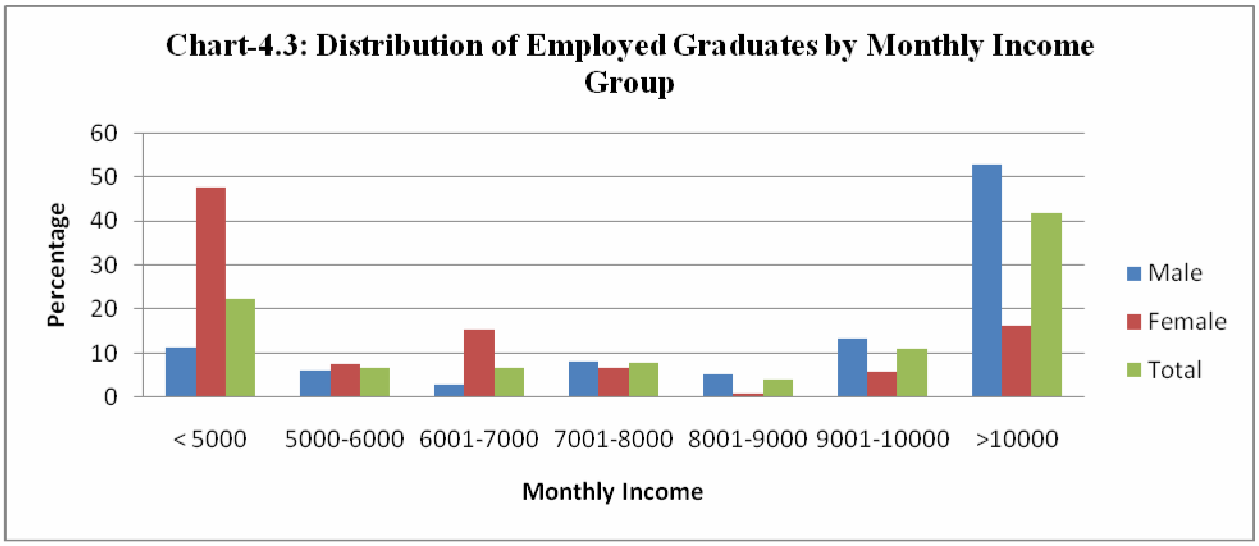
The income impact of training conducted by the five study ministries is respectable. Average monthly income of the employed graduates amounts to Tk. 11,698 compared to national monthly income per earner at Tk. 8,795 (HIES-2010). However, there is considerable difference of monthly income by gender. Average monthly income of the male employed graduates amounts to Tk. 13,890 as against Tk. 6561 for the females. As high as 41.88 percent of the employed graduates earn a monthly income of more than Tk.10,000, while only 22.22 percent of them earn less than Tk.5,000/month. It means that about 78 percent of the employed graduates earn Tk.5,000/month and more and majority of them (57%) earn Tk.8,000/month and more. However, there is considerable difference of monthly income by gender. Only 16.19 percent of female employed graduates as against 52.85 percent of male employed graduates earn more than Tk.10,000/month, while as high as 47.62 percent of female employed graduates as against 11.38 percent of male employed graduates earn less than Tk.5,000/month (Table-4.6 and Chart-3). Thus monthly income distribution is highly skewed generally and more skewed between gender.

The gap between male and female earning is attributable to two core sets of factors: The first set of factors relate to the difference between the skill sets of men and women, particularly differences in educational qualifications, formal and informal nature of training received, and labour market experience in both full-time and part-time work. The second set of factors underlying the gender earning gap are labour market rigidities, which mean that labour is not allocated to its most efficient use. These rigidities take the form of (i) labour market discrimination; (ii) labour market segmentation in terms of part-time versus full-time work, occupational segregation, and segregation by industry; (iii) interruptions to women's work due to family or caring responsibilities or to unemployment; and (iv) social, economic and legislative environment. Most of the female graduates are employed in low-paying occupations e.g. embroidery and some high-paying occupations e.g. electricity works, plumbing, repair of motor vehicles etc are not suitable for female graduates. Due to the gendered division of work, women have to endure inferior jobs and lack effective bargaining power in the labour market. Besides, there are considerable differences in the hours worked with higher proportions of women working part-time and higher proportions of men working full-time (70% of men compared with 31% of women).

Table-4.6: Distribution of Employed Graduates by Monthly Income Group

Monthly income (Taka)		Gender		Total
		Male	Female	
Less than 5000	Count	28	50	78
	% within Monthly income	11.38	47.62	22.22
5000-6000	Count	15	8	23
	% within Monthly income	6.1	7.62	6.55
6001-7000	Count	7	16	23
	% within Monthly income	2.85	15.24	6.55
7001-8000	Count	20	7	27
	% within Monthly income	8.13	6.67	7.69
8001-9000	Count	13	1	14
	% within Monthly income	5.28	0.95	3.99
9001-10000	Count	33	6	39
	% within Monthly income	13.41	5.71	11.11
More than 10000	Count	130	17	147
	% within Monthly income	52.85	16.19	41.88
Total	**Count**	**246**	**105**	**351**
	% within Monthly income	**100.00**	**100.00**	**100.00**

Source: Field survey data.



Source: Calculated from Table-4.6.

The relationship between employment status and year of graduation is important in establishing the time lag between graduation and employment. In addition, it could indicate the cohort of graduates who have stayed longer on the employment queue. The majority of graduates (31.8%) who were unemployed graduated in 2011, followed by 26.7% who graduated in 2010. On the other hand, 19.2% of 2010 graduates were on fulltime employment, with 21.9% of those who graduated in 2011 also on fulltime employment. These results are not conclusive on the time lag between graduation and employment. However, the results show that there has been a sharp rise in unemployment since 2010.

Unemployment was more prevalent among females, while employment was high among males. It appears employers are mainly interested in graduates who have attained national qualification standards. High unemployment rate among female graduates tends to gravitate to much less physically demanding vocations.

IV.3 Acquired Competencies at Training Institutions

Respondents were asked to assess the relevance and adequacy of the skills acquired at a training institution in enabling them to perform the tasks in their current job. The majority of respondents (69.36%) were of the view that the training they received was very relevant; while only 14.08% said they were not relevant. This is further corroborated by that 50.18% and 26.43% of respondents agreed and strongly agreed with the statement that their training adequately prepared them for work. The majority of respondents (32.24%) and 11.29% agreed and strongly agreed that they could easily change jobs within their area of specialization. This could indicate that they have acquired adequate skills that are in demand within their areas of specialization. However, the changing of jobs within their area of specialization cannot be only attributed to skills acquired at training institute. There is a possibility that some skills that were acquired on the job have improved the competency of graduates.

Respondents also rated their ability to be trained on the job highly, with 52.5% and 39.2% agreeing and strongly agreeing with the statement that they could easily be trained on the job. This shows the value that graduates place on the quality of skills they acquired at the training institutions. Respondents were largely of the view that their employers were satisfied with their level of knowledge and skill, with 40.8% and 28.2% agreeing and strongly agreeing respectively that their employers are satisfied with their level of knowledge and skill.

Respondents rated the skills they acquired from training institutes highly. They are generally of the view that the skills acquired are adequate to enable them to perform the tasks in their work adequately to the satisfaction of their employers. Graduates are also of the view that they could easily be trained on the job, as further testimony to the adequacy of the level of knowledge and skill they attained at training institutions. The views of graduate respondents were in tandem with those of trainers who rated the skills of graduates as fair.

IV.4 Perceptions of the Trainers about Technical Skills Acquisition

Key informant interviews with training institutions tutors were mainly intended to triangulate information obtained from graduate respondents. In particular, the interviews sought to establish the perceptions of trainers on employability of graduates, skill level of graduates and quality of training. When tutors were asked if graduates from training institutions got employment on graduation, the majority of them, 73.27% of respondents answered in the affirmative. This is supported by employment status of graduates. This suggests that there is no knowledge gap on employment outcomes of graduates by their trainers. This knowledge may facilitate the necessary improvement in vocation education and necessary linkages for feedback between institutions and graduates.

IV.5 Contributions of Private Technical Training Institutes towards Human Resource Development

Contributions of private technical and vocational training institutes that receive monthly subvention from the government towards human resource development (HRD) look much better than those of their public counterparts. A comparison of trainee-trainer ratios in 2008 and 2010 reveals that private TTCs and ATIs have much lower ratios (less than half) in both years (Table-4.7) indicating much better training outcome of the private training institutes. In training, class size matters, and it matters a lot because training involves hands-on learning. Class size is an important determinant of a variety of student outcomes, ranging from test scores to broader world of work outcomes. Smaller classes are particularly effective at raising achievement levels of the trainees. KIIs with the Principals and FGDs with the trainers also lend credence to this view. Reportedly, there are several showcase examples of IHTs in the private sector. This is possibly because private sector training centres grow in response to market demand and have concern for efficiency and effectiveness of training.

Table-4.7: Number of TTC & ATI, Teacher and Enrolment by Public and Private Sector in 2008 and 2010									
Type of Institute	Management	Number of Institute		Total Number of Teachers		Total Number of Students		Trainees Trainer Ratio	
		2008	2010	2008	2010	2008	2010	2008	2010
Technical Training Centre	Public	31	37	759	802	6565	8877	9	11
	Private	4	6	29	56	111	262	4	5
	Total	35	43	788	858	6676	9139	8	11
Agriculture Training Institute	Public	13	13	135	137	7527	9065	56	66
	Private	91	96	712	732	12458	15156	17	21
	Total	104	109	847	869	19985	24221	24	28
Source: Bangladesh Bureau of Educational Information and Statistics (BANBEIS)									

For all practical purposes, the ministries alone cannot provide sufficient access to and delivery of high-quality training. This points to the need for outsourcing skills training. Private provision by employers and private training organizations often fills the gap. Private sector involvement, whether at the strategic level or at the level of training delivery, can greatly enhance what is offered by the ministries, but this needs to be done in partnership with the ministries with clearly delineated responsibilities which recognize and complement each other's strengths and weaknesses, rather than ministries and private provision working independently of each other. Korean experience reveals that planning, financing and regulation are best undertaken by government while the private sector takes gradually increasing responsibility for provision and delivery of training services.

Along with others, the Bangladesh National Education Policy-2010 (NEP) stated four strategies regarding public-private partnership (PPP) in technical vocational education and training (TVET). Two of them are directly positioning PPP, while we can easily assume that PPP is critically linked in the other two strategies. These are: (i) PPP collaboration will be encouraged to establish new technical and vocational institutes and to develop their management; (ii) private sector will be encouraged to establish quality vocational and technical institutions. Priority will be given to them for inclusion of MPO for the teachers of these institutes. Necessary resources, materials and instruments and financial support will also be provided. Beside these two strategies, strategy nine suggests to introduce "Apprenticeship program" nation-wide through revising The Apprenticeship Act 1962 which can create a good opportunity for PPP in this sector. Another strategy suggests making mandatory for the teachers of all level to get hands-on training within mills and factories on the subjects they are involved in teaching. Along with other concerns National Skills Development Policy-2011 (NSDP) also sheds some lights on PPP issue in the TVET sector in Bangladesh.

Challenges in incorporating PPP in the existing training system are many. First, Bangladesh suffers from a mismatch between employment opportunities and the skills of job seekers. The educational system produces entrants to the labour force with qualifications that do not match the requirements of the productive sectors of the economy. Over the past few decades, the ratio of unskilled to skilled workers has increased in Bangladesh, while the global demand for skilled workers has risen. Bangladesh lacks mechanisms to identify which skills are in demand and where and to train potential labour migrants accordingly. Second, training system is hampered by

inadequate links with industry, outdated curricula and delivery strategies, and little flexibility to respond to training needs at the local level. Third, Bangladesh has an outdated national skills standard that lacks international compatibility. No system is in place to provide employers with reliable signals of the skill levels of job applicants. Skills training system is highly centralized but poorly coordinated, with multiple ministries and private enterprises offering training courses without common curricula or standards. Fourth, private training institutions are not regulated. Instructors generally lack practical experience and classroom equipment, so they teach mainly theory. Fifth, training managers and teachers often fail to recognize their roles in promoting employment and employability. Sixth, enrolment in regular TVET courses requires the completion of grade VIII or higher, which effectively excludes a large proportion of the working-age population. Seventh, formal apprenticeships are almost non-existent; instead, many young people engage in non-formal apprenticeships, for which there is no quality control or system for recognizing their learning. Eighth, training is supply-driven because there is a lack of data on the demand for Bangladeshi workers and the skills needed, both domestically and abroad. Finally, like many other least developed countries, Bangladesh also has a number of systemic weaknesses in its skills development system.

V. SWOC Analysis: Strengths as well as the Present Flaws, Difficulties Subsisting in the Selected Technical Training Centers

Many of the key challenges facing the technical training centers derive from the current structure and management of the skills training development systems evolving in the five study ministries. Principal amongst them are limited inter-agency coordination and no assessment and monitoring of the training outcome, poor linkages with industry and the labour market, insufficient capacity in key agencies and training centers, piecemeal regulation and no training quality assurance, and limited planning of delivery and infrastructure development. The study finds that inadequate supply of instructional materials, large class sizes, inadequate training facilities, weak linkages with local industries for hands-on-experience for both instructors and trainees lead to ineffective and inefficient training of students while emphasis is placed on passing final examination.

Strengths, weaknesses, opportunities and constraints (SWOC) of the sample training centres under the five study ministries are many and multi-dimensional. Most important among them are presented in Table-5.1.

Table-5.1: Strengths, weaknesses, opportunities and constraints of the sample training centres

Strengths	Weaknesses	Opportunities	Constraints
Proactivity of the study ministries to build skilled and employable workforce	Limited market relevance due to more focus on self-employment	Huge demand for skilled workforce at home & abroad	Majority of them lacks national and international accreditation of skills acquired
ADP policy priority in HRD and consistent with NEP-2010, SFYP and NSDP-2011	Inadequacy and irregularity of fund, poor capacity of the training centers, systemic weaknesses	More targeted programmes, mobilization of fund & capacity development of training centers & PPP	Bureaucratic sloth in PPP regulations & implementation, weak financial management,
TVET reforms are ongoing to strengthen technical training base	No autonomy of the departments in key decision making	Innovative ideas can enhance more effective training programmes	Frequent transfer of key players in the ministry and departments
Donors stepped in to support government efforts in skills training	Inadequacy of trainers and shortage of competent trainers	Institutes for TOT may be increased and overseas training tapped	Traditional system of training prevails
	Inadequacy of training infrastructure and equipment	National and international resources may be mobilized	Lack of initiative and dynamism at all levels

VI. Summary of Key Findings and Recommendations

VI.1 Key Findings

The key findings of the study are presented below:

(i) Some institutions did not keep databases for their graduates. In cases where databases existed, they were not up-to-date. It was also established that databases kept by District offices were more up-to-date.
(ii) In none of five study ministries the training institutions are accredited with little or no credentials for the formal labour market.

Employment outcomes and occupations of the training graduates

Employment outcome of training across all training centres except those under the MOH&FW is remarkable. Highest achievers are the training institutes under the MoWCA (97.3%) followed in order by MYS (94.2%) and MEWOE (93.02%). Surprisingly, the share of unemployed graduates is the highest in the case of training centres under the MOH&FW (42.42%) followed by those under the MOA (28.13%). This can be partly explained by the largest share of the graduates pursuing higher studies in the case of MOH&FW followed by MOA.

Among the employed graduates on average 59.83 percent are self-employed while the remaining 40.17 percent are paid employed. The incidence of self-employment is the highest in the case of graduates under MH&FW (88.89%) followed by MoWCA (81.94%). Such high level of self-employment indicates the great fragility of the labour market, and is mostly the outcome of limited wage employment opportunities. They reflect a survival strategy for the graduates forced to take up small-scale own-account informal activities.

Distribution of employed graduates by sectors and trades is illuminating. Professional, scientific and technical services account for the largest share (29.1%) of the employed graduates followed in order by electricity, gas, water & related services (26.8%) and information and communication technology (17.7%) indicating their high market demand because these trades impart cross-cutting skills and feed back newly emerging occupations. Agriculture, forestry and fishery (7.1%) and educational services (6.8%) also reveal moderate demand because they represent conventional trades. Besides, the economy is fast transforming from agriculture to services. Hospitality & tourism, transport, storage & communication, and readymade garment are found to be least in demand because of their low profile and less prospects.

The income impact of training conducted by the five study ministries is respectable. About half of the employed graduates (49.75%) earn a monthly income of more than Tk.10,000, while only 19.21 percent of earn less than Tk.5,000/month. It means that about 80 percent of the employed graduates earn Tk.5,000/month and more and 62.81 percent of them earn Tk.8,000/month and more. Average monthly income of employed graduates is Tk. 11,698 which compares well with the national monthly income per earner at Tk. 8,795. However, there is considerable difference of monthly income by gender. Average monthly income of male is Tk. 13,890 as against of female at Tk. 6561. Only 27.87 percent of female employed graduates as against 59.15 percent

of male employed graduates earn more than Tk.10,000/month, while as high as 40.98 percent of female employed graduates as against 9.86 percent of male employed graduates earn less than Tk.5,000/month. It means that female graduates are employed in low-paying occupations.

The study found that the predominant method used by graduates in finding employment was responding to media advertisements (39.9%). It was also found that it is generally difficult for graduates to get a job as reflected by the high unemployment rate, with 48.7% of the respondents indicating that they have difficulties getting a job. The main difficulty in getting a job was identified as limited job opportunities in the geographical area where the graduate resided, which was identified by 32.57% of the respondents However, where jobs were available, it took relatively little effort to secure one, with 64.34% of the respondents making at most 5 contacts with potential employers before securing a job usually within the first year of graduation.

There is limited mobility of graduates across areas of specialization. This could be indicative of that the programmes are highly specialized. There may be a need to offer programmes to equip graduates with multiple skills.

The relevance and effectiveness of learning in VT in relation to employability (Skills Mismatch)

Respondents rated the skills they acquired from vocational skills highly. They are generally of the view that the skills acquired at VTIs are adequate to enable them to perform the tasks in their work adequately to the satisfaction of their employers. Graduates are also of the view that they could easily be trained in the job, as further testimony to the adequacy of the level of knowledge and skill they attained at VTIs. The views of graduate respondents were in tandem with those of employers who rated the skills of graduates as fair.

Graduates rated the programmes they went through highly in terms of content and instructional quality. They only suggest minimal improvements. The overwhelming majority of the respondents (89.41%) indicated that they would recommend the programmes they went through to others.

The level of the VTI programmes appears to be adequate in terms of the skills they provide. Employer, Trainers and Graduates are satisfied with the levels of skills acquired. The scope of the VTI programmes should be expanded to expose the graduates to more skills but maintaining the standards.

This study established that female graduates are the most hard hit by unemployment, primarily because there appears to be limited employment opportunities in their chosen areas of specialization. However, it also appears in areas of specialization where they competed fairly in school with their male counterparts, they still relatively have difficulties in finding employment. This scenario needs to be investigated further by additional research.

Furthermore, females are traditionally the disadvantaged members of Bangladesh society, further research is needed to establish how other disadvantaged members of society such as the disabled graduates fair in the job market.

As the PPP is a new concept in Bangladesh there is a serious dearth of initiating agencies for such kind of partnership.

VI.2 Recommendations for more Improved Policy Directions

It is recommended that the training institutions keep databases of their graduation on completion and work to establish alumni associations that could assist in updating the database. In updating databases, departments should liaise with District offices.

An up-to-date and reliable labour market information on which to base decisions on current and future skills needs and strategies for meeting them needs to be put in place.

In order to maximize the credibility of training and skills acquired, it is recommended that training institutions and their training courses are accredited by BTEB.

Quality and Effective Training Courses

The existing training systems in the five study ministries call for better adaptation to the needs of the labour market and employment system. There exists acute shortage of trainers across the board suggesting the pressing need for increasing the number of existing trainers. Superimposed on this is the shortage of qualified and competent trainers pointing to the need for improving the quality of training of the trainers. Besides, the need for many occupations to adapt to new areas of competency also signifies new demands for trainers pointing to the need for a radical change in their role and functions. It is no longer enough to be a simple "knowledge transmitter" who makes sure that students have learned the theoretic nuclei of certain subjects, but rather to become a facilitator and learning situations designer.

New demands for trainers: None of this can be put into practice through simply using traditional teacher's presentation and textbook based methods. It is important that trainers also help students to develop basic competency skills, e.g. initiative taking and teamwork abilities, as well as communication, decision-making, and problem solving capabilities, amongst others. In order to do this, trainers must have a complete "methodological toolkit" at their disposal to be used in the transmission of wide ranging areas of competency.

Policymakers should carefully weigh the efficacy of class-size policy against other potential uses of funds. While lower class size has a demonstrable cost, it may prove the more cost-effective policy overall.

Training programmes need to be designed to ensure that the trainees attain pre-specified levels of competence in a given field or training activity. This calls for strengthening the training of the trainers (TOT). Emphasis should be put on the achievement of specified objectives relating to the quality and effectiveness of training courses in terms of increasing the number and quality of trainers and introducing modern training, machinery, equipment and toolkits.

In the existing traditional training system, the unit of progression is time and it is teacher-centered. In a competency based training (CBT) system, the unit of progression is mastery of specific knowledge and skills and is learner- or participant-centered. Two key terms used in competency-based training are: skill and competency. Skill is a task or group of tasks performed to a specific level of competency or proficiency which often use motor functions and typically require the manipulation of instruments and equipment. Some skills (e.g. counseling), however, are knowledge- and attitude-based. Competency is a skill performed to a specific standard under specific conditions. One of the primary advantages of CBT is that the focus is on the success of each participant. Implications for organizations considering implementing a CBT system are that:

(i) Organizations must be committed to providing adequate resources and training materials.
(ii) Audiovisual materials need to be directly related to the written materials.
(iii) Training activities need to match the objectives.
(iv) Continuous participant interaction and feedback must take place.
(v) Trainers must be trained to conduct competency-based training courses.
(vi) Individuals attending training must be prepared for CBT as this approach is likely to be very different from their past educational and training experiences.

Different training centers of various ministries are providing the same training on one or more trades. This points to the pressing need for inter-ministerial coordination, cooperation and regular interaction in order to deliver better quality of training.

Regular payment of salary of the trainers should be ensured to maintain the spirit, tempo and quality of training.

Additional and adequate fund should be allocated to purchase new and sufficient number of training equipment and toolkits.

Bangladesh is a country characterized by low labour demand and high rates of youth unemployment. Entrepreneurship training has the potential to enable youth to gain skills and create their own jobs as well as jobs for others. The distinction between entrepreneurship and self-employment revolves around the existence of an innovative business concept or idea. Entrepreneurs usually attempt to develop something new in creating job opportunities. A course on entrepreneurship development may be introduced at least in the MYS and MoWCA.

Above all, present and future training programmes and courses should be based exclusively on the current and future market demand. For creating opportunities for paid employment, this need-based training approach will require a prior market survey on the employers in order to assess their needs. For creating opportunities for self-employment, this will require an assessment of the current and future demand for commodities and services.

In the skills training programmes of the ministries PPP should be introduced and promoted in order to reduce training cost and bring about greater effectiveness of training. Public–private collaboration can occur at many levels, including the macro (policy) level, the meso (sector) level, and the micro (enterprise) level. Its scope ranges from employer-worker participation in

shaping national training policies to an enterprise's donation of materials or giving of advice to a local training institution. The collaboration can be vertical, between local partners and national institutions, or horizontal, between local institutions or between national entities. PPPs can take the form of the representation of partners on training boards and committees so that they can provide advice and be consulted on policy issues, planning, curriculum development, performance evaluation, and quality control. At the micro level, partnerships can be developed between individual firms and public training institutions and may also involve local government and both public and private training providers, including voluntary agencies. Public training institutions may seek the advice and assistance of enterprises on curriculum development, the setting of quality standards, or performance evaluation, as well as the provision of information on training needs and planning, donation of equipment, vocational guidance and counseling, recruitment of successful trainees, or the organization of industrial attachments to give trainees or trainers practical experience

To further enhance graduate employment, employers and employer organization should form linkages with VTI institutions that are intended to recruit graduates upon completion of their studies.

Institutions should also conduct career fairs where they could sensitize the employers of the skills offered by their graduates

It is highly recommended that there should be an audit of skills required by the employment sector and VTI programmes and enrolment rates be tailored to match the required skills.

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Appendices

Appendix-1

Table-2.1: Trade-wise training statistics of TTCs and BIMT in 2012				
Sl. No.	Name of the Trade	Male	Female	Total
1.	Diploma in Marine Engineering (4-Year Course)	427	20	447
2.	Diploma in Shipbuilding Engineering (4-Year Course)	423	22	445
3.	Marine Diesel Engine Artificer (2-Year Course)	221	3	224
4.	Ship Fabrication (2-Year Course)	225	-	225
5.	Shipbuilding Welding (2-Year Course)	220	-	220
6.	Shipbuilding & Mechanical Drafting (2-Year Course)	216	5	221
7.	Architectural Drafting with AutoCAD	441	577	1018
8.	Dying, Printing and Block Batik	69	614	683
9.	Housekeeping	-	29211	29211
10.	Electronics	1680	1006	2686
11.	Garments	357	1792	2149
12.	Computer Operation	4824	2436	7260
13.	Electrical	3743	195	3938
14.	Refrigeration & Air-conditioning	3186	303	3489
15.	Automotive	2156	78	2234
16.	Plastic Technology	78	31	109
17.	Welding & Fabrication	1594	86	1680
18.	Catering	53	14	67
19.	Fruit & Food Processing & Preservation	83	686	769
20.	Pattern, Marker & Design Making	35	444	479
21.	Computer Graphics Design	647	178	825
22.	Carpentry/Woodworks	358	86	444
23.	Plumbing & Pipefitting	338	31	369
24.	Civil Construction	609	46	655
25.	General Mechanics	520	51	571
26.	Ting & Mig Welding	3	-	3
27.	6G Welding	35	-	35
28.	Civil AutoCAD 2D & 3D	451	315	766
29.	Mechanical AutoCAD	174	61	235
30.	Machine Tools Operation	479	21	500
31.	Ship Safety & Fire Fighting	120	-	120
32.	Ship Fabrication & Welding	90	-	90
33.	Marine Pipefitting	90	-	90
34.	Marine Engine & Mechanical Fitter	120	-	120
35.	Mason	8	-	8
36.	Sewing Machine Operator	54	63	117
37.	Mid-Level Garments Supervisor	73	99	172

38.	Automechanics with Driving	853	28	881
39.	Sewing Machineries Maintenance	35	9	44
40.	Quality Control Management	85	21	106
41.	English Language Course	20	4	24
42.	Korean Language Course	1143	8	1151
43.	Orientation Training	8131	92	8223
44.	EPS	1592	5	1597
	TOTAL	**36059**	**38641**	**74700**
Source: BMET				

Table-2.2: Training courses in the trades related to marine field

Name of the Ministry	Department	Institution	Year of establishment & courses	Duration	Seat Capacity
Ministry of Expatriates' Welfare and Overseas Employment	Bureau of Manpower, Employment and Training (BMET)	Bangladesh Institute of Marine Technology (BIMT)	1958(27)		
			(i) Diploma in Marine Engineering	4 years	40
			(ii) Diploma in Ship Building Engineering	4 years	40
			(iii) Marine Diesel Artificer	2 years	25
			(iv) Shipbuilding and Mechanical Drafting	2 years	25
			(v) Shipbuilding Welding	2 years	25
			(vi) Shipwright Plater	2 years	35
			Total		190
Source: BMET					

Table-2.3: Training institutions and courses under the Department of Women Affairs

Name of Institution	Location	Training Courses	Duration	Total trainees per year
National Women Training & Development Academy	Head Office at Eskaton	Secretarial Science (Bangla & English)	6 months or 1 year	805
		Embroidery		
		Tailoring		
		Batik, Tie-Dye, etc.		
Women Training Centre (WTC)	64 Districts Sadar & 136 Upazila	Handicrafts etc.	1 year	7,280
Women	Zirabo,	Crop production	1 year	200

Agriculture Training Centre	Gazipur	Vegetable production Duck and poultry rearing Fish cultivation Other practical agro-based training		
Begum Rokeya Training Centre	Chattrapur, Mymensingh	Agro-based Training	-	200
Computer Training Centre	Head Office at Eskaton	Computer application Graphics and Design Webpage Design Various		270 (App)
Rural Women's Agro-based Training & Production Centre	Zirani, Gazipur	Agro-based Training	4 Months	120
Ma Fatema (R) Women Training & Development Complex	Shariakandi, Bogra	Poultry & Dairy farming Tailoring Embroidery Garments Computer Food processing	4 Months	150
Women Agriculture Training Centre	Morolgonj, Bagerhat	Poultry Fishery Livestock Horticulture Computer	3 months	200
Bibi Ayesha (R) Women Training Academy	Zirani, Gazipur	Poultry Fishery Dairy Horticulture Basic Computer Garments	6 Months	200
Homeless Girl Children's Shelter Home & VTC	Dinajpur	Different Vocational Training Ended in 2005		
Women Handicrafts & Agriculture Training Centre	Rajshahi	Sewing Livestock Fishery Dairy Horticulture Basic Computer Garments Vegetables & other agro-	3 Months	200

		based Training		
Women Handicrafts & Agriculture Training Centre	Dinajpur	Livestock	3 months	200
		Poultry		
		Fishery		
		Dairy		
		Horticulture		
		Basic Computer		
		Garments		
		Vegetable & other agro- based Training		
Source: www.ilo.org/wcmsp5/groups/.../documents/.../wcms_106496.pdf *Retrieved on 21 April 2014.*				

Table-2.4: Intake Capacity, Number of Students and Teachers, and Student-Teacher Ratio in Agriculture Training Institutes (ATIs)

SL. No.	Location of ATI	Annual Intake Capacity (Number)	Number of Students/ Trainees	Number of Teachers/ Trainers	Student Teacher Ratio
1	Sher-e-Bangla Nagar, Dhaka	200	412	10	41.20
2	Shimultoli, Gazipur	160	326	8	40.75
3	Faridpur	200	756	10	75.60
4	Sherpur	200	711	13	54.69
5	Rahmatpur, Barisal	200	654	13	50.31
6	Doulatpur, Khulna	200	807	10	80.70
7	Tazhat, Rangpur	200	654	9	72.67
8	Gaibandha	200	758	13	58.31
9	Hathazari, Chittagong	160	495	10	49.50
10	Begumgonj, Noakhali	120	524	12	43.67
11	Khadimnagar, Sylhet	120	472	10	47.20
12	Ishwardi, Pabna	200	757	9	84.11
13	Sukarhari, Rangamati	80	201	7	28.71
14	Homna, Comilla	200	178	6	29.67
15	Jhenaidah	40	37	4	9.25
	All ATIs	2480	7742	144	53.76
Source: Data collected from Department of Agricultural Extension.					

Table-2.5: Institute of Health Technology

SL. No.	Place	Name of the Course	Number of Seats
1.	Dhaka, Mohakhali	Laboratory, radiology and imaging, physiotherapy, sanitary inspectorship, dentistry, pharmacy, radiotherapy, occupational therapy, ophthalmic assistance, community health work	327
2.	Rajshahi	Ditto	327
3.	Bogra	Ditto	357

4.	Chittagong, Fouzderhat	Ditto	327
5.	Barisal	Ditto	327
6.	Rangpur	Ditto	327
7.	Jhenaidah	Ditto	327
8.	Sylhet	Ditto	103
Source: Calculated from field survey data.			

Table-3.1: Implementation Status of Construction and Rehabilitation Works of Training Centers during 2008-09/2012-13

Year	Description of construction and rehabilitation works	Implementation status
MEWOE:		
2008-09	-	-
2009-10	-	-
2010-11	Land requisition/acquisition	Ongoing
2011-12	Land requisition/acquisition & civil construction works	Ongoing
2012-13	Land requisition/acquisition & civil construction works	Ongoing
MYS:		
2008-09	-	-
2009-10	-	-
2010-11	Land requisition/acquisition	Completed – outstanding bill for land acquisition paid.
2011-12	Construction of office-cum-academic buildings, 2 hostels, residential building, repair & renovation of 29 YTCs, RCC boundary wall, poultry-duck-cow sheds etc & site devt. works of 11 YTCs	Tenders for construction of 22 YTCs floated and 20% works completed.
2012-13	Ditto	(i) 90% works of 19 YTCs completed and tenders for construction of 10 new YTCs floated. (ii) 50% works of 4 YTCs completed.
MoWCA:		
2008-09	-	-
2009-10	-	-
2010-11	Rehabilitation works of training centres	Ongoing
2011-12	Construction works of training centres	Ongoing
2012-13	Construction & rehabilitation works of training centres	Ongoing
MOA:		
2008-09	Construction, repair, renovation and land development works of Homna, Sherpur, Gaibandha, Daulatpur & Jhinaidah ATIs	Completed
2009-10	Construction of Farmers Training Unit, main gate, boundary walls, internal road, electricity & water supply & construction	Completed

	of dormitory, guest house & 3rd class employees quarters in Sherpur, Gaibandha & Daulatpur	
2010-11	Construction of overhead water tank including reservoir, deep tube well, pond excavation and surface drain & construction of academic building, boys and girls hostels in Sherpur, Gaibandha & Daulatpur	Completed
2011-12	Construction of boundary walls of girls' hostels & Principal's quarter, furniture, farm, office & training equipment & tree plantation & wall, gate, DTW, surface drain, furniture in Sherpur, Gaibandha & Daulatpur	Completed
2012-13	Construction & rehabilitation works of Hathazari, Begumganj, Khadimnagar & Rahmatpur ATIs & purchase of utensils & crockery	Completed
MOH&FW:		
2008-09	Construction & rehabilitation works of Dhaka & Rajshahi IHTs	Completed
2009-10	Construction & rehabilitation works of Dhaka & Rajshahi IHTs	Completed
2010-11	Construction works of Bogra, Barisal & Rangpur IHTs	Completed
2011-12	Construction works of Jhenaidah IHT	Completed
2012-13	Construction works of Sylhet IHT	Ongoing

Source: Data collected from respective departments of five ministries.

Table-3.2: Investment Cost of the ADP Funded Training Centers and Period of Implementation				
Year	Investment cost on physical construction and rehabilitation works (In lakh Taka)	Investment cost on training (In lakh Taka)	Total investment cost on training (In lakh Taka)	Training cost as % of total investment on training
MEWOE:				
2008-09	-	-	-	-
2009-10	-	-	-	-
2010-11	1468.35	-	1468.35	0.00
2011-12	9460.49	165.00	9625.49	1.71
2012-13	18863.08	2350.00	21213.08	11.08
All Years	**29791.92**	**2515**	**32306.92**	**7.78**
MYS:				
2008-09	-	1396.19	1396.19	100.00
2009-10	-	1853.01	1853.01	100.00
2010-11	281.01	2330.05	2611.06	89.24
2011-12	2539.03	1635.14	4174.17	39.17
2012-13	5941.08	1747.77	7688.85	22.73
All Years	**8761.12**	**8962.16**	**17723.28**	**50.57**
MoWCA:				
2008-09	-	-	-	-
2009-10	-	-	-	-
2010-11	-	103.11	103.11	100.00
2011-12	105.00	394.04	499.04	78.96
2012-13	506.10	307.17	813.27	37.77
All Years	**611.10**	**804.32**	**1415.42**	**56.83**
MOA:				
2008-09	1115.815	483.00	1598.815	30.21
2009-10	363.44	502.32	865.76	58.02
2010-11	1554.84	521.64	2076.48	25.12
2011-12	664.129	540.96	1205.089	44.89
2012-13	99.48	598.56	698.04	85.75
All Years	**3797.704**	**2646.48**	**6444.184**	**41.07**
MOH&FW:*				
2008-09	840.41	135.53	975.94	13.89
2009-10	750.23	136.40	886.63	15.38
2010-11	915.00	239.17	1154.17	20.72
2011-12	989.43	351.47	1340.9	26.21
2012-13	375.19	353.31	728.5	48.50
All Years	**3870.26**	**1215.88**	**5086.14**	**23.91**
Source: Respective ministries. Note: * indicates estimated from the field level data collected from IHT.				

Appendix-2

Evaluation of Technical Training Centers/IGA Institutes in the Districts of Bangladesh under Different ADP funded Projects of Various Ministries
Evaluation Sector, IMED, Ministry of Planning, Government of the People's Republic of Bangladesh

SURVEY QUESTIONNARE FOR THE GRADUATES FROM TECHNICAL TRAINING CENTERS UNDER THE MINISTRY OF EXPATRIATES' WELFARE AND OVERSEAS EMPLOYMENT AND BUREAU OF MANPOWER, EMPLOYMENT AND TRAINING

Name of the Interviewer _____ Date of Interview:

Name of Interviewee_____ Telephone_____

Town/Village_____ Upazila/Thana_____ District_____

Year of Graduation_____ Name of the Training Course/Program_____

Name of the Technical Training Center/IGA Institute Attended_____

(Please use a tick (√) to indicate your response where appropriate).

a. Are you familiar with the Ministry of Expatriates' Welfare and Overseas Employment and Bureau of Manpower, Employment and Training (BMET) and their training courses? Yes/No

b. How were you aware of the BMET conducted training courses?

c. What did motivate you to take BMET conducted training course?

SECTION A: PERSONAL INFORMATION

1. Age (in completed years):

2. Gender: (a) Male (b) Female

3. What level of training did you complete at a Technical Training Center/IGA Institute?

(a) Bachelors degree
(b) Higher Diploma
(c) Diploma
(d) Certificate
(e) National Craft Certificate
(f) Trade Test (A,B,C.) Certificate
(g) Other (Please specify)_____

4. What is your training area of specialization/trade?

SECTION B: EMPLOYMENT AND EMPLOYMENT HISTORY

5. State your current employment status: Self-Employed/Paid Employed/Pursuing Higher Studies

a) Employed fulltime
b) Employed part-time
c) Employed temporarily
d) Unemployed and looking for employment (Go to Q. 20)

6. Name of employer & company _____

7. Place of Employment _____

8. Monthly Income (in Taka):

9. ***(If employed)***, in what area of specialization is your job?

Broad Employment Sector	Area of Job Specialization/Title
(i) Agricultural, forestry & fishery	
(ii) Mining & quarrying	
(iii) Manufacturing	
(iv) Construction	
(v) Electricity, gas, water & related services	
(vi) Wholesale & retail trade, repair of motor vehicles & related services	
(vii) Hospitality & tourism services (hotels & restaurants, travel)	
(viii) Information and communication technology (ICT)	
(ix) Transport, storage & communication	
(x) Financial intermediation, real estate, renting & business	
(xi) Professional, scientific & technical services	
(xii) Public administration & supporting services	
(xiii) Education services	
(xiv) Health & social work	
(xv) Seafaring	
(xvi) Other services not elsewhere classified	

10. How long did it take you to get a job after completing your training?

11. How did you get to know about your job?

(a) Friends
(b) Media Advertisements (Please Specify)_____
(c) Door to door (job hunting)
(d) Other (Please specify)_____

12. How many employers did you contact before getting your current job?

13. Specify your type of employer?

(a) Public sector (central government, local government)
(b) Parastatal
(c) Private sector
(d) NGO
(e) Self-employed
(f) Other (please specify)_____

14. How long have you been working for your current employer?

15. How many employers did you work for before the current one?

(a) 0 (Go to Q. 20)
(b) 1
(c) 2
(d) More than 2

16. **(If your current employer is not your first one)**, why did you leave your previous employment?

(a) Sought improved wage
(b) Sought improved working conditions
(c) Needed to change environment
(d) Wanted a new challenge
(e) Retrenched/dismissed
(f) Found employment in my area of specialization.
(g) Other (please specify)_____

17. Are you still employed in your area of training?

(a) Yes (b) No

18. ***(If No to question 18)***, why did you change your career?

(a) Lack of career progression
(b) Poor remuneration
(c) Poor working conditions
(d) Lack of job satisfaction
(e) Other (please specify)_____

19. What are the difficulties you encountered in looking for a job?

(a) Takes too long to find one
(b) Employers not interested in my level of qualifications
(c) Employers not interested in my area of specialisation

(d) Lack of work experience
(e) Limited employment opportunities in my area
(f) Other (Please specify)_____

20. How long have you been looking for a job after training? (Tick)

(a) Less than 6 months
(b) 6 – 12 months
(c) 13 – 24 months
(d) 25 – 36 months
(e) Over 3 years

SECTION C: SKILLS ACQUISITION, QUALITY OF TRAINING AND EMPLOYER SATISFACTION

21. **(Compare the skills you acquired from your training and your ability to perform on your current or previous job)**, would you say your training was: (Tick)

(a) Very relevant
(b) Adequate
(c) Not relevant

22. Can you recommend the course you went through to a friend, colleagues or relative?

(a) Yes (b) No

Using the percentages (%) indicated, rate the extent to which the following components of training should be improved to prepare graduates for the job market. Use a tick (√)

Training component	**100% improvement**	**75% Improvement**	**50% Improvement**	**25% Improvement**	**0% Improvement**
23. Knowledge (Theory)					
24. Training in practical skills					
25. Industrial attachments					
26. Course content					
27. Instructional manuals					
28. Textbooks					
29. Workshop equipment					
30. Laboratory work					
31. Teaching and delivery methods					
32. Instructor's knowledge of theory					
33. Instructor's practical skills					
34. Increase duration of training					

What is your opinion with regard to the following statements of the adequacy of vocational training, graduates' employability and their ability to perform their jobs? ***SDA*** *= strongly disagree;* ***DS*** *= disagree;* ***NA*** *= not applicable;* ***A*** *= agree;* ***SA*** *= strongly agree. Use a tick (√).*

Statements	SDA	DS	NA	A	SA
35. My training adequately prepared me for work					
36. My employer/former employer is/was satisfied with my level of knowledge and skill					
37. It is easy for me to get a job					
38. I can easily be trained to improve my level of skill					
39. I find/found myself very effective in my current/previous job					
40. I can easily change employers within my area of specialization					

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SURVEY QUESTIONNARE FOR THE GRADUATES FROM TECHNICAL TRAINING CENTERS UNDER THE MINISTRY OF YOUTH AND SPORTS AND DIRECTORATE OF YOUTH DEVELOPMENT

Name of the Interviewer _____ Date of Interview:

Name of Interviewee_____ Telephone_____

Town/Village_____ Upazila/Thana_____ District_____

Year of Graduation_____ Name of the Training Course/Program_____

Name of the Technical Training Center/IGA Institute Attended_____

(Please use a tick (√) to indicate your response where appropriate).

a. Are you familiar with the Ministry of Youth and Sports and Directorate of Youth Development (DYD) and their training courses? Yes/No

b. How were you aware of the DYD conducted training courses?

c. What did motivate you to take DYD conducted training course?

SECTION A: PERSONAL INFORMATION

1. Age (in completed years):

2. Gender: (a) Male (b) Female

3. What level of training did you complete at a Technical Training Center/IGA Institute?

(a) Bachelors degree
(b) Higher Diploma
(c) Diploma
(d) Certificate
(e) National Craft Certificate
(f) Trade Test (A,B,C.) Certificate
(g) Other (Please specify)_____

4. What is your training area of specialization/trade?

SECTION B: EMPLOYMENT AND EMPLOYMENT HISTORY

5. State your current employment status: Self-Employed/Paid Employed/Pursuing Higher Studies

a) Employed fulltime
b) Employed part-time
c) Employed temporarily
d) Unemployed and looking for employment (Go to Q. 20)

6. Name of employer & company _____

7. Place of Employment _____

8. Monthly Income (in Taka):

9. ***(If employed)***, in what area of specialization is your job?

Broad Employment Sector	Area of Job Specialization/Title
(i) Agricultural, forestry & fishery	
(ii) Mining & quarrying	
(iii) Manufacturing	
(iv) Construction	
(v) Electricity, gas, water & related services	
(vi) Wholesale & retail trade, repair of motor vehicles & related services	
(vii) Hospitality & tourism services (hotels & restaurants, travel)	
(viii) Information and communication technology (ICT)	
(ix) Transport, storage & communication	
(x) Financial intermediation, real estate, renting & business	
(xi) Professional, scientific & technical services	
(xii) Public administration & supporting services	
(xiii) Education services	
(xiv) Health & social work	
(xv) Seafaring	
(xvi) Other services not elsewhere classified	

10. How long did it take you to get a job after completing your training?

11. How did you get to know about your job?

(a) Friends
(b) Media Advertisements (Please Specify)_____
(c) Door to door (job hunting)
(d) Other (Please specify)_____

12. How many employers did you contact before getting your current job?

13. Specify your type of employer?

(a) Public sector (central government, local government)

(b) Parastatal
(c) Private sector
(d) NGO
(e) Self-employed
(f) Other (please specify)_____

14. How long have you been working for your current employer?

15. How many employers did you work for before the current one?

(a) 0 (Go to Q. 20)
(b) 1
(c) 2
(d) More than 2

16. **(If your current employer is not your first one)**, why did you leave your previous employment?

(a) Sought improved wage
(b) Sought improved working conditions
(c) Needed to change environment
(d) Wanted a new challenge
(e) Retrenched/dismissed
(f) Found employment in my area of specialization.
(g) Other (please specify)_____

17. Are you still employed in your area of training?

(a) Yes (b) No

18. ***(If No to question 18)***, why did you change your career?

(a) Lack of career progression
(b) Poor remuneration
(c) Poor working conditions
(d) Lack of job satisfaction
(e) Other (please specify)_____

19. What are the difficulties you encountered in looking for a job?

(a) Takes too long to find one
(b) Employers not interested in my level of qualifications
(c) Employers not interested in my area of specialisation
(d) Lack of work experience
(e) Limited employment opportunities in my area
(f) Other (Please specify)_____

20. How long have you been looking for a job after training? (Tick)

(a) Less than 6 months
(b) 6 – 12 months
(c) 13 – 24 months
(d) 25 – 36 months
(e) Over 3 years

SECTION C: SKILLS ACQUISITION, QUALITY OF TRAINING AND EMPLOYER SATISFACTION

21. **(Compare the skills you acquired from your training and your ability to perform on your current or previous job)**, would you say your training was: (Tick)

(a) Very relevant
(b) Adequate
(c) Not relevant

22. Can you recommend the course you went through to a friend, colleagues or relative?

(a) Yes (b) No

Using the percentages (%) indicated, rate the extent to which the following components of training should be improved to prepare graduates for the job market. Use a tick (√)

Training component	**100% improvement**	**75% Improvement**	**50% Improvement**	**25% Improvement**	**0% Improvement**
23. Knowledge (Theory)					
24. Training in practical skills					
25. Industrial attachments					
26. Course content					
27. Instructional manuals					
28. Textbooks					
29. Workshop equipment					
30. Laboratory work					
31. Teaching and delivery methods					
32. Instructor's knowledge of theory					
33. Instructor's practical skills					
34. Increase duration of training					

*What is your opinion with regard to the following statements of the adequacy of vocational training, graduates' employability and their ability to perform their jobs? **SDA** = strongly disagree; **DS** = disagree; **NA** = not applicable; **A** = agree; **SA** = strongly agree. Use a tick (√).*

Statements	**SDA**	**DS**	**NA**	**A**	**SA**

35. My training adequately prepared me for work					
36. My employer/former employer is/was satisfied with my level of knowledge and skill					
37. It is easy for me to get a job					
38. I can easily be trained to improve my level of skill					
39. I find/found myself very effective in my current/previous job					
40. I can easily change employers within my area of specialization					

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SURVEY QUESTIONNARE FOR THE GRADUATES FROM TECHNICAL TRAINING CENTERS UNDER THE MINISTRY OF WOMEN AND CHILDREN AFFAIRS AND DIRECTORATE OF WOMEN AFFAIRS

Name of the Interviewer _____ Date of Interview:

Name of Interviewee_____ Telephone_____

Town/Village_____ Upazila/Thana_____ District_____

Year of Graduation_____ Name of the Training Course/Program_____

Name of the Technical Training Center/IGA Institute Attended_____

(Please use a tick (√) to indicate your response where appropriate).

a. Are you familiar with the Ministry of Women and Children Affairs and Directorate of Women Affairs (DWA) and their training courses? Yes/No

b. How were you aware of the DWA conducted training courses?

c. What did motivate you to take DWA conducted training course?

SECTION A: PERSONAL INFORMATION

1. Age (in completed years):

2. Gender: (a) Male (b) Female

3. What level of training did you complete at a Technical Training Center/IGA Institute?

(a) Bachelors degree
(b) Higher Diploma
(c) Diploma
(d) Certificate
(e) National Craft Certificate
(f) Trade Test (A,B,C.) Certificate
(g) Other (Please specify)_____

4. What is your training area of specialization/trade?

SECTION B: EMPLOYMENT AND EMPLOYMENT HISTORY

5. State your current employment status: Self-Employed/Paid Employed/Pursuing Higher Studies

a) Employed fulltime
b) Employed part-time
c) Employed temporarily
d) Unemployed and looking for employment (Go to Q. 20)

6. Name of employer & company _____

7. Place of Employment _____

8. Monthly Income (in Taka):

9. ***(If employed)***, in what area of specialization is your job?

Broad Employment Sector	Area of Job Specialization/Title
(i) Agricultural, forestry & fishery	
(ii) Mining & quarrying	
(iii) Manufacturing	
(iv) Construction	
(v) Electricity, gas, water & related services	
(vi) Wholesale & retail trade, repair of motor vehicles & related services	
(vii) Hospitality & tourism services (hotels & restaurants, travel)	
(viii) Information and communication technology (ICT)	
(ix) Transport, storage & communication	
(x) Financial intermediation, real estate, renting & business	
(xi) Professional, scientific & technical services	
(xii) Public administration & supporting services	
(xiii) Education services	
(xiv) Health & social work	
(xv) Seafaring	
(xvi) Other services not elsewhere classified	

10. How long did it take you to get a job after completing your training?

11. How did you get to know about your job?

(a) Friends
(b) Media Advertisements (Please Specify)_____
(c) Door to door (job hunting)
(d) Other (Please specify)_____

12. How many employers did you contact before getting your current job?

13. Specify your type of employer?

(a) Public sector (central government, local government)

(b) Parastatal
(c) Private sector
(d) NGO
(e) Self-employed
(f) Other (please specify)_____

14. How long have you been working for your current employer?

15. How many employers did you work for before the current one?

(a) 0 (Go to Q. 20)
(b) 1
(c) 2
(d) More than 2

16. **(If your current employer is not your first one)**, why did you leave your previous employment?

(a) Sought improved wage
(b) Sought improved working conditions
(c) Needed to change environment
(d) Wanted a new challenge
(e) Retrenched/dismissed
(f) Found employment in my area of specialization.
(g) Other (please specify)_____

17. Are you still employed in your area of training?

(a) Yes (b) No

18. ***(If No to question 18)***, why did you change your career?

(a) Lack of career progression
(b) Poor remuneration
(c) Poor working conditions
(d) Lack of job satisfaction
(e) Other (please specify)_____

19. What are the difficulties you encountered in looking for a job?

(a) Takes too long to find one
(b) Employers not interested in my level of qualifications
(c) Employers not interested in my area of specialisation
(d) Lack of work experience
(e) Limited employment opportunities in my area
(f) Other (Please specify)_____

20. How long have you been looking for a job after training? (Tick)

(a) Less than 6 months
(b) 6 – 12 months
(c) 13 – 24 months
(d) 25 – 36 months
(e) Over 3 years

SECTION C: SKILLS ACQUISITION, QUALITY OF TRAINING AND EMPLOYER SATISFACTION

21. **(Compare the skills you acquired from your training and your ability to perform on your current or previous job)**, would you say your training was: (Tick)

(a) Very relevant
(b) Adequate
(c) Not relevant

22. Can you recommend the course you went through to a friend, colleagues or relative?

(a) Yes (b) No

Using the percentages (%) indicated, rate the extent to which the following components of training should be improved to prepare graduates for the job market. Use a tick (√)

Training component	**100% improvement**	**75% Improvement**	**50% Improvement**	**25% Improvement**	**0% Improvement**
23. Knowledge (Theory)					
24. Training in practical skills					
25. Industrial attachments					
26. Course content					
27. Instructional manuals					
28. Textbooks					
29. Workshop equipment					
30. Laboratory work					
31. Teaching and delivery methods					
32. Instructor's knowledge of theory					
33. Instructor's practical skills					
34. Increase duration of training					

*What is your opinion with regard to the following statements of the adequacy of vocational training, graduates' employability and their ability to perform their jobs? **SDA** = strongly disagree; **DS** = disagree; **NA** = not applicable; **A** = agree; **SA** = strongly agree. Use a tick (√).*

Statements	SDA	DS	NA	A	SA
35. My training adequately prepared me for work					
36. My employer/former employer is/was satisfied with my level of knowledge and skill					
37. It is easy for me to get a job					
38. I can easily be trained to improve my level of skill					
39. I find/found myself very effective in my current/previous job					
40. I can easily change employers within my area of specialization					

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SURVEY QUESTIONNARE FOR THE GRADUATES FROM TECHNICAL TRAINING CENTERS UNDER THE MINISTRY OF AGRICULTURE AND DIRECTORATE OF AGRICULTURE

Name of the Interviewer _____ Date of Interview:

Name of Interviewee_____ Telephone_____

Town/Village_____ Upazila/Thana_____ District_____

Year of Graduation_____ Name of the Training Course/Program_____

Name of the Technical Training Center/IGA Institute Attended_____

(Please use a tick (√) to indicate your response where appropriate).

a. Are you familiar with the Ministry of Agriculture and Directorate of Agriculture (DOA) and their training courses? Yes/No

b. How were you aware of the DOA conducted training courses?

c. What did motivate you to take DOA conducted training course?

SECTION A: PERSONAL INFORMATION

1. Age (in completed years):

2. Gender: (a) Male (b) Female

3. What level of training did you complete at a Technical Training Center/IGA Institute?

(a) Bachelors degree
(b) Higher Diploma
(c) Diploma
(d) Certificate
(e) National Craft Certificate
(f) Trade Test (A,B,C.) Certificate
(g) Other (Please specify)_____

4. What is your training area of specialization/trade?

SECTION B: EMPLOYMENT AND EMPLOYMENT HISTORY

5. State your current employment status: Self-Employed/Paid Employed/Pursuing Higher Studies

a) Employed fulltime
b) Employed part-time
c) Employed temporarily
d) Unemployed and looking for employment (Go to Q. 20)

6. Name of employer & company _____

7. Place of Employment _____

8. Monthly Income (in Taka):

9. ***(If employed)***, in what area of specialization is your job?

Broad Employment Sector	Area of Job Specialization/Title
(i) Agricultural, forestry & fishery	
(ii) Mining & quarrying	
(iii) Manufacturing	
(iv) Construction	
(v) Electricity, gas, water & related services	
(vi) Wholesale & retail trade, repair of motor vehicles & related services	
(vii) Hospitality & tourism services (hotels & restaurants, travel)	
(viii) Information and communication technology (ICT)	
(ix) Transport, storage & communication	
(x) Financial intermediation, real estate, renting & business	
(xi) Professional, scientific & technical services	
(xii) Public administration & supporting services	
(xiii) Education services	
(xiv) Health & social work	
(xv) Seafaring	
(xvi) Other services not elsewhere classified	

10. How long did it take you to get a job after completing your training?

11. How did you get to know about your job?

(a) Friends
(b) Media Advertisements (Please Specify)_____
(c) Door to door (job hunting)
(d) Other (Please specify)_____

12. How many employers did you contact before getting your current job?

13. Specify your type of employer?

(a) Public sector (central government, local government)

(b) Parastatal
(c) Private sector
(d) NGO
(e) Self-employed
(f) Other (please specify)_____

14. How long have you been working for your current employer?

15. How many employers did you work for before the current one?

(a) 0 (Go to Q. 20)
(b) 1
(c) 2
(d) More than 2

16. **(If your current employer is not your first one)**, why did you leave your previous employment?

(a) Sought improved wage
(b) Sought improved working conditions
(c) Needed to change environment
(d) Wanted a new challenge
(e) Retrenched/dismissed
(f) Found employment in my area of specialization.
(g) Other (please specify)_____

17. Are you still employed in your area of training?

(a) Yes (b) No

18. ***(If No to question 18)***, why did you change your career?

(a) Lack of career progression
(b) Poor remuneration
(c) Poor working conditions
(d) Lack of job satisfaction
(e) Other (please specify)_____

19. What are the difficulties you encountered in looking for a job?

(a) Takes too long to find one
(b) Employers not interested in my level of qualifications
(c) Employers not interested in my area of specialisation
(d) Lack of work experience
(e) Limited employment opportunities in my area
(f) Other (Please specify)_____

20. How long have you been looking for a job after training? (Tick)

(a) Less than 6 months
(b) 6 – 12 months
(c) 13 – 24 months
(d) 25 – 36 months
(e) Over 3 years

SECTION C: SKILLS ACQUISITION, QUALITY OF TRAINING AND EMPLOYER SATISFACTION

21. **(Compare the skills you acquired from your training and your ability to perform on your current or previous job)**, would you say your training was: (Tick)

(a) Very relevant
(b) Adequate
(c) Not relevant

22. Can you recommend the course you went through to a friend, colleagues or relative?

(a) Yes (b) No

Using the percentages (%) indicated, rate the extent to which the following components of training should be improved to prepare graduates for the job market. Use a tick (√)

Training component	**100% improvement**	**75% Improvement**	**50% Improvement**	**25% Improvement**	**0% Improvement**
23. Knowledge (Theory)					
24. Training in practical skills					
25. Industrial attachments					
26. Course content					
27. Instructional manuals					
28. Textbooks					
29. Workshop equipment					
30. Laboratory work					
31. Teaching and delivery methods					
32. Instructor's knowledge of theory					
33. Instructor's practical skills					
34. Increase duration of training					

*What is your opinion with regard to the following statements of the adequacy of vocational training, graduates' employability and their ability to perform their jobs? **SDA** = strongly disagree; **DS** = disagree; **NA** = not applicable; **A** = agree; **SA** = strongly agree. Use a tick (√).*

Statements	**SDA**	**DS**	**NA**	**A**	**SA**

35. My training adequately prepared me for work					
36. My employer/former employer is/was satisfied with my level of knowledge and skill					
37. It is easy for me to get a job					
38. I can easily be trained to improve my level of skill					
39. I find/found myself very effective in my current/previous job					
40. I can easily change employers within my area of specialization					

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SURVEY QUESTIONNARE FOR THE GRADUATES FROM TECHNICAL TRAINING CENTERS UNDER THE MINISTRY OF HEALTH AND FAMILY WELFARE AND DIRECTORATE OF HEALTH

Name of the Interviewer _____ Date of Interview:

Name of Interviewee_____ Telephone_____

Town/Village_____ Upazila/Thana_____ District_____

Year of Graduation_____ Name of the Training Course/Program_____

Name of the Technical Training Center/IGA Institute Attended_____

(Please use a tick (√) to indicate your response where appropriate).

a. Are you familiar with the Ministry of Health and Family Welfare and Directorate of Health (DOH) and their training courses? Yes/No

b. How were you aware of the DOH conducted training courses?

c. What did motivate you to take DOH conducted training course?

SECTION A: PERSONAL INFORMATION

1. Age (in completed years):

2. Gender: (a) Male (b) Female

3. What level of training did you complete at a Technical Training Center/IGA Institute?

(a) Bachelors degree
(b) Higher Diploma
(c) Diploma
(d) Certificate
(e) National Craft Certificate
(f) Trade Test (A,B,C.) Certificate
(g) Other (Please specify)_____

4. What is your training area of specialization/trade?

SECTION B: EMPLOYMENT AND EMPLOYMENT HISTORY

5. State your current employment status: Self-Employed/Paid Employed/Pursuing Higher Studies

a) Employed fulltime
b) Employed part-time
c) Employed temporarily
d) Unemployed and looking for employment (Go to Q. 20)

6. Name of employer & company _____

7. Place of Employment _____

8. Monthly Income (in Taka):

9. ***(If employed)***, in what area of specialization is your job?

Broad Employment Sector	Area of Job Specialization/Title
(i) Agricultural, forestry & fishery	
(ii) Mining & quarrying	
(iii) Manufacturing	
(iv) Construction	
(v) Electricity, gas, water & related services	
(vi) Wholesale & retail trade, repair of motor vehicles & related services	
(vii) Hospitality & tourism services (hotels & restaurants, travel)	
(viii) Information and communication technology (ICT)	
(ix) Transport, storage & communication	
(x) Financial intermediation, real estate, renting & business	
(xi) Professional, scientific & technical services	
(xii) Public administration & supporting services	
(xiii) Education services	
(xiv) Health & social work	
(xv) Seafaring	
(xvi) Other services not elsewhere classified	

10. How long did it take you to get a job after completing your training?

11. How did you get to know about your job?

(a) Friends
(b) Media Advertisements (Please Specify)_____
(c) Door to door (job hunting)
(d) Other (Please specify)_____

12. How many employers did you contact before getting your current job?

13. Specify your type of employer?

(a) Public sector (central government, local government)

(b) Parastatal
(c) Private sector
(d) NGO
(e) Self-employed
(f) Other (please specify)_____

14. How long have you been working for your current employer?

15. How many employers did you work for before the current one?

(a) 0 (Go to Q. 20)
(b) 1
(c) 2
(d) More than 2

16. **(If your current employer is not your first one)**, why did you leave your previous employment?

(a) Sought improved wage
(b) Sought improved working conditions
(c) Needed to change environment
(d) Wanted a new challenge
(e) Retrenched/dismissed
(f) Found employment in my area of specialization.
(g) Other (please specify)_____

17. Are you still employed in your area of training?

(a) Yes (b) No

18. ***(If No to question 18)***, why did you change your career?

(a) Lack of career progression
(b) Poor remuneration
(c) Poor working conditions
(d) Lack of job satisfaction
(e) Other (please specify)_____

19. What are the difficulties you encountered in looking for a job?

(a) Takes too long to find one
(b) Employers not interested in my level of qualifications
(c) Employers not interested in my area of specialisation
(d) Lack of work experience
(e) Limited employment opportunities in my area
(f) Other (Please specify)_____

20. How long have you been looking for a job after training? (Tick)

(a) Less than 6 months
(b) 6 – 12 months
(c) 13 – 24 months
(d) 25 – 36 months
(e) Over 3 years

SECTION C: SKILLS ACQUISITION, QUALITY OF TRAINING AND EMPLOYER SATISFACTION

21. **(Compare the skills you acquired from your training and your ability to perform on your current or previous job)**, would you say your training was: (Tick)

(a) Very relevant
(b) Adequate
(c) Not relevant

22. Can you recommend the course you went through to a friend, colleagues or relative?

(a) Yes (b) No

Using the percentages (%) indicated, rate the extent to which the following components of training should be improved to prepare graduates for the job market. Use a tick (√)

Training component	**100% improvement**	**75% Improvement**	**50% Improvement**	**25% Improvement**	**0% Improvement**
23. Knowledge (Theory)					
24. Training in practical skills					
25. Industrial attachments					
26. Course content					
27. Instructional manuals					
28. Textbooks					
29. Workshop equipment					
30. Laboratory work					
31. Teaching and delivery methods					
32. Instructor's knowledge of theory					
33. Instructor's practical skills					
34. Increase duration of training					

*What is your opinion with regard to the following statements of the adequacy of vocational training, graduates' employability and their ability to perform their jobs? **SDA** = strongly disagree; **DS** = disagree; **NA** = not applicable; **A** = agree; **SA** = strongly agree. Use a tick (√).*

Statements	SDA	DS	NA	A	SA
35. My training adequately prepared me for work					
36. My employer/former employer is/was satisfied with my level of knowledge and skill					
37. It is easy for me to get a job					
38. I can easily be trained to improve my level of skill					
39. I find/found myself very effective in my current/previous job					
40. I can easily change employers within my area of specialization					

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QUESTIONNAIRE FOR THE TRAINERS

(Note: Get the personal information only if the interviewee is willing to provide it).

Name of the Interviewer _____ Date of Interview:

Name of Interviewee _____ Telephone/Email_____

Designation_____ Specialization_____

Qualification: Area of Teaching:

Name of Technical Training Center/IGA Institute and the Ministry _____

Upazila/Thana_____ District_____

Use a tick (√) to indicate your response where appropriate).

1. Name of Institution_____

2. What areas of specialization are offered by your institution?

Broad Employment Sector	Areas of Specialization/Trade
(i) Agricultural, forestry & fishery	
(ii) Mining & quarrying	
(iii) Manufacturing	
(iv) Construction	
(v) Electricity, gas, water & related services	
(vi) Wholesale & retail trade, repair of motor vehicles & related services	
(vii) Hospitality & tourism services (hotels & restaurants, travel)	
(viii) Information and communication technology (ICT)	
(ix) Transport, storage & communication	
(x) Financial intermediation, real estate, renting & business	
(xi) Professional, scientific & technical services	
(xii) Public administration & supporting services	
(xiii) Education services	
(xiv) Health & social work	
(xv) Seafaring	
(xvi) Other services not elsewhere classified	

3. How many people graduate from your institution annually by program of specialization?

Broad Employment Sector	Areas of Specialization/Trade	
	Program of Specialization	Number of Graduates Annually
(i) Agricultural, forestry & fishery		
(ii) Mining & quarrying		
(iii) Manufacturing		
(iv) Construction		
(v) Electricity, gas, water & related services		
(vi) Wholesale & retail trade, repair of motor vehicles & related services		
(vii) Hospitality & tourism services (hotels & restaurants, travel)		
(viii) Information and communication technology (ICT)		
(ix) Transport, storage & communication		
(x) Financial intermediation, real estate, renting & business		
(xi) Professional, scientific & technical services		
(xii) Public administration & supporting services		
(xiii) Education services		
(xiv) Health & social work		
(xv) Seafaring		
(xvi) Other services not elsewhere classified		

4. Which employment sector often employs your graduates upon completion?

(a) Public sector (central government, corporations)
(b) Private sector
(c) Often self-employed
(d) Not sure
(e) Other (please specify)_____

5. Are employers satisfied with the skills acquired by your graduates? (a) Yes (b) No

6. ***(If NO to question 5)***, What areas do they think could be improved or added?

_____
_____
_____

7. Do you feel Vocational Training Programmes adequately prepares graduates for the World of Work? (a) Yes (b) No

8. ***(If NO to question 7)***, what areas do you think need to be improved or added? (Please give reasons for your answer)

_____

_____

_____

9. If you were an employer, would you employ graduates from your institution? Please elaborate.

_____
_____
_____

10. Do your graduates get employment on completion? (a) Yes (b) No

11. How long do your graduates wait before they get employment?

_____
_____

12. How do trades/programmes that you offer prepare trainees for Bangladesh job market?

_____
_____
_____

13. How do trades/programmes that you offer prepare trainees for overseas job market?

_____
_____
_____

14. Do you have any programmes that introduce trainees to the workplace/work environment? (i.e. Internship, apprenticeship, fieldwork etc).

_____
_____
_____

Evaluation of Technical Training Centers/IGA Institutes in the Districts of Bangladesh under Different ADP funded Projects of Various Ministries Evaluation Sector, IMED, Ministry of Planning, Government of the People's Republic of Bangladesh

QUESTIONNARE FOR THE TECHNICAL TRAINING CENTERS/IGA INSTITUTES

(Note: Get the personal information only if the interviewee is willing to provide it).

Name of the Interviewer _____ Date of Interview:

Name of Interviewee_____ Telephone_____

Designation _____ (e.g. Principal)

Name of the Technical Training Center/IGA Institute and the Ministry_____

Year of Establishment _____

Location: Town/Village_____ Upazila/Thana_____ District_____

Use a tick (√) to indicate your response where appropriate).

SECTION-A: BACKGROUND INFORMATION OF THE TECHNICAL TRAINING CENTER/IGA INSTITUTE

1. Name of the Line Ministry	
2. Type of training institute	Private/Government/NGO
3. Total fund received during 2008-09/2012-13	
4. Total fund expended during 2008-09/2012-13	
5. Total number of training courses during 2008-09/2012-13	
6. Total number of hours in each course during 2008-09/2012-13	
6. Total Enrolment of trainees during 2008-09/2012-13	
7. Total number of trainees who graduated during 2008-09/2012-13	
8. Total dropouts of trainees during 2008-09/2012-13	
9. Total number of trainees who failed during 2008-09/ 2012-13	
10. Total number of administrative staff during 2008-09/ 2012-13	
11. Total number of full time teachers/instructors during 2008-09/ 2012-13	
12. Total number of part-time teachers/instructors during 2008-09/ 2012-13	

SECTION-B: BACKGROUND INFORMATION OF THE TRAINING COURSES/PROGRAMMES

14. Training currently provided:

Name of the training course/ Program	Name of occupations the course/program cater	Training/ trades in high demand (a tick) Tick – 1 No tick – 0	Whether BTEB affiliated (Y/N) Yes -1 No -0	Whether the training institute has its own certificate (Y/N) Yes -1 No -0	Duration (contact hours) and level (semi-skilled, skilled and highly skilled) of the course		Course Fee (Tk.)	Enrolment capacity for each course	Number of times the course is conducted annually	Entry requirements for the course
					Duration (1)	Level (2)				
1.	i)									
	ii)									
	iii)									
2.	i)									
	ii)									
	iii)									
3.	i)									
	ii)									
	iii)									

15. Does the training center/institute also provide employment services to the graduates?

☐ Yes (1) ☐ No (0)

16. How many training openings were there during 2008-09/2012-13?

17. Is the training center/institute planning to offer new courses to respond to the market demand?

☐ Yes (1) ☐ No (0)

If Yes, please give details in the table below:

Courses planned to be offered	Number of planned enrolment	Duration (contact hours) and level (semi-skilled, skilled, highly skilled) of the course		Number of times the course will be conducted annually	Entry requirements
		Duration	Level		
1)					
2)					
3)					
4)					

18. How many times curricular designs were changed during 2008-09/2012-13?

SECTION-C: IMPLEMENTATION STATUS OF TOTAL INVESTMENT IN TRAINING CENTERS AND TRAINING PROGRAMMES DURING 2008-09/2012-13

19. Implementation status of construction and rehabilitation works of training centers/institutes during 2008-09/2012-13

Name of Construction and Rehabilitation Works of Training Center/Institute with Year of Allocation	Implementation Status	
	Targeted Time of	Actual Time of

	Completion	Completion

20. Reasons for not completing construction and rehabilitation works of training center/institute, if applicable:
(i)
(ii)
(iii)
(iv)

21. Utilization of Total Investment in Training Programmes

Year	Name of the Training Program	Objectives & Targets of Training	Achievement
2008-09			
2009-10			
2010-11			
2011-12			
2012-13			

22. Reasons for not achieving the objectives and targets of the training programmes, if applicable:
(i)
(ii)
(iii)
(iv)

SECTION-D: GENERAL COMMENTS AND OBSERVATIONS

23. Do you think that the training courses/curriculum are practicable, adequate and economically gainful? YES/NO

IF NOT, what are the reasons? Please elaborate:

24. Do you see any redundancy in and/or duplication of the training courses being offered by different training centers under different ministries? YES/NO

IF YES, What are they?

25. Do you think that the teachers/trade instructors are effectively and adequately trained to impart proper learning and skills to the trainees/students? YES/NO

IF NOT, What are the reasons?
How to make them more effective and adequately trained?

26. How do you assess the skills of the graduates?
How many skilled graduates have you produced during the last five years?

27. How many graduates are using their acquired skills in their practical life?

28. Are the present set of human power/instructors/teachers and infrastructural facilities in your training center adequate? YES/NO
IF NOT, please indicate your additional requirements:

29. How far the objectives of training have been achieved in terms of human resource development and overall employment opportunities of male and female youth force of the country?

30. How do you assess the contributions of private technical and vocational training institutes that receive monthly subvention from the government towards human resource development?

31. What are the strengths as well as the present flaws, difficulties subsisting in your technical training center?

32. What are your recommendations for more improved policy directions towards quality and effective training courses as well as well-coordinated management and sustainable operation of these training centers?

Appendix-3

Checklist for FGDs and Key Informants

Key Themes/Issues:

1. Whether government training programmes are making any change in the quality of life of the training beneficiaries.

2. What proportion of the trained persons under different ministries are getting employed?

3. What proportion of the trained persons are receiving training in one trade/occupation and getting employed in another job?

4. What proportion of the trained persons are getting self-employed/wage-employed?

5. Are the training courses relevant to the job markets at home and abroad?

6. What are the strengths and weaknesses of the government training programmes?

7. Which training programmes (public/private/NGO) are doing better in terms of job, income and quality of life?

Appendix-4

Evaluation of Technical Training Centers/IGA Institutes in the Districts of Bangladesh under Different ADP funded Projects of Various Ministries
Evaluation Sector, IMED, Ministry of Planning, Government of the People's Republic of Bangladesh

Checklist for the Ministries (MEWOE, MYS, MoWCA, MOA, & MOH&FW)

1. Implementation status of construction and rehabilitation works of training centers/institutes or similar type of IGAs related training centers under different ministries during the periods 2008-09 through 2012-13

Year	Description of construction and rehabilitation works	Implementation status	Comments
2008-09			
2009-10			
2010-11			
2011-12			
2012-13			

2. Investment costs on training

Year	Investment cost on physical construction and rehabilitation works (In lakh Taka)	Investment cost on training (In lakh Taka)	Other training cost (In lakh Taka)	Total investment cost (In lakh Taka)	Comments
2008-09					
2009-10					
2010-11					
2011-12					
2012-13					

3. Total number of training institutes/centres, number of courses, enrolment and achievement of training

Year	Total number of training institute/centre	Total number of courses	Total number of trainees enrolled	Total number of trainees passed	Total number of trainers
2008-09					
2009-10					
2010-11					
2011-12					
2012-13					

4. Training courses, enrolment and achievement of training (please use additional pages if necessary)

Year	Name of all the training courses	Total number of trainees	Total number of trainees	Total number of trainers

		enrolled	passed	
2008-09				
2009-10				
2010-11				
2011-12				
2012-13				