

# **ILO-JOBS Assessment**

## **Final Report: Survey and Assessment of Formal and Informal Apprenticeships in Bangladesh**

**March 2009**



**JOBS**  
CREATING OPPORTUNITIES

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**List of Acronyms**

AML	Abdul Monem Ltd.
BASIS	Bangladesh Association of Software & Information Services
BATB	British American Tobacco, Bangladesh
BCC	Bangladesh Computer Council
BFFEA	Bangladesh Frozen Foods Exporters Association
BIT	Bachelors in Information Technology
BLSC	Bangladesh Leather Services Centre
CBT	Competency Based Training
CECA	Canadian Electrical Contractors Association
DYD	Department of Youth Development
ETP	Effluent Treatment Plant
FBCCI	Federation of Bangladesh Chambers of Commerce and Industry
FGD	Focus Group Discussion
FF	Formal Sector – Formal Apprenticeship
FI	Formal Sector – Informal Apprenticeship
GoB	Government of Bangladesh
GST	Goods and Services Tax
HSC (Voc)	Higher Secondary Certificate (Vocational)
IER	Institute for Employment Research
II	Informal Sector – Informal Apprenticeship
ILO	International Labor Organization
ITC	International Trade Center
JAC	Joint Apprenticeship Councils
KII	Key Informant Interview
NETCO	National Electrical Training Council
NSS	National Skill Standards
NVQF	National Vocational Qualifications Framework
PRSP	Poverty Reduction Strategy Paper
RPL	Recognition of Prior Learning
SIAST	Saskatchewan Institute for Applied Sciences and Technology
SIDA	Swedish International Development Cooperation Agency
SDT	Skills Development Training
SSC (Voc)	Secondary School Certificate (Vocational)
TVET	Technical Vocational Educational Training
TVQF	Technical and Vocational Qualifications Framework
WTP	Water Treatment Plant

# 1. Executive Summary

In order to address the challenges faced in the era of globalization, many countries in the West as well as the developing countries which make up the Global South, have duly recognized the need to strengthen workforce capacities by enhancing the overall skill level and knowledge base in industry trades. In less developed countries such as Bangladesh, the need for training more skilled and highly skilled workers is a function of the rapid expansion of the workforce (due primarily to population growth), and the lack of access to relevant and viable skills development and training. In Bangladesh, the Technical Vocational Educational Training (TVET) system is deficient, outdated and ineffective in providing relevant skills and knowledge in work-oriented training. While work has begun to create institutional changes to the TVET system through policy reform, many of which have been introduced and promoted by the ILO, there is still much to do on the road ahead.

The TVET reform project, launched by the Government of Bangladesh, the European Commission and the ILO, faces considerable challenges. There are significant doubts and concerns regarding the current TVET system as both employers and graduates seem wary of the quality and relevance of the skills training provided in many fields. In response to this situation, the Project promotes strengthening formal institutions and training programs with higher quality training for existing and future beneficiaries.

In a much broader context the proposed reforms are also aimed at extending access to the sizable majority of workers who would otherwise be confined to employment in the informal sector, without legal benefits, entitlements or certification for the skills they develop through informal training. The informal sector may account for as much as 80 percent of the total workforce in Bangladesh.<sup>1</sup> Unfortunately, the trainings afforded within the informal system are typically of low quality and hence result in a lower range of skills, productivity and income for most informal workers.<sup>2</sup> A concerted effort must be made to include formal recognition of the informal sector and improve access to formal training institutions and programs as an integral part of TVET reform, so that informal workers can have access to better skills training and development.<sup>3</sup>

Informal apprenticeships have long been a traditional solution for skills development training in poor societies. In looking for viable program options that can strengthen and aid the TVET reform process, the ILO has commissioned this assessment of apprenticeship systems. The purpose of the JOBS-ILO assessment is to:

- Review the operation of both formal and informal apprenticeships in four (4) key industry sectors in Bangladesh by obtaining feedback through expert consultations, surveys and key informant interviews.
- Make concrete proposals on ways to strengthen and improve the training arrangements of apprenticeships for young people.
- Critically analyze the mechanisms of apprenticeship in order to identify new models for pilot projects aimed at strengthening these arrangements through a continued partnership between the ILO and the Government of Bangladesh (GoB).

For the purposes of this report, apprenticeship arrangements have been divided into two categories, Formal and Informal. **Formal apprenticeships** are defined as those which fall under the recognized Bangladeshi law regarding apprenticeships (The Apprenticeship Ordinance of 1962 which mandates the incorporation of an apprenticeship program in businesses over a certain size) which have governmental registration and award certifications for successful completion of an apprenticeship program. With this definition, formal apprenticeship in Bangladesh is extremely limited with a total of 54 formal apprentices within 3 formal apprenticeship programs in the private sector. Few businesses are even aware that a government mandate for the incorporation of an apprenticeship structure even exists. A new piece of legislation under consideration, The Apprenticeship Procedure—2008, lays out

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1 ADB, Planning Document for Skills Development (Draft), "Indigenous Peoples Development Framework", February 2008.

2 ILO Workshop Report, "Apprenticeships in the Informal Economy in Africa," Geneva, 3rd and 4th May 2007.

3 ILO-IIRA (Indian Industrial Relations Association), "Informal Economy: The Growing Challenge for Labour Administration," Edited by A. Sivanathiran, C.S. Venkata Ratnam, 2005.

definitions to be used in the enforcement of the law, and clearly designates the regulatory authority in charge of enforcement and administration. However, though this is an improvement, it remains to be seen if the law will be adopted and then enforced.

At the other end of the spectrum, *informal apprenticeships* can be defined as arrangements that have neither legal status under existing legislation nor fall under the formal institutional regulation of any public sector bureau or administration. It is important to bear in mind that the marked difference between formal and informal apprenticeship is in legal definition (and government recognition), and is the principle characteristic that distinguishes the two types of apprenticeship for the purposes of this assessment. In reality, the formal – informal division is really more of a continuum, where various degrees of program structure can be seen all along the axis, with the Formal Apprenticeships on one end with regulated programs, and the Informal Apprenticeship which tend to lack any rigid or formalized organizational structure at the other. In the middle are arrangements of Formal apprenticeships that can have some informal organization, and Informal apprenticeship which can exhibit some or extensive formal organization and “Formal” structure (such as set pay rates, working hours, set curricula etc). In other words, certain Informal Apprenticeships along the continuum may exhibit more formal, and hence, organized characteristics, and likewise, but not often, Formal Apprenticeships which do not possess *all* of the standards of formality discussed above.

The first objective of the assessment was to look at these apprenticeship structures within **four (4) business sectors: Leather and leather goods; Transport equipment (shipbuilding and bicycle manufacture); Agro-food processing; Information Technology (IT)**. These sectors were selected by the TVET Reform project as they are considered to have the greatest potential for growth in employment, exports, and improved protection for young workers. Great pains were taken to secure a balanced sample of employers and apprentices across sectors; however, in the case of the ICT sector apprenticeship systems are rare. Within each sector, various trades were targeted and while these trades were initially defined, the reality of the survey process required that the selection trades be altered to suit those for which information was most readily available.

The **methodology** followed included desk review, expert consultations, and survey questionnaires targeting two groups, employers and apprentices, in both Formal and Informal programs. Questionnaires were administered through key-informant interviews (KII) with various stakeholders including industry organizations, government agencies, labor unions, training services providers, individual employers, master craftspeople and apprentices. The survey and assessment also employed the use of Focus Group Discussions (FGD), using panels comprised of the abovementioned stakeholders in order to gain in-depth knowledge and additional perspectives against which to measure the findings of the KIIs.

The survey was implemented over the course of three (3) weeks in eight (8) different districts of Bangladesh including, Dhaka, Chittagong, Rajshahi, Natore, Gazipur, Narayanganj, Noakhali, and Khulna. A total of 86 employers and 126 apprentices were interviewed. Despite the concentration of jobs and apprentices in the three major metropolitan areas, the survey also included smaller district level towns and rural areas in order to gain a better picture of the apprenticeship arrangements throughout the country as a whole. These additional areas were selected based in part on the location of different types of industries per the four business sectors.

Survey implementation and data gathering followed the structure of the questionnaires – one for apprentices and one for employers – and as such, the survey findings capture perceptions of both parties, with data presented for both Formal and Informal arrangements. The **major findings** of the survey can be enumerated as follows:

- Formal apprentices are given higher levels of allowance than their informal counterparts.
- Other than allowances, other benefits like medical, sick leave, holiday leave, refreshment, food, insurance etc. are offered. These benefits vary from business to business and most apprentices in informal apprenticeships were deprived of such additional benefits.
- Most formal businesses follow the standard 8 hour workday; however, a few formal businesses, and most informal businesses, do not follow this standard. In informal apprenticeships, 69% worked for more than 8 hours in a workday. In the case of formal apprenticeships, 75% apprentices termed working conditions as good, where as in the case of informal apprentices it was 49%.

- All formal apprentices were recruited through advertisement either in print media (75%) or from the internet (25%). About 50% of informal apprentices were recruited informally typically with the help of a relative. As expected, experience and/or training were not requirements in securing an apprenticeship. This held for both formal and informal apprenticeship programs. Most apprentices participate in these programs to improve employment opportunities and skill levels.
- Certification is provided in most formal apprenticeships. An estimated 75% of formal apprentices expected to receive certificates upon completion of their apprenticeship. On the contrary, 98% of informal apprentices were not given certificates for their participation.
- On the effectiveness of the apprenticeship programs, formal apprentices felt the generally positive; most often considered their programs as being “very effective.” By comparison, 56% of informal apprentices found the programs only “moderately effective.”
- Both formal and informal apprentices experienced financial difficulties/hardship during their apprenticeship, but findings saw that getting a job working with the same business as a full time employee was a common goal in participating in either a formal or informal apprenticeship program. An estimated 35% of informal apprentices participate in these skill development programs in order to obtain overseas employment.
- The formal apprenticeship programs follow a combination of “class room training plus on job training” while most informal programs follow “100% on the job training.” Only 8% of informal apprentices were given class room training by the employers.
- There were no TVET requirements for the formal apprentices that were interviewed. However, 14% of informal apprentices submitted that TVET training was a requirement for their entry to apprenticeship (this was confirmed by both master craftspeople as well as apprentices). Most formal employers stated that they recruited apprentices in order to fulfill corporate social responsibility. In the case of informal apprenticeships, 82% of businesses recruit apprentices in order to fulfill their own employment needs first.
- There are minimum educational requirements for formal apprenticeships. However, 65% of employers did not require any minimum level of education in order to qualify for an apprenticeship. IT businesses did not seem to have any requirements whatsoever.
- The duration for formal apprenticeship is on average about 2 years. In the case of informal apprenticeships, the duration of apprenticeship was around 1 year.
- Formal apprentices receive regular performance evaluations from their employers. 59% of informal employers have formal performance evaluations with an estimated 28% of informal apprenticeships following more informal observation methods.

**Strategies** identified for strengthening and expanding *formal apprenticeships* fall into four (4) categories:

1. Skills Standards - Developing industry- and trade-specific skills standards is the first step to successfully reforming the formal apprenticeship system in Bangladesh.
2. Apprenticeship Learning Organization - Nominate an independent learning organization such as a university, think-tank, or similar organization to act as an independent facilitator for the process of strengthening and expanding all apprenticeship activities.
3. Curricula - National Skills Standards should be the basis for further curricula development with a public-private partnership organization housed in the aforementioned independent learning institution to take overall responsibility for the curricular issues. However, local committees should be established in various regions and districts to identify the specific needs of industry in those areas. Decentralizing the curricula development process will be essential in establishing local ownership over the process, and should increase the confidence of employers in the quality of trainings provided, and increase the number of new employees hired from training institutions.
4. Incentives - While there are very real benefits for both employers and potential apprentices to participate in an apprenticeship system, these benefits are often not readily apparent in the short-term. For this reason, additional incentive structures for both employers and apprentices should be considered: Increased financial incentives for both parties, locally standardized stipends for apprentices, non-financial incentives (Recognition of Prior Learning, tools, public recognition, etc.)

**Strategies** identified for strengthening and expanding *informal apprenticeships* fall into four (4) categories:

1. Recognition of Prior Learning (RPL) - Possibly the most critical step in upgrading informal apprenticeships will be the establishment of a system for the Recognition of Prior Learning (RPL). This will allow informal apprentices—as well as master craftspeople and employers—to receive formal recognition for the skills they currently have, regardless of how or where they were learned.
2. Assessment Tools - A system of simple logbooks based on NCS (see Annex 7 – Sample Logbook) can be used to track the progress of learning during apprenticeships. Standardized exams based on TVET training curricula could be given orally, visually or through demonstration, as opposed to merely written examinations that could potentially limit access for some informal workers.
3. Awareness Raising - First, all potential employers/recruiters would need to be made aware of the relevance and importance of any “new” certifications and how apprentices/employees in possession of them could benefit their businesses. Second, for both employers and trainees, the financial benefits of skills development training (such as apprenticeship) should be captured through a demonstrated cost-benefit analysis of net gains.
4. Exploit Informal Social Networks – The majority of apprenticeship arrangements are informal, and the majority of these utilize informal social networks. For example, create or use existing community organizations as a regulating body in making agreements between apprentices and master craftspeople/employers.

## 2. Introduction

In order to address the challenges faced in the era of globalization, many countries in the West as well as the developing countries which make up the Global South have duly recognized the need to strengthen workforce capacities by enhancing the overall skill level and knowledge base in industry trades. While in the West the growing need for skilled labor is in part due to the application of a more highly mechanized production processes, it is also an outgrowth of an aging workforce transitioning from the world of work into retirement. In less developed countries in the Global South like Bangladesh, the need for training more skilled and highly skilled workers is a function of the rapid expansion of the workforce (due primarily to population growth), and the lack of access to relevant and viable skills development and training. As a result of these conditions in the developing world many countries in the Global South are unable to seize upon the opportunities for economic growth, and hence cannot maximize their efficiency and productivity. Millions are left dependant on subsistence in *informal*, low-skill labor, earning insufficient incomes under illicit work agreements, all of which continue the cycle of poverty.

These conditions result from a marked institutional failure, the solutions for which have to be enacted in a timely manner and at multiple levels—i.e. policy and government, industry sectors, as well as within the labor economy, impacting both the formal *and* informal sectors. There is a profound need to establish an enabling environment, backed by policy reforms, that will provide workers and industry with the necessary tools to implement high-quality demand-driven skills development and training; as well as national standards for accreditation and certification of learning, skills and work experience, which can serve as a basis for strengthening the overall efficiency and productivity of the labor economy.

In Bangladesh, the Technical Vocational Educational Training (TVET) system is deficient, outdated and ineffective in providing relevant skills and knowledge in work-oriented training. The resultant lack of capacity, due to the lack of funding and investment in resources on the part of both government and the private sector, at present remains central to reform efforts by the Government of Bangladesh (GoB), and international donor-funded organizations such as the International Labor Organization (ILO).

While work has begun on creating institutional changes to the TVET system through policy reform, many of which have introduced and promoted by the ILO, there is still much to do on the road ahead. In looking for viable program options that can strengthen and aid the TVET reform process in Bangladesh, the ILO has commissioned an assessment of *apprenticeship systems in Bangladesh*.

The ILO-JOBS assessment of apprenticeship arrangements in Bangladesh, as defined in the TOR, and in the JOBS project proposal, looks at the efficacy and potential of existing apprenticeships, primarily within the informal economy, to serve as an effective means of skills development training which can aid the process of TVET reform. Enhancing the overall productivity and skill level of the Bangladesh labor economy by strengthening the role of apprenticeships in Bangladesh can help provide much needed first hand training across industry sectors, increase the overall skill level of the workforce, create opportunities for young and/or marginalized workers, as well as garner social and legal protections defined under progressive policy platforms.

The purpose of the JOBS-ILO assessment is to:

- Review the operation of both formal and informal apprenticeships in four (4) key industry sectors in Bangladesh by obtaining feedback through expert consultations, surveys and key informant interviews.
- Make concrete proposals on ways to strengthen and improve the training arrangements of apprenticeships for young people.
- Critically analyze the mechanisms of apprenticeship in order to identify new models for pilot projects aimed at strengthening these arrangements through a continued partnership between the ILO and the Government of Bangladesh (GoB).

The skills gap in the Bangladesh labor economy evidences several important issues with regard to poverty and employment. Bangladesh's national labor force is rapidly advancing towards 50 million



people. The level of underemployment has increased substantially over the past decade although unemployment has remained relatively low.<sup>4</sup> Even though there is no shortage in human resources, the flagging skill level of the workforce means that jobs, businesses and industries are left at a comparative disadvantage, and are forced to rely on low-skill labor that creates inconsistencies and deficiencies in production. Reforming the institutions and mechanisms for creating relevant and effective skills training can help to alleviate some of these conditions and boost production, leading to an increase in the added value of labor as well as real wages.

More than 250,000 Bangladeshis migrate abroad each year in search of employment in international labor markets, and 3 million Bangladeshis live abroad currently, the number of Bangladeshis migrating abroad in search of work each year is expected to amplify along with the growing workforce. Remittances from these migrants play an important role in the economy of Bangladesh, representing 8.8% of GDP in 2006.<sup>5</sup> Higher levels of skills amongst these migrants would ensure that they are able to remain competitive in international markets. Giving more relevant and valuable skills training can have a measurable impact for migrant workers, could create greater income generating opportunities for Bangladeshis working abroad, and the resulting higher incomes could increase the levels of remittances they send home.<sup>6</sup>

Bangladesh is a developing country wracked by extreme poverty, and the percentage of those employed in the informal sector is also considerably large in comparison to both regional countries, as well as internationally. Close to 80 percent of the workforce is immersed in, and entirely dependent on a system of employment that affords them no recognition or protection under national labor laws, no access to viable training and skills development, which relegates informal workers to a life of subsistence on low wage employment and tenuous work agreements with employers. Informal employment and the informal economy should be identified as a critical facet to understanding Bangladesh's socio-economic condition, and must be given primacy in undertaking any meaningful and potentially viable strategy for poverty reduction.

Reformation within the TVET system has the potential to yield many tangible and intangible benefits. Apprenticeship can be used as a fundamental tool in delivering practical and relevant skills development for masses of people, formal and informal workers, under- and unemployed, who are seeking a means for more productive and sustainable livelihoods. Apprenticeships can also service a growing need of employers for more highly skilled workers. The JOBS-ILO assessment helps to bring to light the sentiments and outlooks of the people who have a direct stake or investment in obtaining better and more relevant skills and training in their respective trades and industry sectors.

This final report for the ILO-JOBS assessment on apprenticeships in Bangladesh will provide an overview of the role of formal and informal apprenticeships, along with a detailed analysis of formal and informal apprenticeships in the four (4) key industry sectors designated by the ILO. Drawing from the lessons learned in the inception, JOBS will make concrete recommendations on strategies for strengthening and improving formal and informal apprenticeship arrangements in Bangladesh.

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4 The World Bank, The Bangladesh Vocational Education and Training System: An Assessment, p. 9, 2006.

5 The World Bank, Migration and Remittance Factbook 2008;

6 *ibid.*

## 3. Background

### 3.1 TVET Reform: Formal Institutions for SDT

The Technical and Vocational Educational Training (TVET) reform project launched by the government of Bangladesh, the European Commission and the ILO, faces considerable challenges. There are significant doubts and concerns regarding the current TVET system as both employers and graduates seem wary of the quality and relevance of the skills training provided in many fields. With the growth rate indicators of Bangladesh continuing to show gains in output, internally the structure of the labor economy and workforce is coming under pressure to find new and practical ways to develop relevant skills training in order to efficiently and effectively meet market demands.

With a workforce currently approaching 50 million people, and expected to reach 70 to 80 million in the next ten years, the immediate demand for skilled and highly-skilled workers will undoubtedly reach significant proportions. In Bangladesh, many structural and institutional problems exist within the current system of TVET in its design, all of which prevent it from satisfying this increasing demand.

Foremost, access to TVET education is limited for many on the basis of the non-completion of Grade VIII primary school education, a prerequisite for participation in virtually all TVET programs.<sup>7</sup> More flexible enrollment standards should allow youth who have not completed Grade VIII, but who have relevant work experience, access to TVET through accreditation programs for recognition of prior learning (RPL).<sup>8</sup> Furthermore, employers tend to feel that there is a significant skills gap within TVET training programs, and that institutions continually produce graduates with out of date and/or marginal skill sets.<sup>9</sup> In this regard certificate or completion of TVET training is not necessarily viewed as an asset when employers make hiring decisions, and is a stigma that should be addressed in the reform process through awareness building and discussion between focus groups of public and private stakeholders.<sup>10</sup>

Relevant information about labor markets is also widely unavailable to workers when they are making decisions about where inroads to employment can be made through relevant training and skills development.<sup>11</sup> Training courses most often do not create or offer linkages with the private sector. Students in TVET programs should be offered direct on-the-job training and experience while in the process of completing their vocational education. While this could be achieved within the framework of an apprenticeship program, lacking private sector input all but denies students opportunities to be exposed to work environments in their skill or trade through placements, internships or apprenticeships. Linkages with the private sector are needed in order to encourage vocational education schools and polytechnics, their teachers and trainers to update and enhance training curricula with relevant and applicable information on specific trades which will ensure they have a demand-driven focus.<sup>12</sup>

For this specific purpose, it is a common practice in many countries to utilize a national TVET database with relevant demand-centered information from industry sectors on needed skills and employment opportunities, including extensive post-graduate tracking of matriculated students. This sort of a system is typically managed by a single organization within the government where data can be identified, gathered and assimilated before being made available to the administrations of TVET institutions. A nationally administered TVET database would maintain data of market structures, shifts in the demand for skilled labor both in foreign and domestic labor markets; accreditation and certification based on standardized assessments (i.e. Competency Based Training (CBT) standards and the National Vocational Qualifications Framework (NVQF)). Stakeholders would be able to make

7ADB, Planning Document for Skills Development (Draft), "Indigenous Peoples Development Framework," February 2008.

8EC-ILO, People's Republic of Bangladesh Technical and Vocational Education and Training (TVET) Reform Project, "Availability of Data related to Technical and Vocational Education and Training (TVET) in Bangladesh," Md. Nurul Islam, Dhaka, 2008.

9ADB-PINZ, Technical Assistance Consultant's Report, "People's Republic of Bangladesh: Preparing the Skills Development Project," Final Report, August 2007.

10National Policy Group, GPE Regional Brief, Capacity-Building Programme on Gender, Poverty and Employment (GPE) in Southern Africa, "Skills Development and Poverty Reduction," Geneva, May 2003.

11National Institute for Educational Policy Research (NIER), From School to Work: Contemporary TVET regional experiences," final report of the seminar on Technical and Vocational Educational Training, 23 – 30 January, 2007.

12 ILO-IPEC Program for the 'Prevention and Elimination of the Worst Forms of Child Labour in the Urban Informal Economy', Impact Assessment Survey: "On Children Graduated in Skill Development Training", Md. Lutful Kabir, Dhaka, November 2005

direct linkages with the overall TVET system accessing information on wages and remuneration, skills-updating courses, retrenchment and retraining opportunities (for repatriated migrant workers), as well as the general flow of TVET graduates to labor markets.<sup>13</sup>

TVET financing should be thoroughly defined along the lines of capital investment on the part of *both* the public and private sectors, also including NGOs and donor organizations—not only to ensure that resource allocation in the financing/funding of personnel (teachers, managers and administrators), facilities, training materials and curricula are efficient and sustainable,<sup>14</sup> but that the incentives for the private sector are clearly defined in terms of *net benefits* and *profit maximizing outcomes*. Policy measures should be put in place that include clear terms for the collaborative organization of financing for TVET programs and institutions through public-private partnerships.<sup>15</sup>

Gender balance and disenfranchisement should be also figure highly in this policy framework, as well as programs for the inclusion and recognition of the informal sector and people living at the margins of society.<sup>16</sup> Conventional methods and concepts in training should be supplemented by programs that focus on empowerment and capacity building, in addition to demand-driven skills acquisition.<sup>17</sup> The capacities of local entrepreneurs and businesses should be developed with a regional perspective that regards local producers and regional markets as a key actors in delivering viable skills training to hard-to-reach rural and landless poor. Therefore, an expanded scope for the application of more diversified TVET programs should be incorporated into policy frameworks, and training programs should seek to incorporate delivery models which include the involvement of individuals within rural-based economies and markets.<sup>18</sup>

For the purposes of this report, it should be noted that the process of skills and knowledge transfers carried out through the TVET system should be viewed as a *Formal* means of conveyance for skills-based knowledge between an instructor and learner. In this way, TVET can be seen as synonymous with the categorization of *Formal*, as TVET institutions will follow a set curricula and work plan for guiding the learner in the acquisition of skills and work-based knowledge, as well as providing recognized certifications and accreditations upon the successful completion of course training materials *and* falling under the regulation of various GoB ministries. Even though the TVET system has been demonstrated to be deficient in carrying out the effective transfer of skills and work-based knowledge (and despite the fact that many TVET graduates do end up working in the Informal sector, as will be shown later on), the categorization of *Formal* must remain as a designation on account of the abovementioned parameters.

### **3.2 The Informal Sector: Challenges and Opportunities for SDT**

The TVET Reform Project promotes strengthening formal institutions and training programs for existing and future beneficiaries. In a much broader context these reforms are also aimed at extending access to the sizable majority of workers who would otherwise be confined to employment in the *Informal Sector*, without legal benefits, entitlements or certification for the skills they develop through informal training. The informal sector may account for as much as 80 percent of the total workforce in Bangladesh,<sup>19</sup> and although this is a staggering figure, it is not at all uncommon amongst developing nations. The sheer size of the labor force employed informally indicates the need to institute meaningful and basic provisions that would aid these individuals in receiving more benefits from the growing economy.

13 Caritas Switzerland, Working Paper “Sustainability Of Vocational Training Institutes: Success Factors for the Further Development of Vocational Training Institutes—Taking the example of MAWTS, Bangladesh,” Alois Müller, Geert van Dok, Jacqueline Salamí, Lucerne, January 2003.

14 UNESCO International Institute for Educational Planning (IIEP), “Promoting Skills Development,” Report of an Interregional Seminar on Assisting the Design and Implementation of Education for All Skills Development Plans: skills development to meet the learning needs of the excluded, Paris, January 2004.

15 JOBS-UNICEF, Final Report of Adolescent Empowerment Project, “Creating Livelihoods to Contribute to Empowerment of Adolescents in Bangladesh,” 2007.

16 JOBS-UNICEF, Project Phase II, “Technical Livelihood Skills Strategy & Action Plan for Basic Education for Hard to Reach Urban Working Children (BEHTRUWC),” October 2008.

17 CMES (Centre for Mass Education in Science), CMES Annual Report, 2006.

18 Dhaka Ahsania Mission (DAM)-Asia South Pacific Bureau of Adult Education (ASPBAE), ICT Education Case Study, “ASPBAE Research on Information And Communication Technology (Bangladesh),” Mohammad Ali, 2003.

19 ADB, Planning Document for Skills Development (Draft), “Indigenous Peoples Development Framework”, February 2008.

Social protection is an important issue, but what is perhaps more significant is the lack of recognition under law of millions of people who rely on the informal economy for subsistence. In this sense, what must also be given attention with regards to informal employment is some form of formal and nationally recognized certification, by trade, that would also correlate some form of legal protection for individuals working in the informal sector. Informal skills development training should be a major area of focus in any poverty alleviation strategy, as the vast majority of the workforce in Bangladesh can be categorically declared as informal. Lacking legal and social definitions, hence inclusion, recognition or protection under the law, makes it imperative that a progressive policy framework address and acknowledge informal employment and the informal sector.<sup>20</sup>

Informal apprenticeships have been a traditional solution for skills development training in poor societies such as Bangladesh. The trainings afforded within the informal system, however, are typically of a lower order in quality and productivity, and hence provide a lower range of income for most informal workers.<sup>21</sup> Those who rely on informal structures for their livelihoods are at a comparative disadvantage when it comes to accessing tools and resources that would make their businesses and enterprises more economically viable and sustainable. Measurable gains in the quality of skills inputs in production could lead to increased productivity and efficiency. Access to these sorts of resources could be afforded through a national program for skills development and training inclusive of informal sector participants.<sup>22</sup>

It is essential that young people are given primacy in new reforms in the TVET system that would extend training and resources to the informal sector. A successive, or even partial modernization of the informal sector would prove to be an extremely beneficial tool in poverty amelioration—offering access to formalized institutional programs, certification and accreditation, services and legal protections to those who currently find these programs non-existent or inaccessible, especially women and other marginalized groups.<sup>23</sup>

Informal employment and the subsequent lack of legal protection most often leads to increased incidences of child labor, and hazardous occupations for youth employment. Increased access to basic education needs to be addressed within the broader terms of access to skills training and acquisition in order to ameliorate exploitative practices of child workers. Those who are currently not holding educational certification (primary Grade VIII) need to be assisted in finding comparable standards of competency, or given access to basic education in literacy and numeracy so that they can be allowed access to TVET training programs. Traditional apprenticeships and training programs can be strengthened by providing basic skills training in productivity, business and management to trainers and master craftspersons as well as trainees.<sup>24</sup>

A national strategy in poverty reduction should include legal definitions for informal sector workers. The subsequent formalization process for informal workers would grant access to certain social protections and legal benefits through a formally and nationally recognized accreditation process. A concerted effort must be made to include formal recognition of the informal sector as an integral part of TVET reform, so that informal workers can have access to better skills training and development.<sup>25</sup> This must include a mechanism to recognize prior learning during apprenticeships in the informal sector which would allow apprentices in the informal sector to access TVET institutions to upgrade their skills. More information needs to be gathered on the informal sector and incorporated into program platforms for skills development training.<sup>26</sup>

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20 ILO-Nübler, Irgard, "Apprenticeship in the Informal Economy: An Institutional Approach," Prepared for the workshop on Apprenticeship in the Informal Economy: The West Africa Region, Geneva, 2007.

21 ILO Workshop Report, "Apprenticeships in the Informal Economy in Africa," Geneva, 3rd and 4th May 2007.

22 Irgard, 2007.

23 ILO, Project Document, "Urban Informal Economy (UIE) Programme of the Project Support to the Time Bound Programme (TBP) towards the Elimination of Worst Forms of Child Labour in Bangladesh," February, 2007.

24 Irgard, 2007.

25 ILO-IIRA (Indian Industrial Relations Association), "Informal Economy: The Growing Challenge for Labour Administration," Edited by A. Sivanathiran, C.S. Venkata Ratnam, 2005.

26 World Bank, 2007.

### **3.3 RPL and the Bangladesh TVQF**

The National Vocational Qualifications Framework (NVQF) has been developed under the EC/ILO TVET Reform Project, in consultation with other development agencies such as the Asia Development Bank and World Bank, in order to create a framework for a more ubiquitous and universal method of skills recognition and certification in Bangladesh. The NVQF builds on the pre-existing certifications models in SSC and HSC training/certification on the basis of comparison—offering a sequence that will enable legislatures to compare the existing HSC/SSC qualifications with the updated and expanded NVQF that will also conform to internationally recognized standards. The proposed framework for qualifications standards in Bangladesh is ultimately designed with the intent and purpose of introducing “competency-based” curricula, where “competencies required in the workplace, for specific jobs, are included in the learning programs delivered by [...] institutions of learning.”<sup>27</sup>

Within the proposed NVQF there are also provisions set forward for the Recognition of Prior Learning (RPL), which would give under-privileged and under-educated workers with viable skill sets better access to skills training and development through TVET institutions offering courses that would recognize individual skill level certifications or a statement of attainment set by the NVQF; potentially benefiting roughly 50% of the population over the age of fourteen who cannot read or write (World Bank estimates included in Moore document). The first three levels of proposed NVQF have been set up specifically to provide opportunities for the under-privileged and illiterate.

While the proposed document does not specifically deal with the subject of master craftspeople, it can and should be assumed that for any skill level certification or statement of attainment provided by the NVQF, under the subsequent National Competency Standards (NCS), would give any person in possession of prior learning access to take the relevant assessment for an appropriate certification. These provisions should be made in order to begin a standardization procedure that could assess and benefit trainers, teachers and master craftspeople in accrediting the skills and knowledge that they already possess, for which they may not have received proper recognition. Government incentives for skilled master craftspeople could include lease of equipment, or special licensing that could promote better business practices, aiding the master craftspeople’s competitive advantage in the market place. Another incentive for master crafts people could be the opening up of training opportunities that could supply higher certifications, and offer better training in skilled trades for themselves, further accrediting their businesses and services in the market.

### **3.4 Gender and Employment: Major Issues for TVET Reform**

Participation in the labor force by women in Bangladesh is amongst the lowest levels in the world. While rates of participation have more than doubled in the past 10 – 15 years, women’s overall involvement in Bangladesh’s workforce remains minuscule (roughly 26% for women ages 15 – 59). In addition, only about 10 percent of women who are employed earn wages for their labor; and on average, women earn approximately 60 percent of what men do in similar jobs in the market.<sup>28</sup>

In highlighting the major issues and concerns for the general workforce, and as they regard access to viable skills training and workforce capacity building, it needs to be duly noted that the inefficiencies and deficiencies in delivery and organization of TVET, disproportionately affect women in Bangladesh—who are most often excluded from participation in TVET institutions. Likewise, as a majority of women are forced into non-formal work agreements and hazardous and exploitative forms of employment; opportunities for skills training and development through structured programs and educational institutions are few to non-existent. Women in Bangladesh are most often employed in manufacturing (i.e. Ready-Made Garments); as household and domestic workers; or the agricultural sector,<sup>29</sup> and are rarely provided with any formalized training for these occupations, and learn through exploitative practices which do not value (i.e. monetarily) their participation in labor across sectors.

<sup>27</sup> Moore, Ian, Summary: A proposed TVQF for Bangladesh, EC/ILO TVET Reform Project, November, 2008.

<sup>28</sup> World Bank, *Whispers to Voices – Gender and Social Transformation in Bangladesh*, Chapter Four: *Women’s Employment In Bangladesh: Conundrums Amidst Progress*, March 2007.

<sup>29</sup> *ibid*, World Bank (table figures provided by Bangladesh Bureau of Statistics 2004), 2007.

Improved access to education and skills development that lead to paying jobs can enable *both* women and men to improve their socio-economic situation.<sup>30</sup> Education, one of the primary focuses of the MDGs and PRSP for Bangladesh, is crucial to the development and furtherance of workforce capacity and skills. Because women are impacted by lack of access to even basic education, inaccessibility of higher education and skills training, workforce and social discrimination have all contributed to the shortfalls of women's participation in the growing labor economy in Bangladesh. With regard to apprenticeship, it is clear from the official labor statute concerning the administering of formal apprenticeships in Bangladesh, that there is an official bias against women's participation in more viable forms of skills training and workforce capacity building (the law is written, at least in its English translation, with a clear gender bias in terms of only referring to apprentices and employers as "him" or "his").<sup>31</sup>

Drastic changes in policies and procedures in the TVET system, *and* with regard to apprenticeships and skills training and development—are needed *not only* in order to upscale and revamp TVET and workforce capacity building along the lines of modern economic growth; but also to ensure that agendas which coincide with the MDGs and PRSP regarding educational opportunities for women need to be forthrightly acknowledged; and that government and donor-led interventions be scaled in order to accommodate a greater inclusion of women in TVET and relevant skills training programs. Gender needs continual redress within official policies, and gender-equality in employment should be promoted through awareness building campaigns as well as given particular focus of new initiatives for workforce training and capacity building programs.

## 4. Defining Apprenticeship in Bangladesh

### 4.1 Formal Apprenticeship in Bangladesh

For the purposes of this report, formal apprenticeship will solely be defined as those which fall under the recognized Bangladeshi law regarding apprenticeship, which have governmental registration, and awarded certifications for successful completion of an apprenticeship program. With this definition, formal apprenticeship in Bangladesh makes up a minute and seemingly insignificant portion of the overall labor economy. With a total of 54 apprentices within 3 formal apprenticeship programs in the private sector, this staggering contrast with the actual number of workers in the labor economy (around 50 million), would seem to suggest that formal apprenticeship is in fact irrelevant within the context of the Bangladesh workforce.

On the other hand, there are elements of formal apprenticeship that can be posited as being significant in terms of how formal apprenticeships in Bangladesh are made up of certain discernable characteristics. In this way, what are more important with regard to formal apprenticeship are the formal or formalized structures which give formal apprenticeships a more distinct configuration than can be found with informal apprenticeships. These *formal* structures are related to curriculum, pay levels, the issuance of an accredited certification, and institutional affiliation.

For instance, the process of skill and knowledge transfers carried out through the TVET system should be viewed as a *formal* means of conveyance for skills-based knowledge between an instructor/trainer and learner. In this way, TVET can be seen as a structural institution which embodies the characteristics of *formality*—as TVET institutions follow a set curricula and/or work plans for guiding a learner in the acquisition of skills and/or work-based knowledge; as well as providing recognized certifications and accreditations upon the successful completion of course training materials *and* falling under the regulation of various GoB ministries. Even though the TVET system has demonstrated several deficiencies in carrying out the *effective* transfer of skill sets, work-based knowledge and capacities, the categorization of *formal* is rightfully attributed on account of the structures, mentioned above, which can be associated with underlying characteristics of 'formality' and their inherent relationship to formal/legal institutions.

30 Swiss Agency for Development and Cooperation, *Gender and Skills Development – A Practical Tool To Mainstream Gender Equality into Skills Development Project for Better Employment Opportunities*, July 2006.

31 Dhar on *Labor and Industrial Laws of Bangladesh*, Chapter 18: Apprenticeship, p. 358-362, Sections 274-282, 2006.

While this report will maintain that *formal apprenticeship*, as such, relates entirely to the 3 apprenticeship programs currently in operation in Bangladesh (held at Unilever, Abdul Monem, Ltd. and BAT Bangladesh); it is important to also emphasize how the formal and/or formalized structures inherent to these programs are also evidenced in informal apprenticeships at different levels, with varying extent. As will be highlighted in the section below, defining informal apprenticeship in more detail, **formal and informal structures** within apprenticeship are fluid concepts that can be found with varying degrees in both the formal and informal sectors.

## 4.2 Legal Mandate for Apprenticeship in Bangladesh

Apprenticeship, as it is discussed in this assessment, will refer generally to the definitions set forth in the *ILO R60 Apprenticeship Recommendation of 1939*, where “*apprenticeship* means any system by which an employer undertakes by contract to employ a young person and to train him or have him trained systematically for a trade for a period the duration of which has been fixed in advance and in the course of which the apprentice is bound to work in the employer's service.”<sup>32</sup> Apprenticeship in Bangladesh has followed a much less defined legal status, the main legislative acts of which will briefly be discussed here.

*The Apprenticeship Ordinance of 1962*<sup>33</sup> is the legal mandate in Bangladesh that obviated the pre-existing *Apprenticeship Act of 1850*, which was the governing legal document that had dealt with the legalities of apprenticeship from the colonial era. The Ordinance of 1962 was carried over from the days of Pakistani governance to the independent Peoples Republic of Bangladesh after liberation in 1972. The original ordinance was created in response to the emergence of new industries in the public and private sectors outmoding legal definitions in the Act of 1850. The language of this ordinance is vague in most of its clauses, and institutional failings aside, has been almost totally ineffective in establishing a viable and widespread system of apprenticeship in the country (currently there are only three companies honoring the tenets of the ordinance, and in total have only produced 54 apprenticeships for the year of 2008).

*The Apprenticeship Procedure—2008*<sup>34</sup> is proposed legislation which builds on the existing framework of the Ordinance of 1962. Somewhat more clearly than the Ordinance of 1962, this document lays out definitions to be used in the enforcement of the law, and clearly designates the Bureau of Manpower Employment and Training Director General as the “proper authority” in charge of enforcement and administration. Other key elements within the procedure are as follows:

- Defines the terms of ‘apprenticeship’, ‘proper authority’, ‘employer’ (employment is 40 persons or more), ‘committee’ (National Tri-Party Advisors Committee), and ‘trainer of apprenticeship’ or the responsible persons providing training to apprentices.
- The National Tri-Party Advisors Committee acts as a governing body that would instruct business organizations on the Procedure. The body of the Committee has a chair, designated as the Secretary of the Labor and Employment Ministry and will host representatives from other government bodies as well as representatives of employers and employees.
- The Procedure indicates that the program is to be implemented country-wide and holds the employer responsible for the initiation of apprenticeship programs within their respective businesses.
- Holds employer responsible for issuing training curricula to the ‘proper authority’ and guaranteeing the proper selection of apprentices (e.g. in the age range of 14-22 years).
- Apprentices are held responsible for obtaining Class V educational certification.
- Defines the terms for drawing a ‘contract for apprenticeship’, one of the main points being a variance in the terms of the contract with regard to duration, which can be specified in the contract itself.

<sup>32</sup> ILO R60 Apprenticeship Recommendation, Session of the Conference: 25, Geneva, June 28th, 1939

<sup>33</sup> Dhar on Labour and Industrial Laws of Bangladesh—English Translation, “Apprenticeship Ordinance of 1962,” Chapter18, 2006.

<sup>34</sup> Apprenticeship Procedure 2008 (Proposed Legislation), Government of Bangladesh.

- Sets guidelines for stipends paid to apprentices (allotment for stipends cannot be less than 1 percent of total program costs, and cannot be less than 25 percent of a typical employees salary in that trade in the case of individual apprentices).
- Holds the employer responsible for monitoring, evaluating and recording the progress of each apprentice and stipulates that training should be both “practical” as well as “theoretical.” The employer is responsible for issuing exams and certification for the completion of training.
- The ‘proper authority’ is designated with the power to enter and investigate a business organization’s apprentices and apprenticeship programs, as well as levy fines (up to Tk. 25,000) and issue sentences of imprisonment (up to 6 months) for offences. Also designates the legal body in charge of trialing cases as being “none below the level first class magistrate.”

As this law *would apply to all* businesses of a certain size, it remains to be seen if the practice and enforcement of the legal definitions will be followed as under the current law, **few businesses are even aware that a government program mandating the incorporation of an apprenticeship structure even exists.** It should be helpful to note that the Procedure of 2008 pertaining to apprenticeship in Bangladesh, appears to be at the forefront of legislation to be pushed through by the new government. Although this is a strong likelihood, it should also be noted that this Procedure has yet to be structured and its enforcement capabilities tested under all relevant government ministries, and with the appointed personnel of the tri-party advisors committee—there is at this point insubstantial evidence to provide any indication that this successive legislation will correct or amend any of the shortcomings under the Ordinance of 1962.

### **4.3 Informal Apprenticeship in Bangladesh**

Informal apprenticeships have been a traditional solution for skills development training in poor societies such as Bangladesh. The fact that an apprenticeship can be termed as informal means that it has neither legal status under existing legislation, nor does it fall under the formal institutional regulation of any public sector bureau or administration. In this sense, because informal apprenticeships lack any form of legal definition, they are able to operate in *both* the **formal as well as the informal sectors.** Because there are no formal/legal institutions which support informal apprenticeship, apprentices and employers alike have to rely on social networks in order to gain, seek out and/or supply employment. These informal networks engage cultural and traditional means of support that are based on: word of mouth; mutual trust; verbal agreements (as opposed to formal/legal written contracts); recognition of socially established norms and customs; familial, extended family and socio-cultural networks etc.

Those who rely on informal structures for their livelihoods are at a comparative disadvantage when it comes to accessing tools and resources that would make their businesses and enterprises more economically viable and sustainable through relevant and competitive skills training. The trainings afforded within the informal system of apprenticeship are typically of a low order in quality and productivity, and hence provide lower ranges of income versus their formal counterparts. Many times informal apprenticeships are seen as a stop-gap solution in providing cheap labor to employers and businesses. Remuneration for informal apprentices may or may not include monetary compensation, and at times may only include food and/or lodging, with some allowances for vacation/time off and holidays.

It is important to bear in mind that the marked difference between formal and informal apprenticeship is in legal definition (and government recognition), and is the principle characteristic that distinguishes the two types of apprenticeship for the purposes of this assessment. Each form of apprenticeship exists on a continuum—where the extremes are situated between completely formal structures (such as: set and established curricula, regular written and/or formal evaluations, set competencies and standards for evaluation which translate directly into certifications and accreditations) on the one hand; and informal structures such as those mentioned above, on the other. Informal apprenticeships in Bangladesh hold the largest and most significant range of both formal and informal structures, with greater concentrations towards ‘informality’, yet still contain many formal characteristics in some instances, on account of the sole criteria for an informal apprenticeship being the lack of legal definition under Bangladeshi laws and relevant administrative agencies (MoLE, BMET, MoEWOE *et al*).



When broken down in this way, it is evident that these interwoven structures and common characteristics make the designation of *formal* and *informal* apprenticeship considerably more complex than appears on the surface. It is again important to emphasize the obvious contrast of scale with regard to apprenticeship in Bangladesh. There are at most 54 formal apprenticeships currently in operation under the *Apprenticeship Ordinance of 1962* and the administrative jurisdiction of the BMET. These formal apprenticeships are held between three private sector companies. All other apprenticeships within the labor economy of approximately 50 million, whether in the *formal or informal sectors*, are inherently informal by the definitions set forth in this report, and thus constitute a significant range of formal and informal structures (or characteristics) with regard to their (formal or informal) in institutional affiliations; methods of skills transfer, training and workforce development.

## 5. Methodology

The following section on the methodology briefly outlines the initial research and data collection from the inception report, namely the preliminary desk review of literature, as well as the findings of the initial expert consultations. This section will also reiterate the setup and procedure for the implementation of the survey questionnaires that were used in the assessment.

Following the Desk Review also **summarizes** the findings from the **expert consultations**. This section of the methodology presents findings gathered from meetings with stakeholders in public sector programs and private industry. The consultations add emphasis to the primary literature review findings, as well as guide the direction of the survey and key informant interviews (KIIs) for the final assessment report. The findings of the consultations discuss potential enhancements to the apprenticeship system in Bangladesh as well as a representative sample of enterprises and training organizations participating in the apprenticeship system.

The final section of the methodology gives a brief synopsis of the survey design and the implementation phase of the project. This section also identifies two (2) trades for each of the 4 key industry sectors that will help to generate a sample of employers and master craftspeople for the survey and KIIs to be conducted in the next phase of the project.

### 5.1 Desk Review

The document analysis of the Desk Review included in the Inception Report covered four main topics of interest to the assessment. The first was literature gathered on **TVET reform** in Bangladesh as well as in other developing countries. The second contained **summaries of reports on the informal economy**. The third looked at **sector specific reports** relevant to the four (4) key industry sectors identified by JOBS and the ILO to be targeted in the survey assessment and final report. The final section of the Desk Review included a brief **summary of the legal ordinance** pertaining to apprenticeship in Bangladesh, as well as proposed legislation by the GoB that is meant to supplant it. The Desk Review also included an annexure with a bibliography of the source documents and the individual document summaries. (see *Inception Report*)

The findings of the Desk Review developed a context for understanding the role apprenticeships play in Bangladesh. While currently there are an extremely limited number of formally recognized apprenticeship programs under the government ordinance, in the broader context of TVET reform, apprenticeship-type programs can be thought of as a conduit to enhancing the capabilities, scope and effectiveness of skills training—realizing change on a wide scale through a collaborative network that relies on inputs from the public and private sectors, as well as NGOs.

Looking at overall issues and concerns within TVET reform, as well as important discussion on the structure of the informal economy and informal employment, the documents have helped to frame an understanding of where the battlegrounds are for creating an effective model for skills development training in Bangladesh. The Desk Review primarily considered the following discussions: current methods of training in the TVET system; the relevance of the informal economy and workforce; sector-specific information on the four (4) key sectors designated by the ILO; policy measures, current and proposed legislation outlining a legal framework for understanding the role of apprenticeships in Bangladesh.

## **5.2 Expert Consultations**

The consultations with government agencies and firms in the private sector have provided further evidence that have ultimately supported the overall findings of the desk review, and have helped in pointing the way forward during the survey and assessment phases of the project. Consultations were conducted with the Department of Youth Development (DYD), the Bureau of Manpower, Employment and Training (BMET), the Bangladesh Association of Software & Information Services (BASIS) and the Bangladesh Computer Council (BCC), and with administrators working under the joint GoB-ITC (International Trade Centre) program at the Bangladesh Leather Services Centre (BLSC), Hazaribagh—representing public sector participation. Representatives from the private sector include: Gulfra Habib (light engineering and manufacturing), Abdul Monem Ltd. (AML, agro-processing), Landmark Footwear, British American Tobacco, Bangladesh (BATB), and Unilever Bangladesh Ltd. All together the consultations have shown that there is a strong need for skilled labor within various trades and sectors, and thus illustrate the growing requirement for more valid and relevant skills training programs.

Consultations such as these have shown is that the support systems between the public and private sectors are often limited in scope and hindered by conditions in the market that make training programs inaccessible or irrelevant to the needs of employers and employees alike. At the same time, however, most of the stakeholders seem to view formal apprenticeship programs as a viable and valuable means of worker training and skills development. In the future it is evident that the need for skilled workers, and more varied skill-sets within the workforce, will continue to increase. While more information is needed on market-specific areas where employer needs can be fulfilled, it is apparent that structured, formal, apprenticeship programs can be used to satisfy these growing concerns and create trainings for new and future workers who will then be in high demand as these industry sectors continue to grow.

## **5.3 Survey Design**

The assessment phase of the JOBS-ILO project focused on employers and apprentices in both the formal sector and the informal sector. Within the formal sector, a further distinction was made between those with a formal apprenticeship program (i.e. a program which follows a standardized curriculum) and those with an informal apprenticeship program. These distinctions resulted in three distinct sample frames detailed below:

- Formal Sector – Formal Apprenticeship (FF) – employers and apprentices in the formal sector with formal apprenticeship programs under the existing legal arrangements
- Formal Sector – Informal Apprenticeship (FI) – employers and apprentices in the formal sector with informal apprenticeship programs
- Informal Sector – Informal Apprenticeship (II) – employers and apprentices in the informal sector with informal apprenticeship programs

Two questionnaires were developed for each sample frame, one for employers and one for apprentices, for a total of six questionnaires (see Annex 2). The same questionnaires were used for employers and apprentices in all four sectors of interest (Transport, Agro-Processing, Information and Communication Technology, and Leather and Leather Goods) to facilitate comparisons across sectors. Although the separation and distinction of FF, FI and II did not end up in the final analysis of the data, it is useful to note the original design of the survey and questionnaire.

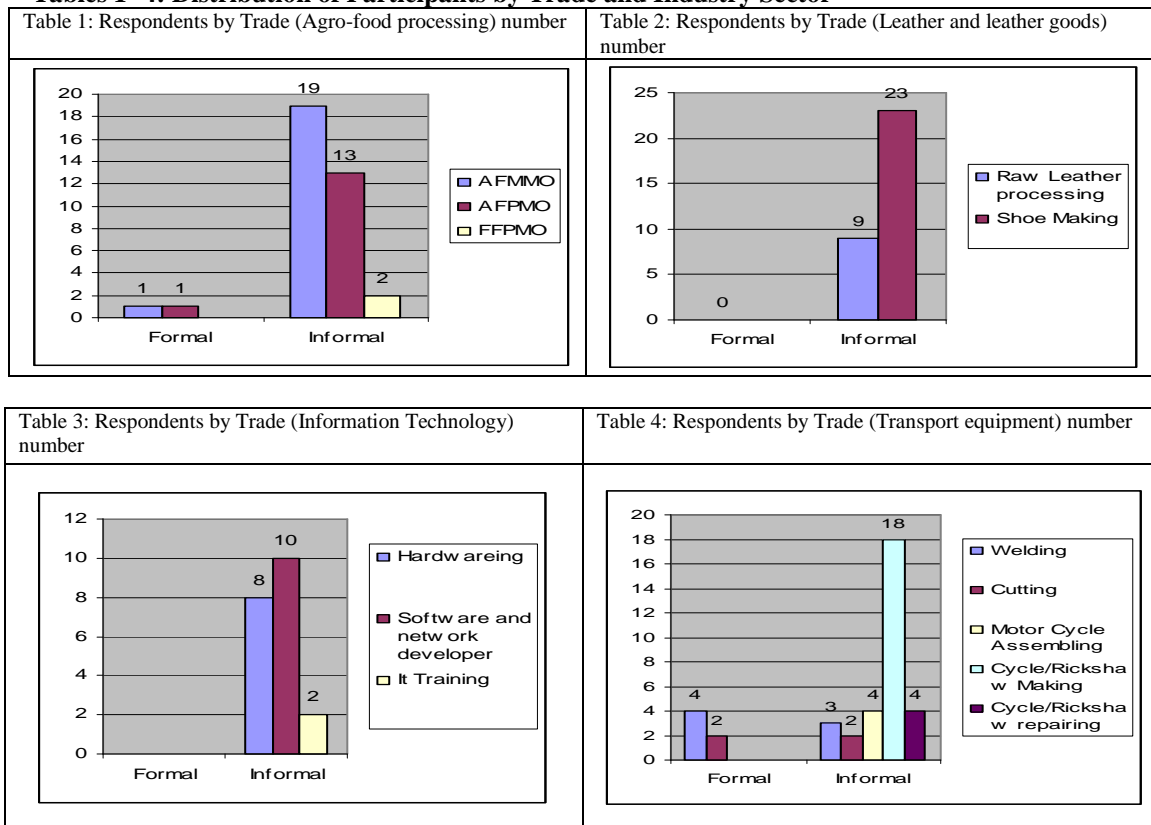
## **5.4 Key Trades in Industrial Sectors**

Per the project proposal, the assessment phase of the JOBS-ILO project has utilized several different methods of data collection. Using the information gathered during the inception phase, this final report has compiled the findings of survey, led by questionnaires given through Key Informant Interviews (KIIs) with various stakeholders including industry organizations, government agencies, labor unions, training services providers, individual employers, master craftspeople and apprentices. The survey and assessment have also employed the use of Focus Group Discussions (FGD), using panels comprised of the abovementioned stakeholders in order to gain in-depth knowledge and additional perspectives supporting the findings of the KIIs.

Through the process of conducting the literature review, the initial consultation meetings and interactions with industry representatives, a set of 8 trades were identified and recommended for further examination in the survey and assessment phase of the project. These trades (with the exception of

those identified in the IT sector<sup>35</sup>) were thought to be representative and operational in both the formal and informal sectors. However, JOBS' actual experience in gathering and conducting interviews in the field led to the designation of *some alternative* trades when and where those originally chosen were not available or practical. The following tables outline the distribution of respondents by trade in each of the four (4) key industry sectors.

**Tables 1- 4: Distribution of Participants by Trade and Industry Sector**

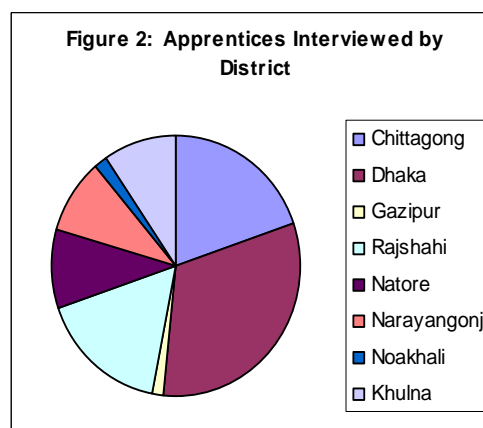
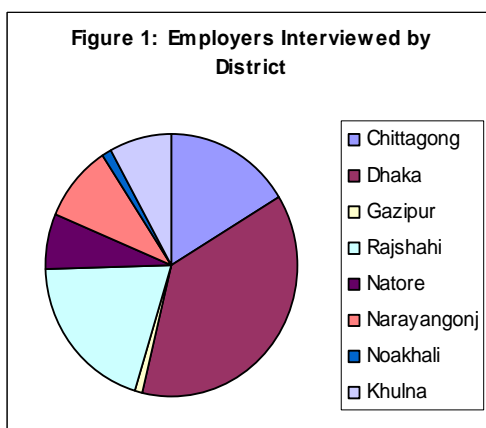


Apart from the initial ILO-JOBS Inception report, the trades that were included in the survey ended up being determined by several factors. The trades which were originally chosen were either not readily available in the localities and businesses that were selected for the survey, or were not made available by the business themselves. As a result, and because of time and budget constraints, the trades chosen and listed above by sector make up the most readily available trades within the four key sectors where apprenticeship is utilized as a means of SDT.

### 5.5 Implementation of Survey

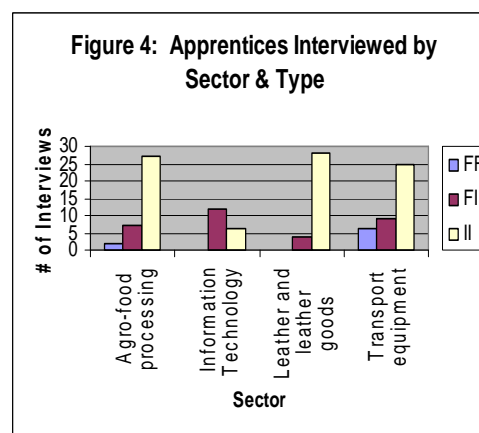
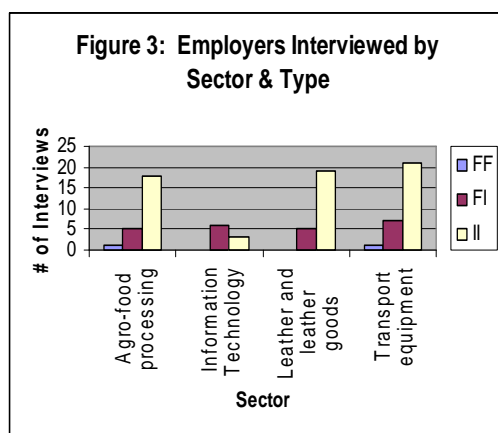
The survey was implemented over the course of three weeks in eight different districts of Bangladesh including, Dhaka, Chittagong, Rajshahi, Natore, Gazipur, Narayanganj, Noakhali, and Khulna. A total of 86 employers and 126 apprentices were interviewed. As can be seen in the figures below, more interviews of apprentices and employers were conducted in the districts which contain the three largest metropolitan areas of Bangladesh: Dhaka City, Chittagong City, and Khulna City, because of the significant role these cities play in the economy, representing more than half of the total GDP of Bangladesh.

<sup>35</sup> It has been determined that informal IT businesses are very rare. As the IT sector is heavily regulated by the government, even small-scale IT businesses, in addition to their larger competitors, most often possess the proper certification and registration under Bangladeshi law, thereby making the businesses, by definition, formal enterprises.



Despite the concentration of jobs and apprentices in the three major metropolitan areas, the survey also included smaller district level towns and rural areas in order to gain a fuller picture of the apprenticeship arrangements throughout the country as a whole. These additional areas were selected based in part on the location of different types of industries. For instance, Natore was selected because of the large numbers of tanneries in the area and Narayanganj was selected as it is a hub of the ship-building industry.

Great pains were taken to try to get a balanced sample of employers and apprentices across sectors; however, in the case of the ICT sector apprenticeship systems are rare. While some ICT companies offer internships to new graduates, including through the BASIS administered internship program, often employers are looking to hire fully qualified individuals rather than providing on the job training or apprentices. This lack of any type of apprenticeship systems, including informal apprenticeships, in many companies resulted in fewer apprentices and employers being interviewed in this sector, as can be seen in the figures below.



Because the formal apprenticeship (FF) system is so small, attempts were made to interview apprentices at all three participants in the formal apprenticeship system. Unfortunately, British American Tobacco Bangladesh (BATB), a participant in the formal apprenticeship system, was unable to take part in the survey; however, the two other participants of the formal apprenticeship system, Unilever and Gulfra Habib, did take part, and a total of 8 formal apprentices were interviewed. Furthermore, 32 formal sector-informal apprentices (FI) from 23 employers were interviewed, as were 86 informal sector informal apprentices (II) from 61 employers. The much higher numbers of II apprentices and employers reflects the much greater numbers of apprentices in the informal sector throughout the economy as a whole.

### 5.6 Focus Group Discussions

Facilitators from JOBS used a series of questions to hold Focus Group Discussions (FGDs) which included both employers and apprentices in two cities, Khulna and Chittagong. The FGD in Khulna included representatives from the agro-food processing and transport sectors, while the FGD held in

Chittagong included representatives from agro-food processing, leather and leather goods, and transport sectors reflecting the greater diversity of industries concentrated in the Chittagong area. To ensure diversity among the participants, JOBS invited representatives from both the formal sector employers and the informal sector. Respondents in both focus groups showed interest in enhancing the existing apprenticeship system, which will be discussed further in the next section. (For a complete list of FGD participants please refer to *Annex 4*).

## 6. Findings

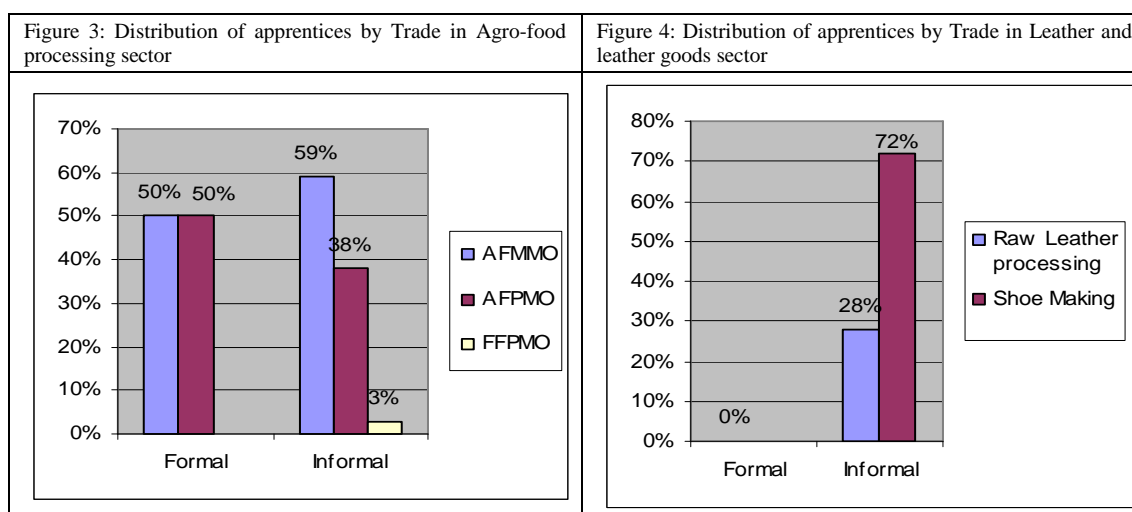
### 6.1 Apprentices Views and Perceptions of Apprenticeship

#### 6.1.1 Apprenticeship under different Trades

Though the trades in each sector can be made out in different ways, the study identified some broad areas/departments considering the division of labour of selected four (4) key industrial sectors. Each business that was interviewed has at least two trades (Table 1).

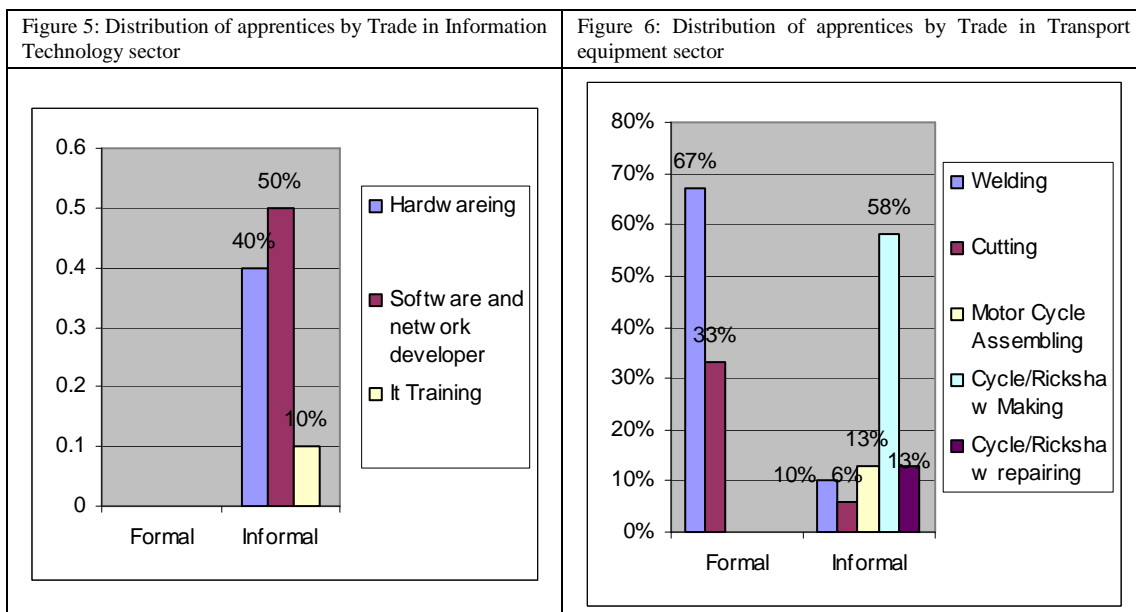
Agro-Food Processing	Leather and leather goods	Information Technology	Transport Equipment
AFHHO=Agro food machine operation	RLP=Raw leather processing machine operation	Hard=Hardwearing	Welding=Welding
AFPMO=Agro food packaging		Soft=Soft wearing, network development and graphic designing	Cutting=Cutting
FFPMO=Frozen foods processing machine Operation	Shoe=Leather cutting, sewing and shoe making		TR=IT training
			CRR=Cycle/Rickshaw repairing.

Survey information points to the distribution of apprentices by trade, and also identifies the working area of apprentices. In case of formal apprenticeships, 50 percent were engaged in agro-food processing and agro-food making machine operation. It is to be noted here that only two apprentices were interviewed under this category. Of the total apprentices in the informal category of agro-food processing, 59 percent were involved with agro-food making machine operation, 38 percent were in packaging, and 3 percent in frozen foods processing (figure 3).



In leather sector, there were no businesses that were interviewed in the formal category. In informal category, most apprentices were engaged in raw leather processing (72%), with the remaining 28 percent in leather cutting, sewing or shoe making (figure 4).

As with the leather sector, there was no organization in the formal category for the IT sector. Of the apprentices of informal category in IT sector, 50 percent were learning software or working in network development, 40 percent were handling hard wear, and remaining 10 percent were engaged in IT training (figure 5).

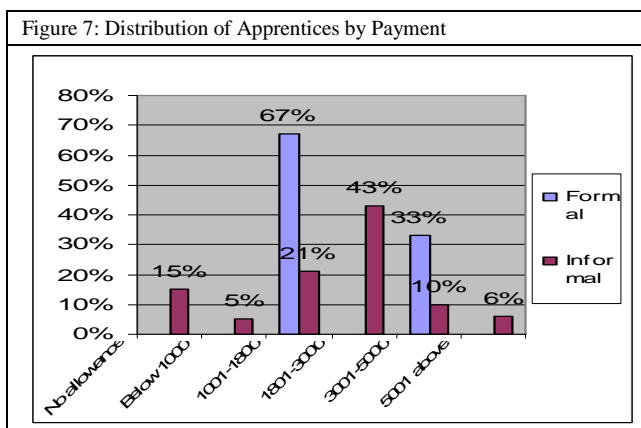


Within formal apprenticeships in the transport equipment sector, two-thirds of apprentices were engaged in welding and one-third in Cutting. It is to be mentioned here that welding and cutting are the main trades in the single business that participated in the survey (Galfra-Habib), and is a manufacturer of spare parts and offers skill development services to the apprentices free of cost.

In the informal category, 58 percent of apprentices were found to be engaged in Cycle and Rickshaw making, 13 percent in Cycle and Rickshaw Repairing and another 13 percent in Motor Cycle Assembling. The organizations in this category were mostly engaged in Cycle-Rickshaw making and repairing. Though welding and cutting are among the major trades in ship-building industry under the transport industry sector, they generally do not offer skills training in welding services to the apprentices free of cost. This may be reflected in the distribution of apprentices in different trades in both the formal and informal categories (figure 6).

**6.1.2. Allowances/Payment to Apprentices**

According to the survey information, 67 percent of the formal apprentices were given allowances of Tk.1000-1800 per month, and the remaining 33 percent received allowances between Tk.3000 to Tk.5000. While some informal apprentices did not receive any allowance for their performance. The survey data reveals that close to 15 percent of the apprentices did not received any allowance. A maximum proportion of 43 percent apprentices received allowances in the range of Tk.1800 to Tk.3000. An estimated number of 6 percent apprentices received reasonably higher volume of allowance of above Tk.5000 (figure 7). It has been observed that in the formal category, allowances do not tend to vary with a single employer.



In Agro food processing sector the range of allowances is relatively wide. Though about 15 percent have not received any allowance, an estimated number of 5 percent received allowances of above Tk.5000. It has been observed that 100 percent of apprentices working in Frozen Food Processing Machine Operation received allowances in the range of Tk.3000 to Tk.5000 (appendix figure-1). In the Frozen Food industry, organizations generally have their own association and have a kind of formal system for recruiting apprentices. Their apprentices

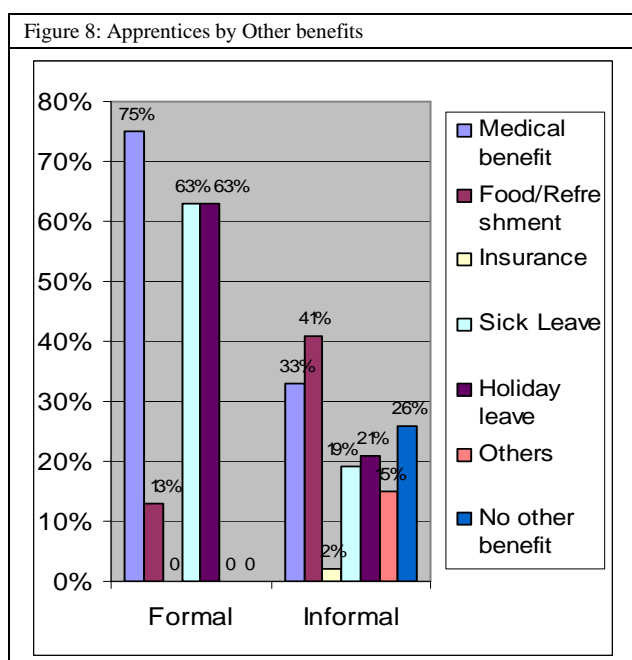
are generally educated and a considerable number of them are employed by the same organization after their apprenticeship. Allowances in the Information Technology sector are generally higher irrespective of trades. The allowances vary in the range of Tk.1800 to above Tk.5000, with a considerable number of apprentices receiving allowances above Tk.5000. It was also observed that 33 percent of apprentices were engaged in training and 29 percent involved in hardware related activities—both received allowances over Tk.5000 (appendix figure-2).

As with the Agro food processing sector, allowances to the apprentices in leather sector vary widely from organization to organization and from trade to trade. 14 percent of apprentices involved in Raw Leather processing do not receive any allowance, and 5 percent of apprentices working in leather processing, along with 10 percent in shoe making, receive allowances above Tk.5000. However, most of the apprentices in the leather sector received allowances in the range of Tk.1000 to Tk.1800 (appendix figure-3). In general, allowances for apprentices are low in the Transport Equipment Sector. A number of them were not given any allowance at all. Most of these apprentices are engaged with Cycle or Rickshaw making or repairing activities. Generally, the structure of the Cycle and Rickshaw making or repairing organizations are informal and apprentices commonly have lower levels of education. Apprentices engaged in Welding, Cutting and Motor Cycle Repairing received relatively higher allowances (figure-4 above).

### 6.1.3. Benefits other than Cash Allowances

Other benefits include medical benefit, sick leave, holiday leave, refreshment, food, insurance etc. These benefits generally vary from organization to organization. However, in the case of both the Agro food processing and ship-building industries, benefits distinctly vary between different trades (figures-5, 6, 7 and 8). With formal apprenticeships, medical benefits, sick leave and holiday leave were enjoyed by most apprentices. However, in the case of informal apprenticeships, most apprentices were deprived of these benefits (figure 8).

### 6.1.4. Working Hours and Tools/Equipment Support



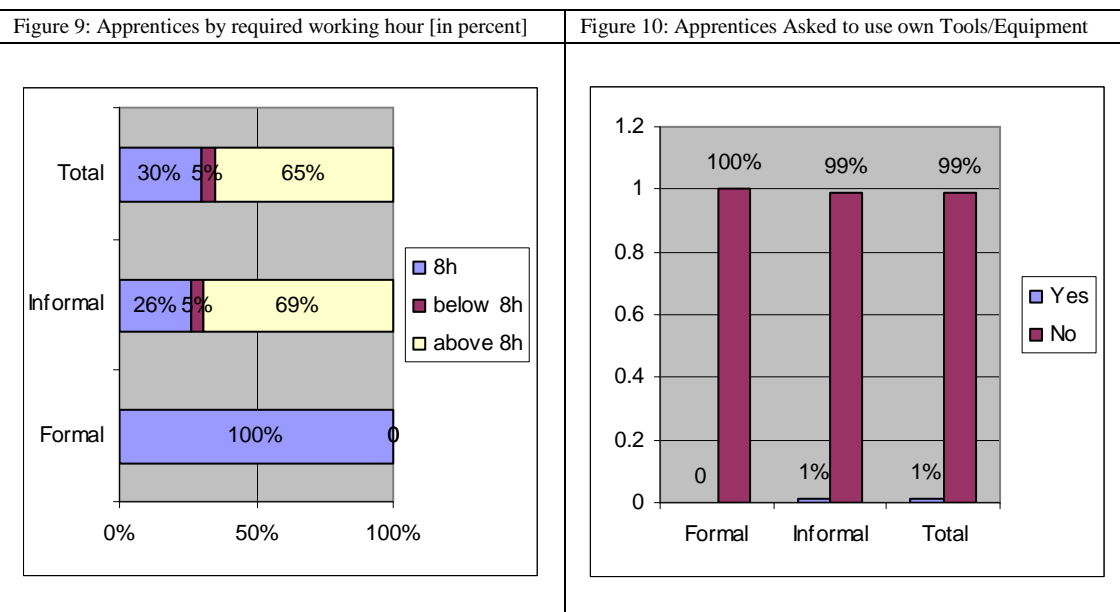
Survey data show that almost all formal organizations follow the standard 8-hour work day, but a few formal organizations, and in general with most informal organizations, hardly follow the standard 8-hour working day, and typically work longer hours. A majority of informal organizations are homestead industries; and as a result they have no time constraints binding for work, as well as no continuous production requirements. Thus working hours for these apprentices depends upon the organization with which they are involved. In informal apprenticeships, 69 percent worked for more than 8 hours per day (figure-9).

Within the broad categories of industry sectors, 100 percent of apprentices worked for more than 8 hours in leather sector and in organizations involved in Cycle and Rickshaw making and repair. It indicates

the informal structure of the firms operating in leather sector and transport equipment sector (appendix figures-9, 10, 11, 12).

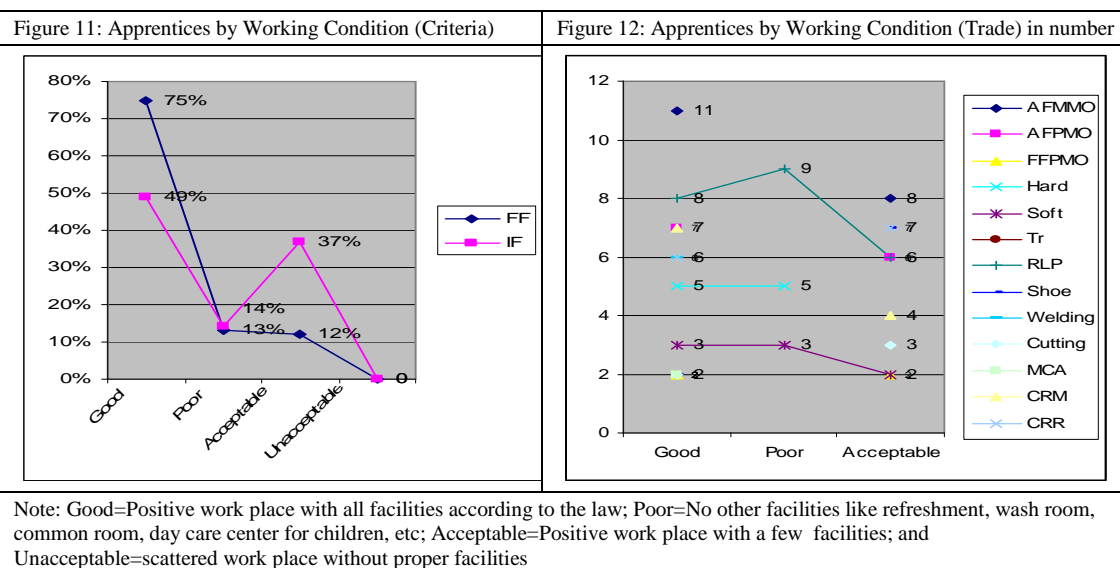
Generally the tools and equipments used by apprentices are supplied by the organization/firms themselves. Only in a very insignificant number of cases (less than 1 percent apprentices) were asked to bring their own tools/equipments to use (figure 10).





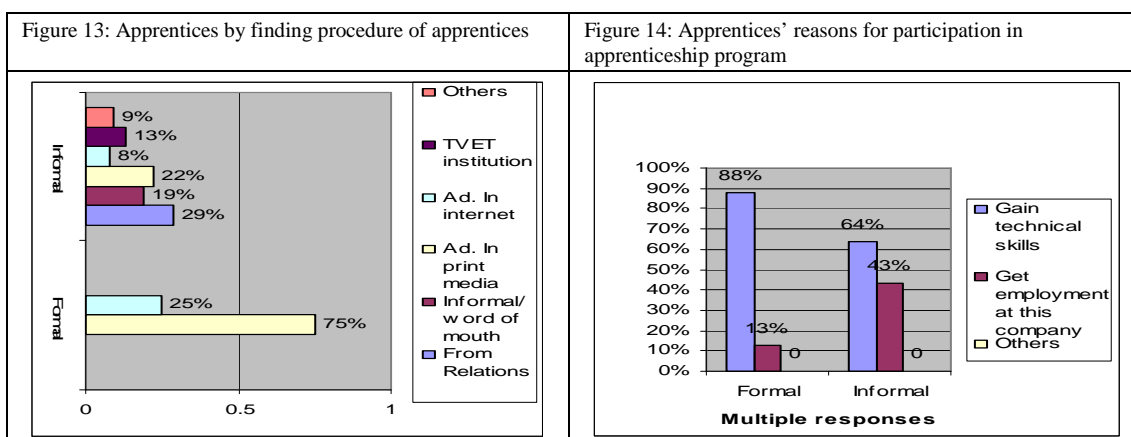
**6.1.5. Working Condition [Apprentices' Perception]**

In case of formal apprenticeship, 75 percent apprentices termed working condition as good, where as in case of informal apprentices it was 49 percent (figure 11).



**6.1.6. Selection/Choosing Organization and Trades by the Apprentices:**

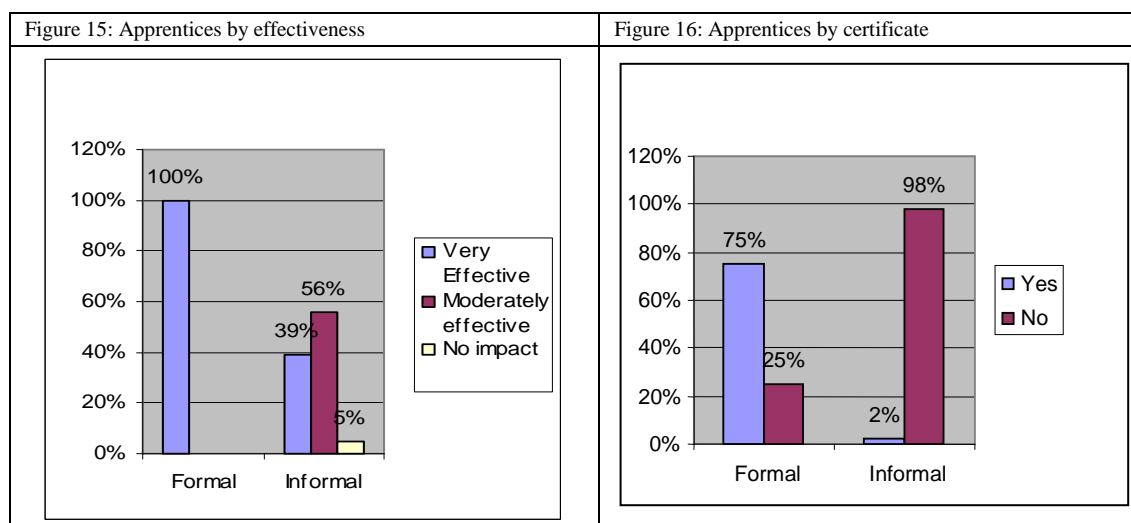
In the case of formal apprenticeships, all the interviewed apprentices were recruited through advertisement either in print media (75%) or on the internet (25%). About 50 percent apprentices under informal category were recruited either informally or with the help of relatives (figure 13, 14). As expected, experience and/or training were not seen as relevant requirements for being offered an apprenticeship; both with formal as well as informal apprenticeship programs (in the case of formal apprenticeships, however, there is a minimum educational requirement of Grade 10 HSC or SSC certification. See Figure 23 below).



From the charts it can be assumed that the provision and acquisition of viable skills training outweighs the mere prospect or opportunities for employment that might be attained through an apprenticeship. In other words, the apprentices who participated in the survey were not simply looking for employment, but were first and foremost looking to acquire skills and training relevant to their employability in the job market.

**6.1.7. Certification and Effectiveness of Apprenticeship [Apprentices' perception]**

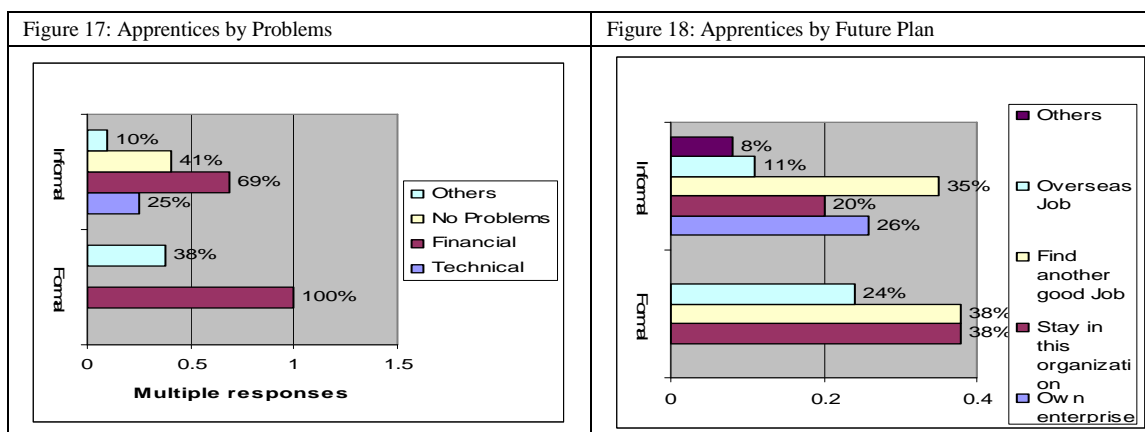
Most formal apprenticeships are provided with certifications. An estimated 75 percent apprentices in the formal category expected to receive certificates for their participation. However, in 98 percent of informal apprentices, there are no certificates that are issued for their participation.



In regard to the effectiveness of the apprenticeship program, formal apprentices were found to be very positive concerning their apprenticeship. Most considered their programs very effective in as far as providing skills training and development and offering a means towards gainful employment. However, in the informal apprenticeship category, 56 percent apprentices found the programs only moderately effective, as Figure-15 illustrates, the perceptions of informal apprentices, although leaning towards the positive end of the spectrum, are much more varied than are their formal counterparts. This could be due in part to the nature of informal apprenticeships, and the fact that these informal work agreements are often exploitative—on the one hand—on the other, we also see that there are considerable proportions of informal apprentices who feel that, by and large, their programs were effective in offering skills training in a relevant trade.

**6.1.8. Problems Faced by Apprentices and Their Future Plan**

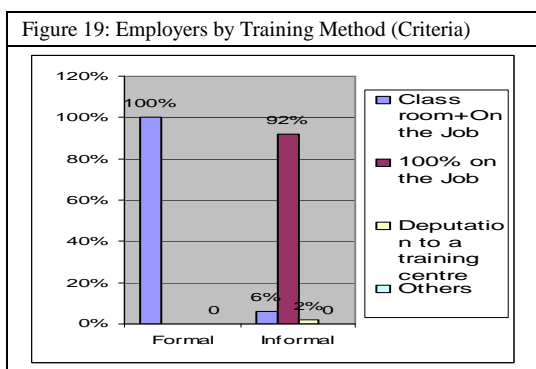
Most formal *and* informal apprentices experienced financial difficulty during their apprenticeship; meaning that they felt that their remuneration was not high enough to suit their needs. Finding a good job or working with the same organization as full time employee, however, were the basic goals of participating in their respective apprenticeship programs, indicating that the hardship was offset by the possibility of gaining full-time employment. An estimated 11 percent of informal apprentices participating in these skill development programs were seeking overseas employment (figures 17 and 18).



## 6.2 Employers Perceptions of Apprenticeship

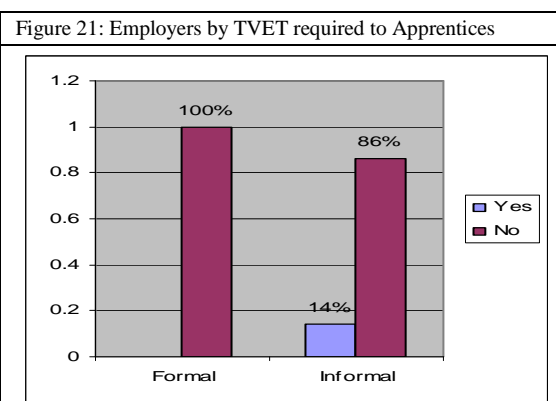
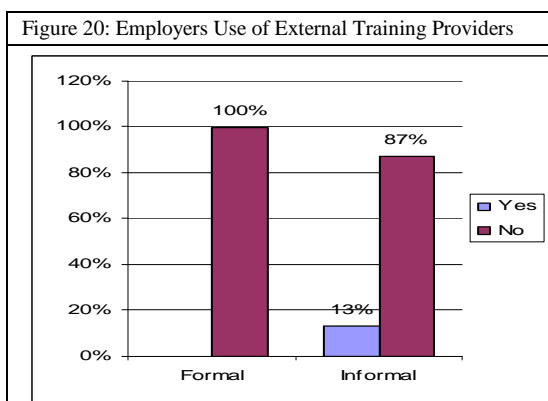
### 6.2.1. Training Method for Apprentices:

Formal organizations follow the “class room training plus on job training” and most of the respondents of informal organizations replied for “100 percent on the job training”. Insignificant percentages (8 percent) of informal apprentices were given class room training (figure 19). Training methods vary from trade to trade because of the different tasks involved in different trades (appendix figures-13, 14, 15, 16).

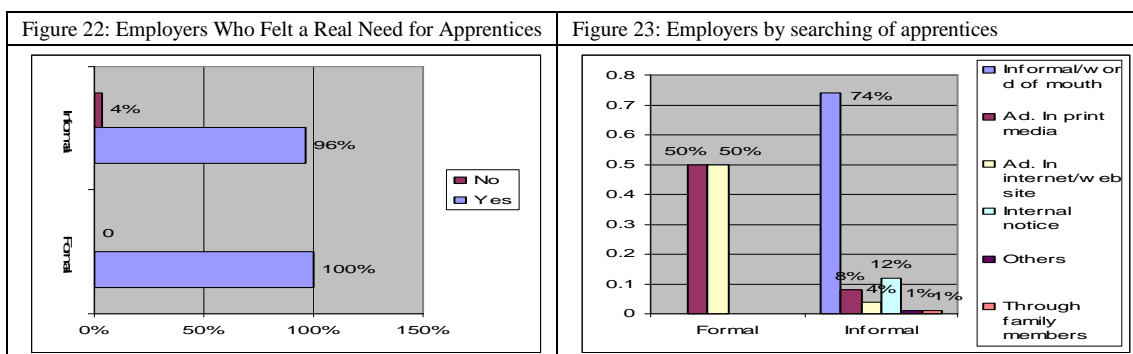


### 6.2.2. Recruitment Process-Requirements and Certification

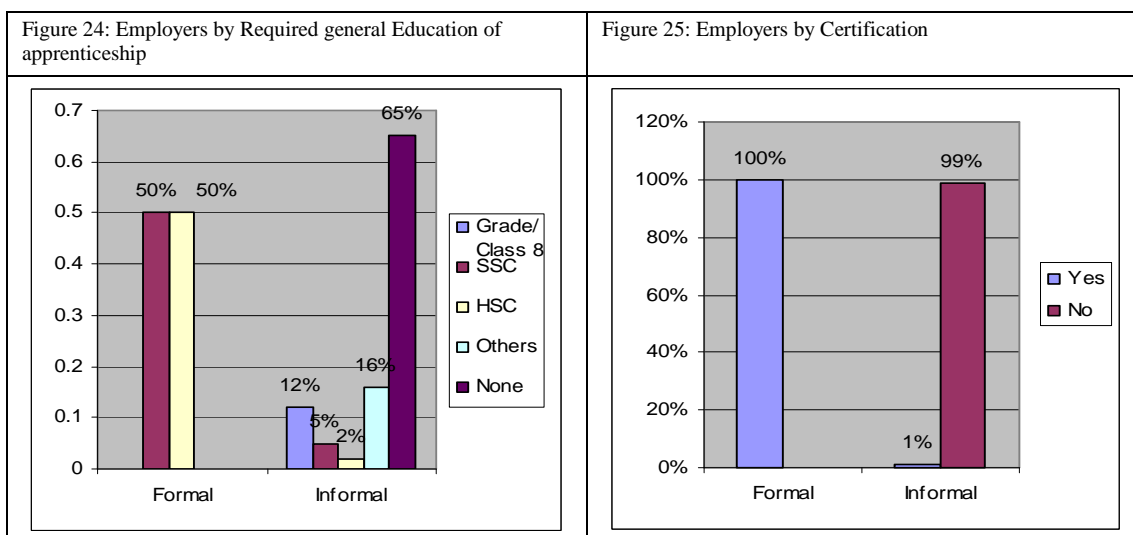
No external training and TVET requirement was there while selecting formal apprentices (figure 20, 21). However, an estimated number of 14 percent had tagged TVET training as requirement to be selected as apprentices [in the case of informal apprentices].



Employers with formal apprenticeships felt a real need for taking on and recruiting apprentices. In the case of informal apprenticeship, most employers identified the need for apprentices, thus justifying holding apprenticeships—however, a small figure felt that even though they had taken apprentices on as employees, that they didn't have a real need for employing them as such (figure 22). In the following figure we can see that employers selected Formal apprentices through public advertisements placed in print or in internet media. Most of the employers of informal apprentices recruited their apprentices through a much wider range of means, which are most predominantly informal (figure 23, i.e. word of mouth, family members as well as digital and print media).<sup>36</sup>



Generally, in formal apprenticeship a minimum education level is required as in HSC or SSC certifications. However, 65 percent of businesses with informal apprenticeships did not require any minimum level of education as part of the qualification to be recruited as an apprentice. Informal apprenticeship programs seem to be much more varied in their educational requirements, with the vast majority not having any formal requirement for education (figure 24). Although all formal apprentices are awarded with certificates after successful completion of apprenticeship, informal apprentices are generally not awarded with any such certificate except in a very small percentage (figure 25). In key informant interviews it was noted that certificates awarded in informal apprenticeships in the informal sector are usually only recognized between similar employers within the same vicinity or commercial district, and are not ubiquitous or universally recognized within informal industry, or throughout the country.

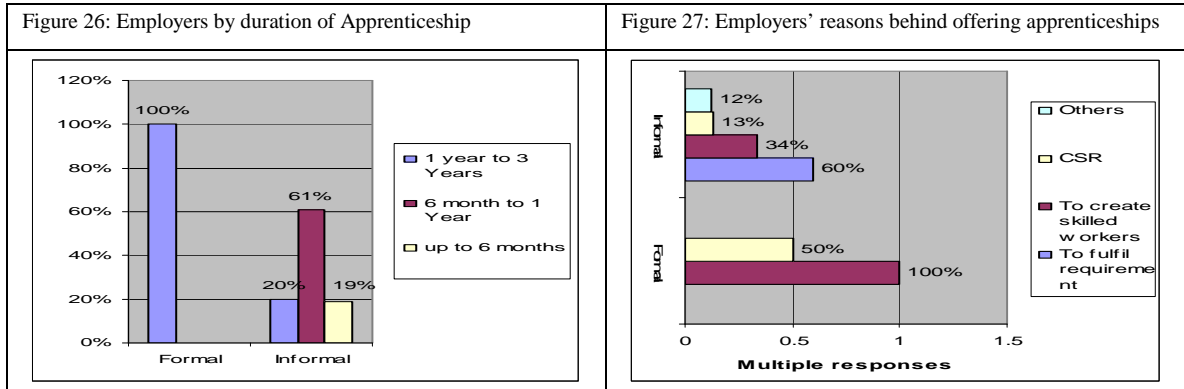


### 6.2.3. Duration and Reason behind undertaking Apprenticeship Program

In most cases, the duration of apprenticeships averaged between 1.5 to 2.5 years. In the case of formal apprenticeships the average duration was around 2 years. In the case of informal apprenticeships, most ran for a duration of 1 year (figure-26). Formal apprenticeship programs were mostly seen as a means

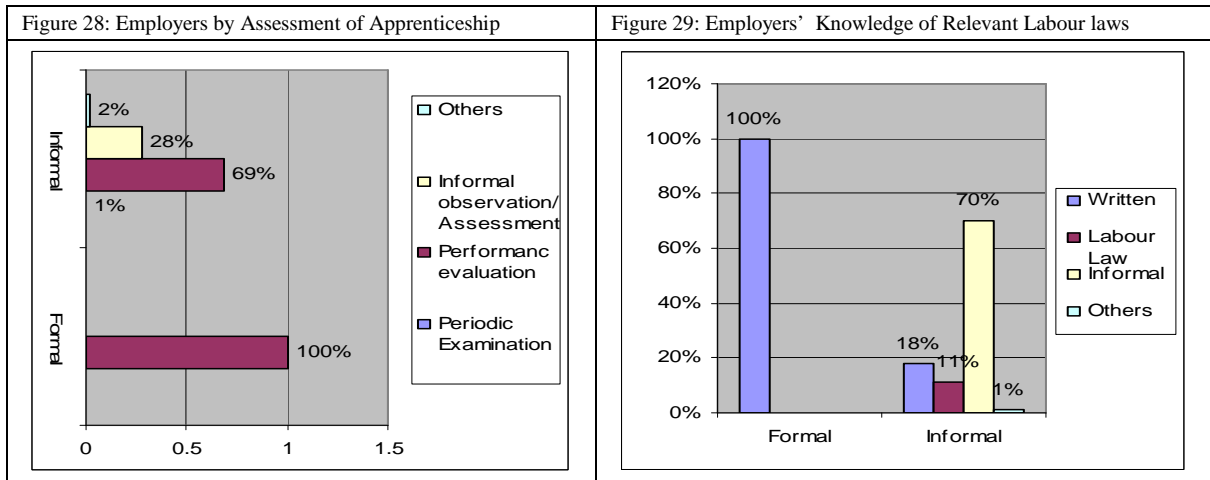
<sup>36</sup> It should be noted here that informal networks do not necessarily account for only familial networks, but that these networks may be wider spread to include extended families and/or working and community relationships as well—An indication that family structures don't figure into informal networks as significantly as had previously been assumed.

of creating skilled workers in the relevant field. On the whole, formal organizations tended to recruit apprentices as part of their CSR activities. An estimated 60 percent organizations run apprenticeship programs to meet their need (figure 27).



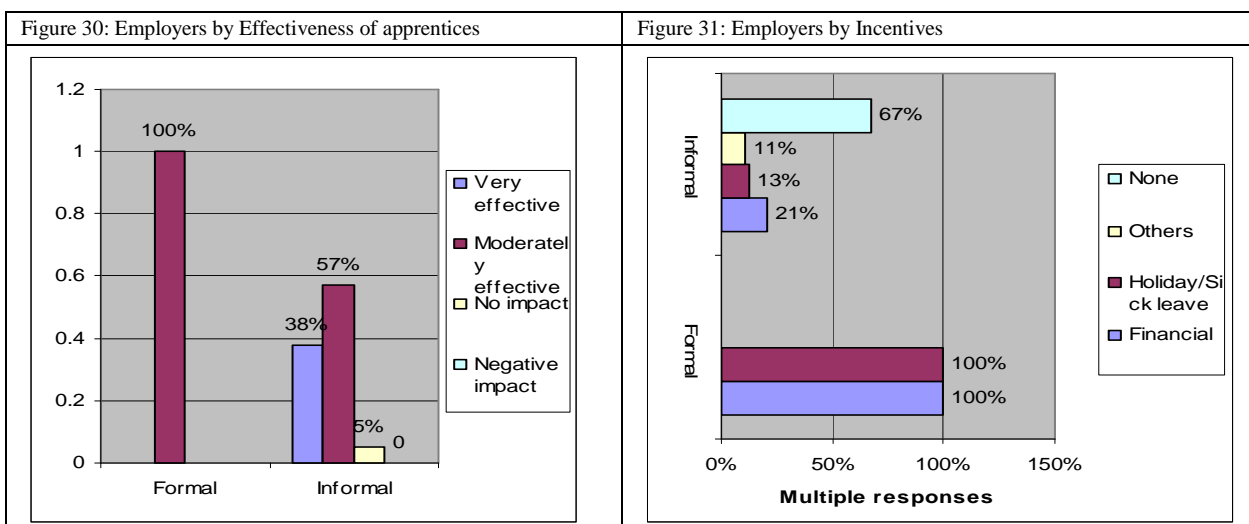
**6.2.4. Performance Assessment and Compliance of Labor Law**

There are much more defined systems of performance evaluation under formal apprenticeship programs. In the case of informal apprenticeships, only 59 percent of businesses have any form of formal performance evaluation system. An estimated 28 percent of informal apprenticeship programs follow informal observation methods (figure 28). The relevant Labor laws pertaining to apprenticeships are typically reviewed and understood by employers with formal apprentices, however, are only understood marginally or informally by businesses with informal apprenticeships (figure 29). This figure particularly highlights the need for building awareness of the apprenticeship laws and/or the benefits of and standards for maintaining an apprenticeship program.



**6.2.5. Effectiveness of Apprentices and Benefits to the Apprentices**

Formal apprentices are found to be moderately effective by employers. In the case of informal apprenticeship, 38 percent of organizations termed apprenticeship as very effective while 57 percent termed it as only moderately effective (figure 30). Employers of formal apprentices provide both financial and some other benefits (holiday leave/sick leave) to their apprentices, however, about 67 percent of the informal apprentices are not given any other incentives aside from regular pay.



### 6.3 Summary of Findings

The survey captures perceptions of both apprentices and employers. The major findings of the survey can be enumerated as follows:

1) Survey information points to the distribution of apprentices by trade, identifying the working areas of apprentices. In the case of formal apprenticeship, 50 percent of formal apprentices were engaged in agro-food-processing or agro-food-making, machine operation. It should be noted that only two apprentices were interviewed under this category. Of the total informal apprentices in agro-food processing, 59 percent were involved with machine operation, 38 percent were in packaging, and 3 percent in frozen food processing. In the leather & leather goods sector, all of the apprentices interviewed were informal. Most apprentices in this sector were engaged in raw leather processing (72%), with the remaining 28 percent in either: cutting, sewing or shoe making. In the IT sector, all apprentices interviewed were informal, with 50 percent were learning software and network development, 40 percent were handling hardware, and remaining 10 percent were engaged in IT training. In the formal category of the transport equipment sector, two-third apprentices were engaged in welding and one-third in Cutting. It is to be mentioned here that welding and cutting are the main trades in the sole business which participated in the sample. Informal apprentices in the transport equipment sector were made up 58 percent by Cycle and Rickshaw makers, 13 percent in Cycle and Rickshaw *Repairing* and another 13 percent in Motor Cycle Assembly. The businesses in this category predominantly consisted of Cycle-Rickshaw making and repairing.

2) Formal apprentices are given higher levels of allowance than their informal counterparts. According to the survey information, 67 percent of formal apprentices were given allowances of Tk.1000-1800 per month, and remaining 33 percent received allowances between Tk.3000 to Tk.5000. A few of the samples informal apprentices (15%) did not receive any allowance at all. 43 percent of informal apprentices received allowances in the range of Tk.1800 to Tk.3000 and roughly 6 percent of informal apprentices received considerably higher allowances of above Tk.5000. It has been observed that formal allowances do not vary according to trade. However, in informal apprenticeships, allowances vary from trade to trade. In the Agro food processing sector the range of allowances is relatively wide. Though about 15 percent have not received any allowance, an estimated number of 5 percent received allowances of above Tk.5000. It has been observed that 100 percent of apprentices working in Frozen Food Processing Machine Operation received allowances in the range of Tk.3000 to Tk.5000. Allowances in the Information Technology sector are generally higher irrespective of trade. As in Agro food processing sector, allowances to the apprentices in leather sector vary widely from organization to organization and from trade to trade. In general, the allowances granted to apprentices are low in the Transport Equipment Sector. A considerable number of them were not given any allowance especially those engaged in Cycle/Rickshaw making or Cycle/Rickshaw repair.

3) Other than allowances, some other benefits like medical, sick leave, holiday leave, refreshment, food, insurance etc. are offered to the apprentices. These benefits to the apprentices generally vary from business to business. However, in case of the Agro food processing and ship-building industries, benefits distinctly vary in different trades. In formal apprenticeship category, medical benefits, sick

leave and holiday leave were enjoyed by most apprentices. However, most apprentices in informal apprenticeships were deprived of these any additional benefits.

4) Most formal businesses follow the standard 8 hour workday; however, a few formal businesses, and informal businesses generally speaking, do not follow the standard number of working hours in the day. Working hours for apprentices depends upon the business with which they are employed. In informal apprenticeships, 69 percent worked for more than 8 hours in a workday. In Cycle Rickshaw making and repairing 100 percent of apprentices worked for more than 8 hours per day. In the case of formal apprenticeships, 75 percent apprentices termed working conditions as good, where as in case of informal apprentices it was 49 percent.

5) All formal apprentices were recruited through advertisement either in print media (75%) or from the internet (25%). About 50 percent of informal apprentices were recruited informally typically with the help of a relative. As expected, experience or training were not requirements in joining an apprenticeship. This held for both formal and informal apprenticeship programs. Most apprentices participate in these programs to get employment opportunities and skill development. Gaining employment was found to be the most common response.

6) Certification is provided in most formal apprenticeships. An estimated 75 percent of formal apprentices expected to receive certificates upon completion of their apprenticeship. On the contrary, 98 of informal apprentices were not given certificates for their participation.

7) On the effectiveness of the apprenticeship programs, formal apprentices felt the most positively, most often considered their programs as being “very effective.” By comparison, 56 percent of informal apprentices found the programs only “moderately effective.”

8) Both formal and informal apprentices experienced financial difficulties/hardship during their apprenticeship; but saw that finding a job working with the same business as a full time employee was a common goal in participating in a formal or informal apprenticeship program. An estimated 35 percent of informal apprentices participate in these skill development programs in order to obtain overseas employment.

9) The formal apprenticeship programs follow a combination of “class room training plus on job training” while most informal programs follow “100 percent on the job training.” Only 8 percent of informal apprentices were given class room training by the employers.

10) There were no TVET requirements for the formal apprentices that were interviewed. However, 14 percent of informal apprentices submitted that TVET training was a requirement for their entry to apprenticeship. Most formal employers stated that they recruited apprentices in order to fulfill corporate social responsibility. In the case of informal apprenticeships, 82 percent of businesses recruit apprentices in order to fulfill their own employment needs first. Formal apprentices were recruited by employers through publishing advertisements in print media or on the internet, while most of the informal apprentices were recruited informally.

11) There are minimum educational requirements for formal apprenticeships. However, 65 percent of employers did not require any minimum level of education in order to qualify for an apprenticeship. IT businesses did not seem to have any requirements whatsoever. Although all formal apprentices are awarded with certificates by their employers upon the successful completion of their apprenticeship, informal apprentices, more often than not, do not receive any such certificate for their skills or training.

12) The duration for formal apprenticeship on average about 2 years. In the case of informal apprenticeships, the duration of apprenticeship was around 1 year.

13) Formal apprentices receive regular performance evaluations from their employers. 59 percent of informal employers have formal performance evaluations with an estimated 28 percent of informal apprenticeships following more informal observation methods.

## 7. Strategies for Apprenticeship in Bangladesh

### 7.1 Strategies for Formal Apprenticeships

Strategies identified for strengthening and expanding formal apprenticeships fall into four (4) categories:

1. Skills Recognition through Competency Standards
2. Apprenticeship Learning Organization
3. Curricula
4. Incentives

*1. Competency Standards* - Developing industry- and trade-specific skills standards is the first step to successfully reforming the formal apprenticeship system in Bangladesh. These standards should be developed so that they recognize different levels of skilled workers in a tiered approach relevant for each industry and trade. For instance, all basic skills in a given trade should be in tier one, with slightly more advanced skills in tier two, three, etc., while the most advanced skills will be in the final tier. While the National Tri-Party Advisors Committee established under the Apprenticeship Procedure—2008 will play an important leadership role in the development of skills standards, business and industry organizations must also play leading roles in order to ensure marketability of the skills package.

The Federation of Bangladesh Chambers of Commerce and Industry (FBCCI) is in the process of developing a Private Sector Task Force which has the goal of providing advice to training centers, including the government sponsored institutions, and guiding training providers in the types of skills that are in high demand among FBCCI members. The Private Sector Task Force should be included in the skills-standards process, as should the specific industry associations for the sectors of interest, such as BCS and BASIS for the ICT sector and Bangladesh Frozen Foods Exporters Association (BFFEA) for the agro-food processing sector, etc. Organizations such as these can provide important information regarding the demand for specific skill sets.

*2. Apprenticeship Learning Organization* - To ensure that the task force becomes and remains effective, it is imperative to nominate an independent learning organization such as a university, think-tank, or similar organization to act as a facilitator for this process. An independent learning organization will be able to act as impartial arbiter in the event of disagreements among the partners, providing a permanent home for the organization, and continue the learning process through research (which will also be a critical aspect in setting up criteria and standardization for RPL). Training providers, including both government organizations and non-government organizations should also be included in the process from the outset.

Additionally, such an independent learning organization can act as a focal point for stakeholders in the broader apprenticeship arena, providing a platform for action research and dialogue to improve the effectiveness of training curricula in preparing apprentices for the current demands of industry trades and vocations. This organization would also be foremost in playing a critical and active role in building awareness about apprenticeship in Bangladesh. A learning organization would be tasked with coming up with models for presenting the benefits measured in utilizing apprenticeship; guidelines for structuring apprenticeship so that employers receive maximum efficiency and employees/apprentices receive the best delivery of relevant skills and training; as well as being a general advocate for the enforcement of the laws currently put in place concerning apprenticeship. Building awareness about apprenticeships is crucial in their ability to function and thrive in Bangladesh.

*3. Curricula* - National Skills Standards should be the basis for further curricula development, and a public-private partnership organization housed in the aforementioned independent learning institution should take overall responsibility for the establishment of new curricula and revision of existing curricula. However, local committees should be established in various regions and districts of interest to identify the specific needs of industry in those areas. These committees should be chaired by a local representative or a member of the national committee; the relevant local government training institute such as the TTC or DYD could act as the chair and house the local committees.



Decentralizing the curricula development process will be essential in establishing local ownership over the process, and should increase the confidence of employers in the quality of trainings provided, and increase the number of new employees hired from training institutions. This should in turn increase demand for trainings among potential apprentices and create better linkages between TVET Institutions and the private sector through an increased number of apprenticeships being offered to graduates entering or seeking employment in private industry. The local committee should also streamline the selection criteria for potential apprentices alongside private industry. The involvement of TVET training providers (such as Technical Training Centers and Technical Schools and Colleges) in this process will give their graduates better opportunities to secure an apprenticeship with a private sector employer.

Also as it concerns public-private partnership, it is important that the development of curricula be an iterative process, not enacted as a one time activity. To ensure that the curricula remain relevant, the pedagogies should continually be revisited by the committees on an annual basis. A particular emphasis should be placed on the Training of Teachers/Trainers. Currently there are very lax qualifications for trainers and instructors in vocational and technical trades. Typically a teacher/trainer, though potentially having a higher degree in engineering or technical/vocational training, is not required to have any real work experience—severely hampering the development of future TVET graduates.

*4. Incentives* - While there are very real benefits for both employers and potential apprentices to participate in an apprenticeship system, these benefits are often not readily apparent in the short-term. For this reason, additional incentive structures for both employers and apprentices should be considered. These incentives can include both financial and non-financial components. Employers and/or industry associations should be able to develop financing models for small and medium enterprises in order to assess their needs in establishing apprenticeship programs. Models for financing apprenticeship should be based on a cost-share platform between employers and apprentices, but should also include incentives and assistance from the government in the form of tax credits or vouchers for tools and equipment.

Based on the findings in the survey and focus group discussions, many apprentices are unpaid or underpaid, especially in the informal sector. This limits both the quantity and quality of potential apprentices and apprenticeships. **Increasing financial incentives for employers and apprentices** is one option which would solve this problem. A model, based on the ongoing BCC-BASIS internship program, is to share the cost of apprentices between the partnering company and the government. In this internship program, interns are paid a stipend, a cost that is shared between the government and the partnering company, in total amounting to Tk. 5,000 per month over the course of the six month internship. This cost-sharing model has the potential to be used for apprenticeships across multiple sectors.

**Stipends for apprentices** should be set by local committees/learning organization in consultation with the Bangladesh Government, ensuring that stakeholders have a say in setting an appropriate stipend level based on local conditions. Local committees should review the stipend levels annually during the review of curricula, guaranteeing that the levels of stipends are dynamic and respond to market forces. The national government can provide funds to the organization chairing the local committees based on the compensation levels developed by the local committees for a pre-determined number of apprenticeships. Government subsidization of the apprentices will have the added advantage of ensuring that all participating businesses and apprentices register with the relevant government authority (i.e. BMET), a critical step in strengthening and expanding the formal apprenticeship system in Bangladesh.

**Non-financial incentives** will also play an important role in strengthening the apprenticeship system. Through developing a formal system for RPL, apprentices will be assured that the skills they learn during their apprenticeships will be formally recognized by future employers both at home and abroad (through NVQF and NCS). In combination with a government subsidized stipend, RPL is a significant non-financial incentive for informally trained apprentices to participate in formal training programs.

Employers can also be offered non-financial incentives through official recognition of their contributions to the formal apprenticeship system. Public ceremonies and certificate distributions can be held to recognize the contributions of employers to the formal apprenticeship system, by honoring

those employers who take and administer apprenticeships, as well as those employers who provide the highest quality of training to apprentices. Public recognition of these employers will also raise awareness among non-participating employers and apprentices, which should lead to higher levels of participation among both apprentices and employers, and serve as a source of advocacy for the formal apprenticeship system more generally.

## **7.2 Strategies for Informal Apprenticeships**

Strategies identified for improving the effectiveness of informal apprenticeships fall into four (4) categories:

1. Recognition of Prior Learning (RPL)
2. Assessment Tools
3. Awareness Raising
4. Informal Social Networks

*1. RPL* - Possibly the most critical step in upgrading informal apprenticeships in Bangladesh will be the establishment of a system for the Recognition of Prior Learning (RPL). This will allow informal apprentices—as well as master craftspeople and employers—to gain access to the formal TVET system by receiving recognition for the skills they learned during the course of an informal apprenticeship as opposed to needing the current Grade VIII (basic) certification. By providing access to the formal TVET system in order for informal workers to upgrade their skills more Bangladeshis will be able to equip themselves with better and more relevant trainings in industry skills and trades, making informal businesses more competitive in the marketplace. The RPL system could potentially be applied and utilized by apprentices as well as employers, master craftspeople and.

*2. Assessment Tools* - A system of simple logbooks based on NCS (see Annex 7 – Sample Logbook) can be used to track the progress of learning during apprenticeships by employers. Based on NCS, these logbooks can be applied nationally within an expanded formal apprenticeship program, and to help with the process of standardization for the informal sector by linking with informal skills training through apprenticeship with NCS. These sorts of assessments can also be used to demonstrate prior learning as a requisite for entry to formal TVET institutions, or in the issuance of statements in attainment. Standardized exams based on TVET training curricula developed under the NVQF could be given orally, visually or through demonstration, as opposed to merely written examinations that could potentially limit access for some informal workers. The composition of these examinations should be reviewed on an annual basis in tandem with the curricula, under an affiliated and responsible government body. Candidates who pass the standardized exam would receive a certificate recognizing their achievement, which can be used to demonstrate their skill level to potential future employers.

*3. Awareness Raising* - Built within this activity would be a significant awareness raising component that would engage in advocacy on two fronts. First, all potential employers/recruiters would need to be made aware of the relevance and importance of any “new” certifications and how apprentices/employees in possession of them could benefit their businesses (such as less time and money spent on their own on-the-job training, more efficiency through productivity, etc). Second, for both employers and trainees, the financial benefits of apprenticeship should be captured through a demonstrated cost-benefit analysis of net gains to investment in training when employing a model of apprenticeship. That is, the utilization of better and more efficient/formalized skills training tools can boost both net profits for employers through enhanced quality and productivity as well as value for money on the part of the trainees. Through a formalized system offering RPL, apprentices in the informal sector will have access to official recognition of their skills through official certifications and accreditations, allowing them to access higher paying employment opportunities both at home and abroad.

*4. Exploit Informal Social Networks* - Another major focus which needs to be given consideration with regard to informal apprenticeships is the use and prevalence of informal social networks. Because the informal sector which utilizes these networks in a country like Bangladesh are so vast, it would be impossible to replace them entirely with any formalized networking system at the scale that is needed. As a result, strategies for improving SDT in the informal sector should seek to include the use and maintenance of these informal social networks in shoring business activities, and regulating the use of improved training methods such as apprenticeship.

One way that informal networks could be utilized in strengthening informal apprenticeships in Bangladesh is to create or use existing community organizations that could be used as a regulating body in making agreements between apprentices and master craftspeople/employers. Because these agreements are often exploitative of the apprentices, and often don't cover any definitive outputs as far as skills and work-based knowledge that will be gained—helping communities to organize “placement” organizations that would rely on informal, word-of-mouth information about potential apprentices and employers in order to mitigate the employment arrangements between the two parties, ensuring that basic terms apply that could include: cost-sharing agreements, duration of apprenticeship, wages and remuneration, skills to be trained in and potential certifications to be awarded etc. Because the networks that would regulate these work agreements are inherently based on mutual trust and reputation, employing them as a mechanism to put in place better/more tenable work contracts between apprentices and employers/master craftspeople could potentially create less exploitative and more structured programs for informal apprenticeship.

### **7.3 Summary of Strategies for Apprenticeship in Bangladesh**

General findings of the survey do not provide any definitive or strong indications of trends in formal or informal apprenticeships, particularly with the weak sample of formal apprenticeships. While the findings of the survey do not give strong statistical inferences for making policy suggestions, they are nonetheless helpful in illustrating the overall situation facing both formal and informal apprenticeships in Bangladesh.

The most obvious solution within the scope of the TVET reform process is to link the two sectors, formal and informal, by utilizing provisions such as RPL, skills standards, standardized exams, log books that would allow informal workers/businesses/apprentices/master craftspeople to gain access to remodeled and revamped skills training coursework and curricula within the TVET system. TVET would be creating new and better opportunities for its current enrollees, and simultaneously engaging new, non-traditional students as well.

While concentrating on addressing both formal and informal apprenticeships within the policy agenda of TVET reform has potential to include many more individuals from both formal and informal sectors, the importance of utilizing existing informal social networks to enhance both formal and informal apprenticeship systems in Bangladesh should not be understated. Because these networks are vast and serve key social needs in the informal economy, any strategy seeking to upgrade either formal or informal apprenticeships should also include parameters for utilizing these networks (e.g. sourcing apprentices, developing standardized apprenticeship agreements between master craftspeople/employers and apprentices, setting standards for remuneration, work hours, identifying non-financial incentives, quality ‘rankings’ of master craftsmen, etc).

## **8. Concluding Remarks**

The main goal of this assessment was to concentrate analysis on apprenticeship programs demand-driven trades that are applicable to needs within specific industries and across different industry sectors. The assessment has also provided insight into the development of effective worker training programs that are able to address the needs of both employers and trainees. Skill-sets were selected based on relevance to the ‘thrust’ sectors as well as the degree to which multiple industry sectors would be able to capitalize on structured skills development training targeting those skills-sets.

Rapid expansion of the workforce in developing countries like Bangladesh has led to a need for training more skilled and highly skilled workers. Apprenticeships can play an integral role in enhancing the overall productivity and skill level of the Bangladeshi workforce through providing on-the-job training. Remittances play an important role in the economy of Bangladesh, representing 8.8% of GDP in 2006.<sup>37</sup> Higher levels of skills learned at home will increase the earnings of the estimated 250,000 Bangladeshis who migrate abroad each year, increasing the remittances they send home. Certified and documented skill enhancement and capacity building would also make Bangladeshis more viable candidates for technical and high-skill jobs in international labor markets. Once abroad, these workers will have access to further skill enhancement and training through direct, international,

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<sup>37</sup> The World Bank, Migration and Remittance Factbook 2008;

on-the-job experience; allowing repatriating Bengali citizens better options for worker retrenchment on their return and bringing valuable skills and work experience to domestic labor markets.

*Formal Apprenticeship System:*

Strengthening and expanding the *formal* apprenticeship system in Bangladesh is a necessary step towards equipping more businesses in the formal sector with better/more relevant skills that can increase their competitiveness in the global market. Formal skills development programs under the design of TVET should follow models which stress up-to-date, demand driven skills which can be deployed across a range of sectors, ensure that *formal* apprenticeships follow set and nationally recognized skills standards (i.e. NVQF), and offer incentives to employers for their participation, mainstreaming the integration of NCS into a comprehensive policy and legislative platform that allows for government support through both financial and non-financial incentives.

*Informal Apprenticeship Structures:*

Virtually all apprenticeships in Bangladesh can be considered informal in the sense that the vast majority are not recognized under Bangladesh apprenticeship law, and would not necessarily benefit from any overhauling of the formal TVET or apprenticeship system. Lacking any relevant certification or accreditation, skills standards, or a framework for recognition of prior learning means that standards are maintained informally (see: 3.2 The Informal Sector, *Annex 3 Best Practices in Apprenticeship*, and the *ILO-JOBS Inception Report*). A major assumption of this assessment, as has been demonstrated in the literature review, is that these informal standards will be of a low order of quality, and hinder small informal businesses from driving competition and increasing real wages.

A major assumption of this assessment, supported by the literature review and survey findings, is that informal standards tend to reinforce the use of low quality skills and thus hinder small, informal businesses from increasing their competitiveness and real wages.

Strengthening informal apprenticeship structures will require *some* means of formalization in order to aid efficiency and effectiveness, as well as easing the introduction of nationally and internationally recognized skill standards—the issue of accessibility may be first and foremost in reaching the informal sector with better and more relevant skills in industry sector trades. However, informal networks, which pervade and facilitate the governance of the informal economy, can and should be utilized, where possible, as a supplement to formal institutional actors within the TVET system.

*Going Forward:*

The biggest challenge in strengthening the apprenticeship system is to find a means of blending formal—i.e. legal, certified and accredited—programs and institutions with existing structures of informal networks and information/skills transference witnessed in the informal sector. The best way of achieving this would be to have the government regulate an official accreditation service that would help informal workers achieve Recognition of Prior Learning (RPL) through competency-based standards used in the NVQF and National Competency Standards (NCS). Through progressive legislation, these accreditations could potentially be used to grant access to TVET institutions for further training courses and certifications. This form of policy could serve both apprentices, as well as master craftspeople in upgrading their skills and gaining access to more formal means of training, and legal recognition.

*Gender Training and Awareness:*

Although a gendered analysis in this study and assessment was lacking, it is prudent that gender be included in any structured approach to redesign and revamp the system for apprenticeships within Bangladesh. Women entering the workforce should be given the same opportunities for obtaining certifications and accreditations based on nationally recognized skills standards, and for work-placement in apprenticeships in both accepted *and* non-traditional trades. Therefore, and in accordance with linking the apprenticeship system in Bangladesh with TVET, NVQF, RPL and NCS—women's inclusion in and access to these institutions should be streamlined and expanded forthrightly.

## **8.1 Lessons Learned**

The qualitative findings of the survey and assessment have shown a range of structures exist in both formal and informal apprenticeships, concerning compensation and benefits, hours worked, educational levels and requirements, and the use of different information networks in finding apprenticeships and apprentices (particularly with regard informal networks). Several facets of apprenticeship structures in Bangladesh were revealed as a result of the interviews and the subsequent data that was collected. Most remarkably:

- A basic range of compensation was determined for apprentices, and subtle differences with regard to remuneration and benefits paid by employers.
- Future plans for employment are varied, but tend to involve acquiring a job with another employer more than starting a new business, working overseas, or even seeking employment with the apprentice's current employer.
- A majority of apprentices experience financial hardship during their apprenticeship.
- TVET is considered as a determinant of eligibility for employment—although on a very limited basis—for both the formal and informal sectors.
- Apprenticeship is viewed by the vast majority of survey participants as an affective, if at times limited, means of skills development and training, and employers and apprentices alike support activities to strengthen apprenticeship structures Bangladesh.

## **Annexes**

Annex 1 – Bibliography

Annex 2 – Work Plan

Annex 3 – Best Practices in Apprenticeship

Annex 4 – List of FGD Participants

Annex 5 – Survey Questionnaires

Annex 6 – Sample Logbook

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## Annex 2: Work Plan

Phase	SL. #	Particulars	1st Week Nov 16-20	2nd Week Nov 23-27	3rd Week Nov 30- Dec 4	4th Week Dec 14-18	5th Week Dec 21-24	6th Week Jan 4- 8	7th Week Jan 11-15	8th Week Jan 18-22	9th Week Jan 25-29	10th Week Feb 1- 5	11th Week Feb 8- 12	12th Week Feb 15-19
	<b>1</b>	<b>Preperation of the Assessment</b>												
I	1.1	Finalization of a detailed work plan in consultation with ILO												
	<b>2</b>	<b>Primary Literature Review</b>												
I	2.1	Review relevant reports and background material of formal internships & apprenticeships												
I	2.2	Review the ILO-IPEC and TVET Reform project reports and other relevant material related to the operation of informal apprenticeships												
I	2.3	Obtain relevant legislation and regulations pertaining to the formal apprenticeship system in Bangladesh												
I	2.4	Review relevant current and future legislation and regulations pertaining to the formal apprenticeship system in Bangladesh												
I	2.5	Prepare a list of key agencies and industrial organizations for each of the eight priority sectors												
	<b>3</b>	<b>Consultation Meetings</b>												
I	3.1	Consult with key agencies regarding current and/or future planned enhancements to the formal apprenticeship system in Bangladesh												
I	3.2	Consult with government agencies and industry organizations to identify a representative sample of enterprises and training organizations participating in the formal apprenticeship system												

I	3.3	Consult with government agencies, industry bodies, NGOs, and community organizations to identify a sample of employers/master craftsmen												
I	3.4	Identify five priority sectors in consultation with the ILO												
I	3.4	Identify ten trades (two for each of the five priority sectors) for detailed analysis on the role formal and informal apprenticeships play in these trades in the formal sector												
I	3.5	Based on these ten trades, finalize the target population for interviews and focus group discussions												
	<b>4</b>	<b>Preparation of Inception Report</b>												
I	4.1	Draft inception report which includes the results of the literature review and an analysis of the current legislative and regulatory framework and identifies the sixteen trades on which the subsequent analysis will focus												
	<b>5</b>	<b>Questionnaire Development</b>												
II	5.1	Draft questionnaire for KII												
II	5.2	Preparation of Draft FGD guideline												
II	5.3	Finalization of the questionnaires and guidelines in consultation with ILO												
II	5.4	Development of database for data analysis												
	<b>6</b>	<b>Field Visits</b>												
II	6.1	Conduct key informant interviews and focus group discussions with industry organizations, labor unions, service providers, individual employers, master												

		craftsmen, and apprentices												
	<b>7</b>	<b>Draft Report</b>												
II	7.1	Draft report on the role of apprenticeships in each of the sixteen trades												
II	7.2	Submit draft to ILO and receive feedback to incorporate into the final report												
	<b>8</b>	<b>Final Report</b>												
II	8.1	Finalize the draft incorporating feedback from the ILO												
II	8.2	Submit final report to ILO												

### ***Annex 3: Best Practices in Apprenticeship***

As a supplement to the research conducted in the primary literature and desk review (see Annex 7: ILO-JOBS Inception Report), this section comprises a secondary review of literature based on ‘best practices’ in apprenticeship. The best practices research compiles documents from both western apprenticeship programs and guides (Canada, UK and Australia) as well as documentation which covers donor-funded initiatives for developing apprenticeships in the Global South (Africa and South Asia). This research will help to further contextualize the structure, organization and potential for apprenticeship programs to be enhanced in Bangladesh, and will provide a meaningful comparison against the findings of the survey assessment.

While literature from the West does not give consideration to the ‘informal sector’ as it is understood in the context of developing countries such as Bangladesh, there are meaningful comparisons that can be derived from the framework and policies that have accompanied various strategies for providing viable skills training to the workforce. It is evident that there is a strong demand for skilled labor in developed countries across a range industry sectors at present. While this need is defined almost solely in terms of an aging workforce, the underlying assumptions prove to be synonymous between the West and South: finding effective and practical ways of recruiting and training skilled laborers in order to satisfy growing demands in the overall economy.

More crucially, this section will examine skills the development programs of governments and donor agencies in Africa and South Asia (e.g. Ghana, Tanzania, Kenya, Morocco, South Africa, Sri Lanka et al). Focusing on several brief examples will help to provide a context which can highlight challenges and innovations for strengthening apprenticeships in developing countries, primarily as it regards the informal economy. It is important to note that while keeping with a strictly socio-legal interpretation of ‘informal’ as meaning without the inclusive bounds of legal, political or civic mandate—informal institutions, networks and associations tend to make up the vast majority of economic activity in the Global South, including Bangladesh. The informal economy should not be considered in any sort of distinct separation from the ‘formal economy’ as such, rather, the interplay and interdependence of both needs to be emphasized.

#### ***Canada, the UK and Australia***

Although the West may be better equipped, both financially and institutionally, to handle and implement large scale programs for social and economic improvement, many of the problems now facing Western countries with regard to shortages of skilled labor are also evidence of a commonality throughout the world to adapt to changing economic conditions in sustaining economic growth. As mentioned above, the steadily increasing age of the workforce in Europe, North America and Australia has spurred policy-making bodies into action. To enhance the quality and capabilities of its workforce, Canada, the UK and Australia (in addition to other Western countries) have sought to both recruit and train young people in trades as a means of replacing highly skilled workers transitioning from the world of work into retirement.

Even though the scope for replication in countries like Bangladesh may be limited overall, the underlying themes discussed in this section will help to provide further context for opportunities in structuring an enabling environment around progressive policy measures. This brief analysis will discuss issues related to:

- Financing and funding for apprenticeship programs through the collaboration of public-private partnerships.
- Incorporation of technology applications and ICT, as well as other alternative methods of administering skills transfers, training and development.
- Incentives for both employers and apprentices fostered through awareness building around the potential *benefits* of apprenticeship—making an investment in human capital in the form of skills development and training.

Many of these themes will parallel the findings of the initial ILO-JOBS inception report, and will reaffirm several of the recommendations found in prior literature. What will be important to consider from this review is not that Bangladesh or any globally southern country should necessarily seek to emulate the practices and policies of the West, but that certain elements of practicality with regard to organization and efficiency may be useful in finding a more comprehensive solution to structuring skills development frameworks for apprenticeship, particularly with regard to the points listed above.

*Collaborative Funding Efforts*—In addressing the need for more relevant and useful training authorities, many governments in the West have had to deal first and foremost with the issues related to funding. Because training a viable and competent workforce also brings with it the burden of cost, there is automatically a substantial hurdle to consider when asking the question “who pays?” While this question is much more pronounced in developing countries due to severely limited and overstretched resources and ineffective governments and policy-making institutions, it is still a question of due consideration in places like Europe and the UK, where governments are much more functional and resources can be made readily available.

One example of collaborative institution building in the West is evidenced in Canada. In a jointly led effort by the National Electrical Training Council (NETCO) and the Canadian Electrical Contractors Association (CECA), a system of *Joint Apprenticeship Councils (JAC)* was developed in order to create a mechanism that can leverage available funding from the Canadian government, as well as private industry in order to finance training programs that provide valuable skills development training for Canadian workers. JACs are founded on industry-based *Training Trust Funds* derived from multiemployer collective agreements. This long-term, sustainable financing enables JACs to effectively administer a network of training facilities and institutes. The Training Trust Funds are legal entities that provide the financing for multiple nationally recognized training programs, and which receive a continuous revenue stream from multiple sources (e.g. maximizing tax exemptions of sales, property, value-added taxes, GST reimbursement, and issuing tax receipts for equipment donations; and maximizing access to federal and provincial/territorial funding).<sup>38</sup>

As discussed in the Inception Report, many of the recommendations for the Global South involve working out a collaborative arrangement between government, labor associations, TVET institutions and the private sector in jointly funded training programs (e.g. in the creation of training and learning programs or institutions) that would utilize incentives offered by governments to private sector industries to create opportunities for workers to increase their skills and knowledge base through formal TVET institutions.

*Integrated Technology Approaches and Alternative Methods of Training*—Because of the endemic nature of technological applications in modern economies, employers, trade bodies, associations, TVET institutions as with public policy have all looked towards several different methods to aid in the dissemination of information through various technological applications in training. Many policy guidelines in the West now look a great deal towards the incorporation of multi-media and web-based materials in order to supplement and administer trainings both in and outside of the workplace. Online and web-based media help to offset the costs of procuring training materials and resources in addition to offering off-site training which can be completed outside of regular training facilities, campuses and workplaces. The Saskatchewan Institute for Applied Sciences and Technology (SIAST) in Canada has created an online campus that promotes distance learning through the use of web-based materials as a tool in structuring more teacher-learner interaction, as well as interaction between peer learners.<sup>39</sup>

Another example of the integration of technology is evident in the UK, which set up a government-funded e-learning program. The agenda of the *Learndirect* program is to extend high quality training to workers and apprentices in England through extensively developed online training courses. Described as the largest government supported e-learning network in the world, the Learndirect program in the UK boasts more than 40,000 individuals who have completed its “Skills for Life” program, and registered over 300,000 people in its more than eight hundred learning packages. The primary focus of the Learndirect program is

<sup>38</sup> National Electrical Trade Council, Canada, Guide to Best Practices for Joint Apprenticeship Committees (JACs), November 2007.

<sup>39</sup> see Ross, Heather M., Mervold, Dalton P., *Best Practices in Providing Apprenticeship Training at a Distance*, Saskatchewan Institute of Applied Science and Technology, 2007.

in five key areas: life skills which promote literacy, numeracy and ICT; skills for employability, productivity and competitiveness in the workplace; skills that promote community awareness and involvement (e.g. social justice, and community regeneration); skills for furthering education and higher learning; and skills for the use of information services such as career counseling and guidance.<sup>40</sup>

The integration of ICT technologies into training programs and curricula is inherently limited to the availability of resources, primarily in the form of funding. The underlying assumption behind integrating ICT into a framework for skills development is to offer a diversified array of training models which make it easier and more efficient for trainees (apprentices) and employers alike to adapt comprehensive trainings to the social and economic circumstances of those individuals. Diversified training modules increase the scope and ability of skills development and training to function in a variety of settings.

Using ICT in alternative methods of training can be promising, but it is not necessarily the most practical wide-scale approach in a country such as Bangladesh, where there is limited access to computer-based technologies and information, as well as a lack in basic comprehension of computer applications. Although ICT can't be employed on the scale that it is in Europe or North America within the developing world, its use is still integral to platforms for economic development, as has been indicated in the PRSPs for Bangladesh and elsewhere.

*Incentives for Investment in Training*—Funding for training programs is an issue of primacy, and makes up the basis for which training programs can measure their effectiveness and scope. The means for developing continuous and sustainable funding for training programs ultimately rests with the public and private sectors' efforts to collaborate in providing financial resources suitable for maintaining quality and effectiveness. In this way, the provision of funding should be counted as a direct investment for the growth and development of any business, industry or enterprise. Framing investment in skills development and training in the context of economic cost-benefit analysis is essential to garnering both public and private financial support.

While all parties in the equation, from the employer to government agencies as well as trainees might judge the short-term opportunity costs of investment in training, the measurable outcomes of these activities are undoubtedly over the long-run of enterprises and careers. In the UK, a study by the University of Warwick Institute for Employment Research (IER) found that by investing in its 'human capital', "each industry and/or business is ensuring the re-supply and retraining of their workforce, keeping them up to date with the evolution of skills and materials, and absorbing the costs over time of the apprenticeship training."<sup>41</sup>

In this regard, apprenticeships (or any form of worker training and skills development) should be seen as a direct investment on the part of the parties involved (employees, governments and employers in industry), and should not merely be seen as a stop-gap measure in satisfying a need for a supply of cheap labor. The Australian Government's approach to best practices in worker training is stated in the Department of Education, Science and Training's *A Guide to Managing the first 100 Days of Apprenticeship*: "The decision to employ a new apprentice should not be taken lightly. A careful, detailed, methodical analysis must be undertaken that is based not just on current, short-term needs but also future, long-term expectations. Moreover, the decision must involve careful consideration of the degree of financial and human resources commitment associated with employing and retaining an apprentice."<sup>42</sup>

<sup>40</sup> Industry Training Authority British Columbia, *Alternative Trades Training: Best Practices from Across Canada*, May 2006.

<sup>41</sup> p. 13, Hasluck, Chris; Hogarth, Terence; Baldauf, Beate and Briscoe, Geoff, *The Net Benefit to Employer Investment in Apprenticeship Training: A Report for the Apprenticeship Ambassadors Network*, University of Warwick Institute for Employment Research, November 2008. See also p. 20 on short-term benefits of apprenticeship: "For many employers, the rationale for engaging in Apprenticeship training is based on the longer-term benefits that accrue to the business. Nonetheless, Apprenticeships can bring benefits to the business as well as costs even in the short-term. The main short-term benefit to the employer is the trainee's productive contribution during the Apprenticeship training period... such a contribution may be small at the start of an Apprenticeship but can be significant towards the end of training. The value of the productive contribution will depend very much on the nature of the business and occupation being trained for, and the structure of the Apprenticeship (especially the extent to which training takes place on-the-job)."

<sup>42</sup> p. 20, Department of Education, Science and Training (DEST) Australia; Australian Industry Group, *A Guide to Managing the First 100 Days of an Apprenticeship: A practical approach*, developed for the National Skills Shortages Strategy, August 2007.

### *Africa and South Asia*

The regions of Africa (particularly sub-Saharan Africa) and South Asia offer similar economic and social landscapes to Bangladesh, and can help to underscore the challenges of training those who lack the most basic educational and economic opportunities. Because skills development and training are seen as vital steps on the road to economic recovery and revitalization, many governments in the Global South, often working in tandem with donor initiatives, have expressed their commitment to extending learning opportunities through educational and training programs that will enhance livelihood options for marginalized and impoverished groups.

What is more important in considering skills development training in the Global South, as it is also the primary focus of this assessment, is the attention that needs to be given to the ‘informal economy’. Because of the limited extent to which Global South governments are able to secure and maintain vital resources for development, a vast majority of workers are left without legal and social protection in their livelihood activities. Thus, strengthening the overall skill, knowledge base and learning opportunities for individuals in developing countries will be entirely dependent on the inclusion of informal workers in a socio-political framework that acknowledges the experience and capacity of informal training and livelihoods. This sort of inclusion will be examined through the literature on Africa and South Asia from the following vantages:

- Recognition of prior learning (RPL) through nationally recognized skills qualification frameworks and capacity assessment certifications.
- Policy measures that are inclusive of, and provide recognition for the informal sector and informal employment; and which strengthen the ability of informal workers to organize collectively through associations in order to secure and maintain rights.
- Creation of inter-sectoral (i.e. public-private-donor) linkages that promote cooperation and joint venture in skills development and training, as well as funding.
- Training programs that are adaptive and flexible to changing circumstances and needs of stakeholders, and that are cognizant of the social environment (i.e. accessible to marginalized and hard to reach groups, such as the rural poor and landless).

While this is an overall limited range of concepts when looking at the informal economy and apprenticeship in the Global South, these few themes will help to center on efforts led by developing countries to strengthen livelihoods through viable skills development programs and partnerships.

*ICT in Sri Lanka and RPL*—The Bachelors in Information Technology (BIT) administered by the University of Colombo School of Computing, Sri Lanka, is one example of a program that also allows those who could not enter university to be granted a degree through the recognition of prior learning. It also gives opportunities to non-graduates working in IT to receive formal qualifications in IT through self-governed learning. The BIT is a three-year program that gives a certificate in IT after completion of module examinations at the end of the first year. An advanced certificate is awarded to those who complete year two test modules, with the BIT is given at the end of the third year. The program is structured so that students can either opt for self-study or utilize their attendance at private schools that offer courses in the BIT curriculum. The BIT covers themes in data structure and algorithms, the fundamentals of software engineering, object oriented systems development, rapid application development, visual computing, project management, and software quality management, among other topics.<sup>43</sup>

The Swedish International Development Cooperation Agency (SIDA) report which highlighted the BIT program at the University of Colombo, also stressed the advocacy of RPL programs as a useful tool in giving access to marginalized and impoverished groups, stating: “It is important to ensure that ICT training is open for people with diverse backgrounds...Therefore, it is recommended that SIDA support the development of effective bridging regimes to accompany broader intervention supporting ICT training. Bridging could allow [...] applicants to gain entry to ICT training without meeting the formal educational

<sup>43</sup> p. 62, Mendes, Shawn Tuijnman, Albert Young, Nina, *Education and Training for ICT Development in Sri Lanka and Tanzania*, Swedish International Development Cooperation Agency (SIDA), March 2003.

requirements. Learning pathways would allow ICT graduates to receive advance credit if, at some point in the future they decide to pursue university-level studies to become for example, professional computer engineers.”<sup>44</sup> SIDA also put emphasis on the need for Sri Lanka to extend a national certification and accreditation for IT that could potentially drive competition between training providers in meeting standards.<sup>45</sup>

*Policy Measures for the Informal Economy*—Public policy is the crucial element which must lead any concerted effort at TVET reform, and the delivery of high quality skills to the workforce. The extension of legal and social services to informal economy workers, whether in Africa or the Subcontinent, is needed in order to institute lasting reforms that can benefit the entire workforce. The implementation of effective policies will determine how well a developing country will be able to initiate the necessary changes that will help it adapt to the shifting global economy. If developing countries in the Global South are able to ascend economic growth, manage the dissemination of knowledge and information for capacity building and skills development, and to spur multi-sector industrial growth (potentially while embracing the integration of ICT and other technological applications)—each country will do so on the basis of the policy measures which it puts into place, and that will open more avenues for the workforce to receive high quality and relevant skills training.

On the policy agenda, Morocco and Tunisia offer an example of governments responding to improve the functioning of traditional apprenticeships by focusing on the introduction of apprenticeship contracts between master craftspeople and apprentices, setting standards for remuneration levels, offering incentives to employers in the form of tax exemptions, setting age restrictions for employment, and introducing programs which can incorporate dual training between the workplace and training institutions.<sup>46</sup>

*Collaborative Development*—This issue of ‘responsibility’—as far as financing and funding of TVET and other sources/means of training provision—is one of the most difficult and complex issues surrounding the effective implementation of skills development programs. National strategies for SDT and programs for enhancing workforce capabilities overall are first and foremost at the juncture of determining how to create and sustain viable worker training programs. Resources in many developing countries are scarce to begin with. These scarcities exacerbate ongoing governance issues, and further limit public agencies’ ability to coordinate, plan and support viable and wide ranging programs for successful SDT. At the root of this issue is where responsibility can be placed. Is SDT a public or a private good? Is the provision of SDT ultimately the responsibility of the state, or of the private sector, or of the workers who conceivably benefit from the enhancement of work-based skill sets?

All of these questions surfaced in the ILO-led debate Apprenticeship in the Informal Economy, conference and workshop held in 2007 in Geneva, Switzerland. The more succinct and basic question that was asked is: “Who Pays?”; as all the programs that were discussed in various development projects throughout the African continent eminently faced shortfalls in the area of resources. NGOs which are reliant on donor funding tend to assume a majority of the cost-burden of establishing and implementing skills training programs. While governments in these regions struggle to provide comprehensive public support through the configuration of ministries, agencies and TVET institutions; ultimately their efforts are hamstrung by the uncoordinated deployment of the limited resource base which they possess. Aside from on-the-job-training, private sector input is little to non-existent for the purposes of enhancing workforce capacities, and little financial input is given to TVET and other institutional programs for SDT.<sup>47</sup>

In the ‘best practices’ research, it has been found that most often the success of a skills development program will depend on the amount of funding that it is able to leverage (i.e. from NGOs and donor funding, from government ministries, and/or the private sector); and that for these programs to be self-

<sup>44</sup> p. 12, *ibid*, 2003.

<sup>45</sup> p. 68, *ibid*, 2003.

<sup>46</sup> p. 7, Association for the Development of Education in Africa (ADEA), *Beyond Primary Education: Challenges and Approaches to Expanding Learning Opportunities in Africa*, Biennale on Education in Africa, Maputo, Mozambique, May, 5-9 2008.

<sup>47</sup> ILO, Apprenticeship in the Informal Economy in Africa, Workshop Report, Geneva, 3-4 May 2007.



sustaining, inputs from all sectors and stakeholder groups must be incorporated into a consolidated and reliable network of program actors and beneficiaries. Funding must come from the state and the private sector. NGOs will be better able to leverage these agreements in implementing structured, market focused SDT programs which compliment the overall structure of institutional and policy frameworks. Within these frameworks, programs can be extended to informal economy actors in broadening the scope by enhancing the system of skills training to reach further segments of society.

**Annex 4: List of FGD Participants**

<b>Table 1: Focus Group Discussion Participants</b>			
<b>Focus Group Discussion</b>	<b>Participant</b>	<b>Organization</b>	<b>Sector</b>
Khulna	Md. Anwar, Apprentice	Rajdhani Rickshaw Garage	Transport
Khulna	Md. Saiful, Apprentice	Rajdhani Rickshaw Garage	Transport
Khulna	Md. Rafiqul, Owner	Rajdhani Rickshaw Garage	Transport
Khulna	Md. Sakeel, Owner	M/S Hawrah Bakery	Agro-Food Processing
Khulna	Md. Anser, Apprentice	M/S Hawrah Bakery	Agro-Food Processing
Khulna	Mr. Rafiq, Owner	M/S the Adi Hawrah Bakery	Agro-Food Processing
Khulna	Md. Belayet, Apprentice	M/S the Adi Hawrah Bakery	Agro-Food Processing
Khulna	Md. Ibrahim, Apprentice	M/S the Adi Hawrah Bakery	Agro-Food Processing
Khulna	Khondoker Aynul Islam, Owner	Southfield fisheries Ltd.	Agro-Food Processing
Khulna	S. Humayun Kabir, Owner	Amam Sea Food Industries Ltd.	Agro-Food Processing
Khulna	Md. Mahfuz Hasan, Apprentice	Amam Sea Food Industries Ltd.	Agro-Food Processing
Khulna	Sk. Md. Abdul Baki, Vice president	BFFEA	Agro-Food Processing
Khulna	Md. Ferdous Alam Farajee, Director	BFFEA	Agro-Food Processing
Khulna	Md. Liakat, Owner	M/S Hugly Bakery	Agro-Food Processing
Chittagong	Md Zakaria Jamal, Manager, HR & Admin	ARK Seafood	Agro-Food Processing
Chittagong	Mr. Moklesur Rahman, Apprentice	M/S Mahi Shoe & Gents	Leather and Leather Goods
Chittagong	Md. Ziaur Rahman, Owner	M/S Mahi Shoe & Gents	Leather and Leather Goods
Chittagong	Mr. Sajid Hussain, Chief Executive	M/S Western marine	Transport
Chittagong	Md. Rubel Hossain Apprentice	M/S Western marine	Transport
Chittagong	Shahid Nur, Apprentice	M/S Western marine	Transport
Chittagong	Mr. Rakhil Saha, Company Secretary	M/S Bonoful & Co.	Agro-Food Processing
Chittagong	A.B.M Shamsul Alam, Apprentice	M/S Bonoful & Co.	Agro-Food Processing
Chittagong	Soumitra Sarker, App	M/S Bonoful & Co.	Agro-Food Processing
Chittagong	Swapon Kumar Datta, Manager	Galfra Habib Ltd.	Agro-Food Processing & Transport
Chittagong	Md. Jahangir Alam, Apprentice	Galfra Habib Ltd.	Agro-Food Processing & Transport
Chittagong	Md. Jamal Uddin, Apprentice	Galfra Habib Ltd.	Agro-Food Processing & Transport
Chittagong	Md. Karim Ullah, Owner	M/S Fulkoli Food Products	Agro-Food Processing
Chittagong	Md. Omer Faruq, Apprentice	M/S Fulkoli Food Products	Agro-Food Processing

**Annex 5: Sample Questionnaires**

**TVET- APPRENTICES**

**(INFORMAL APPRENTICESHIP/INFORMAL ECONOMY)**

**KEY INFORMANT INTERVIEW (KII)**

**A. Identification**

**Questionnaire No** :

**Sector (Please Circle)** : 1. Leather & Leather goods      2. Transport  
equipment

3. Agro-Food Procession      4. Information Technology (IT)

**Date of Interview** : \_\_\_/\_\_\_/2009

**Interviewer:** \_\_\_\_\_

**Name of respondent :**

\_\_\_\_\_

**Name of the Organization:** \_\_\_\_\_

**Sex:**       Male       Female

**Present Age:** \_\_\_\_\_ **Age Upon Starting Apprenticeship:** \_\_\_\_\_

**Marital Status:**      1. Married      2. Single

**Highest level of education:** \_\_\_\_\_

**Address:** \_\_\_\_\_

**E-mail:** \_\_\_\_\_ **Web site:** \_\_\_\_\_

**Working Area (Please Circle):** 1. Urban      2. Rural      3. Both

**Telephone:** \_\_\_\_\_ **Cell:** \_\_\_\_\_

**District (Please Circle)**      a) Dhaka      b) Chittagong      c) Natore  
d) Mymensingh      e) Dinajpur/ Rangpur f) Others: \_\_\_\_\_

**Specify the trade/business of your organisation:**

\_\_\_\_\_

**Number of hours worked per day (average):** \_\_\_\_\_

**Number of days worked per week (average):** \_\_\_\_\_

**Are you supplied with your own tools:** Yes: \_\_\_ No: \_\_\_

**Are you required to supply your own tools:** Yes: \_\_\_ No: \_\_\_

## **B. Stakeholder Background in Employment**

*Note: Multiple answers are allowed for all questions below if applicable.*

### **1. Are you a relative or family friend of:**

1.1. Boss/owner? \_\_\_

1.2. Another regular employee? \_\_\_

1.3. Both? \_\_\_

1.4. Neither? \_\_\_

### **2. If a relative or family friend, please specify your relationship with that person:**

2.1. Relation to boss/owner: \_\_\_\_\_ 2.2. Relation to regular employee:

\_\_\_\_\_

### **3. Have you worked in this trade or another trade previously?**

3.1. Worked in this trade previously \_\_\_

3.2. Worked in another trade

previously \_\_\_

3.3. Worked in this trade and other trades previously (Both) \_\_\_

3.4. No previous work in this or other trades \_\_\_

**If you have worked in other trades previously, please specify which ones and for how long:**

1) Trade: \_\_\_\_\_ Duration: \_\_\_ Years \_\_\_ Months

2) Trade: \_\_\_\_\_ Duration: \_\_\_ Years \_\_\_ Months

3) Trade: \_\_\_\_\_ Duration: \_\_\_ Years \_\_\_ Months

4) Trade: \_\_\_\_\_ Duration: \_\_\_ Years \_\_\_ Months

5) Trade: \_\_\_\_\_ Duration: \_\_\_ Years \_\_\_ Months

**4. Have you learned other skills before your current attachment? (Please mark all that apply)**

- 4.1. Yes: at TTC, VTC (formal education) \_\_\_      4.2. Yes: at NGO \_\_\_  
4.3. Yes: in non-formal training course \_\_\_      4.4. Yes: On-the-job training (w/o apprenticeship) \_\_\_  
4.5. Yes: in another apprenticeship \_\_\_      4.6. Yes: observation (w/o being employed) \_\_\_  
4.7. No previous skills or experience \_\_\_

**If answer above is 4.5 (in another apprenticeship), please indicate where your training was held, for how long, and the skills you learned:**

- 1) Business or Training Provider: \_\_\_\_\_, Duration: \_Years \_Months,  
Skills: \_\_\_\_\_  
2) Business or Training Provider: \_\_\_\_\_, Duration: \_Years \_Months,  
Skills: \_\_\_\_\_  
3) Business or Training Provider: \_\_\_\_\_, Duration: \_Years \_Months,  
Skills: \_\_\_\_\_  
4) Business or Training Provider: \_\_\_\_\_, Duration: \_Years \_Months,  
Skills: \_\_\_\_\_

**5. If you have learned/obtained skills previously, how important are they in your current apprenticeship?**

- 5.1. Very important      5.2. Somewhat important  
5.3. Not very important      5.4. Not important at all

**C. Information and Stakeholder's View of Apprenticeship**

**1. Which section/department of your company are you attached to?**

**Please specify:**

**2. What are your main duties and responsibilities (if any) as an apprentice?**

**Please specify:**

**3. When did you join the current apprenticeship programme?**

Please specify date: \_\_\_\_\_

**4. How did you find out about this programme?**

4.1. From relations/acquaintances already employed in the company

4.2. Informal/word of mouth  
media

4.3. Advertisement in print  
media

4.4. Advertisement in the internet

4.5. TVET institutions

4.6. Other (please specify): \_\_\_\_\_

**5. How did you come to the decision to apprentice in this specific field or trade?**

5.1. Based on suggestion; (please specify from whom): \_\_\_\_\_

5.2. Potential for better income opportunities

5.3. Opportunity for more training and experience

5.4. Limited access to other fields or trades

**6. Why did you choose to participate in this apprenticeship programme?**

6.1. Gain technical skills

6.2. Get employment at this company

6.3. Other (please specify): \_\_\_\_\_

**7. What was the selection process for your apprenticeship?**

7.1. Interview

7.2. Written test

7.3. Selection based on education/experience

7.4. Informal

7.5. Other (please specify): \_\_\_\_\_

**8. What were the educational and/or experience requirements for the apprenticeship?**

**Education:**

8.1. Grade/Class 8

8.2. S.S.C.

8.3. H.S.C.

8.4. Other (please specify): \_\_\_\_\_

**Experience (please specify):** \_\_\_\_\_

**9. Was a TVET Diploma required for this apprenticeship position?**

9.1. Yes

9.2. No

**10. If Yes, what Diploma was required?**

**Please specify:** \_\_\_\_\_

**11. If Yes, from where did you receive your diploma?**

**Please specify:** \_\_\_\_\_

**12. What is your position called at the company?**

12.1. Apprenticeship

12.2. Attachment Programme

12.3. Internship

12.4. Traineeship

12.5. Other (please specify): \_\_\_\_\_

**13. Specify the required duration to complete your apprenticeship.**

13.1. 3 years

13.2. 1 year

13.3. 6 months

13.4. Other (please specify): \_\_\_\_\_

**14. What allowance/remuneration do you get as an apprentice?**

**Please specify:** \_\_\_\_\_

**15. Does your allowance/remuneration increase over the course of your apprenticeship?**

15.1. Yes

15.2. No

**If “Yes”, how much does your allowance/remuneration increase as you progress in your internship?**

Please

Specify: \_\_\_\_\_

**16. What benefits other than direct financial remuneration do you get?**

- 16.1 Medical benefits
- 16.2. Food/refreshments
- 16.3. Insurance
- 16.4. Sick Leave
- 16.5. Holdiay Leave
- 16.6. Other (please specify): \_\_\_\_\_
- 16.7. No other benefit

**17. What is the position/function of your immediate supervisor?**

Designation/position (please specify):

\_\_\_\_\_

Function/main responsibility (please specify):

\_\_\_\_\_

**18. Do you find your supervisor supportive of your skill development objectives?**

- 18.1. Very helpful
- 18.2. Quite helpful
- 18.3. Moderately helpful
- 18.4. Not helpful

**19. If the answer to the above is 17.1, 17.2, or 17.3, name three reasons why you think your supervisor is contributing to your skill development.**

- 1) \_\_\_\_\_
- 2) \_\_\_\_\_
- 3) \_\_\_\_\_

**20. If the answer to Question 17 is 17.4, name three reasons why you think your supervisor is not contributing to your skill development.**

- 1) \_\_\_\_\_
- 2) \_\_\_\_\_
- 3) \_\_\_\_\_

**21. Can you please comment on your working conditions, are they good, poor, acceptable, unacceptable?**



**22. Are you aware of any laws/regulations regarding apprenticeship?**

22.1. Yes 22.2. No

**23. Do you have any knowledge of the formal apprenticeship system administered by BMET?**

23.1. Yes 23.2. No

**24. Do you think there is a need for your employer to take apprentices?**

24.1. Yes 24.2. No

**25. If above is Yes, why?**

25.1. To fulfil staffing needs for skilled workers

25.2. To create skilled workers for industry

25.3. To meet CSR objectives

25.4. Other (please specify): \_\_\_\_\_

**26. What method of training are you receiving as a part of your apprenticeship? (Multiple answers may apply)**

26.1. Class room + on the job 26.2. 100% on the job

26.3. Deputation to a training centre 26.4. Other (please specify):

\_\_\_\_\_

**27. If you need new skills in your trade/profession, how do you acquire them?**

27.1. Observing other craftspersons

27.2. Observing other businesses

27.3. Participation in skills development courses  
employer

27.4. Provisions from current

27.5. Other, please specify:

\_\_\_\_\_

**28. Does your company engage external trainers/training provider organisations for training apprentices?**

28.1. Yes 28.2. No

**29. If training provider organisation(s) are engaged by your company please provide the name(s) of such organisation(s):**

**30. How is your progress evaluated?**

30.1. Periodic examinations

30.2. Performance evaluation

30.3. Informal observation/assessment

30.4. Other (please specify): \_\_\_\_\_

**31. Will you receive a certificate at the end of the apprentice period?**

31.1. Yes

31.2. No

**32. If yes, who issues the certificates?**

32.1. Employer

32.2. Employer jointly with external organisation (please specify):  
\_\_\_\_\_

32.3. External organisation (please specify):  
\_\_\_\_\_

**33. Who recognizes the certificates once they are issued?**

33.1. All Employers (general)

33.2. Similar businesses but not all

33.3. Other, Please Specify: \_\_\_\_\_

33.4. None other than your  
business

**34. What kind of guidelines/rules do you follow in connection with your apprenticeship?**

34.1. Written guideline

34.2. TOR/Job description

34.3. Informal guideline

34.4. Other (please specify):  
\_\_\_\_\_

**35. Do you receive any performance incentives from the company?**

35.1. Yes

35.2. No

**36. If Yes, please specify what incentive(s):**

**37. How effective is the apprenticeship programmes you are involved in?**

37.1. Very effective

37.2. Moderately effective

37.3. No impact

37.4. Negative impact

**38. What types of skills are transmitted in the apprenticeship? (Please mark all applicable)**

38.1. Skills relevant to particular trade\_\_ (Please Specify):

\_\_\_\_\_

38.2. Technical skills (general) \_\_ (Please Specify):

\_\_\_\_\_

38.3. Business management \_\_

38.4. Accounting \_\_

38.5. Special instruction in handling materials \_\_ (Please Specify):

\_\_\_\_\_

38.6. Other, please

specify:\_\_\_\_\_

**39. What do you think are the benefits and positive outcomes of the apprenticeship programmes you are involved in?**

39.1. Skill development

39.2. Possibility of employment at this company

39.3. Employment opportunity at other companies

39.4. Increased social standing

39.5. Entrepreneurship opportunities

39.6. Other (please specify):

\_\_\_\_\_

**40. What problems/barriers, if any, are you experiencing at this programme?**

**Please describe:**

**41. What type of support would make the training you receive more effective?**

- 41.1. Better training facilities
- 41.2. Better technical resources
- 41.3. More competent trainers
- 41.4. More time allocation for training
- 41.5. Other (please specify):  
\_\_\_\_\_

**42. What sort of new arrangements or improvements would benefit your apprenticeship experience?**

- 42.1. Financial and/or other incentives
- 42.2. New learning resources
- 42.3. More structured programmes and curricula
- 42.4. Greater roles for training providers and community organisations
- 42.5. Other (please specify):  
\_\_\_\_\_

**43. Would you participate in other skills upgrading or business related courses?**

- 43.1. Yes
- 43.2. No

**If No (above), why or why not?**

- 43.3. There are not appropriate courses available
- 43.4. Do not have the time
- 43.5. Do not have the available financial resources
- 43.6. Do not need further training
- 43.7. Other, please specify: \_\_\_\_\_

**44. What are your future plans after this apprenticeship?**

- 44.1. Stay at this company
- 44.2. Find job at another company
- 44.3. Search for employment overseas
- 44.4. Seek further educational training
- 44.5. Other (specify): \_\_\_\_\_

**45. If answer to above is 43.3, please specify which country(s):**

\_\_\_\_\_

**46. In the event that you are not hired by the company/employer administering the apprenticeship, how would you find out about other employment opportunities in your field/trade?**

- 46.1. From family/friends/acquaintances
- 46.2. Through print/electronic media
- 46.3. From Internet
- 46.4. Other (please specify): \_\_\_\_\_

**47. What other skills (if any) should be provided in your training in order to improve it? (Please mark all that apply)**

- 47.1. Technical skills\_\_
- 47.2. Theoretical background information\_\_
- 47.3. Workshop skills (production maintenance)\_\_
- 47.4. Mechanics/machine maintenance\_\_
- 47.5. Accounting\_\_
- 47.6. Purchasing\_\_
- 47.7. Teaching/training skills\_\_
- 47.8. Customer relations\_\_
- 47.9. Safe handling of tools/materials\_\_
- 47.10. Basic Education \_\_
- 47.11. English Language\_\_
- 47.12. Other, please specify:\_\_\_\_\_

**48. What changes do you believe are necessary to make the informal apprenticeship system more effective?**

**Please describe:**

**49. Would you participate in a government run formal apprenticeship program?**

49.1. Yes

49.2. No

**50. If Yes, why?**

**Please specify:** \_\_\_\_\_

**51. If No, why?**

**Please specify:** \_\_\_\_\_

**52. What are your future plans in view of the current apprenticeship and career planning?**

**Please describe:**

#### **D. Observations and Comments**

**Observation of the respondent (attitudes towards prospective activities/sectors)**



**TVET- EMPLOYER**  
**(INFORMAL APPRENTICESHIP/INFORMAL ECONOMY)**  
**KEY INFORMANT INTERVIEW (KII)**

**A. Identification**

**Questionnaire No** : \_\_\_\_\_

**Sector (Please Circle)** : 1. Leather & Leather goods      2. Transport equipment  
3. Agro-Food Procession      4. Information Technology (IT)

**Date of Interview** : \_\_\_\_/\_\_\_\_/2009.

**Interviewer:** \_\_\_\_\_

**Name of respondent :** \_\_\_\_\_

**Name of the Organization:** \_\_\_\_\_

**Sex** :  Male       Female      **Age:** \_\_\_\_\_

**Marital Status:**      1. Married      2. Single

**Level of education:** \_\_\_\_\_

**Address:** \_\_\_\_\_

**E-mail:** \_\_\_\_\_ **Web site:** \_\_\_\_\_

**Working Area (Please Circle):** 1. Urban      2. Rural      3. Both

**Telephone:** \_\_\_\_\_ **Cell:** \_\_\_\_\_

**District (Please Circle)**      a) Dhaka      b) Chittagong      c) Natore  
d) Mymensingh      e) Dinajpur/ Rangpur f) Others: \_\_\_\_\_

**Specify the trade/business of your organisation:**  
\_\_\_\_\_

*Note: Multiple answers are allowed for all questions below if applicable.*

## **B. Employer's Background and Professional Biography**

### **1. How did you learn the skills that you use in your trade?**

1.1. Informal Apprenticeship

1.2. Trade School, TTC, VTC

1.3. Formal Training Program: Please Specify Which One: \_\_\_\_\_

1.4. Other, Please Specify: \_\_\_\_\_

### **2. If answer to question (1) above is 1.1 (Informal Apprenticeship), do you think that the apprenticeship was helpful in giving you the necessary skills to run your own business?**

2.1. Yes

2.2. No

### **3. How long have you run your own business as a master craftsperson? Please specify in years and months: \_\_\_\_\_ years \_\_\_\_\_ months**

### **4. How did you start your own business?**

4.1. Government Loan

4.2. Private Loan (Bank)

4.3. Personal Savings

4.4. Family Contribution

4.5. Group Venture (Pooled Resources)

4.6. Other: \_\_\_\_\_

### **5. Do you work with other businesses and their master craftspeople in order to help/improve your own business?**

5.1. Yes

5.2. No

### **6. Do other businesses and their master crafts people help to train any of your employees/apprentices?**

6.1. Yes, Employees and Apprentices

6.2. Neither Employees nor Apprentices

6.3. Employees but NOT Apprentices

6.4. Apprentices but NOT Employees

### **7. Do you try to use new technologies in improving your business/products and services?**

7.1. Yes

7.2. No



**8. If answer to question (7) above is 7.1 (Yes), How do you learn to use new technologies in your business?**

8.1. Word of Mouth

8.2. Trade Publications? Please Specify Which ones: \_\_\_\_\_

8.3. Training Courses

8.4. Other?, Please Specify: \_\_\_\_\_

**C. Information & Employer's View about Apprenticeship**

**1. Do you currently have any form of apprenticeship programme at your organisation?**

1.1. Yes

1.2. No

*Please answer Questions 2 –46 if answer to Question 1 is Yes.*

*Please answer Questions 2 – 5 if answer to Question 1 is No.*

**2. Are you aware of any laws/regulations regarding apprenticeship?**

2.1. Yes

2.2. No

**3. Do you think there is a need to take apprentices in your organisation?**

3.1. Yes

3.2. No

**4. If you answered Yes to question (3) above, why?**

4.1. To fulfil company requirement

4.2. To create skilled workers for industry

4.3. As a part of Corporate Social Responsibility (CSR) activities

4.4. Other (please specify): \_\_\_\_\_

**5. In the absence of an apprenticeship programme, how would you meet your staffing needs?**

5.1. Informal/word of mouth

5.2. Advertisement in print media

5.3. Ad on the internet/company website

5.4. Internal notice

5.5. Through family members or employee family members

5.6. Other (please specify): \_\_\_\_\_

**6. What do you call the apprenticeship function of your organisation?**

- 6.1. Apprenticeship
- 6.2. Attachment Programme
- 6.3. Internship
- 6.4. Traineeship
- 6.5. Other (please specify): \_\_\_\_\_

**7. How long have you been training apprentices in your business?**

- 7.1 For as long as business has been in operation
- 7.2 Less, please specify duration: \_\_\_\_ Years \_\_\_\_ Months

**8. How do you select the apprentices for a new intake?**

- 8.1. Informal/word of mouth
- 8.2. Ad in print media
- 8.3. Ad on the internet/ company website
- 8.4. Internal notice
- 8.5. Through family or the family of regular employees
- 8.6. Other (please specify): \_\_\_\_\_

**9. Please specify the total number of apprentices currently engaged by your organization.**

- 9.1. No. of apprentices (Male):
- 9.2. No. of apprentices (Female):

**10. Please specify the no. of apprentices engaged in specific department/section/function:**

Department/Section/Function	No. of Apprentices	
	Male	Female

**11. What is the average period of apprenticeship in your company?**

11.1. three (3) years

11.2. one (1) year

11.3. six (6) months

11.4. Other (please specify): \_\_\_\_\_

**12. What allowance/remuneration do you make to the apprentices?**

**Please specify:** \_\_\_\_\_

**13. Does the allowance/remuneration increase over the course of an apprenticeship?**

13.1. Yes

13.2. No

**If “Yes”, how much does the allowance/remuneration increase as an apprenticeship progresses?**

**Please Specify:** \_\_\_\_\_

**14. What benefits other than direct financial remuneration do you provide?**

14.1 Medical benefits

14.2. Food/refreshments

14.3. Insurance

14.4. Sick Leave

14.5. Holdiay Leave

14.6. Other (please specify): \_\_\_\_\_

14.7. No other benefit

**15. What method of training do you administer for the apprentices?**

15.1. Class room + on the job

15.2. 100% on the job

15.3. Deputation to a training centre

15.4. Other (please specify): \_\_\_\_\_

**16. Do you engage external trainers/training provider organisations for training apprentices?**

16.1. Yes

16.2. No

**17. If you engage training provider organisation(s) please provide the name(s) of such organisation(s):**

\_\_\_\_\_

**18. What are the educational and/or experience requirements for the incoming apprentices at your company?**

**Education:**

18.1. Grade/Class 8

18.2. S.S.C.

18.3. H.S.C.

18.4. None

18.5. Other (please specify): \_\_\_\_\_

**Experience (please specify):** \_\_\_\_\_

**19. Do you require the incoming apprentices to have a TVET diploma?**

19.1. Yes

19.2. No

**20. If Yes, do you have a preferred TVET provider from whom you recruit?**

20.1. Yes

20.2. No

**If Yes, please specify:** \_\_\_\_\_

**21. How do you assess the progress of your apprentices?**

21.1. Periodic examinations

21.2. Performance evaluation

21.3. Informal observation/assessment

21.4. Other (please specify): \_\_\_\_\_

**22. Do you provide certificates at the end of the apprentice period?**

22.1. Yes

22.2. No

**23. If yes, who issues the certificates?**

23.1. My company

23.2. My company, jointly with external organisation (please specify):  
\_\_\_\_\_

23.3. External organisation (please specify):  
\_\_\_\_\_

**24. Who recognizes the certificates once they are issued?**

- 24.1. All Employers (general) those trades  
24.2. All similar businesses with those trades  
24.3. Other, Please Specify: \_\_\_\_\_  
24.4. None other than your business

**25. What kind of guidelines/rules do you follow to administer the apprenticeships?**

- 25.1. Written guideline  
25.2. Labour law regulation  
25.3. Informal guideline  
25.4. Other (please specify): \_\_\_\_\_

**26. Do the above guidelines/rules vary between different trade/functions within your company?**

- 26.1. Yes  
26.2. No

**27. What type of incentives do you provide to the apprentices to perform better?**

**Please specify:** \_\_\_\_\_

**28. How effective is your apprenticeship programme in terms of skills enhancement of participants, productivity, and fulfilment of company objectives?**

- 28.1. Very effective  
28.2. Moderately effective  
28.3. No impact  
28.4. Negative impact

**29. What types of skills are transmitted in the apprenticeship? (Please mark all applicable)**

- 29.1. Skills relevant to particular trade \_\_\_  
29.2. Technical skills (general) \_\_\_  
29.3. Business management \_\_\_  
29.4. Accounting \_\_\_  
29.5. Special instruction in handling materials \_\_\_ (Please Specify): \_\_\_\_\_  
29.6. Other, please specify: \_\_\_\_\_

**30. Do you have enough tools and materials to adequately provide training for apprentices?**

- 30.1. Yes, tools and materials are sufficient
- 30.2. Yes but need more/better tools/materials
- 30.3. No, not enough tools/materials to train properly apprentices

**31. What happens to apprentices who do not perform adequately, misbehave or do not keep with employment agreement? (Mark all that apply)**

- 31.1. Fined \_\_\_
- 31.2. Temporarily suspended from work/training \_\_\_
- 31.3. Fired/terminated from employment \_\_\_

**32. How do you think the female apprentices fare, on average, in skill development through the apprenticeship programmes compared to their male counterparts?**

- 32.1. Better
- 32.2. Equal
- 32.3. Worse

**33. What are the benefits and positive outcomes of the apprenticeship programmes at your company?**

- 33.1. Quality enhancement
- 33.2. Higher profit
- 33.3. Social compliance
- 33.4. Other (please specify): \_\_\_\_\_

**34. What do most apprentices do after their apprenticeships are completed?**

- 34.1 Stay at your company
- 34.2 Work for another company
- 34.3 Start their own business
- 34.4 Work abroad
- 34.5 Other (please specify): \_\_\_\_\_

**35. What percentage of the apprentices do you absorb in your own company when they complete their apprenticeships?**

Please specify: \_\_\_\_\_

**36. What is the main reason that you do not absorb all apprentices?**

- 36.1. No business need
- 36.2. They leave for higher pay elsewhere
- 36.3. Other (specify): \_\_\_\_\_

**37. Is there any opportunity for the apprentices completing their programme to get overseas employment?**

37.1. No

37.2. Yes (please specify which country(s):

\_\_\_\_\_

**38. If above is Yes, what percentage of the successful apprentices gets overseas employment?**

Please specify: \_\_\_\_\_

**39. What are the problems/barriers that you experience in taking apprentices and/or continuing with apprenticeship programmes?**

Please describe:

**40. What are the reasons you do not choose apprentices through the formal apprenticeship system (i.e. by registering with BMET)?**

40.1. Unaware of the formal system

40.2. Reluctant to commit time & efforts to the registration formalities

40.3. Limited access to funds

40.4. Other (please specify): \_\_\_\_\_

**41. What type of support do you require to make the training of apprentices more effective?**

41.1. None needed

41.2. Funding

41.3. Technical resources

41.3. Availability of competent human resources

41.4. Other (please specify): \_\_\_\_\_

**42. Which community institutions and other organisations do you think can effectively support improving the apprenticeships system?**

42.1. Government

42.2. Industry/trade bodies

42.3. International Donors

42.4. Training Service Providers

**43. What sort of new arrangements or improvements would benefit the apprenticeship system? (Please mark all that apply)**

- 43.1. Financial and/or other incentives to employers \_\_\_
- 43.2. New learning resources \_\_\_
- 43.3. More structured programmes and curricula \_\_\_
- 43.4. Greater roles for training providers and community organisations \_\_\_
- 43.5. Availability of supplemental training courses and facilities \_\_\_
- 43.6. Other (please specify):  
\_\_\_\_\_

**44. What other skills (if any) could be provided in the apprenticeship that would improve it? (Please mark all that apply)**

- 44.1. Technical skills\_\_\_
- 44.2. Theoretical background information\_\_\_
- 44.3. Workshop skills (production maintenance)\_\_\_
- 44.4. Mechanics/machine maintenance\_\_\_
- 44.5. Accounting\_\_\_
- 44.6. Purchasing\_\_\_
- 44.7. Teaching/training skills\_\_\_
- 44.8. Customer relations\_\_\_
- 44.9. Safe handling of tools/materials
- 44.10. Literacy/numeracy\_\_\_
- 44.11. Other, please specify:\_\_\_\_\_

**45. What type of incentive system would best motivate you to participate in a formal apprenticeship system administered by the government?**

- 45.1. None needed
- 45.2. Tax credit
- 45.3. Stipend paid by government
- 45.4. Not interested in participating
- 45.5. Other (please specify): \_\_\_\_\_

**46. What are your future plans regarding apprenticeship?**

**Please describe:**



## **D. Observations**

### **Observation of the respondent (attitudes towards prospective activities/sectors)**

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**ILO TVET Reform Project**

**Informal Apprenticeship**

**Competency Skills Log Book**

**Welding Trade**  
**TVQF Level 2**

## Competency Skills Log Book (CSLB)

**Inside Front Cover:** ILO TVET Project Brief  
NTVQF System (appendices)  
Recognition of Prior Learning (RPL) (appendices)

### Informal Apprenticeship – Welding Trade

#### *Employer Details*

Name of Master Crafts Person:  
Business Name:  
Address:  
Contact Details:

Photo - MCP



Signature:

Photo of Business

#### *Apprentice Details*

Name of Apprentice:  
Fathers name:  
Mothers Name:  
Address:  
Contact Details:

Photo - App



Signature:

### Informal Apprenticeship Requirement Checklist

- Master Craft Person Training Accreditation  
No.....
- Minimum workshop trade equipment requirements met
- Workplace safety inspection performed
- Apprentice has met minimum age requirements

**Name:**

**Signature:**

## **Informal Apprenticeship Code of Practice**

To include – hours of work

Rates of pay

Working conditions, holidays, sick days etc

OSH responsibilities

Training agreement (Competency Skills Log Book)

NTVQF in Bangladesh

Assessment

**Master Crafts Person Declaration: I ..... Of .....agree to the terms & conditions as per the Informal apprenticeship Code of practice.**

**Signature:**

**Witness:**

**Apprentice Declaration: I ..... Of .....agree to the terms & conditions as per the Informal apprenticeship Code of practice.**

**Signature of Apprentice:**

**Signature of Guardian:**

**Witness:**

**Date Commenced Apprenticeship:**

**Expected Completion Date:**

**Details of Training Institution linked to this Informal Apprenticeship:**

Name of Institution:

Address:

Contact Person:

Contact Details:

Workplace Visit Dates:                      a)                                      b)                                      c)

ILO National Professional (only for pilot):

Name:

Contact Details:

Photo:

### ***1. The new Improved Informal Apprenticeship***

#### ***1.1 Rationale***

#### ***1.2 New informal Apprenticeship***

**2. The Competency Skills Lob Book**

2.1 What a CSLB is

2.2 How to Complete

2.3 On the Job Training &amp; Assessment

2.4 Reasonable Adjustment (description) e.g. reader and scribe for assessments

**NATIONAL OCCUPATION COMPETENCY STANDARDS**  
**for**  
**WELDER**  
**Certificate Level 1 - 4**  
**(Code: TI 0003)**

	Units of Competence (UoC)	UoC Code No.	NTVQF Level	Hours
<i>Common Core Units of Competence</i>				
1	Use basic mathematical concepts	FDFCORBM2A	1	40
2	Apply OSH practices in the workplace	TBD	1	20
3	Use English in the workplace	TBD	2	80
4	Operate in a self-directed team	TBD	3	40
5	Present and apply workplace information	FDFCORWCM2A	1	40
<i>Sector Specific Core -- Units of Competence</i>				
6	Interpret technical drawing	MEM9.2B	1	20
7	Work in the manufacturing industry	TBD	1	40
8	Use hand and power tools	<b>MEM18.1C/18.2B</b>	1	80
9	<b>Use graduated measuring instruments</b>	<b>TBD</b>	1	40
10	Apply quality systems and procedures	MEM15.2A/15.24A	3	40
11	Apply Fundamentals of Welding Metallurgy in the Workplace	BSDC 0210	2	40
12	Perform Spot Welding	TBD	2	40
13	Perform Gas Cutting and Welding	<b>BSDC 0208</b>	1	40
<i>Stream &amp; Associated Electives - Units of Competence</i>				
14	Perform Shielded Metal Arc Welding-Position 1G, 2G	To be developed	3	40
15	Perform Shielded Metal Arc Welding-Position 3G, 4G	To be developed	3	20
16	Perform Shielded Metal Arc Welding-Position 5G, 6G	To be developed	4	60
17	Perform Shielded Metal Arc Welding-Position 6ZR	To be developed	4	40
18	Perform Gas Metal Arc Welding (GMAW or MIG) 1G, 2G	To be developed	4	40
19	Perform Gas Metal Arc Welding (GMAW or MIG) 3G, 4G	To be developed	4	40
20	Perform Gas Metal Arc Welding (GMAW or MIG) 5G, 6G	To be developed	4	40
21	Perform Gas Metal Arc Welding (GMAW or MIG) 6ZR	To be developed	4	40
22	Perform Gas Tungsten Arc Welding (GTAW or TIG) 1G, 2G	To be developed	4	40
23	Perform Gas Tungsten Arc Welding (GTAW or TIG) 3G, 4G	To be developed	4	40
24	Perform Gas Tungsten Arc Welding (GTAW or TIG) 5G, 6G	To be developed	3	40
25	Perform Gas Tungsten Arc Welding (GTAW or TIG) 6ZR	To be developed	3	40
26	Inspect & test welds	To be developed	4	40
27	Estimate cost of jobs	To be developed	4	40

**List of Competencies – Welding Trade - TVQF Level 2**

**1. Apply OSH practices in the workplace**

*TEXT & PICTURES ON OSH*

**Revision Questions**

*e.g. fill in the missing space from the word list or picture list supplied*

Safety glasses oxy goggles welding helmet work boots first aid kit

- a) A ..... must be worn when ever arc welding or serious permanent damage will occur to the eyes which will lead to blindness.
- b) ..... prevent foreign objects damaging the eyes while grinding and drilling and must have an approved stamp on them.
- c)

**OJA (on the job assessment)**

**OSH Assessment.**

**Apprentice has been assessed by (can tick both):**

Progressive assessment

Challenge Test date: 2<sup>nd</sup> date:

I certify that ..... has  / has not  met the assessment requirements for OSH

Signature of MCP: Date:

**2. Use hand and power tools**

*TEXT & PICTURES OF HAND TOOLS*

**Revision Questions**

OJA (on the job assessment)

**Apprentice has been assessed by (can tick both):**

Progressive assessment

Challenge Test date: 2<sup>nd</sup> date:

I certify that ..... has  / has not  met the assessment requirements for Hand Tools.

Signature of MCP: Date:

### 3. Use graduated measuring instruments

#### *TEXT & PICTURES OF GRADUATED MEASURING INSTRUMENTS*

#### Complete list of competencies continued

#### Work Diary: (major achievements)

Date	Description of Work Performed	Apprentice Signature	MCP signature
------	-------------------------------	-------------------------	------------------

#### *Completion of Competency Skills Log Book*

**Date:**

**Student Declaration:**

**Master Crafts Person Declaration:**

**Assessment**

## **Annex 7: Workshop Report**

### **ILO-JOBS Workshop Report on: Technical Vocational Education and Training Reform in Bangladesh**

#### ***Introduction:***

In culmination of the ILO-JOBS Assessment of Formal and Informal Apprenticeships in Bangladesh, a subsequent workshop was arranged and organized by the ILO which included members of the business community as well as representative personnel from the public sector in Bangladesh. The workshop was entitled a *Stakeholder's Consultation Meeting on Technical Vocational Education and Training (TVET) Reform in Bangladesh*, and was held on 9<sup>th</sup> June, 2009 at the BRAC Center Inn in the Moakhali area of Dhaka City in Bangladesh.

This report will cover the highlights of the day's events, keynote presentations and working group sessions, and will provide details on the feedback received from participant stakeholders on the reformation of TVET and the use *and/or* relevance of utilizing apprenticeship in Bangladesh for the formal and informal sectors.

#### ***Presentations and Background Summary:***

In concluding the research and assessment conducted by JOBS Group for the International Labour Organization (ILO) on formal and informal apprenticeships in Bangladesh, a 1-day workshop was organized in order to bring various stakeholders from the public, private and NGO sectors together to discuss the research findings and relevance of the study. The workshop included a morning session of presentations given by both members of the ILO and JOBS teams who were involved on carrying out the study—detailing the assessment methodology, meaning and background of TVET reform and why apprenticeship is seen as a potentially viable mechanism for implementing meaningful changes that will result in a better trained and more highly skilled workforce in Bangladesh.

The scheduled events and presentations consisted of the following:

- Welcome address given by Arther Shears who is Chief Technical Advisor of the ILO TVET Reform Project.
- Introductory Address and Presentation on Component 5 of the TVET Reform Project, and the Purpose of the Apprenticeship Study given by Ross Hatton, the ILO Advisor on Skills Training for the Underprivileged (Component 5).
- JOBS Welcome and Background Address given by Elli Takagaki, Gender Specialist at JOBS Group, Bangladesh.
- Introduction and Background and the findings of the Apprenticeship Study given by Joshua Bryant, Lead Researcher for JOBS Group, Bangladesh.
- Presentation on the Formal Apprenticeship System given by Shariar Shams, Survey Team Lead for JOBS Group, Bangladesh.
- Presentation on Methodology and Findings of the Apprenticeship Study given by Joshua Bryant followed by a question and answer session with Ross Hatton, Joshua Bryant and Shariar Shams.
- Presentation on Recognition of Prior Learning (RPL) given by John Arthur, RPL Specialist and Consultant with the ILO.



- A Formal Apprenticeship Model, presented by Ross Hatton.
- An Informal Apprenticeship Model, Presented by Ross Hatton.
- Working Group Sessions with workshop participants—2 groups assigned to discussion and presenting discussion topics on Informal Apprenticeships; 1 group assigned to discussion and presenting on formal Apprenticeship; 1 group assigned to discussing and presenting on RPL (each group had roughly 7 to 8 people).
- Closing Remarks by ILO and JOBS Key Staff.

The Presentations and Q & A, as well as the Working Group Sessions were all geared towards and organized for the purpose of gaining feedback from the participants on key features, concerns and recommendations for the ILO in creating an effective approach to incorporate apprenticeships into a national policy framework, as well as to have apprenticeship utilized more by the private sector in delivering better and more effective skills development and training to the workforce in Bangladesh.

Each of the presentations given was meant to provide the participants with background information that would both raise awareness of the concerning the topics (TVET Reform, the need for better skills training and development, and apprenticeships as a means for better skills training delivery); and to generate discussion of the subject matter that would in turn lead to useful feedback and recommendations for future ILO programming.

Each presentation was relatively brief, but contained as much relevant and specific information on the subjects covered in order to duly inform the participants and involve them in subsequent discussion and group activities.

#### ***Question and Answer Session:***

The question and answer sessions did much to stimulate meaningful discussion, however, this was limited to many instances of clarification on the part of JOBS and the ILO. Many of the topical points brought up by participants during the Q and A session highlighted the following key points:

- Formal Apprenticeship categorization failing to include OTHER government and NGO programs (such as BASIS or the UNDP) for apprenticeship on account of their not being registered with the BMET.
- Looking at the role of SMEs in Bangladesh which make up the vast majority of employment and the relevance of apprenticeship to these businesses and organizations
- Looking at the precedence of apprenticeship in Bangladesh, under the various laws and regulations, and exploring the concept with in the national context—is this a “new idea” which has to be presented, or is there some format for awareness building that can establish a relevant connection for workers and employers to relate to their own experiences?
- Approaching the feasibility of apprenticeships through cost-schemes and assessments—i.e. are apprenticeships going to be applicable and/or cost-effective for every single business in Bangladesh and how do you determine criteria for making the necessary application?
- How do you raise awareness about apprenticeship both demonstrating the feasibility and benefits of apprenticeship as well as in terms of the relevant apprenticeship laws as well as the role of the BMET in enforcing these laws 1) in order to increase participation in the Formal Apprenticeship System in Bangladesh and bring formal sector businesses into compliance with the law; 2) gain

private sector input in setting skill and competency standards within industry in order to begin upgrading and creating programs for demand driven skills in various industry sectors.

- Similarly, how does/would a more broad reaching and standardized system for apprenticeship create better/stronger linkages with the private sector in order to continuously advise on demanded skills and competencies needed in the workforce?
- If the Informal Sector is comprised mostly of SMEs which may not fall under the enforcement of BMET apprenticeship laws (i.e. 50 employees in apprenticable trades); what are incentives that can be given in order to solicit and gain their participation in workforce training through programs such as apprenticeships?

Participants present seemed to absorb much of the information given during the keynote presentations from ILO and JOBS staff. They were able to interpret the concepts and relate much of it to their own experience as public officials or private sector employers and managers. While no concrete suggestions or recommendations were offered by the participants at this point in the program, their interest in the subjects did carry over into the remaining activities of the workshop.

### ***Working Groups Methodology:***

Working Groups were organized during this section of the workshop using participants discussion facilitated in small groups to focus on 3 subjects (one per group) from the days previous discussion and presentations. Each group was tasked with identifying key problems related to each subject and to come up with proposed solutions which they were to present on after the period of group facilitation. Thus subjects that were assigned one to each group were: Formal Apprenticeship, Informal Apprenticeship, RPL—2 groups were assigned to presenting discussion topics on Informal Apprenticeships; 1 group assigned to Formal Apprenticeship; 1 group assigned to discussing and presenting on RPL (each group had roughly 7 to 8 people). The working groups were given worksheets to guide discussion topics and were allocated a total of 1 hour in order to facilitate discussion, identifying 3 key problems and solutions for their subject, as well as writing up a 5 minute presentation on the basis and conclusions of their group time.

### ***Working Group Recommendations and Key Themes:***

#### Formal Apprenticeship Working Group:

*Key Problems Identified*—Major themes and issues in addressing Formal Apprenticeship in Bangladesh

- Lacking awareness on the part of Private Sector as to laws regulating Formal Apprenticeship; and/or the benefits of making an investment in better skills development and training programs
- The linkages between the public and private sectors are non-existent and/or ineffective—hence not following laws or having more apprenticeship programs to begin with
- Incentives and benefits need to be given to both employers and employees in order to secure their participation

*Identified Solutions*—

- Curricula and training materials need to be updated and “modernized” in order to give workers better skills training under apprenticeship programs
- Advocate and provide incentives for enterprises to engage in the Formal Apprenticeship system through awareness building campaigns aimed at private sector employers; utilizing published

materials (electronic and print media) and presentation documents outlining the benefits of apprenticeship—and that would facilitate public private partnership

- Public incentives and budgetary allocation to apprenticeship programs—private sector investment

Informal Apprentices Working Group(s):

*Key Problems Identified*—Themes and issues facing Informal Apprenticeship in Bangladesh

- There is no regulatory mechanism for the Informal Sector or Informal Apprenticeship
- There are no incentives that are offered to Informal Sector businesses to employ apprentices, and very little awareness on the part of employers as to the benefits of making a proper investment in employee training
- Lack of assessment bodies and certification practices that could aid the Informal Sector in strengthening its workforce through better skills accreditation processes.

*Identified Solutions*—

- Facilitate an awareness-building campaign through workshop presentations, electronic and print media, as well as other non-traditional means of communication and marketing tools—on the benefits of apprenticeship and investment in training
- Introduction of a governing authority/law enforcement body to regulate and assist/recognize Informal Sector employees and businesses—or the establishment of some advisory committee through existing legislative and government ministries
- Utilization of the governing authority/law enforcement body/advisory committee in making recommendations on incentives to be offered to Informal Businesses and employers

RPL Working Group:

*Key Problems Identified*—

- The need for recognition of existing skills both in the Formal, but predominantly within the Informal Sector—coupled with the need to offer a means for skills upgrades and improvement
- There is a great need for increased access to TVET programming and certifications by non-traditional and marginalized groups who are excluded because from formal training because of education or the need to work
- Lack of initiative to implement among trade bodies and governmental institutions—there is a general lack of awareness on all sides of RPL and the benefits such a system would afford

*Identified Solutions*—

- Use RPL as a “formal” means to acknowledging “informal” skilled workers competencies and work-oriented capacities
- Introduction of an issuing authority or law enforcement body that would regulate, assess and recognize skills attainment levels under RPL, and the issuance of certifications for workers’ skill level and capacities
- Trade bodies and Industry representatives should work in collaboration to set standards utilized by an issuing authority in RPL, and should be set up to assess the skills of workers on an industry-specific basis, and in order to ensure that skills are easily recognized and awarded the proper certification.

***Conclusions:***

Workshop participants, who were representative of the public and private sectors as well as NGOs, were very receptive to the information on Formal and Informal Apprenticeship and Recognition of Prior Learning; and seemed to duly acknowledge its relevance to the overall design of the TVET Reform Project. After the morning presentations, the participants seemed to absorb and pick up on the key themes that were highlighted by both JOBS and the ILO. A general understanding of these themes enabled the participants to fully engage in their respective Working Groups with the subject matter. Furthermore, as the information that was given by the workshop presenters was acknowledged, each working group was able to aptly discuss the major points of consideration, and to convey their understanding of these points as they are related to the many topics that were covered by the presenters.

The major themes that have been enumerated above should serve as a basis for highlighting important features and considerations for undertaking a multifaceted approach to designing both guidelines for future pilot programs aimed at strengthening apprenticeship in Bangladesh—as well as policy frameworks for facilitating the collaborative effort of the public and private sectors and NGOs in their future programs for workforce development and skills training.

***Annex 8: Follow-On Study—Informal Apprenticeship Model for Bangladesh***

**ILO National Professional's Follow-On  
Study and Assessment:**

Stakeholder Feedback on Presentation of a New Informal  
Apprenticeship Model for Bangladesh

ILO, Dhaka

December 20, 2009

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## 1. INTRODUCTION

With the proposed policy on “Skills Development” in Bangladesh put forward by the ILO, Apprenticeship has been given significant weight in terms of its relevance as a vehicle for workforce, capacity and skills development in the country. Section 2.1 of the *Bangladesh Skills Development Policy 2010 – 2015* defines the process of skills development and training thus:

Skills development is ... the full range of formal and non-formal vocational, technical and skills based education and training for employment and or self-employment. In keeping with international trends, skills development thus includes: a) **The full scope of pre-employment and livelihood skills training, including TVET *and apprenticeships***; b) Education and training for employed workers, including workplace training; and c) Employment oriented and job-related short courses, for both domestic and international markets.<sup>48</sup>

The tenets of the skills development policy for Bangladesh coincide directly and deliberately with other policy agenda items of the GoB under Education for All (EFA) and Non-Formal Education (NFE). The underlying basis of the entire TVET reform project launched by the EC, the ILO and the GoB, is in strengthening the ways, means, institutions and policy frameworks which govern the implementation of workforce capacity building, and skills development and training (SDT)—primarily through the TVET institutional system. As mentioned above, apprenticeship is one focus of the entire TVET reform policy on skills development; however, it deserves major consideration as a viable and essential facet of TVET reform in Bangladesh.<sup>49</sup>

The ILO assessment carried out by JOBS-Group, Bangladesh, was meant to provide background research, and practical demonstration of specific features of formal and informal apprenticeships in Bangladesh. Under Component 5 of the ILO TVET Reform Project, apprenticeship was designated as a critical tool in reshaping TVET, and creating lasting and essential linkages with the private sector. Apprenticeship was found to be inherently “informal” in most instances in Bangladesh, on account of: 1) There only being 54 registered and legal apprenticeships in Bangladesh under the “competent authority” (i.e. the Bureau of Manpower, Employment and Training—BMET); and 2) the majority of employment in Bangladesh being based in the informal economy, which accounts for roughly 80 percent of all employment in the country. In addition, apprenticeship was shown to exhibit a range of features which shifted from more formal, structured programs for workplace training—to informal work attachments that were entirely ungoverned, unstructured and most often exploitative—and furthermore, that this ‘range’ of informality was evident in both formal and informal businesses and industry.<sup>50</sup>

This follow on study by ILO National Professional (NP) staff will revisit these considerations, and it will also provide further insight into the major challenges of issuing and structuring a new informal apprenticeship program in Bangladesh. A limited sample was taken of apprentices and master crafts persons (MCPs), in order to gain feedback on a proposed model for governing informal apprenticeships under the tenets of the ILO TVET reform project. This follow-on study will provide information gathered from the responses given by various stakeholders (informal apprentices and MCPs), which were taken by ILO NP staff who conducted interviews with respondents following semi-structured questionnaire guidelines—posing questions relevant to the new system. This report will provide a methodological overview; show the basic outline for informal apprenticeships in Bangladesh in relationship to the NVQF/NCS, and RPL guidelines; and will categorize and demonstrate the quality of feedback generated in the survey from stakeholders about their views and understanding of the new informal apprenticeship model.

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48 EU-ILO-GoB, *Bangladesh Skills Development Policy 2010 – 2015*, September 2009.

49 ILO-JOBS, *Final Report: Survey and Assessment of Formal and Informal Apprenticeships in Bangladesh*, March 2009.

50 *ibid.*

## 2. PROPOSED INFORMAL APPRENTICESHIP MODEL FOR BANGLADESH

Using the guidelines laid out in the proposed Skills Development Policy for Bangladesh, informal apprenticeships have been designated as an essential medium for integrating a broader system for skills development and training, workplace training and attachment, as well as guiding the skills recognized in various trades under a comprehensive framework for a standardization of procedures for assessment, qualification and certification/accreditation (i.e. under the NVQF, and NCS guidelines). RPL also provides a further step in creating inroads to TVET and NCS certifications by allowing workers employed in the labor force to be tested through Competency Based Training and Assessment CBT&A, which will, in essence be standardized between TVET institutions and formal/informal businesses and employment.

The policy guidelines task the primary institutions within the TVET system with the responsibility of maintaining and administering these new systems under TVET reform (e.g. DTE, BTEB, BMET, etc). These institutions are not only essential to the upscaling of TVET delivery in training institutes in Bangladesh—but will also hold responsibility for the assessment and certification/accreditation procedures used to evaluate skills of TVET graduates and informal employees who receive structured training according to NCS and NVQF.

While the policy guideline for skills development in Bangladesh pays consideration to both formal and informal apprenticeships operating under a revised system and framework for standardization of the country's competencies and skills in trades—in order to garner support for apprenticeship in the informal sector, the policy has stated that, in addition to establishing: minimum working age under apprenticeship, acceptable working conditions, rates of pay for and duration of apprenticeships, as well as procedures and guidelines for RPL and the issuance of certifications to informal apprentices—in informal apprenticeships will further be strengthened as mentioned under *Section 5i.9*: “To encourage apprenticeships in the informal sector, the government and its partners will trial and evaluate the use of incentives including equipment, skills training, affordable micro finance and other support so that participation in the apprenticeship system brings material benefit beyond the improved skill level of their staff.”<sup>51</sup>

The *Competency Skills Log Book* (CSLB) developed by the ILO for informal apprenticeship will provide a structured guideline for informal master craftspersons (MCPs), workshops and employers who employ the informal apprenticeship model and workers under apprenticeship. The CSLB is meant to act as a document that also provides an outline for curriculum within the informal apprenticeship framework—this outline will help to maintain consistency within delivery of informal apprenticeship training; so that different workshops within the same/similar trade(s) will all follow a standard set by the NVQF and all subsequent monitoring, assessment and evaluation standards. The CSLB will also serve as a data log for the record of informal apprentices, as they progress in attainment of skills and competencies during their training under apprenticeship; and the certifications which they will receive under the new system will follow from CBT&A under the NVQF and NCS.

The CSLB will provide the basis for RPL and workplace training under apprenticeship. It will also necessitate for the certification and accreditation of MCPs in assessing skills on the basis of the structured levels outlined in the CSLB. Therefore, under the structure of the new informal apprenticeship model, MCPs will also receive a structured training in order to obtain certification under the informal apprenticeship model. The MCPs certification and identification number will initiate one level of assessment in the workplace. CBT&A assessors, to be appointed at TVET training institutes partnered with under the TVET reform project—will administer the assessment of competencies for both MCP as well as informal apprentices in issuance of NCS certifications.

Pre-apprenticeship training will provide a further incentive to employers for engaging informal apprenticeships in their businesses; and offers a way to find suitable placements for trainees/apprentices which can ultimately lower the drop-out, or fail rates for apprentices by screening potential apprentices in

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<sup>51</sup> EU-ILO-GoB, 2009.



their ability to complete pre-apprenticeship training prior to the start of an (informal) apprenticeship. Pre-apprenticeship training will be mandatory under the new informal apprenticeship system, for MCPs as well as potential apprentices. Pre-apprenticeship training will include instruction and certification in the following areas:

Table 2.1: Pre-Apprenticeship Training Schedule for Informal MCPs and Apprentices

**Informal Apprenticeship Training for:**

- **Master Crafts Person (MCP)**

*Course: Introduction for Master Crafts Persons: Duration: 37hrs (7 or 8hrs x 5 days)*

- **Informal Apprentices (App)**

*Course: Introduction for Informal Apprentice's: Duration: 20hrs (6 or 7hrs x 3 days) plus optional 30 hrs (6hrs x 5 days)*

Category of Training	App Hrs	MCP Hrs
<b>1. Apprenticeships:</b>		
→ Formal & Informal Apprenticeships in Bangladesh		
→ Current Informal Apprenticeships in Bangladesh	4hrs	4hrs
→ New Informal Apprenticeship system		
→ Roles & Responsibilities		
<b>2. Code of Practice:</b>		
→ Hours of work		
→ OSH	3hrs	3hrs
→ Leave entitlements		
→ Rate of pay		
→ Responsibilities		
<b>3. Industrial Environment:</b>		
→ Type of Industry		
→ Types of work within industry	2hrs	--
→ Types of Positions		
→ Career Progression		
<b>4. Workplace Communications</b>		
→ Personal presentation		
→ Customer communications	4hrs	4hrs
→ Workplace documents		
→ How to sell your skills		
<b>5. Occupational Safety &amp; Health (OSH):</b>		
→ Hazards in the workplace	3hrs	3hrs
→ Eliminate, Modify & Protect		
→ Personal Protective Equipment (PPE)		
<b>6. Record Keeping: (e.g. RPL, CSLB, portfolios, samples of work, etc)</b>	2hrs	--
<b>7. Gender Awareness</b>	2hrs	2hrs
<b>8. Workplace Environment</b>		
→ Responsibilities		3hrs
→ Harassment in the Workplace		
	<b>20hrs Total</b>	<b>19hrs Total</b>
Training Institute Delivery (Applicable to Some Trades Only/Optional)		
<b>9. Hand &amp; Power tools (Hands on CBT where possible)</b>	(6hrs)	--
<b>10. Basic Practical Skills for the Job (e.g. basic welds, measuring, cutting, etc)</b>	(24hrs)	--
<b>Additional Courses for Master Crafts Persons Only</b>		
<b>11. Training and Assessing on the Job</b>	--	18hrs
<b>Total Number of Hours in Training (with additional courses in gender training to be added later)</b>	<b>20hrs</b>	<b>37hrs</b>

Once MCPs have completed the pre-apprenticeship training (and the Training and Assessing courses), they will receive a certification as a registered workplace trainer and assessor. MCPs will then be an accredited trainer in CBS&A and will have full access to the provisions under 5i.9 of the Skills Development Policy as an incentive for continuing in the informal apprenticeship program. Upon completion of the pre-apprenticeship training, apprentices will receive recognition on their CSLB by an CBS&A accredited training institution (initially provided by the ILO under the Informal Apprenticeship Pilot, by the partnering lead agency).

The CSLB will also include assessments and certification of attainment in skills according to the new NVQF guidelines. MCPs will deliver training and be responsible for documenting the progression and successful completion of skills training under the informal apprenticeship program according to NCS in specific trades.

Table 2.2: National Competency Standards (Welder), Certificate Level 1 – 4  
(PROPOSED DRAFT FOR DEMONSTRATION PURPOSES ONLY)

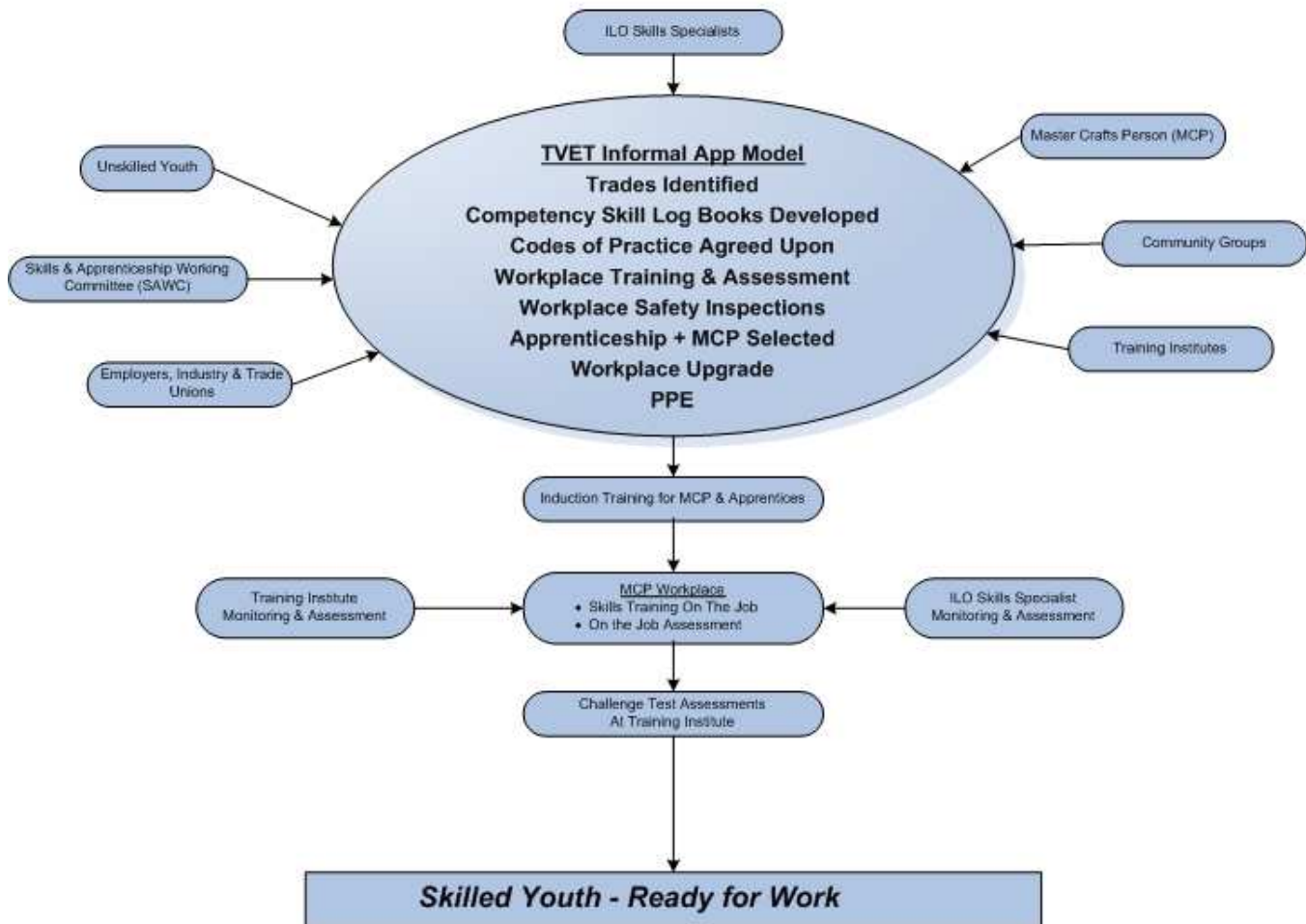
	Units of Competence (UoC)	UoC Code No.	NTVQF Level	Hours
<i>Common Core Units of Competence</i>				
1	Use basic mathematical concepts	FDFCORBM2A	1	40
2	Apply OSH practices in the workplace	TBD	1	20
3	Use English in the workplace	TBD	2	80
4	Operate in a self-directed team	TBD	3	40
5	Present and apply workplace information	FDFCORWCM2A	1	40
<i>Sector Specific Core -- Units of Competence</i>				
6	Interpret technical drawing	MEM9.2B	1	20
7	Work in the manufacturing industry	TBD	1	40
8	Use hand and power tools	<b>MEM18.1C/18.2B</b>	1	80
9	<b>Use graduated measuring instruments</b>	<b>TBD</b>	1	40
10	Apply quality systems and procedures	MEM15.2A/15.24A	3	40
11	Apply Fundamentals of Welding Metallurgy in the Workplace	BSDC 0210	2	40
12	Perform Spot Welding	TBD	2	40
13	Perform Gas Cutting and Welding	<b>BSDC 0208</b>	1	40
<i>Stream &amp; Associated Electives - Units of Competence</i>				
14	Perform Shielded Metal Arc Welding-Position 1G, 2G	To be developed	3	40
15	Perform Shielded Metal Arc Welding-Position 3G, 4G	To be developed	3	20
16	Perform Shielded Metal Arc Welding-Position 5G, 6G	To be developed	4	60
17	Perform Shielded Metal Arc Welding-Position 6ZR	To be developed	4	40
18	Perform Gas Metal Arc Welding (GMAW or MIG) 1G, 2G	To be developed	4	40
19	Perform Gas Metal Arc Welding (GMAW or MIG) 3G, 4G	To be developed	4	40
20	Perform Gas Metal Arc Welding (GMAW or MIG) 5G, 6G	To be developed	4	40
21	Perform Gas Metal Arc Welding (GMAW or MIG) 6ZR	To be developed	4	40
22	Perform Gas Tungsten Arc Welding (GTAW or TIG) 1G, 2G	To be developed	4	40
23	Perform Gas Tungsten Arc Welding (GTAW or TIG) 3G, 4G	To be developed	4	40
24	Perform Gas Tungsten Arc Welding (GTAW or TIG) 5G, 6G	To be developed	3	40
25	Perform Gas Tungsten Arc Welding (GTAW or TIG) 6ZR	To be developed	3	40
26	Inspect & test welds	To be developed	4	40
27	Estimate cost of jobs	To be developed	4	40

For each unit of competence (UoC), the apprentice will either be “progressive” or “challenge” tested on their attainment of skills and competencies designated under specific trades by the MCP. Once the CSLB has been completed (in whole or part), the apprentice must appear before an assessor designated at an accredited training institute in CBT&A in order to receive either a “full” qualification, or a “Statement of Attainment” at any qualified level that was reached under apprenticeship and verified by the accredited MCP.

The certification/accreditation of apprentices under the CSLB can then be used in two ways: first, as a direct vehicle to gain access to formal TVET training at an accredited training institute, serving as the basis of RPL; second, the apprentice can use their certification as a document to apply for financing from an established lending institution (i.e. micro credit issued through a NGO or Bank) as a means of starting their own business or micro enterprise. Through these measures and incentives, apprenticeship can become a viable option for worker training in the informal sector. Making a vital and necessary institutional connection between the informal workforce and formalized competency standards in industry trades should help to bolster the overall economy in Bangladesh, as well as creating a new and inherent value for productive labor, skills training and development.

Chart 2.3 – Mapping Inputs and Linkages of the Proposed Informal Apprenticeship Model for Bangladesh

## TVET Reform Project – Informal Apprenticeship Training Model



**Key aspects of the newly structured Informal Apprenticeship System are:**

- Industry input into skills/competencies to be delivered through training
- Code of practice (OSH, Hrs worked etc) established & monitored
- Competency Skills Log Books introduced to ensure consistency between workplaces
- Pre Apprenticeship training for both Apprentices & Master Crafts Persons
- Master Crafts Persons trained in Workplace Training & Assessment
- Incentives for Master Crafts Persons to participate
- Skills assessed both on and off the job
- Provides direct linkage to formal training institutes for informal workers

The ILO intends to implement the strategy by seeking synergies with the on-going TVET Project. The TVET Project will build and enhance the capacity of key skills training institutes for the implementation of the master crafts person system.

### 3. METHODOLOGY

In seeking to reaffirm the findings of the ILO-JOBS assessment on apprenticeship in Bangladesh, the ILO recruited and trained National Professional (NP) staff on administering basic surveys and consultations with stakeholders in several divisions of the country. The NPs were oriented over a period of 10 days in November 2009, including initial briefings by relevant ILO staff and core leadership on Component 5 of the TVET Reform Project. The orientation also included several field visits with stakeholders (who comprised employers of informal workshops, MCPs, apprentices, and training institute personnel); and following the initial 10 days, an additional period of review and field study was carried out in the beginning of December 2009 by the NPs.

NPs carried out interviews and consultations with stakeholders in Khulna/Jessore, Dhaka and Chittagong divisional cities and as well as at the district level. They used semi-structured interview guidelines developed in consultation with ILO Component 5 staff. The focus of the interviews was centered in two distinct areas:

- 1) On the experience, thoughts, ideas and conditions of stakeholders in their respective occupations and work detail;
- 2) In gathering feedback on the proposed informal apprenticeship model, taking into consideration observations and recommendations from the participants—on informal apprenticeship in general, as well as their willingness and/or interest in seeing the adaptation of an informal apprenticeship model in Bangladesh.\*

The NPs were able to interview a total of 15 MCPs, 8 apprentices and 5 skilled workers. Several local private sector industries and employers were also visited, in addition to several Technical Training Centers located in Jessore, Khulna and Chittagong. Several of the interviews were taken with participants of the UNDP's Urban Partnership for Poverty Reduction (UPPR) Program; which is a partnership between the GoB, the UK's DfID, and the UNDP. The UPPR will attempt to bring skills development and workforce capacity training to a substantial number of Bangladeshis (approximately 3 million urban poor and extreme poor), supporting the employment of urban poor in local industries and business. The UPPR's apprenticeship scheme is a primary vehicle in developing employment opportunities for urban poor, and as such remains a potentially viable partner and linkage across programmatic interventions between the ILO and the UNDP.

Stakeholder consultations were also conducted with several industry associations—employers' associations *and* trade unions. Discussed in greater detail below, the associations interviews have shown a valuable opportunity for additional support and partnership under a new pilot; employers' associations and trade unions have an open interest in advocating for, as well as providing advisory input on modeling an effective informal apprenticeship program in Bangladesh. The findings of the field visits made by NPs with UPPR participants as well as other stakeholders from different areas of Bangladesh by will be detailed in the following section.

### 4. FINDINGS

The findings of the NP review and assessment on the potential for a new apprenticeship model in Bangladesh will be broken into subsections according to each different stakeholder group that was interviewed (i.e. Apprentices and Skilled Workers; Master Craftspersons; Training Providers; Private Sector Industries and Industry Associations; and Trade Unions). Each section will highlight the common responses as well as basic demographic information (in the case of Apprentices, Skilled Workers and

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\* Please see Annex 1 for interview guidelines with apprentices, skilled workers and MCPs.

MCPs). Subsequent to the section on findings, will be a brief section comprised of basic assumptions and observations made by NPs during their field exercises; followed by summary and conclusions.

### **Training Providers**

**Jessore Technical Training College (JTTC), Jessore**—Established in 2001, JTTC graduates SSC and HSC Vocational students with Class X and class XII certifications respectively. With a present enrollment of 600, students study in two shifts (Morning and Afternoon) in order to complete their 2 years in training, which covers a total of 93 credit hours of practical sessions out of 180 credit hours. The school is currently attempting to develop National Skills Standards (NSS) I and II course criteria. However, there is a shortage of funds and equipment, as well as properly trained instructors, and thus, the trade school is suffering as students are becoming less inclined towards pursuing hands-on training. There is apparently demand in the market for skilled workers, demonstrated by local jute and construction companies who contacted the college looking to source electrical technicians. JTTC feels that course curriculum should be demand centered; and that the school should implement a rapid adjustments to accommodate continual changes in the most modern and cutting-edge technology (e.g. CRT, Plasma, HDTV technology in television and home electronics). He expects that the issue of capacity building, quality assurance, linkages with the private sector all need to be addressed forthrightly. While curriculum is adjusted every two years, policy makers are visibly absent and/or uninterested in making contributions to planning. Areas where trades causes could be included in course curricula are: ICT and ICT-related services; Automotive; Dairy; Tailoring for Fashionable Wears; amongst others. The overall quality of teachers should be increased through knowledge and technology transfers. However, since these resources are unavailable, teachers remain ill-equipped in providing quality training in existing trades.

**Christ Church Trade School (CCTS), Jessore**—Initiated in 1982 by Church of Bangladesh Social Development Program. CCTS presently employs 9 regular instructors and 2 mobile school instructors. Lodging and food are provided to the students, who are predominantly from, but not limited to, the Christian community in Jessore. The courses offered at the trade school are: Carpentry, Automotive, Electrical, Machinist—Welding, Refrigeration and Airconditioning are offered in short courses. Long-term course take 42 hours per week and are given in both theory and practical application of skills in trades. CCTS current enrolls approximately 45 students per year. At the end of general coursework, aptitude tests are given for all trades. Long courses in trades run over 2 years and in three semesters which are 85 days each. The course curriculum is different from BTEB's curriculum but CCTS feels that the program is compatible and the student would be able to test appropriately in NSS II and III examinations. CCTS also helps to provide income generation for students by fabricating Wooden Toys (Rocking Horses), Cut Gears, Furniture, General machining for production. The income generated from the students' production has also earned a considerable reputation for graduating students, who are seen as having good hands-on experienced and competent skills in technical and vocational trades. Short courses at CCTS run six months, for 2 hours each afternoon, 4 pm to 6 pm. The school also provides mobile training for 6-month, full-time courses in small engine mechanics and electrical trades. CCTS has become reputable in the areas, and compared to other GoB training schools.

**Khulna Technical Training Center (KTTC), Telegati, Khulna**—Initiated in 1985, KTTC offers programs for SSC Voc and HSC Voc accreditations. Short courses are offered in computer tech, electrical, Auto Cad, pipe fitting under regular curricular programming; as well as offering courses which facilitates public-private partnership programs in Solar Energy (which has a total of 30 trainees)—in addition there are another 91 students in 14 trades. KTTC has substantial infrastructure, resources and installations, that in observation, were clearly underutilized. In 12 years of operation they have graduated 1,758 students; which is also approximately 50% of their enrollment. Current enrollment is about 150 students per year. Out of 476 students passed in 2009 (Jan –June) about two-thirds were absorbed by the workforce, most of whom started their own employment (although these figures are not substantiated). About a third went for higher studies. In spite of having demand-centered trades offered in their course curriculum, as well as significant resource allocations, KTTC is also plagued by deficiencies in capacity amongst teacher/trainers in the effective delivery of training programs.

**UPPR Town Projects, Khulna**—UPPR has projects based in Khulna which include their Settlement Improvement Fund (SIF), allocating funding for improved living conditions and basic infrastructure—as well as the Socio Economic Fund (SEF) which encourages employment through apprenticeship training, and is facilitated through a contract with employers. The UPPR organizes participants into community groups, and community groups into Community Development Clusters (CDC). Participants work together to generate a Community Action Plan (CAP) annually which is reviewed after six months. These community planning sessions help to identify priorities in terms of funding, infrastructure development, water and sewerage system improvement and other community needs. Based on the CAP, a contract is drawn between the City Corporation Mayor, CDC and apprentices. Each apprentice receives a 1,500 Bangladeshi Taka (BDT) stipend per month from the UPPR. A committee monitors the apprenticeship program for recidivism for the initial three months of the apprentices training. UNDP and DfID also monitor status of apprentices. This scheme imparts a basic training for apprentices under the tutelage of a MCP, and in collaboration with the business or employer. One considerable difficulty in the program implementation has been with the issue of payment of apprentices. MCPs have been found to demand money of the apprentices for their training under UPPR. The apprentices are paid a stipend as per the apprenticeship contract, however, it has also been expressed in concern that the MCP will also demand that some of the money be paid to them (often threatening to withhold signatures from the apprentice skill log and attendance cards). Issues have also been experienced in terms of gender discrimination although the CDC and MCPs will attempt to address these concerns, it is not clear what the procedure for dealing with such concerns as they arise actually are.

### **Private Sector**

#### **Industries Visited—**

**Viyellatexgroup ( VTG ):** Ready Made Garments (RMG) in knit and woven wears, producing turnover of USD 150 million for knit composite. VTG has six units and 12, 000 workers.

**HS Enterprises (HSE):** Motorcycle sales and repair/servicing centers located in Dhaka.

**Uttara Motor Ltd. (UML):** Largest selling motorcycle industry ( Suzuki ) in Bangladesh (followed by Honda and TVS). 10 independent service centers and 106 dealers, in five divisions of the country (86 dealers have their own workshops). UML services approximately 50% of the national market.

**TVS Bangladesh (TVS):** Upcoming motor cycle Industry with 10 independent service centers and 30 dealers (set to increase to 50 dealers by march 2010). TVS plans to initiate the concept of YES (Young, Energetic and Service-oriented—pushing single-technician service shops in the country).

**Energy Pac Engineering Ltd, Bangladesh (EPEL):** Major industrial manufacturer of power transformation equipment, emerging a major industrial concern in Power generation, engineering, electro-mechanical and agri-mechanical products. EPEL employs 300 workers in its transformer factory.

**Mark Industries Pvt. Ltd. (MIPL), Dhaka:** Reputed agri-machinery and equipment manufacturer for pharmaceutical, agricultural, chemical, cosmetic, toiletries, and food processing. MIPL employs 60 regular skilled workers under the direction and supervision of 10 MCPs.

**BARN Engineering Works, Chittagong:** Engineering industry which manufactures light to medium-sized industrial parts and machinery, employing approximately 40 workers.

#### **Feedback from Consultations/Interviews—**

- As vocational training is unsuitable, factories in RGM prefer to hire unskilled workers as helpers and train them through industry associations and NGOs.
- Government and international agencies should promote trade based and intensive hands-on training for industrial employers for work placement.

- Vocational trades are “being polluted by SSC and HSC” vocational schools. Therefore it is better to recruit directly based on industry and trade experience—not from TTCs and TSCs, under which standards vary in the training that is given.
- Cannot afford recruitment of TVET graduates
- Recruits from Mirpur Agricultural Workshop and Training School (MAWTS) start their employment at 5,000 BDT/mo salary on a trial basis, and recruits from Underprivileged Children’s Employment Program (UCEP) can train for one year in a factory job starting 4000 BDT/mo
- Migration should be planned for in terms of hiring and training practices.
- Planning for training institute set-up needs to prioritize the use and employment of expert instructors in technical trades.
- Employer in motorcycle repairs and servicing feels they cannot employ apprentices as they lack hands-on experience.
- Formal accreditation can help to raise the social status of MCPs, as well as provide incentive for their further training and certifications. Provisions of better equipment and tools, as well as marketing support (such as a façade with signage promoting the accreditation of the MCP and/or employer can also help to boost business.
- Apprentices are felt not to be acceptable because of a perceived “lack of competence”; therefore companies “recruit on vacancy”, and are not interested to train workers through MCPs.
- Industries should be partnered with directly in workforce capacity and skills training initiatives. Both small and large-scale industries expressed they can use well trained technicians but they do not have time, nor the investment to make in new hiring and training practices.
- Areas of trades which can be replicated are to be decided by going for in-depth market need analysis from both formal and informal industries (e.g. determining market demand for skills and trades in motor cycle repair workshops or RMG factory technicians, for instance)—as well as assessing trends in market demand in terms of local/national economies.
- There are number of major brand-names in motor cycle sales and repair in Bangladesh (Uttara Motors, TVS, Rider, HS Enterprises, et al). All of these businesses mentioned follow the *Sales, Services and Spares* (3-S) approach to business and management within the sub-sector.
- These motorcycle sales/repair businesses occasionally employ “Helpers” to assist their mechanics in operation and maintenance. Helpers are chosen through a basic assessment of their aptitude and background experience, and are hired based strictly on need (typically these businesses do not encourage a formal training, or any selective curriculum as they are more focused in customer service within their own or their authorized dealers/servicing centers).
- The motor cycle service and repair sub-sector has a basic infrastructures for delivering training and can be considered a strong potential partner for an Informal Apprenticeship pilot project (on the basis of locality/visibility of business sites, and the availability of training centers and MCPs).
- The central service centre of HS Enterprise (HSE), catering for major repair needs of their clientele (they have two other centers in Dhaka); and offers services via a mobile team dispatched from the central service centre; and on the average service approximately 400-500 vehicles per month from their central location.
- HSE had previously encouraged training through apprenticeship and used to train apprentices until 2005 (during the past 4 years their main offices stopped sending trainees for reasons not known to HSE). The training period, up until 2005, was 3 months long. The training did not follow any specific curriculum and training was given in whatever department of repair/servicing was most urgently needed.
- HSE trainees had to learn by assisting head mechanics or MCPs. Training was totally informal and inconsistent, varying from job to job, or from trainer to trainer. Currently they have only a few MCPs, one who has been with the company for almost 27 years (this gentleman was trained abroad in China).

### ***Apprentices and Skilled Workers***

A total of 13 apprentices (8) and skilled workers (5) were interviewed with semi-structured questionnaires by NP staff. Of these, only one female (Skilled Worker) was interviewed, the rest of the respondents being

male. The locations of interviews with respondents took place mostly in Dhaka, with the exception of 1 interview in Khulna, and 4 interviews in Chittagong. The type of businesses visited where interviews were taken with respondents include: engineering and electricians workshops; automotive and motorcycle repair shops; electronics repair shops; refrigeration and air conditioning repair shops; health services provider; and one furniture maker. The range in educational levels of respondents was: Class V (3); Class VI (2); and Class VIII (3). There were 2 respondents who had no previous educational training at all, but both had received skills training from NGOs (one of these was trained under the UNDP-UPPR Program).

The average age of respondents upon being interviewed was approximately 20.8 years of age, with a range of ages from 14 to 30 years. The average age of respondents when they started work was approximately 16.9 years with a range from 12 to 25 years.

Three common reasons were cited by respondents when asked their reasons for joining with their current occupations: Father's/Family's decision; Community suggestion; Own Decision. Approximately 42% of those who responded to the question (12) cited their father (who was specifically mentioned in several instances) or family—this figure was the same for respondents who cited their choice of occupation as being the result of their own decision. 16% of the respondents said that their decision came as a result of community suggestion. In terms of how respondents were able to find out about the opportunities for their current employment (specifically with regard to apprentices), a more even distribution of reasons was given between: being familiar with the business because of locality; the business owner being a relative/acquaintance; being referred by a relative; being referred by another worker. Four of the respondents who were interviewed cited the UPPR program itself as the reason for their decision—as all four of these were involved in the program. Of the respondents who were not involved in the UPPR program, only one (1) stated that they had undergone any formal interview process with employers or MCPs in being hired, the rest had all been selected through informal means.

Nearly two-thirds of the apprentices who were interviewed were in their first employment, the other third having had some other placement in a workshop or industry. The range of duties and workplace tasks for apprentices and skilled workers were given as follows:

- Helper, Carrying materials, Sheet straightening
- Motorcycle repair/Assembly (parts)
- TV and A/V Repair
- Refrigeration repair
- Sheet welding and refrigerator repair
- Wiring and fan repairing
- Automotive and auto body repair
- Basic health care services
- Supervision final assembly and finishing of furniture
- Repair and supervision of all electrical equipment, AC and fridges and TVs
- Cutting and Sheeting of Metal
- Electrical component repair and assembly

The majority of respondents, again approximately two-thirds, had been working in their area/trade in a specific work detail since they began their employment. The remaining third had begun their employment in another area of workplace detail.

All of the interviewees stated that the training they were given consisted of on-the-job instruction, while working in a productive capacity as well (this was inclusive of UPPR participants). In at least two cases, respondents remarked that they were actually given no direct and properly demonstrated guidance, but were expected to learn by merely observing the MCP. If more than one apprentice is working in a shop, they are typically grouped together between 2 and 5 persons. Of the 5 skilled workers who were interviewed, 4 had been trained under different NGO training programs (ILO/UNDP Community-Based Training; and UNDP UPPRP).



Apprentices earned salaries between 300 and 3,000 BDT/mo (in instances where they received cash payments, there were only 5 apprentices who were given monetary remuneration)—on average, these apprentices made 1,360 BDT/mo in salary. Only 1 of the respondents stated that they were *only* given food and lodging as remuneration; however, 2 others were given food and accommodation in addition to a monthly stipend of 300 – 500 BDT/mo. Skilled workers made considerably more in their workshops, earning between 2,000 and 8,000 BDT/mo—and approximately 5,300 BDT/mo on average.

Only one respondent (of both apprentices and skilled workers) clearly remarked that they had received any formal and contractual documentation for their employment. This individual was currently apprenticing under the UPPR program, therefore presumably this is a standard practice within the program itself. The remaining interviewees all stated that they had been provided no documentation of their employment and/or apprenticeship by employers. When asked about following occupational safety and health guidelines for the workplace, only 30 percent stated clearly that they did. The remaining 70 percent followed no OSH guidelines at all. None of the respondents remarked that they had been involved in or witnessed any workplace accidents, however. In terms of the presentation of the workplaces where apprentices and skilled workers were employed, it was observed that the level of technology and equipment could most often be rated as “average” rather than “poor” or “good”. None of the workshops appeared to be “good” as far as presentation, and one workshop only was clearly observed to be “poor”.

All of the respondents, apprentices and skilled workers, stated that they felt very satisfied with their learning and training under their current occupations. Only one respondent stated that they felt that they would be better suited to their trade if they were able to have any additional training from an institution. None of the respondents revealed any experience of obstacles in gaining skills training or employment. Of the apprentices, 88% said that once they had completed their training they would look to move to another workshop or seek out other employment. Only one of these respondents, however, said that they would like to start their own business. All of the skilled workers interviewed remarked that they had planned to stay in their current employment/with their current employer.

### ***Master Craftspersons (MCPs)***

In total there were 15 MCPs interviewed under the follow-on study. Eleven (11) MCPs were male and four (4) were female. The Trades of MCPs given were as follows:

- Electrician (2)
- Electronic Repair (1)
- Manufacturing/Engineering (2)
- Motorcycle Repair (3)
- Agro-Machinery Production (2)
- Paper Box/Carton Making (1)
- Food Service/Catering (1)
- Refrigeration Workshop (1)
- ITC-Related (1)

Eleven of the MCPs were interviewed in different areas of Dhaka City, one of which was near to Tongi and Gozipur (slightly north of the main city but still in Dhaka Division). Businesses had been in operation between 2 and 30 years; and for approximately 17 on average between the businesses that were visited. Only two of the businesses visited demonstrated figures for hiring female workers—however, it is possible to assume, that some of the larger employers (who had as many as 100 to 200 employees) may have had hired employees who were women, though it remains unclear what capacities these hires would be working in, particularly with regard to machine and engine repair shops. The average number of skilled workers in workshops was approximately 23, however the range of skilled workers employed in the workshops visited was from (zero) 0 to 120. Several workshops had no other skilled workers aside from the MCP and only hired apprentices. On average, workshops employed 11 apprentices but again showed a wide range from (zero) 0 to 100 (only one workshop did not hire apprentices, however). Most of the workshops visited were

small, and in many cases the number of apprentices exceeded the number of skilled workers employed or were the only other employees working aside from the MCP.

Of the 15 MCPs interviewed, 13 stated that their roles in the workplace involved both productive capacities as well as supervisory. Only 2 MCPs stated that their only role and function in the workplace was as supervisors (these were both in the larger employer workshops; 100 employees or more). Eleven apprenticeships under these employers functioned with a set duration for completion, and on average, these apprenticeships last 32.7 months (the range of apprenticeship durations was between 6 and 84 months). Twenty-six (26) percent of apprenticeships had no fixed duration; and two-thirds of apprenticeships had no set plan or outline for administering training, and no set list of skills for training apprentices.

It was remarked by 33 percent of MCPs that apprentices will stay employed with the MCP/employer after completing their apprenticeship; 53 percent said that apprentices will leave for other employment opportunities. Also mentioned was that apprentices will start their own business (remarked once), and travel for work abroad as migrant laborers (remarked once).

In terms of remuneration, fully one-third of MCP/employers offered no benefits whatsoever. The range of salaries for apprentices at these workplaces was between 500 and 3,000 BDT/mo; on average approximately 1,300 BDT/mo. Other benefits and modes of remuneration included: 50% of full-worker's salary; profit-sharing schemes (twice remarked); food and lodging (twice remarked).

Approximately 60 percent of the MCPs interviewed said that they felt they had adequate tools for training apprentices. Typically it was the smaller workshops, most of whom had been donated equipment after completing training provider, or NGO training, who had the most difficulty maintaining their equipment and/or purchasing new equipment.

40 percent of MCPs had no organized method in hiring/selecting apprentices; most typically this was done through word-of-mouth, or through family, friends and relatives. Only one MCP remarked on using any formal interview process (larger employer/workshop), and 3 workshops had sourced their apprentices through NGO training programs.

### ***Remarks on the Informal Apprenticeship Model for Bangladesh by MCPs***

MCPs were presented with a basic framework and outline (explained by NPs) about a potential guideline for an Informal Apprenticeship Model to be piloted by the ILO in Bangladesh (see section 2 above). The MCPs remarks will be enumerated below:

- An Informal Apprenticeship Pilot under a more structured guideline for apprenticing in workshops would be a good idea – 66% of MCPs.
- Willingness to follow an Industry Code of Practice as a standard procedure – 87% of MCPs.
- Mandatory Induction Training for apprentices at an affiliated training provider – 73% of MCPs (45% of these MCPs also remarked that the time requirements for the apprentices' deputation might be of some issue).
- Additional training for MCPs as a positive aspect of the new model – 80% of MCPs (42% of these MCPs also remarked that time requirements might be an issue).
- Making it a necessity and showed a willingness to follow the Competency Skills Log Book (CSLB) – 42% of MCPs.
- Felt that it was a good idea to have it mandatory that apprentices be Challenge Tested regularly by a third party – 27% of MCPs. However, 47% of MCPs felt that it would be a good idea for apprentices to be Challenge Tested upon completion of their apprenticeship.
- The national policy to institute Recognition of Prior Learning (RPL) will result in positive gains for MCP and Skilled workers – 60% of MCPs.
- Reasonable Adjustment for learning-impaired, illiterate, or disabled apprentices in terms of evaluation and assessment of skills seen as a positive feature – 20% of MCPs.
- 13 out of 15 MCPs were interested to take part in the ILO Informal Apprenticeship Pilot.

### ***Findings from Consultations with Employers Associations and Trade Unions***

**Industry/Employer Associations** – The Bangladesh Engineering Industry Owners Association (BEIOA) is a national association of industry employers, and is one of the largest in the country. BEIOA expressed a need and interest in finding support for offering substantial training to its employees in industry trades; particularly for new generation machines and technologies not currently in use within industry sub-sectors. The BEIOA felt that while they may not need assistance in providing training on existing machines and technologies; they felt that local bodies in ‘outstations’ like Bogra, Chittagong, Jessore, et al, may not agree with this notion as Dhaka could be seen as being geared more towards export-oriented production; whereas ‘out-country’ workshops need more/better training in order to meet internal/national market demand, and may be using informal apprentices in much greater numbers—marking a potential inroad for offering guidance on informal apprenticeships through a pilot program in Bangladesh.

The BEIOA felt most strongly that the government should support them in two distinct areas: **1) Short-term bank funding at nascent stage of business operations; and 2) In the provision of specific industrial park land for the Light Engineering Sector ( LES )**, which can help to ensure sustainability relevant to future demand and export markets. BEIOA also revealed an interest in, and an offering of more general support for the TVET reform project in Bangladesh—addressing their needs in training and workforce development within LES.

- ILO may consider holding FGDs with BEIOA to delve further into the needs within different industry sub-sectors and with respect to providing appropriate training and workforce capacity building and development (FGDs should be inclusive of industry/employers representative of out-country businesses as well).
- Trades in motor cycle repair and servicing figure prominently into LSE sub-sectors, which make up a significant part of membership in BEIOA.
- The need to introduce an informal apprenticeship model was seen to be justified, but for pilot projects, project sites will need further consideration in terms of visibility, and the availability of infrastructure, and MCP in trades.
- Member industries started very small focusing on market needs and have survived by themselves over the years through their own labor and inventiveness. In spite of their efforts they cannot compete in the fast pace of global competition. Their adapted technologies are obsolete and they cannot earn foreign currency; and also find it difficult to meet local demand when it comes to precision work (such as automotive repairing and maintenance)
- There are more than 4,000 member industries in 30 locations and in different districts of Bangladesh.
- The association has developed its own training facilities and courses to cope with current demands of the industries.
- Now they feel an urgent need to transition to future technological applications within LES.
- The industry needs Industrial park sites to cater for future generation machines as the current industrial areas are saturated (typically located in old and unsafe buildings with substandard wiring and load connections). Inadequate facilities makes it difficult for industries in LES to attract foreign direct investment (FDI).
- There is extreme shortage of quality trainers in Bangladesh and the available trainers lack appropriate hands-on experience needed to sufficiently train workers in LES industries and relevant trades.
- Linkages should be made with Indian training and workforce capacity-building programs (such as those launched by ILO, World Bank, SDF, et al)—particularly in W. Bangal, where there is a similar cultural climate and language—specialists or advisors who are Indian Nationals could be recruited to provide technical assistance to the design of industry training programs.
- Many BEIOA members are now exporting to even USA through their own development. GoB and national bank’s should aid in providing capital assistance in order to increase long term

- viability of LES industries. GOB and Banking sector are not helping the industries in long term development and financing making it infeasible to adapt new technologies.
- Training and infrastructural development can pave the way to increasing skilled labor and workforce capacities in LES.

**Trade Unions** – Meetings with three (3) nationally recognized trade bodies in Bangladesh (National Coordination Committee on Workers Education, NCCWE; Bangladesh Institute of Labor Studies, BILS; Bangladesh Trade Union Centre, BTUC). All three workers' associations were involved with ILO and TVET project, and have fairly good working knowledge of TVET reform and the aims of the ILO initiatives/components under the project; the underlying assumption in holding the consultations being that trade unions can aid in developing a sustainable model for Informal Apprenticeship in Bangladesh; and that the active participation of trade unions can be extremely beneficial to planning and implementation under the pilot project; and in creating a favorable situation between employees and employers in creating and structuring acceptable codes of practice for skills training and development, as well as employment.

The views expressed during the series of meeting with trade unions differed in nature, and some of the remarks are related to the ILO's forthcoming Community-Based Training for Rural Economic Empowerment (CB-TREE) pilot, but have been included herein in order to present an overall understanding of the trade unions expressed views. The following points will reflect general sentiments among the aforementioned trade bodies, as well as other important facets discussed in consultations:

- Trade Unions feel that TVET (as well as CB-TREE) has not been able to sustain its programs in order to improve the situation of working children, female workers (urban and village) and child laborers.
- ILO and TVET reform should go beyond the 4 planned sectors in staging program interventions.
- NCCWE and BILS are not affiliated with any particular political party and can therefore extend non-partisan assistance in engaging the TVET reform programs.
- Minimum wages need to be given due attention and consideration in establishing sustainable interventions; and ILO should engage directly with the process for streamlining policy initiatives in collaboration with minimum wage enforcement and all associated governing bodies, institutions and organizations.
- Government enforcement of training and skills standards should be supported by the National Skill Council under the Ministry of Labor and Employment (MoLE)
- Workshops should be conducted with business owners, trade union leaders, and employers associations in order to identify the real needs/demand of the labor market—by trade and geographical locality.
- Questions the relevance of and Informal Apprenticeship program to large-scale employers; therefore, a subsequent model should be tooled more towards small-scale industries.
- Gender should play a clear role in any subsequent piloting of an Informal Apprenticeship model.
- All apprenticeship programs must be sustainable in the long-run, and should be self-sustaining through comprehensive business and organizational planning—clear marketing strategies and frameworks led by support networks and multi-sector linkages.
- Post-training support should be linked with direct employment opportunities, and/or work-placement programs that can ensure long lasting credibility and relevance of the programs.
- Infrastructure designed under TVET reform programs, as well as instructors of TTCs/TSCs, and advanced/accredited trainees must be given certification that is 100% supported by GoB.
- **With regard to MCP's social recognition under the proposed informal apprenticeship scheme—through certification and signatory status—will not produce the desired importance for the recognition of MCPs skills and accreditation; and that it will not make for credible employment solutions in the future.**

- Politicians have offset the balance of equitability in the workforce by campaigning to scale up the salaries of ‘white collar’ workers, while ignoring the cries for wage increases within ‘blue collar’ employment (factories and workshops, etc).
- The trade union movement is divided as the industry sectors and large-scale employers (i.e. Jute, Textile, and Leather, etc) has also been widely ineffective.
- Trade union leaders often feel that their priorities do not include a position of working towards the empowerment of rural economies and job markets in any massive scale, though the need is urgent.
- Overseas labor markets should be a focus and priority of initiatives for workforce capacity building and development—and foreign demand for labor should figure into an analysis of priorities for sector-wide training and skills development programs.
- FGDs should be held with Trade Union Leaders, industry/business owners, and representatives from the relevant public sector ministries within the GoB.
- Comprehensive labor market surveys must help to assess the distribution and concentration of trades/skills in demand on a sector by sector basis.

## 5. SUMMARY AND CONCLUSION

The NP follow-on study has identified many of the same structures in workplace attachment, apprenticeship and employment, which had been observed in the ILO-JOBS assessment from March 2009. What is evidenced are inherent and underlying constraints in creating a more feasible and viable system for apprenticeship which can serve as a sound and practical basis for delivering skills training and development to the workforce; also, the issue of a lasting and meaningful linkages between workforce training (such as apprenticeship et al), government TVET institutions and training providers, NGOs, and overwhelmingly the private sector (i.e. business, industry, associations and private training centers).

The private sector is seldom able to meet with training providers at any level, and the mistrust of the overall TVET system by private industry and business has relegated the vast majority of graduates to continuing education in technical and vocational education or training, without any viable and hand-on practical experience in their field or area of specialization. Likewise, business and industry have yet to realize the limitations of the methods of worker recruitment and in-house training which are most often used—failing to see that training workers is a necessary *investment*, and *not* an expense se such, or a *cost* of doing business; it is the foundation of industrial mechanization and endues the economic growth of the country.

Apprenticeship in Bangladesh, particularly with regard to informal apprenticeships under both the formal and informal businesses in the country, are perhaps one of the most viable means of strengthening the overall structure and transmittance of skills and skill-based knowledge to workers and recruits—practical training in skills and trades. The potential to link these systems under a new model for informal apprenticeship would necessitate the inclusion and partnership of all various stakeholders (public, private, NGO, donor, institution)—the new system can accommodate the upgrading of skills; it can account for the allocation of resources better; it can provide and facilitate linkages—all on account on all stakeholders positions in the system being given an inherent value. This value must not only translate itself into monetary gains and profits at every level of participation, but it must include recognition, foremost, in the relationships and partnerships themselves, and that all aspects of business and employment are improved forthwith.

This value is also evidenced in the findings. It is clear that a skilled employee is much more valuable to an organization than an unskilled worker. It is also clear from several of the apprenticeships, that there is at least a nominal recognition that training an employee to become a skilled worker can create a value to the business itself (i.e. some apprentices are paid up to 3,000 BDT/mo at times). There was also an overwhelming consideration from MCPs that participation in a structured apprenticeship program, albeit given some modest incentives, was a highly favorable proposition to employers who already had

structured, semi-structured and completely informal skills training under apprenticeship. Furthermore, it seems evident from the findings that structure, documentation, procedure, legal and nationally recognized accreditations and certifications—not to mention the provisions under RPL—etc, are looked upon as a reasonable step towards upgrading both the proficiency of business and/or productive capability, as well as lending to the legitimacy of the business itself (in terms of reputability and marketability within an area).

If Bangladesh is able to effectively utilize the potential of its human resources, it will have to invest in them. That means investing in people: in the skills, education and infrastructure that will deliver high-quality and demand-driven skills training and workforce capacities that are relevant to the particular market conditions of Bangladesh. The investment is the key, and has to come from all stakeholders, particularly with the government and the private sector. Re-institutionalizing TVET in the country needs to be considered in terms of a massive scale. Apprenticeship is one vehicle that can potentially reach millions, not only bringing meaningful and viable skills training—but connecting them with the national-level policies that will like the qualifications and training they receive at a level and standard of international accreditation. These initial *and* broad steps can be made; the will has to be present from counterparts who are deeply vested in the proliferation and implementation of an entire overhaul and reinvention of skills training, development and workforce capacity building envisaged in TVET reform. In Bangladesh, this will depend on how well international organizations are able to organize, collaborate and facilitate the necessary linkages between different sectors and stakeholder groups. The potential exists, and the need of such a program is at least acknowledged if not completely understood and/or demanded. The wheels are in motion, and Bangladesh's successful rollout of TVET reform, can be strengthened by a concerted effort to bring an Informal Apprenticeship Model to bear amongst the masses of informal workers and employers in the country.

## Annex 1 – Sample Questionnaires

### Informal Industry Visits

#### Questions to Apprentice / Skilled Worker

**Who is: Male /Female** | **Apparent Age: .....**

1. Your (respondent) name:  
- name & mobile no. of the concerned MCP/Owner:
2. Current designation: Skilled Worker / Apprentice / .....
3. Describe briefly about your family (what is the home district, what the parents do, their social status etc):
4. Name of your Enterprise<sup>52</sup>:
5. (a) What is your education (i.e., up to which class you have studied) and (b) do you have any tech/voc. education/ short training:
6. (a) What is your age at present, (b) at what age you started working, (c) when you joined here, and (d) what was your level then:
7. When and how you joined here, was it your decision, or pressed by guardians, what were the motivations etc:
8. How did you know about this enterprise: located near-by / MCP-owner is relative / through another worker / other, please clarify:
9. How were you selected, any interview, test etc:
10. If it is not your first job, where you worked previously and why you left those places:
11. As a skilled worker/apprentice of this enterprise, in which section you work, and what are your present jobs:
12. Do you work in the same section/job from the beginning, is the shifting is very frequent:

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<sup>52</sup> The profile of business should be collected from the concerned owner or MCP

13. If you're an apprentice, please describe in brief the training process (✓ tick appropriate boxes):
- € Training is given while, performing a job
  - € Only oral instructions are given (i.e., MCP himself does not show how to do)
  - € MCP is too busy to pay proper attention
  - € Supporting materials (like books, charts etc) are used
  - € Some class-room sessions are held
  - € They take you to other places for strengthening training
  - € Any other important aspect of your training
14. How many of you (apprentices) work and learn together at present:
15. If you are already skilled worker, tell where and how you completed apprenticeship:
16. As an Apprentices / Skilled Worker / ....., how much and on what basis you are being paid (or, tell if there is any payment for apprentices at all):
17. As an Apprentices / Skilled Worker / ....., while joining, did you get any documents/contract:
18. Do you sufficiently follow OHS here:
19. Was there any incident of accident with you or your mates:
20. As an apprentice, do you feel satisfied about your learning here, what in your opinion the obstacles (if any) of learning here:
21. As an apprentice, what is your future plan, to stay here or move to other places or others:

### **Points of Observation**

To be completed by interviewer:

- Over all appearance and to read the body language of the apprentice, whether that tells about confidence and satisfaction or not
- Level of technology and equipment
- OHS Issues
- Observation if any gender harassment
- Whether duration of apprenticeship is given prior to appointment
- Documentation aspects
- Take Photo if the respondent and owner permit



### Informal Industry Visits

#### Questions to Master Crafts Persons (MCP)

1. Name of Master Crafts Person: \_\_\_\_\_  
M  F
2. Business/Industry type: \_\_\_\_\_
3. Address: \_\_\_\_\_
4. Phone number: \_\_\_\_\_
5. Years of operation: \_\_\_\_\_
6. Role of MCP: a) Supervision only  b) Work & supervision
7. Number of staff:  
a) Skilled workers: \_\_\_ M \_\_\_ F b) Apprentices: \_\_\_ M \_\_\_ F

*Questions 8 to 14 for those who employ apprentices.*

8. What is the average duration of the apprenticeship? \_\_\_\_\_
9. Is there a training plan or list of skills that the apprentice must learn?  
\_\_\_\_\_
10. Once the apprentice becomes skilled, do they remain employed or move on to other work? \_\_\_\_\_
11. What incentives do the apprentices receive? E.g. money, food lodging etc  
\_\_\_\_\_
12. How did you select your apprentice? \_\_\_\_\_
13. Do you feel that you have adequate tools & equipment to train apprentices?  
Yes  No
14. If no to Q12, what equipment do you require to train apprentices?  
\_\_\_\_\_

***Discuss new informal apprenticeship model with Master Crafts Person.***

Record comments for each area below (if any).

Check list:

Informal apprenticeship pilot (include incentives & minor workshop upgrade)

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Industry Code of Practice

---

Induction training for Apprentice at Training Institute

---

Training for MCP

---

Competency Skill Log Books (show examples)

---

RPL for MCP & skilled workers

---

Challenge testing apprentices on completion

---

Reasonable adjustment

---

Certificate (with MCP name on it)

---

Social status for MCP

---

15. Main points of discussion from master Crafts Person:

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16. Would MCP be interested in being part of Informal apprenticeship pilot?

Yes

No

**To be completed by National Professional**

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1. How would you rate the presentation of the business? Poor----- Good

2. Level of equipment: Poor----- Good

3. OSH: Poor----- Good

4. Photo of business available? Yes  No

Completed by: \_\_\_\_\_ Date: \_\_\_\_\_