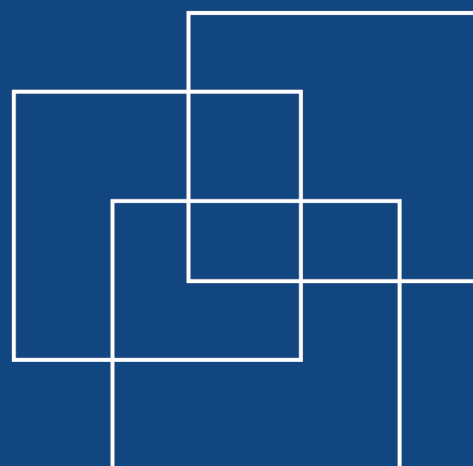




International
Labour
Organization

Compilation of assessment studies on technical vocational education and training (TVET)

Lao People's Democratic Republic, Mongolia, the Philippines,
Thailand and Viet Nam



Compilation of assessment studies on technical vocational education and training (TVET)

**Lao People's Democratic Republic, Mongolia, the Philippines,
Thailand and Viet Nam**

Regional Skills Programme
DWT for East and South-East Asia and the Pacific

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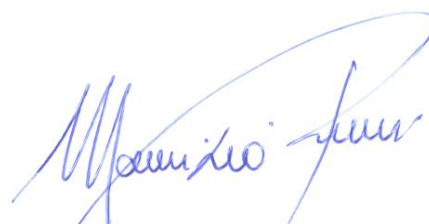
Preface

The availability of a highly skilled human resource base has become a crucial determinant of maintaining this growth for many countries in the Asia and Pacific region. Governments and other stakeholders are paying closer attention to developing technical capabilities through technical and vocational education and training (TVET), a primary instrument used to meet labour market needs that emerge from rapid technological changes, economic growth, and unfolding labour market dynamics. With such growth, countries in the region are experiencing significant changes, and will face a number of challenges in the coming years, many of which are labour market related. This places demands on skills and the capacity for the continued learning of existing workers and new entrants into the workforce, and thus on national education and training systems.

TVET has been recognized as an effective instrument for productivity and sustainability improvement. It plays an important role particularly in: i) providing skills sets required by enterprises and across national economies; ii) supporting pathways into employment, particularly for vulnerable groups (e.g. youth, women, and disabled people); iii) strengthening mobility between occupations for experienced workers; and iv) supporting the development of new skills, and assisting workers to be prepared for change or progress in their occupations or careers. All of these factors have placed TVET at the core of workforce development. Besides there, TVET is a critical driving force for human resource development, and has become increasingly significant in many countries in the region.

This compilation of *Assessment Studies of Technical Vocational Education and Training in the Lao People's Democratic Republic, Mongolia, the Philippines, Thailand, and Viet Nam*, aims to help the respective countries overcome existing human resource constraints by addressing the skills mismatch issue and ensuring the provision of high-quality and demand-driven TVET. They will also help in determining future policy measures that will improve and strengthen strategic areas for TVET development.

These studies are divided into five chapters. Each chapter presents the assessment study findings of each of the five countries. It also includes recommendations that fall under the following categories: identification of a number of remaining gaps and challenges to policy implementation; mechanisms to strengthen the policy framework for improved coordination and implementation – in country; capacity building for TVET institutions and of the overall TVET system; mechanisms to strengthen the linkages between the TVET system and the labour market; and improving access to TVET to the general public and raising TVET's social profile.



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for East and South-East Asia and the Pacific

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Acknowledgements

This publication is a compilation of assessment studies that contains a critical analysis and assessment of the current state of education and skills development as well as technical vocational education and training (TVET) in selected ASEAN countries including Lao People's Democratic Republic, Mongolia, Myanmar, the Philippines, Thailand and Viet Nam during 2011–2013. It was prepared under the overall leadership of Mr Maurizio Bussi, Director of the ILO Decent Work Technical Support Team for East and South-East Asia and the Pacific. Ms Carmela Torres, the ILO Senior Skills and Employability Specialist, provided the overall guidance and technical supervision of the contents and quality of the country studies throughout the publication.

The studies were prepared by the following ILO consultants:

- Lao People's Democratic Republic technical and vocational education and training assessment, by Ms Souleima El Achkar Hilal in September 2013;
- An assessment of the TVET system in Mongolia: Policies, structure, outputs, implications, and recommendations for the country's employment and socio-economic development, by Ms Souleima El Achkar Hilal in June 2011;
- A review of the TVET system in the Philippines, by Mr Leonardo A. Lanzona, Jr. in December 2013. Ms Gladys Navarro helped in gathering data and coordinating the interviews and presentations with the Technical Education and Skills Development Authority (TESDA). Valuable comments were received from key persons in TESDA as well as from the International Labour Organization (ILO);
- TVET in Viet Nam: Situational assessment and inputs for the legal reform process, by Ms Souleima El Achkar Hilal in January 2013;
- Comprehensive research on the general assessment of current skills systems and delivery: Research study on Thailand, by Ms Qingrui Huang, December 2012.

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Executive summary

1. Background and objectives

Generally, the labour market composition of the Lao People's Democratic Republic, Mongolia, the Philippines, Thailand, and Viet Nam, reflect that more than half of the employed workers in each country are in the informal sector, engaged in low- or semi-skilled occupations. Compared to those employed in the formal sector, informal-sector workers have lower education attainment and are most likely engaged in low- or semi-skilled occupations such as agricultural and fishery work, craft and related trades work, services work and shop sales work, and elementary occupations. In addition, most of the workers in these countries participate in low-productivity work, i.e. agriculture, construction, and the wholesale and retail trade, all of which suggest the urgent need for skills development. The implication is that there is a strong need to upgrade and improve skills training to close skills gaps and to increase labour productivity through TVET.

The objective of this publication is to assess TVET in the Lao People's Democratic Republic, Mongolia, the Philippines, Thailand, and Viet Nam, to determine future policy measures that will improve and strengthen strategic areas for TVET development; and to help the respective countries overcome existing human resource constraints by addressing the skills mismatch issue and ensuring the provision of high-quality and demand-driven TVET. The studies also identified recommendations that fall under the following categories: identification of a number of remaining gap areas and challenges to policy implementation; mechanisms to strengthen the policy framework for improved coordination and implementation – in country; capacity building for TVET institutions and of the overall TVET system; mechanisms to strengthen the linkages between the TVET system and the labour market; and improving access to TVET for the general public, and raising TVET's social profile.

2. TVET in Asia

Skills development is vital to improving employability, reducing unemployment, enhancing productivity, promoting sustainable development, and promoting decent work. TVET, as one of the key components of skills development policies, is a critical driving force for human resource development, and has become increasingly significant in many countries, especially in East Asian countries. According to the World Bank,¹ the global share of TVET enrolment in secondary education in East Asia and the Pacific was 5.80 per cent. In 2012, the share reached 17.18 per cent. This rising trend can be translated as TVET taking on a greater role in the region.

Trends in this region reflect wide gaps and diverse economic backgrounds, suggesting different development gaps. The share of TVET in the Lao People's Democratic Republic decreased from 13.34 per cent in 1980 to 0.81 per cent in 2012. On the other hand, the trend in Mongolia increased remarkably from 6.31 per cent in 1980 to 14.40 per cent in 2012. The share of Thailand slightly fluctuated from 14 per cent to 20 per cent, but on average at around 16.24 per cent (source: The World Bank).

Asian economies are undergoing significant changes, and will face a number of challenges in the coming years, many of which are labour market related. This includes the establishment of the Association of Southeast Asian Nations' (ASEAN) Economic Community (AEC) in 2015, with the goal of creating economic integration, a single-market production base, and a freer flow of skilled labour in the region.

¹ Education statistics, World Bank data bank.

Countries must ensure that existing skilled worker shortages do not become a binding constraint on economic growth, by investing in skills development and curbing the “brain drain” of skilled workers to neighbouring countries. Education and training planning must also be consistent with government priorities and labour market demand, to reduce skills mismatches. Skills development, including in the informal sector, is key to ensuring that a country’s growth path is sustainable and inclusive of the entire population, including the majority rural population.

3. Assessment of TVET in the Lao People’s Democratic Republic

The economy of the Lao People’s Democratic Republic is undergoing significant changes, with implications for workforce development and planning, as high growth in some industries and services is foreseen.

Human resources and skills development have featured high on the government’s agenda in recent years. The country is currently in the second stage of its education-sector reform, which focuses on promoting TVET, and important changes are taking place in terms of legislation relating to TVET. Specifically, a new Labour Law, as well as the country’s first TVET Law – previously there had only been government decrees regarding TVET – were due to be approved in parliament by the end of 2013. The new TVET Law aims to increase the relevance of training for labour market and industry needs, and to improve access to training and the flexibility of training programmes and modalities.

The government’s TVET strategy was approved in 2007, and the Master Plan (2008–2015) for its implementation was subsequently developed, which addresses a number of priority areas, including defining the scope of TVET, integrating the demand side in skills development and planning, TVET promotion, quality assurance and improvement, and labour market information (LMI). The Master Plan set out the activities to be undertaken regarding these issues, an implementation plan for each, and designated the departments or stakeholders responsible for each component.

There has been significant donor involvement in the TVET sector in the Lao People’s Democratic Republic in recent years. The largest project is the Asian Development Bank’s (ADB) Strengthening TVET (S-TVET), which has been ongoing since 2010 and is expected to improve formal TVET quality, private-sector involvement in TVET strategy and delivery, TVET access and equity, and TVET management and governance. Many of the TVET challenges in the Lao People’s Democratic Republic are addressed under one or the other of the components of the S-TVET project, or by the legislative changes. However, the pace of implementation is slow – particularly given the rapidly approaching AEC in 2015 – and significant gap areas remain.

The overall TVET system in the Lao People’s Democratic Republic consists of a wide range of skills training, which can be divided in two broad categories: (i) training aimed primarily at increasing food security and generating supplementary income in rural areas (e.g. agriculture, livestock production, handicrafts production, and eco-tourism); and (ii) training primarily aimed at improving employability in urban or relatively advantaged areas (e.g. dress-making, computers and software, foreign languages, and hospitality).

A large share of the skills training in the Lao People’s Democratic Republic is in the first category, and there is considerable demand and need for such training. Indeed, the labour force survey (LFS) 2010 results reveal an important urban-rural divide regarding training. The proportion of people having received TVET was less than 5 per cent in urban areas, 2.2 per cent in rural areas with roads, and only 1.3 per cent in rural areas without roads. Out of the total number of people aged 15–64 who had received TVET in the Lao People’s Democratic Republic, only 4 per cent were from remote rural areas that had no road access. Furthermore, while the agriculture sector accounted for 66 per cent of the country’s employment in 2010, only 1.5 per cent of that sector’s workers had ever received TVET. Indeed, 1.5 per cent of skilled agricultural workers – a group

that consists of more than 2 million workers (65 per cent of the country's employment) – had ever received skills training. Therefore, a significant gap exists in skills training provision, whether formal, informal, or non-formal, for agricultural workers, and in remote areas in particular.

In the second category of skills training, training is provided in a range of topics that may or may not be consistent with labour market demand. Indeed, until recently, there have been concerns that TVET planning was not taking into account the country's strategic plans, nor private-sector needs, but rather "social demand" by students and parents for skills areas where few opportunities exist in the Lao People's Democratic Republic. Recently, however, there have been attempts at reversing this trend, and orienting policy toward labour market needs through legislative reform and increased private-sector involvement in training strategy, policy, and implementation. One challenge is the lack of timely and reliable LMI and TVET and education data, and the lack of a national system for career guidance and counselling at TVET schools and at the secondary school level. This challenge is being addressed with the establishment of a labour market information system (LMIS) within the Ministry of Labour and Social Welfare (MOLSW), and a TVET Education Management Information System (EMIS) within the TVET Department of the Ministry of Education and Sports (MOES). The ADB supports the development of the LMIS and EMIS, and introducing vocational guidance and career counselling in seven public and four private TVET institutions selected for quality improvement under the S-TVET.

In terms of governance, key institutions such as the National Training Council (NTC) and trade working groups (TWGs) remain weak and need capacity building to become more effective. This is partly because TVET is relatively new in the Lao People's Democratic Republic. Strengthening these institutions would improve TVET quality and relevance through increased private-sector participation. This is another issue being addressed under the S-TVET.

One important issue is the lack of understanding of TVET concepts by the managers of some institutions who come from general education and are less aware of the needs and demands of industry.

Most of the TVET in the Lao People's Democratic Republic is delivered by institutions under the MOES, but there are a large number of other institutions providing training: schools under the provincial departments of education; training centres under the MOLSW and other line ministries; unions; private-sector organizations; company training centres; and non-governmental organizations (NGOs). Training providers can be placed along a broad spectrum in terms of capacity and quality of training. In general, whether public or private, training institutions with stronger linkages with the private sector, or that are supported by international donors or companies, fare best. These training institutions benefit from adopting the standards and curricula of companies or organizations with which they have partnerships; from having experts from these companies deliver training, internships, and apprenticeship opportunities for their students; and from more modern technologies and equipment being donated by these entities.

There are no harmonized competency standards at the national level in the Lao People's Democratic Republic. Based on previous government decrees that divided the responsibility for TVET and skills development under different ministries (the MOES and the MOLSW), the two ministries developed their own set of competency standards, sometimes for the same occupation. A National Qualification Framework (NQF) is being developed, however, with the cooperation of both ministries and with support under the S-TVET, and has been outlined in the TVET Law. Despite existing guidelines for NQF development, the process is daunting and is expected to take many years.

Insufficient funding from the government budget is a challenge for training schools that must cover high costs associated with infrastructure, equipment, teacher training, and qualification, among other things. Indeed, TVET provision can be very expensive, particularly due to the constant need to upgrade equipment as technology changes. To fill the investment gaps, training

institutions are encouraged to seek additional funds from private companies, NGOs, and donors, and to generate their own revenue in the market.

In 2013, the MOLSW and the MOES drafted a document or decree regarding the national training fund, which was included in the revised labour law and submitted to parliament. However, industry representatives are sceptical about the implementation of this fund and the enforcement of legal provisions relating to it. Some representatives have suggested that the fund should be set up and managed at the level of professional associations rather than at the national level.

The significant gaps in training funding and quality, the skilled worker shortages, and the need to improve productivity and competitiveness have led industry to increase its investment in training in the Lao People's Democratic Republic in recent years. Training is provided by industry directly – through industry associations, on-the-job at company premises, and at industry training centres – or by public and private providers with which companies have partnerships. Industry involvement in the development and implementation of TVET strategy (e.g. development of competency standards) is increasing, but would be further improved if the TWGs were strengthened.

The Master Plan and the TVET Law include several provisions to improve TVET access and equity. In particular, the government provides incentives (e.g. a voucher programme) to target vulnerable groups including women, the poor, ethnic groups, and inhabitants of remote rural areas. New modalities for training delivery, such as the Integrated Vocational Education and Training (IVET) programme and module-based courses, aim to increase the flexibility of training programmes and remove pre-conditions for training, therefore eliminating barriers to training.

This assessment study has identified a number of challenges facing TVET in the Lao People's Democratic Republic, as well as government and donor initiatives to address many of the challenges. The following recommendations focus on the remaining gap areas, to avoid duplication of donor efforts:

- providing skills training in rural areas for agricultural workers and handicrafts worker (weavers) in the informal sector;
- providing support to scale up the “Know About Business” (KAB) Programme at the national level;
- providing support for policy development (guidelines and incentives) for small and medium-sized enterprises (SMEs) to train their workers and to take on interns or apprentices;
- training of TVET school managers in TVET concepts and approaches; and
- capacity building for LMI and analysis (LMIA) at the MOLSW.

4. Assessment of TVET in Mongolia

Before the recent global economic crisis, Mongolia experienced high economic growth rates, driven by mining and animal husbandry and herding, and high world prices for the products from these sectors. However, this growth has failed to generate productive employment on a sufficient scale to improve overall living standards and reduce poverty. In the aftermath of the crisis, gross domestic product (GDP) growth has returned to its pre-crisis levels, and is expected to be even higher in the coming years due to substantial investment in the mining sector.

Policy-makers are aware of the challenges and opportunities that the forecasted growth represents for Mongolia, and of the need for economic diversification to reduce the country's vulnerability to economic shock and ensure that benefits from growth are spread across the population and labour force through more decent work opportunities. Although there is currently an urgent need for workers in mining-related occupations, this capital-intensive sector has limited long-term employment generation potential. More significant employment creation is expected along the mining supply chain and through spill-over effects in related sectors in industry and services.

Revisions made to the TVET Law in 2009 constitute major steps towards achieving this objective. These steps include the improved participation of employers and unions in the policy process, the creation of the National Council on TVET and the TVET Agency, the emphasis on public-private partnerships (PPPs), and on private-sector participation in all aspects of TVET (from curriculum development to training provision).

Although many changes have taken place, and more developments are underway with the aim of improving TVET in Mongolia, this study has identified a number of remaining gap areas and challenges to policy implementation. Recommendations to Mongolia's policy-makers for improving the country's TVET system can be grouped under five major areas:

- strengthening the policy framework for improved coordination and implementation;
- building the capacity of TVET institutions and of the overall TVET system;
- strengthening the linkages between the TVET system and the labour market;
- improving access to social dialogue and tripartite involvement in TVET; and
- improving TVET access for vulnerable groups such as disabled people and informal-sector workers.

The findings of this study provide support for the activities listed under the Action Plan for Mongolia from the International Labour Organization (ILO) Skills and Employability Programme for Asia and the Pacific (SKILLS-AP)/Japan Regional Workshop on "Addressing Skills Mismatch through Public-Private Partnerships." The recommendations are consistent with ILO objectives and priorities stated in Mongolia's Decent Work Country Programme (DWCP) for 2006–2010, specifically in terms of strengthening "tripartism" to support social and economic policy development, implementation, and policy reform; and of supporting employment promotion strategies for sustainable livelihoods and poverty alleviation in the formal and informal economy. These priority areas are still relevant and will continue to be important in the coming years. This report was written in 2011, and the text reflects the known information up to that point.

5. Assessment of TVET in the Philippines

This paper is a review of the performance of the TVET system in the Philippines that analyses three other main areas that relate to the relevance of TVET. The first area pertains to the quality of the TVET programme, which comprises the content, learning, and teaching of technical education courses. The second area points to the issue of accessibility, or the extent to which workers who need these programmes are able to access them. The last area is that of finance, resources, governance, and other inputs that are provided to, and required by, the TVET system.

Using indicators recommended by the ILO Working Group Indicators (WGI), as well as other available information from the Philippines' TVET statistics, the following findings are important.

Quality

Worker certification is used as a measure of quality. Certification is only provided to those who meet competency standards, and it helps to ensure the productivity, quality, and global competitiveness of middle-level workers. However, the certification of workers seems to be limited in certain sectors, and is not extensive enough to meet the demands of industries. This feature is a function and product of the training regulations designed for each school and course, as well as for the quality of trainers. The study finds that the existing training regulations are not sufficient for certain trades or sectors, and may not be applied in certain cases. The Technical Education and Skills Development Authority (TESDA), the agency authorized to confer certification, has even allowed certain programmes to operate without training regulations, so that new programmes can respond to emerging and specific industry needs. Furthermore, the number of qualified trainers is also limited, especially in private institutions.

Accessibility and participation in TVET

Enrolment has gradually decreased as more students opt to take college courses. Most of the training regulations are in the service sectors such as ICT and tourism, reflecting the high demand for such courses in the market. However, the number of schools and the number of scholarships given by the government do not have a high correlation with the number of poor households across several regions. Two types of scholarships are provided: one is intended for low-income earners, and the other is offered to anyone who requires income support during periods of unemployment. The report notes that most of the funding went to the latter, while the former has not been properly utilized by those it is targeted at. This could mean that the targets are unaware of these scholarships, or that the schools are not found in the regions where they reside.

Finance: The TVET system does not receive very much in terms of government funding, as the financial structure is expected to be market-driven – that is, funded by either the trainee or the private sector. This creates problems in terms of public goods, particularly in the formation of research and development, which is expected to benefit not just the individual trainee or company, but the whole sector. Nevertheless, despite the limited funding, there are various ways in which funds can be allocated more efficiently. TESDA, for instance, can offer incentives for the private sector to be more involved in skills formation, by enhancing programmes like the dual training system, or by setting up partnerships in the operation and administration of TESDA-administered schools. Funds that are saved from such partnerships can be used for improving the certification system, enhancing the future development of the system, and expanding the scholarship programme for the disadvantaged.

Relevance: The poor performance in the above areas has affected the relevance of TVET. First, the number of those enrolled has slightly decreased, especially in rural areas. This is due to the lower utilization of community-based training, as well as the increased demand for tertiary education. This reflects the poor quality of the TVET. Second, employment has focused more on services and tourism and very little on critical areas where shortages are expected in the future, such as in agriculture, construction and manufacturing. This stems from the failure of TVET to have a more forward-looking view of the employment situation. The limited funds for developing new courses and for attracting greater participation within different industries can explain this. Third, labour force participation among graduates has decreased in recent years. This could reflect that the courses are not exactly meeting the needs of the industry. At the same time, the observation that more graduates are opting to go back to school instead of entering the labour market could indicate that low-income households that need employment are not being reached by the TVET programmes.

While external factors can prevent the TESDA from responding well to the needs of the labour market, there are internal factors that need to be addressed. The TESDA will need to change its governance and regulatory framework, and the government must clearly create an enabling framework that includes:

- defining the place of private providers in the national education strategy, by providing clear incentives to TVIs in linking with industry;
- setting clear, objective, and streamlined criteria, through the training regulations, that the private sector must meet in order to establish and operate schools;
- introducing school funding systems that integrate public and private schools, and that are neutral and responsive;
- implementing scholarships programmes that are properly targeted and accessible to low-income earners; and
- establishing an effective quality assurance system.

6. Assessment of TVET in Thailand

The Thai economy relies heavily on the export sector and international trade. During the 2000s, average annual GDP growth – created largely by industry and the services sector – was 4.4 per cent, although it saw two obvious fluctuations between the range of 9.2 per cent and 11 per cent, and between 2.4 per cent and negative 2.3 per cent, respectively, during the two financial crises of 1997 and 2008. Export goods and services account for a large share of Thailand's GDP, reaching a peak of 76.4 per cent in 2008. Thailand's economic growth, therefore, is driven largely by the export sector, which is consequently affected by the global economic situation.

In terms of the gross domestic product (GDP) share in broad economic sectors, Thailand has shifted from an agriculture-based economy towards one that is manufacturing and services oriented. The services sector has played a dominant role in Thailand's economic development, representing 47 per cent of GDP on average from 1995 to 2010. This is followed by the industry and agriculture sectors, contributing an average of 42 per cent and 10 per cent of GDP, respectively.

The sectoral status of economic growth is reflected in the employment situation. Although the agriculture sector is still an important contributor to national employment, employment distribution has shown an overall shift from agriculture to services. In 2001, the agricultural sector's share of employment was 46 per cent, and services made up 39.7 per cent; in 2010, the share of agriculture had declined to 40.7 per cent, while services had climbed to 45.8 per cent.

Although Thai firms mainly assemble products as a large part of their added value, the increasing percentage of high-tech products in Thailand's exports indicates that production has been gradually moving from labour-intensive industries to more technology-intensive goods and services. Sustaining the growth of the Thai economy requires shifting to a productivity-driven growth strategy. In addition, the "creative economy" (including functional design, media, traditional and cultural expression, and art) is expected to become a new source of growth and exports.

However, it should be noted that more than half of the employed workers in Thailand are in the informal sector, engaged in low- or semi-skilled occupations. Compared to workers and employees in the formal sector, informal-sector workers generally have lower educational attainment, and are most likely to be engaged in low- or semi-skilled occupations in agriculture and fisheries, crafts and related trades, as service workers or shop sales assistants, and in elementary occupations. In addition, the majority of Thai workers still participate in low-productivity sectors such as agriculture, construction, and the wholesale and retail trade, all of which suggests an urgent need for skills development in the Thai workforce.

The government has ambitious aims for economic development and decentralization in the coming years, yet Thailand still suffers from a severe lack of skilled labour in the garment, wood and furniture, machinery, and auto parts industries, although the extent to which firms are constrained by particular obstacles differs across industries. The government has also taken the improvement of agricultural productivity into account, in order to strengthen the agriculture sector and support national development. The Eleventh National Economic and Social Development Plan (NESDP) clearly emphasizes the quality and continuity of skills development throughout the working life of individuals – with effective skills utilization.

In addition, as it moves towards an ageing society, Thailand's ongoing demographic structural change suggests that the labour force will be smaller in the coming decades. The percentage of the population aged 65 and above increased from 5.7 per cent to 8.9 per cent between 1995 and 2010. During the same period, the population aged 0–14 declined by 6.7 per cent. Although the total population grows at an average rate of 1.0 per cent annually, the growth rate itself turned negative in 2002. Despite an extremely low unemployment rate, the youth unemployment rate (age 15–24)

is much higher – a more fluctuating trend, implying that youth unemployment is more sensitive to economic cycles.

The economic backdrop places demands on skills, capacity, and for continued learning by employees – and, therefore, on the national education and training systems. It implies that there is a need to upgrade and improve skills training to close the skills gaps and increase labour productivity through TVET.

However, research shows that more students prefer to enter the labour market at a higher educational level. Most students at upper-secondary level pursue a higher level of study, although it is not clear whether they continue on the vocational track or transfer to general programmes. Even though the number of vocational graduates continues to increase, the share of employed people graduating from the vocational schools to the upper-secondary and higher levels has dropped significantly. Furthermore, the findings of this research study also show that the wage and employment status of TVET graduates still lags, due to a range of key factors such as redundant or overlapping policy-making and administration frameworks, outdated curricula, unqualified teachers, poor public TVET profile, and fewer linkages with the industrial sectors.

Although many changes have taken place, and more developments are underway, a number of remaining gaps and challenges to policy implementation have been identified. Recommendations to policy-makers for improving the country's TVET system can be grouped into four major areas:

- strengthening the policy framework for improved coordination and implementation;
- building the capacity of TVET institutions and of the overall TVET system;
- strengthening the linkages between the TVET system and the labour market; and
- improving access to TVET for the general public, and raising the social profile of TVET.

7. Assessment of TVET in Viet Nam

Viet Nam's economy has undergone rapid structural change in recent years, but the education system as a whole, and training TVET in particular, has failed to keep up with the pace of change. A legal reform process has been underway, and progress has been made since the adoption of the 2006 TVET Law. However, addressing the current challenges requires significant institutional change, which is difficult to implement, due to both the incentive structure of the actors concerned, and a lack of capacity at the institutional level. The ongoing process of legal revision provides an important opportunity to push for the required reforms, but for this to happen, the process itself must be more transparent, cooperative, and inclusive of all stakeholders.

The TVET system in Viet Nam includes skills development courses and programmes offered by institutions under the General Department of Vocational Training (GDVT); the Ministry of Labour, Invalids, and Social Affairs (MOLISA); the Ministry of Education and Training (MOET); other ministries, provincial- and district-level government agencies; or by companies, private institutions, trade unions, and other mass organizations. The governance structure and the division of authority between the MOLISA, the MOET and their provincial-level representatives, for different aspects of TVET management, has led to confusion, inefficiencies, and weak accountability.

Training planning is done at the provincial level. However, the lack of labour-market information (LMI) at the local level, and of information regarding the quality of TVET programmes, as well as the lack of timely vocational guidance, prevent individuals from making informed decisions regarding career options, and contributes to negative social perceptions and low take-up of TVET.

The government's "socialization" policy, which aims at promoting the establishment of private TVET institutions and TVET provision by enterprises and non-governmental actors, has only led to a slow increase in the number of these institutions, due to limited implementation of support

policies, and low competitiveness relative to public institutions that have access to state funding and which benefit from a better reputation.

The TVET Law has introduced new standards – the DACUM method for curriculum development, competency-based training (CBT), and relatively greater autonomy for TVET institutions – and has emphasized the need for cooperation with the private sector. However, the GDVT retains the role of developing the largest share of TVET curricula, with institutions having limited freedom and autonomy to build strong partnerships with enterprises, to innovate, and to develop high-quality training programmes.

Even if provided with more autonomy, institutions generally lack the capacity to fulfil these objectives. Furthermore, the incentive structure of the system (funding, governance, etc.) is such that few institutions try to change the status quo. In addition, limited industry involvement means that schools do not have new technologies, and trainers lack the know-how to use these technologies. As a result, training programmes and content remain inadequate and irrelevant.

Private sector participation remains limited because, although emphasized in policy and legislation, few implementation mechanisms exist to promote it. Similarly, although the TVET Law mentions target groups, few measures are in place to provide equal access for certain groups such as women and people with disabilities. Among the recommended changes to the law are to specify mechanisms for industry involvement – particularly favouring the engagement of industry associations or private-sector councils – and to mainstream gender and disabilities issues in the TVET Law and system. This report is a situational assessment of TVET in Viet Nam, with inputs for the legal revision process.²

The paper further provides recommendations on skills and TVET system development, which are grouped into the four following broad categories:

- labour-market information and training planning;
- tripartite mechanisms with a focus on skills development;
- linking TVET with employment creation schemes and initiatives at the local level; and
- promoting equity and access, and the concept of “IVET” or “integrated TVET,” which includes soft skills components at schools in rural areas in particular, with modules on occupational health and safety, and workers’ rights and responsibilities, among others.

² The views and recommendations in this document are the author’s, and may not necessarily correspond to the views and position of the ILO.

Abbreviations and acronyms

ADB	Asian Development Bank
ADB-TESDP	Asian Development Bank Technical Education and Skills Development Project
AEC	ASEAN Economic Community
AFTEX	ASEAN Federation of Textile Industries
<i>aimag</i>	province (Mongolian)
AMCHAM	American Chamber of Commerce
ASEAN	Association of Southeast Asian Nations
BOE	Bureau of Employment (Viet Nam)
BOT	Bank of Thailand
BPO	business process outsourcing
BTVE	Bureau of Technical and Vocational Education (Philippines)
CBT	competency-based training
CHED	Commission on Higher Education (Philippines)
CIDA	Canadian International Development Agency
CLC	community learning centre
CMTU	Confederation of Mongolian Trade Unions
CST	Cooperative Study Training
DACUM	Developing a Curriculum
DANIDA	Danish International Development Agency
DED	Department of Education (Philippines)
DepED	Department of Basic Education (Philippines)
DILG	Department of Interior and Local Government (Philippines)
DOA	Department of Agriculture
DOET	Department of Education and Training (Viet Nam)
DOLE	Department of Labour and Employment (Philippines)
DOLISA	Department of Labour, Invalids, and Social Affairs (Viet Nam)
DOS	Department of Statistics (Lao People's Democratic Republic)
DPO	disabled persons organizations (Viet Nam)
DSD	Department of Skill Development (Thailand)
DST	Department of Science and Technology (Philippines)
DSWD	Department of Social Welfare and Development (Philippines)
DTI	Department of Trade and Industry (Philippines)
DTS	dual training system
DVT	dual vocational training system
DWCP	Decent Work Country Programme
<i>dzud</i>	severe winter (Mongolian)
EMIS (TVET)	Education Management Information System
EPR	employment-to-population ratio
ESDF	Education Sector Development Framework
ESDP	Education Sector Development Plan
EU	European Union
EPR	employment-to-population ratio
FDI	foreign direct investment
GDP	gross domestic product
GDVT	General Department of Vocational Training (Viet Nam)
<i>ger</i>	traditional Mongolian tent (Mongolian)
GET	Gender and Entrepreneurship Together (ILO)
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit (German International Cooperation)
GJP	Global Jobs Pact

GSDC	Garment Skills Development Centre (Lao People's Democratic Republic)
GSO	General Statistics Office (Viet Nam)
GTZ	Deutsche Gesellschaft fuer Technische Zusammenarbeit (German International Cooperation – now known as GIZ)
HIES	household income and expenditure survey
HRD	human resource development
HRFC	Human Resources Forecast Centre
I-CARE	Invigorating Constituent Assistance in Reinforcing Employment programme
ICP	International Comparison Programme (World Bank)
ICT	information and communications technology
IES	impact evaluation study
ILO	International Labour Organization
IMF	International Monetary Fund
IPEC	International Programme on the Elimination of Child Labour (ILO)
ISCO	International Standard Classification of Occupations
IT	information technology
IVET	Integrated Vocational Education and Training Programme
IYB	Improve Your Business Programme
JICA	Japan International Cooperation Agency
KAB	“Know About Business” (ILO programme)
KILM	Key Indicators of the Labour Market (ILO)
<i>khoro</i>	small, local-level administrative unit
KOICA	Korea International Cooperation Agency
LAK	Lao kip
LFS	labour force survey
LFPR	labour force participation rate
LFTU	Lao Federation of Trade Unions
LFTUVTCS	LFTU Vocational Training Centre-School
LGTS	Lao-German Technical School
LGU	local government unit
LHA	Lao Handicraft Association
LKSDC	Lao-Korean Skills Development Centre
LMI	labour market information
LMIA	labour market information analysis
LMIC	Labour Market Information Centre
LMIS	labour market information system
LMP	Labour Market Project
LNCCI	Lao National Chamber of Commerce and Industry
LRYU	Lao Revolutionary Youth Union
LSWO	Labour and Social Welfare Office (Mongolia)
LWU	Lao Women's Union
MAFLI	Ministry of Food, Agriculture, and Light Industry (Mongolia)
MASP	Mongolian Agriculture Support Programme
MCA-M	Millennium Challenge Account-Mongolia
MCC	Millennium Challenge Corporation
MECS	Ministry of Education, Culture, and Science (Mongolia)
MNC	multi-national corporation
MNT	Mongolian tugrik
MOC	Ministry of Commerce (Thailand)
MOE	Ministry of Education (Thailand)
MOES	Ministry of Education and Sports (Lao People's Democratic Republic)
MOET	Ministry of Education and Training (Viet Nam)
MOH	Ministry of Health (Lao People's Democratic Republic)

MOHLW	Ministry of Health, Labour, and Welfare (Japan)
MOI	Ministry of Interior (Thailand)
MOIC	Ministry of Industry and Commerce (Lao People's Democratic Republic)
MOL	Ministry of Labour (Thailand)
MOLISA	Ministry of Labour, Invalids, and Social Affairs (Viet Nam)
MOLSW	Ministry of Labour and Social Welfare (Lao People's Democratic Republic)
MONEF	Employers Federation of Mongolia
MOU	memorandum of understanding
MOUA	Ministry of University Affairs (Thailand)
MPI	Ministry of Planning and Investment (Lao People's Democratic Republic and Viet Nam)
MSWL	Ministry of Social Welfare and Labour (Mongolia)
MTPDP	Medium-Term Philippine Development Plan
NCVET	National Council on Vocational Education and Training (Mongolia)
NDIC	National Development and Innovation Committee (Mongolia)
NEC	National Employment Council (Mongolia)
NESDB	National Economic and Social Development Board (Thailand)
NESDP	National Economic and Social Development Plan (Thailand)
NGO	non-governmental organization
NIU	National Implementation Unit (Lao People's Democratic Republic)
NMYC	the National Manpower and Youth Council (Philippines)
NQF	National Qualifications Framework
NSCB	National Statistical Coordination Board (Philippines)
NSO	National Statistical Office of Mongolia, National Statistical Office of Thailand
NSTDA	National Science and Technology Development Agency
NTC	National Training Council (Lao People's Democratic Republic)
NTESDP	National Technical Education and Skills Development Plan (Philippines)
NTTAQP	National TVET Trainers and Assessors Qualification Programme (Philippines)
NVQF	National Vocational Qualification Framework
OECD	Organisation for Economic Cooperation and Development
OHCHR	Office of the High Commissioner for Human Rights
ONESQA	Office of National Education Standards and Quality Assessment (Thailand)
OVEC	Office of the Vocational Education Commission (Thailand)
PESFA	Private Education Student Financial Assistance (Philippines)
PHP	Philippine peso
PICS	Productivity and Investment Climate Survey
PPP	public-private partnership
PSALM	policy-oriented, sector-focused, area-based, and labour market-driven approach
PSPs	provincial skills priorities
PTC	provincial training centre
PTQACS	Philippine TVET Qualifications and Certification System
RASP	Rural Agribusiness Support Programme
RTC	regional training centre
SDC	skills development centre
SIYB	Start and Improve Your Business Programme
SKILLS-AP	Skills and Employability Programme for Asia and the Pacific (ILO)
SMEs	small and medium-sized enterprises
SOE	state-owned enterprise
S-TVET	Strengthening TVET

SUCs	state universities and colleges
<i>sum</i>	district (Mongolian)
SYB	Start Your Business Programme
SYIB	Start and Improve Your Business programme
TDF	Trade Development Facility
TESDA	Technical Education and Skills Development Authority (Philippines)
TOT	training of trainers, training of teachers
TPPD	Trade and Product Promotion Department (Lao People's Democratic Republic)
TTI TESDA	Technology Institutes of TESDA (Philippines)
TVET	technical and vocational education and training
TVI	Technical and Vocational Institute (Philippines)
TVQ	Thailand Vocational Qualifications
TVQF	Thailand Vocational Quality Framework
TVQI	Thailand Vocational Qualifications Institute
TWG	trade working group
TWSP	Training for Work Scholarship Programme
U-ACT	Universal Access to Competitiveness and Trade
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific, and Cultural Organization
UNIDO	United Nations Industrial Development Organization
USAID	United States Agency for International Development
USDA	United States Department of Agriculture
UTPRAS	Unified TVET Programme Registration and Accreditation System
VCCI	Viet Nam Chamber of Commerce and Industry
VEDC	Vocational Education Development Centre (Lao People's Democratic Republic)
VGCL	Viet Nam General Confederation of Labour
VND	Vietnamese dong
V-NET	Vocational National Education Test
VQ	Vocational Qualification Test
VTA	Vocational Training Association
WEC	Women's Entrepreneurship Council (Viet Nam)
WEO	World Economic Outlook (IMF)
WGI	Working Group Indicators

Lao People's Democratic Republic: Technical and vocational education and training assessment

Souleima El Achkar Hilal

September 2013

1. Background and purpose of the study

An important policy debate around education and skills development is underway in the Lao People's Democratic Republic. Many donors have been heavily involved in the sector in recent years, and a lot of changes have taken place. The International Labour Organization (ILO) has commissioned an assessment study of the TVET sector in the country, to take stock of developments and trends in the sector, and identify remaining gap areas for potential involvement. The study involved a literature review, and the analysis of available TVET data, including relevant data from the 2010 LFS. In April 2013, a brief series of consultations with TVET stakeholders from government, industry (employers), unions, and donors took place; several TVET schools were visited in Vientiane, and a questionnaire was sent out to selected training centres in the provinces. The results of the study, which are presented in this report, were initially presented and validated during a workshop on "Matching and Anticipating Skills in the Lao People's Democratic Republic," which took place in Vientiane in July 2013 and was jointly organized by the ILO and the Lao National Chamber of Commerce and Industry (LNCCI).

2. Demand for skills in the economy

2.1 Major development factors and trends

The Lao People's Democratic Republic's economy is undergoing important changes, with significant implications for workforce development and planning. High growth is anticipated in industry and in services, particularly in mining, hydropower, trade, hotels and restaurants, telecommunications, and information technology (IT). Furthermore, the garments industry, which started out in the Lao People's Democratic Republic in the 1990s, is now one of the country's most important export sectors. It is also one of the largest sectors in terms of employment, with 30,000 workers, and consequently the government is helping businesses and manufacturers by facilitating the export process (simplifying the forms that must be filled in, among other things). Other important sectors are agriculture (where the Lao People's Democratic Republic has a comparative advantage due to fertile land and abundant water resources), and the textiles and handicrafts industry, in which the country also has a comparative advantage through the use of traditional methods and materials.

There are concerns about the sustainability of the growth trajectory that the Lao People's Democratic Republic is taking. In particular, there is a need to ensure that growth is inclusive and that environmental impacts on the majority rural population are mitigated. Investment and trade agreements with foreign countries and companies need to be carefully drafted and reviewed to ensure that the Lao People's Democratic Republic receives adequate and fair benefits from its resources, and that these resources are exploited sustainably.

Growth in the mining industry is threatening other industry sectors through currency appreciation ("Dutch Disease"). Foreign exchange earned through mining exports, and a high currency, lead to an economy of consumption (of foreign-produced goods) with a negative effect on local production. Similarly, with the focus on hydropower generation, deforestation (loss of rainforest) is resulting in the drying up of rivers and dams. Even the Mekong River's water levels have dropped and the fish have disappeared, eliminating a source of subsistence for many Lao people. Even if trees are replanted, they take a long time to grow; the trees that are being cut are very old. The rainforest, which has very rich and diverse vegetation, is being replaced for economic reasons

by rubber tree plantations, which require chemicals and pesticides, with major implications for the agriculture sector. The government is trying to promote organic methods, such as silk production, but it is difficult to do so, due partly to higher associated costs. Silkworms are also very sensitive to pesticides (mulberry leaves can be contaminated, and the silkworms disappear). Cotton and mulberry are both important for the textiles and handicrafts industry. There is a need to raise awareness among the younger generations about the importance of preserving their culture, heritage, and traditional methods and activities, which are at risk of disappearing.

Industry in the Lao People's Democratic Republic is also facing many challenges, including high competition (locally, regionally, and globally), high investment (start-up) costs, skilled worker shortages, and worker retention difficulties. The two latter challenges are linked with, and partly attributable to, significant labour migration to neighbouring countries, particularly Thailand but also to Viet Nam. There are believed to be some 65,000 Lao people working legally in Thailand, and some 800,000 illegally. Migrant workers and, in particular, illegal migrant workers, many of whom are female and come from poor rural areas, have low educational attainment, and are quite vulnerable.³ From the southern provinces only, there are estimated to be some 50,000 Lao workers in Thailand legally, and some 250,000 or more who are there illegally. For example, an estimated 80 per cent of Savannakhet Province's workforce is in Thailand, mainly illegally, attracted by higher wages. For this reason, companies like KP Group are unable to find enough workers (not just skilled, but also unskilled) for their factories in the province.⁴ Furthermore, because of the lack of skilled Lao labour, there are also workers from neighbouring countries like Viet Nam who constitute skilled, relatively cheap, and hard-working labour who are in the Lao People's Democratic Republic legally or illegally, and who work on building dams or on rubber plantations, for example.

Existing labour market challenges will only increase in and after 2015, when the Lao People's Democratic Republic will join the AEC. Producers in the already highly competitive handicrafts market, for instance, will have to improve the quality of their products and textiles to remain competitive. There is also a need to promote and market Lao products as unique, to differentiate them from Thai, Vietnamese, or Chinese products, by emphasizing their authenticity and the use of traditional techniques and patterns. Similarly, garments and other manufacturing industries will have to improve the quality of their products, while also keeping their costs low. Downward pressures on labour costs are likely to lead to additional retention problems and labour migration, which will exacerbate the existing skills shortages. Another challenge made more pressing by the impending AEC is the need for innovation, which is also linked to skills development.

³ For instance, it is common to hear that after working in Thailand for many years, a woman comes back without her savings, which are extracted from her before she crosses the border.

⁴ KP Company, or KP Group, is the official supplier in the Lao People's Democratic Republic of a large number of brands in several areas including food and beverages, chemicals, automotive and machinery, electric products, and technology. The brands include Phillips, Bridgestone tyres, Best Foods, and Yamaha, among others. The company's management has complained that even workers who have no money to go to Thailand will work at the KP factory for a few months until they have saved enough money to go abroad. This is despite the good salaries (above minimum wage, and with many additional benefits such as free transportation, money for food, a canteen serving very cheap food, and accommodation for those out of the province). In Thailand, they may be paid more (300 Thai baht [THB] per day compared to THB 180 by KP in Lao People's Democratic Republic) but do not have all the benefits that they have in the Lao People's Democratic Republic, particularly if they are in Thailand illegally, in which case they have no social or labour rights protection at all. In 2013, KP Group was planning to establish a second factory to manufacture parts for digital cameras, in Savannakhet, and needed more technical and skilled workers, but also unskilled workers.

2.2 Skills needs and training gaps at the national level

The agriculture sector accounts for the majority of the country's workers. However, there is a shortage of skilled agricultural workers and a lack of interest in the sector by the younger generations. Lao youth are not interested in agriculture, nor in traditional activities like growing silkworms; they aspire to have "city jobs" and office jobs, particularly in the public sector – such as banking – rather than to work in factories (the social preferences for "white collar" over "blue collar" jobs). Furthermore, despite higher remuneration in private companies, many people prefer working as public-sector officials. Therefore, companies not only have to compete with each other for skilled workers, but they also have to compete with the public sector, and with international organizations. The challenge posed by the low interest in, and take-up of, TVET among youth – which is attributable to social preference and negative perceptions of the sector – was reiterated by many participants during the ILO-LNCCI workshop.

Despite the importance of agriculture in the Lao People's Democratic Republic, there is a major gap in the sector regarding skills development and TVET. This is partly due to the structure of the sector (largely informal, with few large companies) that makes it difficult to organize for training provision. There is no agriculture association organizing skills training as in other economic sectors, despite the emphasized need for such training in agriculture by related trade and industry groups.

Similarly, a needs assessment workshop organized by the Lao Handicraft Association (LHA) during the annual festival for its members revealed the need for trained weavers in the provinces. Like agricultural workers, weavers are difficult to reach for the purpose of training provision. Indeed, individual weavers work on a contract basis – formal and informal agreements – with SMEs in the handicrafts sector. A proposal for training provision to weavers was drafted on behalf of the LHA and was submitted to the Trade Development Facility (TDF)⁵ in August or September 2012, but has not yet been accepted.

In the tourism sector, labour supply remains below demand on almost all levels. There is a 40 per cent turnover of staff because most of the workers are also students. Although the number of professionals in the hospitality sector is increasing, their number remains quite small. Attracting and retaining professionals is difficult and requires changing mind-sets, because it is largely due to a negative perception associated with occupations that require serving others; Lao workers do not seem to have the service-oriented culture found in other Asian countries. There are five major provinces for tourism but the industry is also spread out across the country, and the challenges are the same in all provinces.

The shortage of skilled workers is a critical binding constraint on the country's development. According to KP Group, there are large companies with plans to open factories in the Lao People's Democratic Republic – including for cameras and eye glasses – but the lack of workers will ultimately be a major obstacle for new companies to come and contribute foreign direct investment (FDI). Indeed, Lao employers find it difficult to recruit technician graduates in engineering, mechanics, or other skilled occupations, as a majority of students are enrolled in business administration or other non-scientific or non-technical subjects.

The demand for skilled workers is so high that the Lao-German Technical School (LGTS) reports employability rates of 100 per cent, with all their graduates finding employment in companies that have a partnership with the school, such as Toyota, and RMA Group (which includes Land

⁵ The Trade Development Facility is a World-Bank led, multi-donor trust fund established to help the Lao People's Democratic Republic achieve its poverty reduction and economic growth targets through trade facilitation and by building the government's capacity to undertake tasks related to regional and global economic integration.

Rover). Indeed, students are sent for internships at these companies, which more often than not ends up employing them. Last year, the school received letters from companies requesting workers. The school invited company representatives to attend the end-of-year ceremony and reception where certificates are handed to the graduates, and to recruit them on the same day. Therefore, on that day, the graduate TVET student receives both a certificate and an employment contract (or at least an employment guarantee) in hand.

On the other hand, university graduates from business administration, accounting, and banking and finance courses have a hard time finding employment after graduation, as there are too many of them for the number of opportunities currently available in the Lao People's Democratic Republic. Indeed, the skills mismatch issue was emphasized by many participants during the ILO-LNCCI workshop as a major labour market challenge for the country.

Until recently, in the private sector, management positions tended to be filled by foreigners, while Lao workers were employed in lower-level positions. There is a need for training middle- to upper-level management for Lao nationals, in order to reverse this trend. The Garment Skills Development Centre (GSDC) has initiated such training for managers in the industry, which is estimated to need some 10,000 skilled workers annually.

2.3 TVET and workforce profile – LFS 2010 results

The first LFS in the Lao People's Democratic Republic was conducted in 2010. The survey included questions on vocational training, and provides important insights into the TVET profile of the workforce across the country, especially when compared with and checked against other data on TVET.

2.3.1 TVET by demographic group

LFS results reveal that in 2010 a very small proportion (only 3 per cent) of the working-age population (aged 1–64) was receiving, or had ever received, TVET, as shown in table 1. By demographic group, this proportion was 5.5 per cent for adult men, 2.3 per cent for adult women, and only 1.2 per cent and 1.3 per cent for young men and young women respectively.

Most of those who had received TVET were adults (60 per cent were men and 26 per cent were women). This is partly because the question's timeframe refers to the interviewee's life, as opposed to recent years only. Young men and women represented only 6.6 per cent and 7.4 per cent of those who had received technical or vocational training in the country.

Table 1. Working-age population with TVET by demographic group, 2010

Gender	Age group	Persons with TVET	Working-age population	Percentage of all persons with TVET	Percentage of demographic group's working-age population
Male	Youth (15–24)	7 201	587 536	6.6	1.2
	Adult (25–65)	65 106	1 189 543	60.0	5.5
Female	Youth (15–24)	8 013	601 022	7.4	1.3
	Adult (25–65)	28 269	1 220 321	26.0	2.3
Total		108 589	3 598 422	100.0	3.0

Source: Lao People's Democratic Republic, LFS 2010.

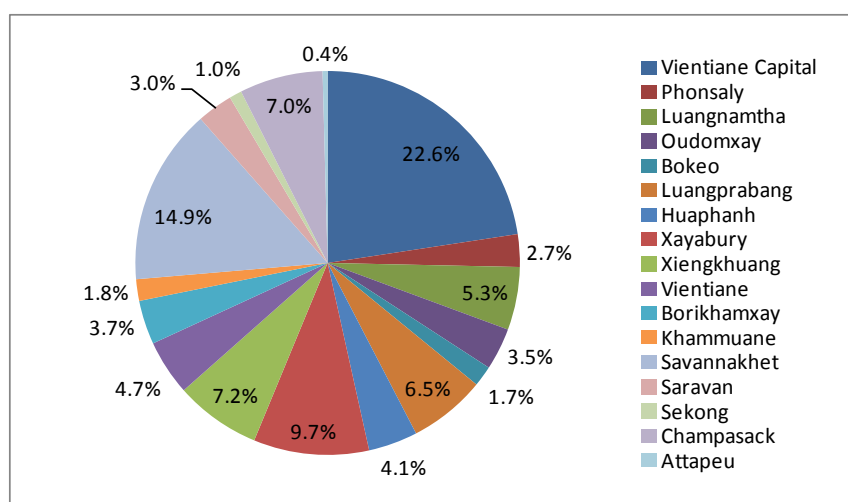
2.3.2 Rural-urban divide and TVET by province

LFS results also suggest an important urban-rural divide regarding training. The proportion of people having received TVET was less than 5 per cent in urban areas, 2.2 per cent in rural areas with roads, and only 1.3 per cent in rural areas without roads.⁶ Out of the total number of people aged 15–64 who had received TVET in the country, 51 per cent were from urban areas, 45 per cent from rural areas with roads, and only 4 per cent from remote rural areas that had no road access.

By province, approximately 23 per cent of those with TVET (24,500) were from Vientiane Capital; another 15 per cent, or 16,000, from Savannakhet; approximately 10 per cent, or 10,500, from Xayabury; and 7 per cent in each of Xiengkhuang and Champasak, with the remaining 40 per cent across the other 12 provinces, as shown in figure 1.

In terms of shares of the provinces' working-age populations, Luangnamtha and Xiengkhuang ranked highest with 5.6 per cent of their working-age populations having received TVET, followed by Vientiane Capital (5.0 per cent), Xayabury (4.8 per cent), Phonsaly (3.4 per cent), and 3.2 per cent for both Savannakhet and Huaphanh, as shown in table 2. Less than 3 per cent of the working-age population in the other provinces had received TVET in 2010.

Figure 1 Distribution of people receiving or having received TVET by province, 2010



Source: Lao People's Democratic Republic, LFS 2010.

2.3.3 TVET by field of training

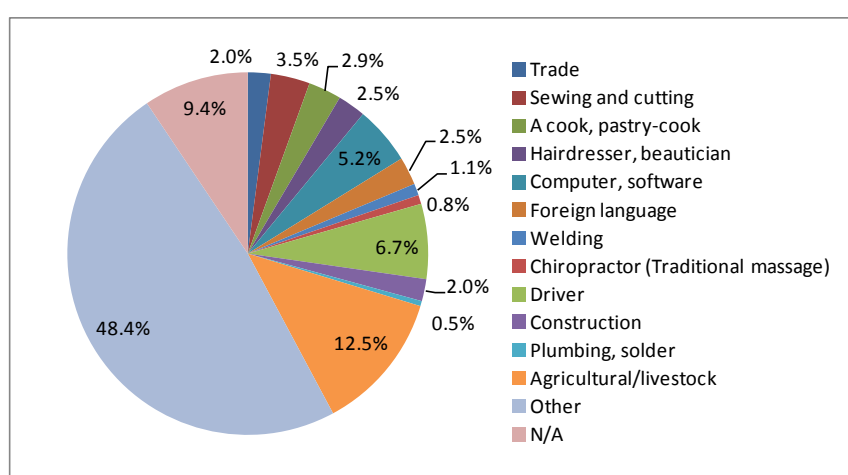
Based on the results, the LFS question on the main TVET field of study was either not adequately formulated, not properly asked by the enumerators, or was misunderstood by respondents. Specifically, nearly half (48 per cent) of responses to the question regarding the main topic of TVET training was “other” rather than any of the multiple-choice options available, and another 9 per cent did not provide an answer, as shown in figure 2. This means that either significant answer options (such as accounting and business administration) were missing in developing the questionnaire – a problem that should have been flagged during the piloting stage of the survey – or the enumerators did not ask the questions adequately or miscoded the answers, or many interviewees misunderstood the question or the answer choices. However, the results suggest that

⁶ All figures listed in this section refer to 2010, as they are obtained from either the LFS 2010 report or generated by the author from the LFS 2010 micro-data set.

the most common TVET fields of study at the national level were in agriculture and livestock (12.5 per cent), driving (6.7 per cent), and computers and software (5.2 per cent). The large numbers of people trained in driving may be overestimating the actual figure, as some of the skills training centres include driving schools (regular driving schools, not technical training to become a driver by occupation). Indeed, this is reflected in the result that 10 per cent of people in the richest quintile of households indicated having received driving training.⁷

In urban areas, 12 per cent of trained people were trained in computer applications, and another 10 per cent in driving. In rural areas, the most common field of training was agriculture and livestock, with 20 per cent of all trained people, and more than 25 per cent of trained people from the poorest quintile. Agriculture and livestock was the only area cited as the main field of study by interviewees from all provinces; with the lowest share of people with TVET citing it as their major field in Phonsaly at 3.1 per cent, and the highest share in Sekong, with 34.8 per cent (table 2). In addition to Sekong Province, agriculture and livestock was cited as the field of TVET for more than 20 per cent of people with TVET in three provinces (Oudomxay, Luang Prabang, and Attapeu).

Figure 2. Distribution of people receiving or having received TVET by field of training, 2010



Source: Lao People's Democratic Republic, LFS, 2010.

⁷ The income quintiles were calculated for the LFS 2010 Report on the basis of a wealth index computed using the methodology proposed by the DHS Wealth Index, which is used in UNICEF surveys. The methodology was used in the multiple cluster household survey of Lao People's Democratic Republic. It uses factor analysis to allot a combined score to each household based on their assets and amenities. For detailed note on the methodology of computation of the wealth index, please visit <http://www.measuredhs.com/publications/publication-cr6-comparative-reports.cfm>.

Table 2. TVET distribution by main field of study by province, and trained people (absolute number and percentage of the province's working-age population)

	Trade	Sewing and cutting	A cook, pastry-cook	Hairdresser, beautician	Computer, software	Foreign language	Welding	Chiropractor (traditional massage)	Driver	Construction	Plumbing, solder	Agricultural and livestock	Other	N/A	Total	Percentage of province's working-age population
Vientiane Capital	6.1	6.1	6.4	5.8	9.0	4.3	0.4	1.1	7.8	3.1	0.4	5.6	38.0	6.1	24,534	5.0
Phonsaly			3.5	3.3	3.3							3.1	83.5	3.3	2 977	3.4
Luangnamtha		1.8		1.6					3.1	3.0		8.2	62.5	19.7	5 761	5.6
Oudomxay			2.5		13.2	7.5						20.9	14.8	41.1	3 839	2.4
Bokeo				6.6	5.7	5.7	6.3	6.6	6.3			11.6	44.8	6.3	1 882	2.0
Luang Prabang		4.7	4.6	1.6	7.1	5.7	1.5	3.8	4.4	4.0		20.8	31.3	10.5	7 041	2.9
Huaphanh		2.3	2.3				2.4	4.6	2.2			8.4	42.3	35.5	4 493	3.2
Xayabury	1.1	0.8	1.4		1.7	3.5	0.9		1.8			14.1	69.6	5.1	10 538	4.8
Xiengkhuang		1.5	1.4		1.5		2.8		8.9		1.4	17.4	56.3	8.9	7 844	5.6
Vientiane		7.7	3.5	2.1	1.7	2.1			10.1	2.4		10.8	53.2	6.5	5 061	1.5
Borikhamxay	4.8	2.5				2.4	2.3		24.1	2.5	5.0	7.0	44.7	4.6	4 026	2.7
Khammuane	4.9	11.9	5.2		4.6		5.5		5.2	17.6		5.8	33.7	5.4	1 976	0.9
Savannakhet		1.9	1.2	3.6	8.5	1.2	0.6		11.0	0.7		18.7	50.9	1.8	16 143	3.2
Saravan	3.3	5.8	3.3	3.3	6.0		3.1		9.5	5.8		5.7	44.6	9.5	3 269	1.6
Sekong		5.2	5.9						11.9	5.9		34.8	11.2	25.2	1 134	2.0
Champasak	2.9	3.9	1.4	1.1	2.5	1.1					1.3	16.7	62.5	6.7	7 615	2.1
Attapeu												22.4	35.7	41.9	456	0.6
Total	2.0	3.5	2.9	2.5	5.2	2.5	1.1	0.8	6.7	2.0	0.5	12.5	48.4	9.4	100	3.0

Source: Lao People's Democratic Republic, LFS, 2010.

2.3.4 Training duration

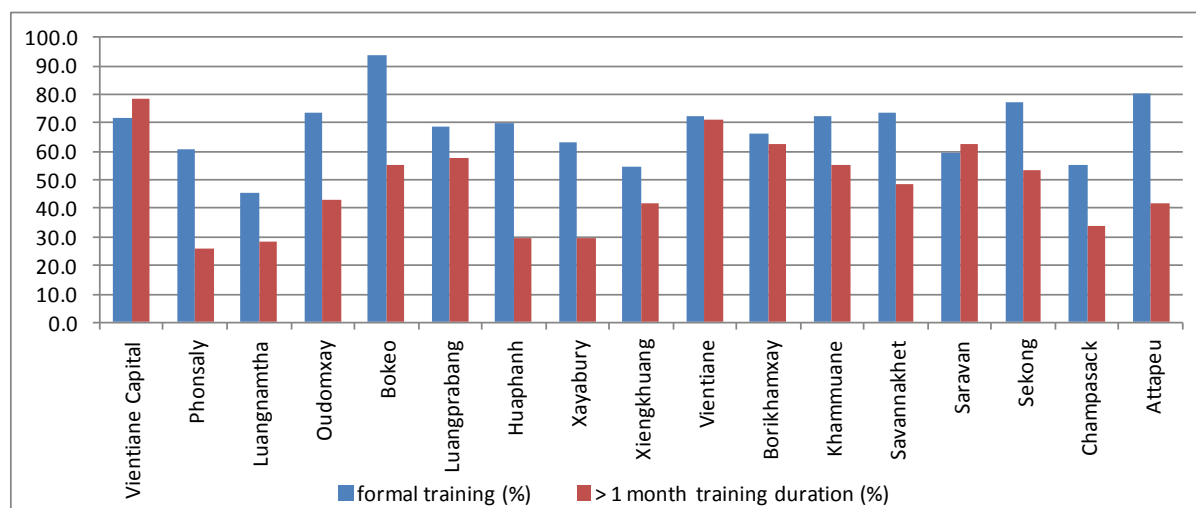
Training in agriculture and livestock tends to be of shorter duration than other TVET areas. Specifically, more than 30 per cent of people trained in this area were trained for less than one week, and another 42 per cent received one or two weeks of training. The share of trained people with more than one month training was just over 20 per cent, as shown in table 3. Another training area with relatively short duration is for chiropractors and traditional massage, with nearly 70 per cent of people having received one or two weeks of training, and another 10 per cent having received less than a week of training. On the other hand, more than 90 per cent of people trained in driving and as hairdressers or beauticians, and more than 80 per cent of those trained in foreign languages, sewing and cutting, and welding, received training that was longer than one month. Figure 3 shows the percentage of trained people with formal training and training of longer than one month, by province.

Table 3. Training duration and formal versus informal training by main field of study (percentage distribution)

	Trade	Sewing and cutting	A cook, pastry-cook	Hairdresser, beautician	Computer, software	Foreign language	Welding	Chiropractor (traditional massage)	Driver	Construction	Plumbing, solder	Agricultural and livestock	Other	N/A	Total
Training Duration															
Under one week	23.6	2.7	15.2	0.0	3.1	0.0	0.0	10.5	2.6	8.6	0.0	31.1	13.9	9.3	13.1
One or two weeks	17.9	3.7	24.1	3.5	22.7	10.0	8.2	69.2	0.0	9.1	40.7	42.2	30.9	20.6	25.9
One month	0.0	8.0	6.3	4.1	13.5	3.1	9.2	0.0	3.7	15.7	0.0	6.0	5.8	11.3	6.6
More than one month	58.5	85.6	54.5	92.3	60.7	87.0	82.7	20.3	92.4	66.6	59.3	20.7	47.6	44.2	52.1
Formal vs. Non-formal training															
Formal	81.9	37.0	59.9	62.8	89.2	89.2	55.9	69.4	91.3	66.1	59.5	56.4	66.0	61.6	66.8
Non-formal	18.1	60.9	35.5	37.2	9.3	10.8	44.1	30.6	8.7	33.9	40.5	41.8	30.7	17.5	29.1
N/A	0.0	2.2	4.6	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	1.7	3.3	20.9	4.1

Source: Lao People's Democratic Republic, LFS, 2010.

Figure 3. Trained people with formal training and training of longer than one month (shares), by province



Source: Lao People's Democratic Republic, LFS, 2010.

2.3.5 Formal and non-formal training

Because the survey answer options lump together all training of longer than one month, it is not possible to distinguish between the vocational education and training stream with programme durations of more than a year, from the skills development stream with programme durations of less than a year. However, the training areas where most of the training was one month or less

(agriculture, chiropractor, plumbing) can be identified as either being in the skills development TVET stream or in non-formal education.

Indeed, 42 per cent of people trained in agriculture, and 40 per cent of people trained in plumbing received non-formal training (table 3). Other training areas with a large share of trained people having received non-formal training were sewing and cutting (more than 60 per cent) and welding (44 per cent).

At the national level, approximately 67 per cent of trained people had received formal training with government-approved certificates (table 3). This proportion was 73 per cent in urban areas, 59 per cent in rural areas with roads, and 55 per cent in rural areas without roads. By province, it ranged from 46 per cent in Luangnamtha to 94 per cent in Bokeo. In Vientiane Capital, 72 per cent of trained people received formal training (figure 3).

Table 4. Trained workers by industry

	Employed with TVET	Industry employment	Trained workers in industry as percentage total employed with TVET	Industry workers as percentage of total employment	Trained workers as percentage of industry employment
Agriculture, forestry, and fishing	30 546	2 087 870	29.7	66.3	1.5
Mining and quarrying	805	15 424	0.8	0.5	5.2
Manufacturing	8 523	149 600	8.3	4.8	5.7
Electricity, gas, steam, and air-conditioning supply	893	7 502	0.9	0.2	11.9
Water supply, sewerage, waste management and remediation activities	305	3 103	0.3	0.1	9.8
Construction	3 259	70 553	3.2	2.2	4.6
Wholesale and retail trade; repair of motor vehicles and motorcycles	11 874	260 059	11.5	8.3	4.6
Transportation and storage	2 098	31 568	2.0	1.0	6.6
Accommodation and food service activities	902	17 482	0.9	0.6	5.2
Information and communications	1 026	11 273	1.0	0.4	9.1
Financial and insurance activities	640	7 114	0.6	0.2	9.0
Real estate activities	189	580	0.2	0.0	32.5
Professional, scientific, and technical activities	381	5 146	0.4	0.2	7.4
Administrative and support service activities	484	10 301	0.5	0.3	4.7
Public administration and defence; compulsory social security	20 236	132 138	19.6	4.2	15.3
Education	12 193	71 836	11.8	2.3	17.0
Human health and social work activities	2 054	13 505	2.0	0.4	15.2
Arts, entertainment, and recreation	96	6 846	0.1	0.2	1.4
Other service activities	3 876	22 633	3.8	0.7	17.1
Activities of households as employers; undifferentiated goods- and services-producing activities of households for own use	214	9 625	0.2	0.3	2.2
Activities of extraterritorial organizations and bodies		1 258	0.0	0.0	0.0
N/A	2 417	211 574	2.3	6.7	1.1
Total	103 010	3 146 991	100.0	100.0	3.3

Source: Lao People's Democratic Republic, LFS, 2010.

2.3.6 TVET by industry and occupational groups

In which industry sectors are trained people employed in the Lao People's Democratic Republic? In 2010, some 30 per cent of workers with TVET were employed in agriculture, forestry, and fishing, and another 20 per cent were employed in public administration, as shown in table 4. Approximately 12 per cent of workers with TVET were employed in education, another 12 per cent in wholesale and retail trade, and 8 per cent in manufacturing.

Comparing industry sectors' share in the country's total employment with the proportion of trained workers in each industry sector reveals important insights regarding skills mismatches. In

particular, the agriculture sector accounted for 66 per cent of total employment in the Lao People's Democratic Republic in 2010, yet only 1.5 per cent of the sector's workers had received training (table 4). On the other hand, real estate industries accounted for less than 1 per cent of total employment, but approximately a third of its workers had received training.

Table 5. Trained workers by occupational group

	Employed with TVET	Occupational group employment	Trained workers in occupational group as a percentage total employed with TVET	Occupational group workers as a percentage of total employment	Occupational group trained workers as a percentage of occupational group employment
Armed forces occupations	3 640	27 619	3.5	0.9	13.2
Managers	6 410	46 259	6.2	1.5	13.9
Professionals	20 995	144 355	20.4	4.6	14.5
Technicians and associated professionals	4 609	37 959	4.5	1.2	12.1
Clerical support workers	2 324	19 927	2.3	0.6	11.7
Service and sales workers	10 519	173 348	10.2	5.5	6.1
Skilled agricultural, forestry, and fishery workers	30 503	2 051 446	29.6	65.2	1.5
Craft and related trades workers	7 082	96 653	6.9	3.1	7.3
Plant and machine operators, and assemblers	6 873	78 698	6.7	2.5	8.7
Elementary occupations	7 395	257 664	7.2	8.2	2.9
N/A	2 660	213 063	2.6	6.8	1.2
Total	103 010	3 146 991	100.0	100.0	3.3

Source: Lao People's Democratic Republic, LFS, 2010.

The significant training gap in agriculture, revealed by looking at industry shares in employment and shares of industry workers with TVET, can be confirmed by examining the occupational group employment shares. Indeed, skilled agriculture, forestry, and fishery workers accounted for 65 per cent of the country's workers in 2010, but again only 1.5 per cent of the group's workers had ever received TVET as shown in table 5.

3. National education, training policies, and legislation

3.1 Education and TVET legislation

There have been two government decrees on TVET in the Lao People's Democratic Republic: the first decree for the development of TVET (No. 209 of 1998) was replaced by another (No. 036 of 2011), which is the current legal reference for TVET. Decree No. 036 on Technical and Vocational Education and Training and Skills Development distinguishes between the functions of the MOES, responsible for (TVET), and the MOLSW, responsible for skills development, certification, and testing. By separating TVET and skills development, however, the decree has led to some confusion and duplication of efforts, with the two ministries working on developing standards for the same occupation, for instance.

There are a number of legal changes that affect TVET. The most recent Labour Law (2009) was being revised at the time of writing this report, and a new draft had passed in parliament, and a TVET law was being drafted (the first TVET law in the country, where previously there had only been the decrees). Elements of Decree No. 36 were planned to go under one or the other of these new laws, but there is a need for cooperation between the MOLSW and MOES on this issue.

The TVET law development process was taking place at the MOES, based on the Education Law and on Decree No. 036, which had been drafted at the MOLSW. The NTC established a task force of eight or nine members to be in charge of this process, including a German expert, the deputy director of the Ministry of Planning, the director-general and deputy director from the MOES TVET Department, the directors of the Vocational Education Development Centre (VEDC), the LGTS, and Papasak Polytechnic School, two members of the National Assembly (from the Department of Justice and from the Commission of Social and Cultural Affairs). The draft law has been completed and was expected to be distributed to all the line ministries concerned, as well as to donors, for their inputs, comments, and recommendations, by the end of May 2013. The draft law was also to be presented at a meeting and workshop organized for all stakeholders to contribute feedback and comments, and at the annual conference of the NTC. The final version would then be submitted to the NTC president, then to the Ministry of Justice and to the national assembly.

The new TVET law is expected to be a stronger legal instrument than the decree had been, and should therefore be easier to enforce or implement. The new law aims to re-combine vocational training and skills development, and to harmonize standards across the country. It changes the name “vocational education and training” to “vocational training” to emphasize that TVET refers to all vocational skills development. It applies to all training providers in the country, and attempts to address most of the challenges currently faced. The development of the new law had support from the German government through Deutsche Gesellschaft fuer Technische Zusammenarbeit (the German Development Agency – GTZ), mainly financially, and to a limited extent technically, using neighbouring countries’ experiences for guidance, while adapting the law to the Lao context. The new law will clearly state the roles and responsibilities of TVET institutions and stakeholders, outline an NQF, and cover different modes of training delivery.

In terms of legislation, another relevant document is Decision No. 155 on the decentralization of education. This decision divides the responsibility between the Higher Education Department and the TVET Department at the MOES, and prevents TVET schools from providing training at the undergraduate level and above. TVET schools are now allowed to offer a higher diploma at the most, and only universities can give bachelor’s degrees.

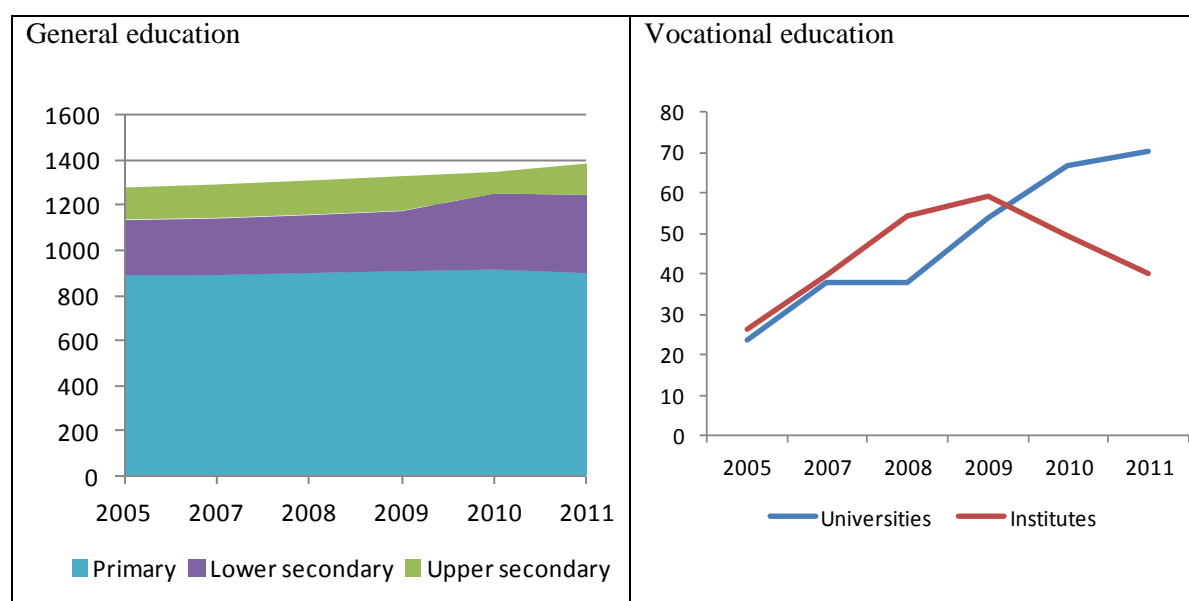
3.2 Government planning and priorities on education and TVET

The Lao People’s Democratic Republic is currently in the second stage of its education sector reform, which focuses on post-secondary education. In terms of education policy, there has been a change in orientation and focus from higher education towards TVET. The government’s strategy is outlined in the Education Sector Development Framework (ESDF) and the Education Sector Development Plan (ESDP) 2011–15.

The proposed education reform includes the following: Currently, most students finishing lower secondary school continue to higher secondary school and to university, and very few want to go into TVET. The MOES wants to have a certain quota of lower secondary school graduates who can go to higher secondary school, and the rest would have to go to TVET. According to the ESDF, 40 per cent of lower secondary school graduates should go into TVET, but in reality a lower proportion of them do for many reasons – among them, students, parents, and the system in general (incentive structure through higher salaries and requirements for employment) value higher education over TVET. MOES statistics show a decrease in the number of students in training institutions in recent years, and an increase in general education and higher education, as shown in figure 4. In addition to the quota system, the government is trying to provide incentives for youth to go into TVET (e.g. a voucher programme, and exemption from having to pass entrance exams, among other things).

The Strategic Plan for the Development of Technical and Vocational Training from 2006 to 2020 (the TVET Strategy) was approved by the prime minister in June 2007. The Master Plan for Technical and Vocational Education and Training (the TVET Master Plan) was subsequently developed to implement the TVET Strategy. The Master Plan (2008–15), which was developed by an inter-ministerial team with the support of the Luxembourg government, outlined a number of priority areas and issues to be addressed. These include defining the scope of TVET, integrating the demand side in skills development and planning, TVET promotion, quality assurance and improvement (including the development of an NQF, curricula, methods, teacher development, and access and equity, among others) and LMI.

Figure 4. Students in general and vocational education (thousands)



Source: MOES, 2013.

3.3 TVET objectives, target groups, and mechanisms for implementation

3.3.1 TVET objectives and mechanisms for implementation and follow-up

The main objectives for TVET in the Lao People's Democratic Republic are to contribute to the country's socio-economic development, achieve poverty reduction targets, and help the country to emerge from the group of least-developed countries by 2020 (the TVET Master Plan).

The purpose of the TVET Master Plan was to provide directions for managers, administrators, directors, and staff of TVET providers, and to identify the roles and responsibilities of the line ministries concerned, and all stakeholders, in order to facilitate the implementation of the TVET Strategy. The Master Plan details 130 activities, each with its own indicators, responsible organization, and implementation plan. It highlights the importance of securing financial resources, the need for inter-departmental coordination, as well as the long-term follow-up of the plan as key issues for the successful implementation of the strategy.

3.3.2 TVET target groups, and access and equity

Based on the TVET Strategy and Master Plan, training providers are encouraged to target several groups, including new labour market entrants (school leavers), existing workers, young people, older adults, and disadvantaged groups (e.g. the poor, the populations of remote rural areas, and

ethnic groups). The government is providing incentives for disadvantaged groups to participate in TVET, through voucher schemes and scholarships. They currently have scholarships, but the amount will be increased to account for inflation, and larger amounts will be allocated for higher levels of TVET and for ethnic groups. The ADB's Strengthening-TVET project (S-TVET) includes support for the development of a training assistance voucher programme.

The new TVET law aims to improve access to, and the flexibility of, training programmes. It therefore emphasizes several modes of training delivery: dual cooperation training and on-the-job training; IVET; and competency-based training (CBT).

4. The TVET system

4.1 TVET institutions and governance

TVET is a relatively new area in the Lao People's Democratic Republic, and as a result TVET institutions are not yet strong enough, but are still "learning by doing." The current legislation distinguishes between short-term skills development training (less than 12 months) falling under MOLSW jurisdiction; and continuous training of more than 12 months, called TVET, and which falls under MOES jurisdiction. The two ministries are, therefore, the main departments in charge of TVET in the country. However, some skills development and vocational training is also provided under other line ministries such as the Ministry of Industry and Commerce (MOIC) and the Ministry of Health (MOH).

4.1.1 MOES TVET Department

The TVET Department is responsible for TVET policy development and implementation in the schools that fall under the ambit of the MOES. Previously, the department had less influence than other departments at the MOES, for instance than the Private Education or higher education departments. However, this may change with the reorientation of education policy toward promoting technical skills. The TVET Department consists of four divisions: Administration; Monitoring and Evaluation, including quality assessment; Teacher Training and Development; and TVET Image.

4.1.2 MOLSW Department of Skills Development

The Department of Skills Development of the MOLSW has the responsibility for skills development (as distinct from the TVET programmes under the MOES) and skills assessment. The training conducted at the centres under the MOES is generally of short duration, non-formal, and non-accredited.

4.1.3 National Training Council

The NTC is an inter-ministerial organization and tripartite body of 35 members: representatives of youth, women, unions, employers, and different ministries. Its main constituents are the MOES, MOLSW, and LNCCI. Its president is from the MOES, and its vice-presidents are the vice-minister of labour and the president of the LNCCI. The NTC's members are not technical experts but rather high-level representatives. The NTC's budget (for salaries, equipment, and other items) comes from the MOES, but its mandate is above the MOES. The NTC is the umbrella organization for all TVET in the Lao People's Democratic Republic, and it plays the role of an advisory body regarding skills development issues.

In terms of TVET governance, the NTC is crucial but has not been very effective to date. It needs to be strengthened, and particularly its permanent office (NTC-PO). Among the reasons suggested for the shortcomings of this institution are a limited budget and a lack of leadership. Indeed, at the time of writing this report, the NTC had not had any meetings for two years, largely because of the lack of capacity (lack of qualified staff) at the NTC-PO to organize the meetings. The NTC was going to hold a conference in the second week of May 2013 on TVET reform, but this conference was postponed. A new director has recently been appointed to the council. The importance of strengthening the NTC was raised by participants in the ILO-LNCCI workshop.

The NTC's official name has recently been changed from the NTC to the National Council on TVET and Skills Development. This makes it clear that it covers both TVET streams (VET under the MOES and skills development under the MOLSW).

4.1.4 Trade working groups

Under the NTC, 12 TWGs were established, or are in the process of being established, by the MOES and LNCCI, with the responsibility to oversee skills or occupational or professional standards development, and curricula development.⁸ The TWGs are an attempt at involving industry in the process as much as possible. In the future, through these TWGs, industry will also be involved in the development of assessment standards, and industry representatives will be invited to become assessors.

Some of the TWGs are also still quite weak, and need to be strengthened, but others are working and ready to cooperate, in particular the ones in the automotive and hotels and restaurants sectors. If the NTC and the TWGs were strengthened, public-private partnerships (PPPs) on training would improve considerably in the Lao People's Democratic Republic.

4.1.5 Training institutions

There is a very wide range of skills training provided in the Lao People's Democratic Republic. This training can be divided in two broad categories: training aimed primarily at increasing food security and generating supplementary income in rural areas (e.g. livestock production, small plants, handicrafts production, and eco-tourism); and training primarily aimed at needs in urban or relatively advantaged areas (e.g. dress-making, computers and software, foreign languages, and hospitality and hotels).

Most of the TVET is delivered by institutions under the MOES, but there a large number of other institutions also provide training: schools under the provincial departments of education, training centres under the MOLSW, unions, community learning centres (CLCs), private-sector organizations, company training centres, and NGOs, among others.

There are 22 TVET institutions under the direct responsibility of the MOES TVET Department (including the VEDC); at least one in each province, and more in Vientiane. In these 22 schools, there were some 18,000 students in 2009. These schools cover short-term courses (less than six months), courses for skilled workers (six months to a year), certificate level courses (two or three years), and diploma courses (two or three years) at the middle and higher levels.

In addition to the schools under the MOES, there are six training centres under the MOLSW. There were four centres under the MOLSW and a total of approximately 2,700 students in 2008–

⁸ The 12 TWGs are in: hotels, restaurants, furniture, printing, handicrafts, garments, ICT, construction, automotive, basic business skills, mining, and electricity and power. The last two were in the process of being established at the time of writing this report.

09. In these centres, there are five levels of skills development training: basic skills; semi-skilled; 3 skilled workers; trades; and supervisors. The duration of the training offered depends on several factors, including the training level. For instance, basic skills training can range from three weeks to six months. The trainees have three options upon completion of the training: continuing with further vocational training at a higher level; self-employment; or employment in local SMEs.

In addition to the TVET schools and training centres under the MOES and the MOLSW, there are a number of centres run by unions. The Lao Revolutionary Youth Union (LRYU) is also highly engaged in skills training. The vocational training department of the LRYU was established in 1997. Its name was subsequently changed from “vocational training centre” to “vocational development department.” Currently, the department is responsible for training for the whole country. Under the LRYU, there are 12 training centres (two in Vientiane, including the one at the union’s headquarters, and ten in the provinces). The training given at each centre depends on local needs, identified by the provincial-level youth union. However, the training programmes are technically managed by the central union. The LRYU is responsible for age groups 6–8 (juvenile), 9–14 (young pioneers), and 15–35 (youth). The skills training activities involve the third group (youth).

The Lao Women’s Union (LWU), an umbrella organization for all Lao women’s groups, has its own training centre. The Lao Federation of Trade Unions (LFTU) was also in the process of building a training centre. In accordance with the Strategic Human Resources Plan of the LFTU, Phase 1 of the LFTU Vocational Training Centre-School (LFTU VTCS) was completed in 2011. The cost of the facilities and infrastructure for the centre has been entirely covered by the government. The LFTU still had to complete the building of dormitories at the time of writing this report. Eleven occupational areas would be covered at the centre. Training had already started (or was being piloted) in two of these, namely in tailoring (they had 15 sewing machines) and welding, and was being delivered by teachers from the Lao-Korean Vocational Training Centre. The target group of this centre includes all students across the country, including those who could not complete secondary school and who have only primary school or basic skills.

In addition to the training schools and centres under the ministries and unions, some private-sector associations and companies have their own training centres, and other SMEs provide training on their own premises. For instance, some handicraft SMEs provide workers with training in special and traditional weaving techniques. They have their own training facilities and have experts to provide the training. The training aims to improve the quality of the products (e.g. straight side lines). Previously, it was aimed at teaching people how to preserve their culture and heritage, and involved passing on the traditional expertise.

Recently, the MOES TVET Department has been asked to take charge of private TVET providers, which is a big challenge, as there are almost 100 of them. The department needs to develop a framework for the administration of these new institutions.

4.2 Training capacity versus demand

Regarding training capacity, skills development has been recognized as crucial for the Lao People’s Democratic Republic’s socio-economic development, especially as the country gears up for the advent of the AEC in 2015. Training institutions are trying to get up to par, by modernizing and improving facilities, and procuring new equipment for training. The training capacity (facilities, equipment, and staff, among other things) varies significantly across TVET schools, as does the quality of training provided (see Section 11). In general, the training centres or colleges that are supported by donors or have foreign counterpart organizations or strong industry linkages have greater capacity and higher training quality.

At the high end of the spectrum is the LGTS, which may not be representative in terms of TVET schools under the MOES. It was ranked number one in terms of the schools preferred by employers in an ADB study conducted under the S-TVET project (see Chapter 10). The LGTS has approximately 800 students, and takes on approximately 350 students every year. Out of the students, at the time of writing this report, only 40 were women, but this number has been increasing over the years; it was only two or three a few years before that. The LGTS has 67 teachers, and provides training in four areas: automotive, plumbing and welding, electrician, and metal-working and machinery.

Similarly, the Lao-Korean Skills Development Centre (LKSDC) is at the high end of the spectrum for the centres under the MOLSW. The LKSDC was established in 2004. The government of the Republic of Korea helped build the facilities, provided equipment, and then handed the centre over to the Lao government, but continues to provide support. Until 2005 the centre trained workers in five occupational areas: computers (IT), automotive, electronics, carpentry, and tailoring. Currently, they offer training in three additional occupations: cooking, beauty, and electricity. There were some 800 trainees at the LKSDC at the time of writing this report, including 135 women. Out of the trainees, 758 were in three disciplines (IT, electricity, and automotive – the three highest skilled that can lead to higher diplomas) and 57 were in the other five disciplines (lower skilled, they can get only a certificate). Out of the 800 students, 700 would complete their training in the year of writing. Out of the graduates, some 40 to 50 trainees would continue to university.

A major challenge for the LKSDC is the limited number of teachers (42 teachers for the 800 students). Out of the teachers, 13 are female. The 42 teachers are very competent, and knowledgeable about skills standards and curricula, but they cannot obtain additional teachers from the MOLSW because of the quota system that assigns a certain budget allocation to each government department. Because government revenues are low, so has been the MOLSW budget. As a result, the centre needs to hire additional teachers from outside (not from the pool of teachers qualified under the MOLSW), who tend to be less qualified. They currently have 18 of these additional teachers and train them in pedagogical approaches and teaching methods. Teachers from the latter group are often not interested in remaining at the training centres, and want to eventually teach in government schools (they view teaching at the skills development centre simply as a stepping stone for work in the government).

Training centres run by unions also vary in terms of capacity. Again, the centres that are linked with donors or companies have higher training capacity and outcomes. In the Ban Dan San training centre run by the LRYU in Vientiane Province, the second phase of a cooperation project is underway with the regional office of the Salesians of Don Bosco society in Bangkok.⁹ The cooperation project, which began in 2008, is in four areas: automotive, repair parts, welding, and electricity. The Ban Dan San centre has the best facilities and equipment, and provides the highest quality of training among all the LRYU centres.

Teachers at the LRYU training centres come from the National University. These centres have permanent teachers, but sometimes hire additional teachers as well. They also have international volunteers providing training, particularly in languages. Currently, they have five German volunteers teaching English – one based at the HQ and the other four elsewhere in Vientiane Province. There are also Japan International Cooperation Agency (JICA) volunteers providing training in Japanese. Seven training courses in Chinese have already been conducted by Chinese volunteers, but they are now waiting for new volunteers to come (there is currently a shortage of teacher dormitories). For training in the construction sector, the LRYU cooperates with the MOES

⁹ Don Bosco has a network of technical colleges in many countries. Its objective is to empower disadvantaged and marginalized youth.

and the Young Entrepreneurs Association. In general, they cooperate and work closely with both the MOES and MOLSW.

There is considerable demand for training among the poorest students at LRYU centres, but insufficient capacity to train them all. In 2012, there were 500 young people identified as needing training in the centre of Vientiane, but the capacity of the centre was sufficient for only 90. The training costs of poor students are covered by funding from the LRYU budget, from the government, and from the fees paid by other students. The centre sent 96 students to be trained in centres under the MOES because of lack of capacity (insufficient funds).

4.3 Equitable access and flexibility of training

The main objective of the skills development training under the MOLSW is to help poor people improve their quality of life through better opportunities. The trainees at the MOLSW centres tend to be mainly (70 per cent to 80 per cent of them) poor people from rural areas. They are mainly people who have just completed high school but cannot find work. After the training, 70 per cent of them find employment (as employees) and 10 per cent become self-employed. Little information is available about the remaining graduates, who often move back to their home areas. The MOLSW centres have dormitories (separate for male and female), and the training offered is free (covered by the government) for most of the priority sectors. However, there are some sectors where training is expensive and trainees must therefore pay a fee (e.g. IT and computers).

Over 50 per cent of trainees at the LKSDC are poor people from rural areas, and they all stay in dormitories. There are sometimes not enough beds, and the students have to stay in the classrooms. Sometimes, these trainees arrive from the provinces and have never been to Vientiane, so the director of the centre has to pick them up at the bus station. In terms of access and equity, there are no barriers for people to be trained in the centre. In rural areas, the MOLSW local (district-level) offices identify poor people who meet certain selection criteria, and send a list to the central MOLSW. Then, based on the budget, a certain number of students are selected, and placed in the training centres, based on the area that they wish to train in. For these trainees, costs are covered by the government. The other trainees have to cover their own fees.

There are two groups of youth who receive training at the centres run by the LRYU: the poorest, who don't have to pay (representing approximately 20 per cent of all students), and a general group who must pay the fees (representing approximately 80 per cent of the trainees). As mentioned, the poorest students are selected from the provinces, based on certain criteria, specifically that they must come from the poorest families, they must be jobless, and must have no other opportunities to study. The LRYU has a network at the grassroots level that makes it easy to identify and select the poorest students. Fees vary from 900,000 Lao kip (LAK) to LAK 2 million for one training course, depending on the programme. The duration of the training also depends on the programme, and ranges from one or two weeks to three months. At the Ban Dan San centre, there is a special funding arrangement for trainees in electricity installation; they do not have to pay any training fees until they graduate and start working. Then, they can repay. The 76 trainees of the Ban Dan San centre are all male, because of the programmes of study offered there.

In July 2013 there was a plan to open a new training centre in cooperation with the Vietnam Women's Union, with funding from the Don Bosco organization. This centre is for poor young women (17–25 years old) and offers a six-month training programme in tailoring. Each course has 15–20 students. All the training costs for the women is covered by the Don Bosco organization.

As an initiative to reach the population in remote areas, every year the LGTS sends students from the school to these areas to train local people. This approach is successful at achieving its objectives; even when local people cannot read or write, they sometimes filmed the training sessions for future reference.

4.3.1 Integrated vocational education and training

In terms of equity, access and flexibility, a very important concept is integrated vocational education and training (IVET), which was created many years ago but was only recently implemented in the Lao People's Democratic Republic. The concept was developed because of the observation that many students who enrolled in TVET schools at the provincial level in particular, had only completed primary school and had very basic skills, if any. There was, therefore, a need to combine non-formal education (basic skills, life skills, and short-term courses at the semi-skilled level) and technical training. Previously, formal TVET was under the TVET Department, and non-formal education under the Non-Formal Education Department (NFED) of the MOES. All schools were under MOES TVET except one training centre for non-formal education in Vientiane, which fell under the NFED, but there had been almost no training activities there. IVET schools offer formal and non-formal training at the same time, combining the two under the same roof.

IVET schools differ from other TVET schools in that they have 50 per cent of their capacity reserved for non-formal courses. Their target groups are different; they include those who want to learn basic, life skills, and are adapted to the local economic and labour market context (which changes considerably across the country, particularly between north and south). The IVET concept aims to remove barriers to training for all target groups, by offering training without any pre-conditions (even if people cannot read or write, they can receive training).

IVET schools have been established across the country with cooperation from GTZ. There are now six IVET schools in the northern provinces, and three in the south. The LGTS also applies the IVET concept, providing short-term courses based on private-sector needs, but other schools under the MOES do not.

One challenge faced by the IVET schools is the poor understanding of the concept, including by the directors of these schools. The importance of the recognition of former learning, for example, or of having module-based courses.

5. Labour market information and training planning

5.1 Labour market information

Accurate and timely labour market information (LMI) is crucial for effective TVET planning and delivery. In the Lao People's Democratic Republic, some LMI exists but is collected on an ad hoc basis by different organizations, including ministries and donors. For instance, the ADB undertook a labour market needs assessment survey in 2010, based on which the priority skills areas were selected for the S-TVET project. However, there is a lack of readily available, reliable, and consistent information, gathered on a continuous basis, and which requires a labour market information system (LMIS) to be in place.

Under the TVET Master Plan, the MOLSW is responsible for analysing data on skills demand in the economy, in cooperation with the MOES and other line ministries. For this reason, an LMIS is being established within the Statistics Division of the Cabinet of the MOLSW, with ADB

assistance under the S-TVET project.¹⁰ The Department of Statistics (DOS) and Ministry of Planning and Investment (MPI) are also supporting the process.

The project has recently started, and had a budget of US\$80,000 for 2013 for setting up the LMIS unit at the MOLSW. The plan for 2014 had to be submitted to the ADB. Currently, equipment (computers, software, among other items) is being purchased and installed. The next phase of the project involves designing the data collection instruments. The MOLSW plans to undertake establishment surveys to gather data on employment demand. The data collection will be done at the provincial level (decentralized) but the data will then be sent to the LMIS unit. The unit will also be linked to employment services; therefore, demand data will come from the LMIS and will be matched with supply data from employment services. The ILO has been involved in setting up employment service centres (employment services) at the provincial level, under the MOLSW.

The LMIS unit will be staffed from within the MOLSW, by workers who have IT skills and knowledge of LMI. They may not be experts or statisticians, but will be provided with training and are expected to learn while working. The ADB project includes capacity building for data gathering, processing, and dissemination.

The first LFS in the Lao People's Democratic Republic was conducted in 2010. The results were presented in the Labour Force and Child Labour Survey 2010 report. Conducting an LFS on an annual basis would considerably improve the LMI available in the country.

5.2 Vocational guidance and counselling

The implementation of vocational guidance and career counselling at the lower and upper secondary school levels was listed as an activity under the TVET Master Plan for 2011–15. However, to date there is no system of vocational guidance in the Lao People's Democratic Republic, despite a great need for one due to the lack of skilled workers and the skills mismatch issue. Career guidance and counselling only takes place in some private schools in the provinces, as these schools have more incentives to have their graduates employed. The ADB is introducing vocational guidance and career counselling in the seven public and four private TVET institutions selected for quality improvement under the S-TVET project.

At the launch event in Vientiane for UNESCO's Global Education for All Report – which in 2013 focused on “Youth and Skills” and “Education for Work” – representatives of youth organizations emphasized the need for career guidance and counselling services not only at the higher educational levels, but starting from after primary school. Indeed, currently, the majority of students in the Lao People's Democratic Republic want to be government officials or work for international organizations or international companies, or be entrepreneurs. They need to be made aware of where opportunities truly lie, and about the reality of competition (“how hard people in Thailand and Vietnam work, for instance, to have such a strong services sector”).

The challenge posed by the negative image that is discouraging youth from going into TVET can be partly addressed through vocational guidance and, more generally, through the provision of information. Specifically, during the ILO-LNCCI, participants were encouraged to learn from the New Zealand approach to attracting youth, which involved: providing them with information to change their misperceptions; and by initially interesting them in a broader sector (e.g. the overall construction sector, as opposed to masonry, for example).

¹⁰ Before ADB support for the LMIS project had been confirmed, the MOLSW had held talks with the ILO and China to discuss their potential support for the project. The ILO was not aware at the time about the forthcoming ADB assistance in this regard.

5.3 Training demand analysis and planning

According to industry representatives, the MOES previously did not sufficiently take into account government priorities for economic development and the needs of the relevant industries in education planning, but rather the demand of students and parents (social demand). This has resulted in a skills mismatch situation, with many students graduating from vocational education who cannot find work. For instance, there are too many accounting graduates when the labour market needs only a few, while the opposite is true for construction, electricity, and the automotive sector. For the latter sectors, labour demand exceeds supply; there is a shortage of skilled workers. For instance, according to a TVET school director, 100 per cent of electricity graduates can find employment in the Lao People's Democratic Republic at the moment.

However, in recent years the MOES has realized the importance of taking into account the country's economic and labour market needs in training planning, and has taken steps in the right direction, consistently with the TVET Master Plan. The pace of implementation has been slow, partly because "the mind-sets of people who have been working in some positions for a long time cannot change overnight". The changes and reforms need to be implemented immediately, however. As one industry representative explained, "the Lao People's Democratic Republic cannot afford to wait". In order to properly implement these changes, however, the MOES needs access to timely and accurate LMI, and cooperation with industry and other ministries and stakeholders.

At the TVET centres that do not fall under the MOES, there also seems to be limited demand analysis in training planning, with the possible exception of some LRYU schools. In order to plan its training, the LRYU conducts a needs assessment study every two years across the country. The union also organizes a meeting in early March of every year to gather information and feedback from the trainees. The needs assessment study is supported by the Don Bosco organization. Currently, they have found high demand for motorbike repair programmes in the northern provinces (the LRYU has not yet been able to provide this training), and for mushroom growing and processing (the union has offered training in this area in partnership with a Vietnamese organization). In the south, there is high demand for automotive training. At the LRYU HQ, training is provided in beauty, and in tailoring and sewing. On the other hand, the selection of the 11 occupational areas in which training will be provided at the LFTU Vocational Training Centre was not based on any labour market assessment, but rather on observations regarding the needs of factories nearby.

5.4 National TVET statistics

As is the case for LMI, there are currently no reliable and consistent data on enrolment in, or the supply of graduates from, TVET institutions. Data are available at the institution level and are sent to the MOES upon request. The development of a TVET EMIS is also planned under the S-TVET project, which would enable users to have access to information on available programmes and study options, and the number of graduates annually, among other things. It would be established within the Research Unit of the MOES TVET Department. As for the LMIS, the DOS and the MPI would support the process. The ADB would provide capacity building for the collection, processing, analysis, and dissemination of data.

6. Training funding and efficiency

6.1 TVET funding mechanisms and funding levels

The funding for TVET schools under the MOES, MOLSW, and other line ministries is benchmarked to the ministries' budgets, and is considered lower than the socially desirable levels. The government budget share of the schools under the MOES has varied from 30 per cent to 98 per cent; the remaining budget has been covered by student fees and other contributions (TVET Master Plan). Unions also receive government funding for training purposes. For instance, the government funds a training programme at the LRYU HQ centre, in beauty for young women, who then go on to work across the country.

Insufficient funding is a challenge for training schools that must cover high costs associated with infrastructure, equipment, teacher training, and qualifications, among others). Indeed, TVET provision can be very expensive, particularly due to the constant need for upgrading equipment as technology changes. For instance, the LGTS Development Plan for 2012–15 requires US\$4.5 million, and it has already received most of this amount.

To fill the investment gaps, training institutions' partnerships and cooperation with private companies are crucial. For instance, the LGTS has partnerships with a number of companies, including Phu Bia mining, Lao Toyota, Thai Toyota, and Japanese Toyota, among others. These companies lend and donate valuable equipment and training material that the school could otherwise not afford to purchase. The LRYU also has a cooperation programme with Lage Lao, a private-sector company, to fund students who finish their training and would like to start businesses. They give interest-free loans to three graduates every year. The MOES wants to encourage all schools to build partnerships and cooperate with industry.

Similarly, training institutions are encouraged to build linkages and obtain funding from donors. For instance, in 2008, the LKSDC received US\$800,000 from the Government of the Republic of Korea because they had made good progress. The Government of the Republic of Korea also covers the costs associated with an exchange programme for teacher training (teachers from the centre go to the Republic of Korea, and Korean experts come to teach at the centre. The LKSDC has a five-year plan for 2011–15, which details planned expenditures of some LAK30 billion (approximately US\$4.3 million), and which was submitted to the government of the Lao People's Democratic Republic. The government accepted the plan but cannot cover all the costs, so asked it to prepare a proposal for the government of the Republic of Korea. Obtaining the needed funding is a long process: first, the MOLSW must give approval, then the Ministry of Planning, and finally the government of the Republic of Korea.

The LFTU is currently implementing the second phase of the development of its training centre, but needs to find partners to help with hiring trainers. It has a shortage of funding and training equipment at this stage, and plans to prepare proposals for funds from international agencies. It plans to hire teachers from Papasak Polytechnic School, and to get some funding from trade union federations in other countries like Viet Nam.

The required levels of investment in TVET in the coming years, as per the Master Plan are significant. The total budget needed for implementation of the plan was over US\$ 150 million, in addition to the US\$15 million of the recurrent budget. The plan was based on the assumption that the government will be increasing its resources as a result of economic development, and will therefore increase its investment in TVET, but that donor funds would nevertheless be needed.

6.1.1 The proposed national training fund

Under the 2009 Labour Law – and specifically under Chapter II: Building and Development of Labour Skills – all employers are required to “establish and implement a plan under which they set aside an annual dedicated fund of 1 per cent from the annual salary or wages reserve fund of the employees to cover expenses for training or upgrading of professional qualifications both within the country and abroad for workers under their responsibility.”¹¹ If the employer is unable to do so itself, then it is required to contribute this amount to a national training fund. The national fund will consist of these contributions, as well as 1.5 per cent of the annual salary tax of employees from the state budget, and other funds mobilized from domestic and foreign sources.¹²

The national fund training, which would fall under the responsibility of the MOLSW, has not yet been set up, however, and there has been no decree on the management of the fund, and no board of directors to manage it. Therefore, for the time being, employers do not want to contribute to the proposed fund, due to concerns over its governance, accountability, and transparency. They would like the fund to have a board of directors that reports to a tripartite committee overseeing the operations of the fund (report on the kind of training provided, and how many people are trained, among other things), as is the case for the social security fund, which does have a tripartite committee allowing employers to have a say in how funds are allocated.

The MOLSW is currently in the process of drafting a document or decree regarding this fund, together with the MOES, that would be included in the revised labour law to be submitted to parliament by the end of the year. The proposed fund would be a common fund for both streams (vocational education and training and skills development). However, industry representatives are sceptical about the implementation of this fund and the enforcement of legal provisions relating to it. Some representatives have suggested that the fund should be set up and managed at the level of professional associations rather than at the national level.

6.1.2 TVET providers and market revenue

The law allows the skills development centres, whether private or public, the freedom and flexibility to generate their own revenues in the market (unlike government schools within the national education system). Indeed, because of the limited government budget, skills development centres (SDCs) often need to, and are encouraged to do so, in order to cover their costs (teacher salaries, among other things). For instance, the LKSDC raises additional revenue by charging fees to some students (for certain programmes) and charging companies fees for placements or the work of interns.

The GSDC, which has been set up using donor funds, aims to become financially self-sufficient and therefore charge registration fees. Initially, factories were reluctant to pay these fees; they were used to having training provided for free or at a very low cost, but the training quality was poor. The GSDC explained to factories that they are paying for quality, and also that the registration fee provides an incentive for workers to actually attend the entire workshop, to get the maximum benefits from it. With time, factories were convinced, began appreciating the quality of training, were more willing to pay for it, and the GSDC has started increasing its fees. It now has money set aside (currently, all training costs are covered by the TDF, and therefore all of the registration fees are going into a bank account for when the GSDC will begin phasing-out of donor funding).

¹¹ Labour Law 2009, Chapter II, Article 10: Obligations related to building and development of labour skills.

¹² Labour Law 2009, Chapter II, Article 11: National fund for building and development of labour skills.

7. Quality of education and training

In general, training quality at TVET institutions remains low, although as with capacity, there is a large spectrum, with some institutions performing a lot better than others. Since 2010, under the S-TVET project, the MOES has been trying to improve training quality through the development of national skills standards and curricula, and training materials, introducing module-based training, and replacing old and outdated machinery with new equipment. In particular, under the S-TVET project, support for the purchase of equipment is given to seven public and four private institutions, in the four priority areas selected under the project (automotive, construction, furniture making, and basic business services). The institutions were selected on the basis of a number of criteria relating to their existing capacity and quality of training, among other things. The skills priority areas were selected on the basis of the labour market needs assessment undertaken by the ADB in 2010.

7.1 National Qualifications Framework

Currently, there is a large spectrum of formal, non-formal, and informal curricula, certificates, and diplomas available from different organizations in the Lao People's Democratic Republic. For this reason, it is very difficult (for potential trainees, employers, and other stakeholders) to assess the value of these certificates or diplomas, in terms of the trainee's skills and ability to perform in the job, or to move on to higher education levels. This challenge would be eliminated if there was an NQF to serve as a reference to the skills and competencies of workers required by their occupation.

The MOLSW and the MOES are working on establishing an NQF for the Lao People's Democratic Republic, which is outlined in the new TVET law and which divides skills into five levels: basic, semi-skilled, skilled, technician, and higher technician. Although general guidelines exist for the NFQ, the framework is likely to take several more years to complete, and implementation remains problematic. One challenge in terms of developing the NFQ – not just for the Lao People's Democratic Republic, but internationally as well – is how to recognize skills in the non-formal or informal-learning sector. The United Nations Educational, Scientific, and Cultural Organization (UNESCO), which has its own guidelines for NQFs, has supported the TVET and NFE departments in the development of an NQF.

ASEAN is scheduled to launch the AEC at the end of 2015, and as that date approaches, the issue of standard harmonization and equivalency is becoming more pressing. At the ASEAN level also, however, the development of a qualification framework is underway, and there is an important policy debate on issues like developing a credit transfer system.

7.2 Occupational standards, courses, and curriculum development

There are currently no national occupational standards that are used as a reference for all TVET providers in the Lao People's Democratic Republic; standards for some occupations differ across training providers, while for other occupations, no standards exist at all. Indeed, based on TVET Decree No. 036, which stipulates that TVET falls under the MOES and skills development under the MOLSW, each of the two ministries has been developing its own occupational standards. Therefore, different skills standards exist for the same occupation in the country. Furthermore, there is a lack of donor coordination on this, as the ADB funds and supports standards development at the MOES, while the ILO and Government of the Republic of Korea have done the same at the MOLSW.

A national committee to develop occupational standards exists and consists of representatives from government (primarily from the MOES TVET Department) and industry (bipartite). The committee is not tripartite because unions are considered to lack the expertise required. At the time of writing this report, there had been 17 competency standards developed, and four curricula implemented (carpenters, bricklayers, motorcycle repair, and basic business services such as bookkeeping). Additional curricula will be implemented for another five occupations, including agricultural machinery repair, welding, and secretarial. Training packages, including assessment standards, are being developed for all 17 occupations.

There are a number of concerns with the development of these standards, namely that the committee members tend to be education-sector experts, more so than private-sector experts. These education-sector experts may be senior officials who have been in education for many years but are less familiar with new pedagogical approaches or new technologies. Industry representatives feel that their involvement in the process is not sufficient to reach the desired outcomes in terms of standards and curriculum development. For instance, although the tourism industry association was invited to contribute to the development of a new curriculum for hotel management for Papasak Polytechnic School, it felt that its training needs would be best fulfilled by having a diploma course at its own training centre. The main difference would be a more significant practical training component: the association would like to have a 12-month course, within which each month consists of one week of theoretical and three weeks of practical training (based on a similar system in Malaysia), compared to the TVET college's three months' practical training out of three years. The capacity of the association's training centre is only 25 students per year, however, and it cannot substitute for the national educational system in preparing skilled workers for the industry.

There is a need to restructure the curricula of TVET schools from subject-based to module-based courses. The latter approach is more flexible, allowing training programmes to be divided into short-term modules. Long-duration training programmes also pose a barrier to potential students from the countryside, for instance, who cannot afford to leave home for long periods at a time. Dividing the course into modules would allow them to complete the programme module by module, and be absent from home and from their work only for a short period (e.g. one month) at a time, and this absence can be during the season when they cannot work. Then, when all the modules are completed, they can obtain a certificate. Currently, there are two German experts working on developing a modular system for the automotive sector at the LGTS. The module-based approach is going to be piloted and then introduced in the other schools.

Linked to the importance of modular courses, there is also a need to shift from traditional approaches to CBT in developing curricula. This shift is currently underway, and CBT is being implemented in 11 institutions (seven public and four private) during a first phase or piloting stage. It is very important for the Lao People's Democratic Republic to adopt CBT because neighbouring countries have already done so, and in 2015 with the AEC and increased labour mobility across borders, Lao workers will be at a disadvantage. A shift to new teaching methods requires the training of teachers to ensure that they understand the concepts and can deliver the material. For this reason, the TVET Master Plan emphasizes the importance of teacher development.

As is the case with standards, training providers have their own curricula. In many cases, training institutions adopt the standards or curricula of partner companies or donor governments. For instance the LGTS has a curriculum, but no national standards, for the following areas: automotive, plumbing/welding, electric, and metal/machinery. However, the school cooperates with Toyota, Ford, and Phu Bia mining company among others, that follow international standards, thus ensuring that their training quality is high. It will add two additional occupations that will have standards as well as modular curricula: agricultural machinery and heavy machinery. For agricultural machinery, it will use standards developed by experts from a Thai company. For heavy machinery, it has draft standards developed by a number of experts.

At the LRYU training centres, there are few occupational standards, with the exception of the Dan San centre, where the Don Bosco organization's standards and special curricula and a module-based approach are used. For instance, the motorcycle repair programme at the Dan San centre, which has duration of six months, involves two modules over four months and a practical component of two months at a private company. The LRYU's new training centre will cooperate with the Vietnam Women's Union, will adopt standards and curricula from Don Bosco, and will have a module-based approach. On average, 30 per cent of the training content at the LRYU centres is theoretical, while 70 per cent is practical. The quality of the practical training is constrained by the lack of funds for new equipment (with the exception of the Dan San centre). The LYRU is in the process of preparing curricula and other proposal documents to submit to the MOES. Currently, their trainees obtain a certificate upon graduation, but the LYRU wants to make the necessary arrangements for these trainees to be able to pursue their studies within the formal education system and obtain a diploma.

In many important industry sectors for the Lao People's Democratic Republic, such as garments and handicrafts, no national standards or curricula exist, with the possible exception of silk smiths and carpet weavers. In the case of handicrafts, trainees at private centres are taught to follow standards for product requirements for export (e.g. size, colour, or pattern). The GSDC has bought 65 garments training modules from the International Garments Training Centre (IGTC, Indonesia) and adapted them for its courses. It still has not used all of the modules. The content of the courses involve both a theoretical and practical component. The GSDC focuses on training quality as key to increasing the garment sector's exports. For this reason, it has adopted the ASEAN Federation of Textile Industries (AFTEX) standards, and set up a system for certification for the occupations in which they provide training (i.e. sewing machine operators, and garments supervisors).

7.3 Skills assessment and certification

Testing and certification is conducted at the SDCs under the MOLSW. A technical committee delivers the testing (This committee should be tripartite, but in practice is often bipartite due to lack of capacity of unions), but there is a need for qualified testers in the Lao People's Democratic Republic for skills development, unlike the vocational education and training stream, where the testers are more skilled and often come from university backgrounds. The LKSDC five-year development plan emphasizes the centres' intention to improve teacher quality and testing and certification. They have recently improved testing and certification in three areas: construction, automotive, and electricity. When trainees complete their training, they are tested and given a diploma, but they must work for two years and acquire experience before coming back to be tested again and certified.

The LRYU sends trainees in the construction and automotive sectors to be tested and certified by the MOLSW every year. In the other sectors, there are no national standards and no testing and certification. The GSDC is the only organization in the Lao People's Democratic Republic accredited by the MOLSW to provide certification for sewing-machine operators and for garments supervisors. Before providing them with accreditation, the MLSW visits their facilities and assesses their capacity.

The GSDC also offers an optional AFTEX certificate (to ASEAN standards), which will be particularly beneficial to Lao workers in 2015 as the single market and free flow of skilled labour comes into being. At the time of writing, only three people in the Lao People's Democratic Republic had obtained this certificate. However, this certification exists for only a couple of occupations, and there is a need for other occupations to be included. Adopting the AFTEX standard has been an initiative of the Association of the Lao Garments Industry (ALGI) and not the government because it understood its benefits. Other industry associations (e.g. the wood furniture association) are trying to establish similar standards.

Some employers in the Lao People's Democratic Republic have concerns about the issue of skills certification, fearing that certified employees would become "selective with respect to the work that they can do, and may want to find employment outside the company and even outside the country."

Teacher quality and certification is also a concern for the MOES, and is one of the issues being addressed under the S-TVET project.

8. Accountability of the education and training system

The TVET schools under the MOES are supposed to report to the MOES TVET Department every semester. However, in 2012, they only reported on an annual basis. They use some performance indicators. Similarly, training centres under the MOLSW report to the ministry and also use performance measures and indicators such as drop-out rates, unit costs of training, graduation rates, and employability rates of graduates. However, there is little follow-up after graduation. The LKSDC director has proposed to the MOLSW to undertake tracer studies, but due to the budget considerations, this idea never had any traction.

The training schools under the LRYU prepare annual reports that are sent to the Central Skills Development Department of the union. There is a 70 per cent completion rate for training programmes of the LRYU.

Centres that receive donor funds are also accountable to the donors. The GSDC, for instance, is accountable to both the ALGI and donors (TDF). It prepares reports for factories, with recommendations based on observations during the training, and quarterly reports and statistics to the TDF. It uses many performance measures and indicators, including efficiency, productivity, and attitude of the workers. It also uses evaluation sheets at the end of the courses (one sheet per trainer). It calculates unit cost per trainee and attempts to be as sustainable as possible by limiting electricity consumption, among other things.

9. Industry training

9.1 Industry investment in training, and industry training organizations

The significant gaps in terms of training funding and quality, the skilled worker shortages, and the need to improve productivity and competitiveness before the AEC comes into effect, have led industry to increase its investment and involvement in training in the Lao People's Democratic Republic in recent years. Training is provided by industry directly (through industry associations, on-the-job on company premises, and at industry training centres) or by public and private providers with which companies have partnerships. Some general training (not industry-specific) is provided by the LNCCI and the Lao Business Women's Association (LBWA).

Industry associations that provide training in the Lao People's Democratic Republic include the tourism association (hotels and restaurants), which has a training centre and provides small-scale training in different fields: housekeeping, restaurant management, bartending, and reception, among other things. The association also uses the MOES technical schools, mainly Papasak. Enterprises in the hotel industry that have own training programmes also have their own standards.

The Lao Institute for Tourism has established a model training centre; the project is funded by the Luxembourg Development Agency.¹³ The construction sector association also provides training in cooperation with the MOES and the LNCCI.

The garments and textile industry association (ALGI) has its own training organization, the GSDC, which was established mainly because public TVET centres in the Lao People's Democratic Republic were not providing workers with the skills demanded by the industry. The GSDC was set up in 2010 as one of the 20 trade-related projects funded under the TDF, a multi-donor trust fund, financed by AusAID, the European Union (EU), and GTZ, administered by the World Bank, and implemented by the MOIC, the Trade and Product Promotion Department (TPPD), and the National Implementation Unit (NIU). The private sector's contribution to the GSDC is non-financial (not funding) but in terms of equipment, material, and experts from the network of companies it works with.

During the first year and a half of its operation, the GSDC's founders visited and interviewed garment factories to assess their needs. Although the initial idea had been to train mid-management level supervisors, the interviews and needs assessment revealed that some 70 per cent of factories also needed training for their sewing operators. The GSDC was therefore set up to train workers in two occupations – sewing-machine operators and supervisors – and afterwards expanded to other higher-level management and leadership courses.

The GSDC provides two types of training: “public” – open to anyone who wishes to enrol (workers from different factories, among others), and “on-site” – which means targeting the workers of a specific factory. Although it is called on-site, only the practical training takes place at the factory; the theoretical side takes place at GSDC facilities. The optimal size of classes is about 15 trainees. In its first three years of operations – only 1.5 years of training provision, as the first 1.5 years consisted of research and setting up operations – the GSDC provided training to some 400–420 garments workers. Its goal is to train 600–700 workers annually. The GSDC also conducts training of trainers (TOT) for the garments sector, and these trained trainers can then work in the factories.

Before the GSDC, no such training existed in the Lao People's Democratic Republic. Furthermore, management positions tended to be filled by foreigners, while Lao people were in the lower-level positions. By training Lao nationals in management, the GSDC aimed to change this situation. The GSDC is still the only organization in the Lao People's Democratic Republic providing training specifically for garments factory workers. Other existing TVET providers are in the tailoring sector, and provide different skills training.

Some factory owners prefer to provide specialized, on-site training to their workers than to send sewing-machine operators to a training centre where they receive a more general training and maybe are not trained using the machines that they will use at work (there are more than ten types of sewing machine). In particular, if the factory produces only one product (e.g. jogging pants), and each employee is responsible for only one part along the chain, then he or she is trained in only this part, using the machine used at work, and specializes in it. Another reason for factory managers' reluctance to invest in workers' training is that they are concerned that workers who receive training will then be poached by other companies. This is less likely for management levels, and indeed the GSDC has found that factories are more willing to invest in training for management levels than for lower levels.

In other sectors, international companies and their Lao subsidiaries have training budgets and conduct their own training activities. For instance, skills development and human resources are a

¹³ Available at: http://www.lux-development.lu/pays_details.lasso?lang=uk&pays=lao&pro=485 [accessed 21 August 2014].

priority for all companies in the KP group. Their workers are encouraged to continuously upgrade their skills. Each company in the group has a training budget, and newly hired staff are given a two-week to three-month training course (duration depends on the position) when they join the company. For instance, workers hired in occupations like mechanics at Lao Toyota, which has its own training programme (curriculum), are given longer training depending on the level of the position. First-level training is provided in the Lao People's Democratic Republic, but for higher levels (second or third), they must be sent to Thailand. KP group also cooperates with JICA and sends workers to Japan for training. It also provides training to workers before promoting them to a higher position.

9.2 Apprenticeship practices and partnerships between industry and TVET

Industry also cooperates with public and private TVET providers in the form of partnerships. For instance, the LGTS has partnerships with several companies that send experts to share their experience, donate equipment, and thus contribute to improving the training quality and employability of the younger generation. It also has apprenticeship agreements with several companies. At the time of writing, the LGTS had 40 apprentices in industry, and six international trainers.

Similarly, the LKSDC has partnerships with large companies for internships and for placement (hiring) of graduates after completion of their studies. In the case of SMEs, however, trainees themselves have to find internship placements and employment. The centre previously approached SMEs (sent them official letters) asking them to take on students, but some 20 or 30 trainees would still not find a placement at the end of the year.

The challenge in finding placements for students is largely due to the fact that the number of large companies is increasing at a slow pace, and also to the fact that there are no formal guidelines or government regulations for the placements process, and SMEs have many expenses so they cannot always take on trainees. Training providers would like to have formal apprenticeship and partnership agreements with industry that are regulated by the government, as well as policy incentives for SMEs (e.g. subsidies or tax exemptions) to take on trainees.

Currently, as no formal guidelines or regulations exist regarding industry-TVET provider partnerships, TVET providers' management plays a crucial role in establishing strong partnerships with industry. One important challenge that has been cited is that managers of TVET schools and centres often come from a general education background and not from the TVET sector, so they do not understand the concept as well, and they do not know how to build solid linkages with the private sector.

10. Skills training for employment promotion initiatives

The informal sector and informal employment still accounts for the largest share of employment in the Lao People's Democratic Republic. Most of the rural workforce is engaged in informal agricultural activities. Indeed, a large share of the vocational training that takes place in the Lao People's Democratic Republic is in agriculture. The LFS 2010 results indicated that agriculture and livestock was the main field of training of the largest share (12.5 per cent) of trained people in the country (figure 2). There was a problem with the survey question, however, and it is likely underestimating the actual share of agriculture in skills training, which is estimated to be close to 50 per cent. Indeed, there is very high demand for training in agriculture, where only 30,500 workers out of more than 2 million workers in the sector have ever received TVET (table 4).

As is the case for agricultural workers, a large number of workers in the handicrafts industry are weavers or own-account workers who work from home, often in the villages, and receive little training. These weavers work alone or in groups, and work for short terms without employment contracts for SMEs or other “middle men” who purchase their products and resell them in the market.¹⁴ In terms of skills training for the handicrafts industry, a gap remains for these weavers in the provinces, more so than in Vientiane, where training has been conducted and the quality of products has generally improved.

Another industry with a large informal-sector component in the Lao People’s Democratic Republic is restaurants, which, unlike the hotels industry, where a number of larger companies operate, consists mainly of SMEs and family businesses with limited resources for, and access to, training.

A major initiative that targeted the informal sector in the Lao People’s Democratic Republic with vocational training, with the objective of employment promotion, was the BAFIS project, run by GTZ.¹⁵ This project has been over for many years, but based on the BAFIS experience, the NFED of the MOES has been delivering basic vocational skills training through the CLCs. There are a few hundred of these community-based centres across the country, but they have very limited capacity and resources for training provision. Nevertheless, they represent an important structure and network. Skills development in the non-formal education stream, life-long learning, and the constant training and re-training of workers will also be more important in the context of the AEC, particularly because some of the neighbouring countries like China and the Republic of Korea are very strong in this area.

The ILO has also started a “Know About Business” (KAB) programme in one of the vocational schools under the MOES. The programme was found to be very useful, and the MOES decided to integrate it into the regular curricula in all high school across the country. The ILO helped the MOES revise the KAB curriculum to make it more relevant to the local context, and to implement it in five schools. Indeed, the integration of the ILO KAB course in all of the training curricula was mentioned in the TVET Master Plan under the promotion of self-employment initiatives. The MOES began drafting an implementation plan to scale up to the national level, but could not do so because of a shortage of funds. The ILO subsequently funded the implementation of the KAB, but only in the schools of one province, within the framework of an ongoing ILO project to improve overall working conditions (training and productivity, among other things).

The Master Plan also mentions the need to include short courses for skills development in the informal economy, within poverty reduction programmes, and recommends reviewing the

¹⁴ In terms of the formal/informal sector division in the handicrafts industry in the Lao People’s Democratic Republic, three types of entities can be distinguished:

1. The individual weavers – self-employed, work from home, often in the villages, alone or in groups, who design, weave, and sell their products to the middle men, who are described in (2) and (3), and are usually not registered, i.e. informal employment.
2. The middle men, who do not produce (do not weave) any handicrafts, but buy them from the weavers and sell them in the markets (local and export). These are registered (formal sector).
3. SMEs who are mostly members of the LHA. Their products tend to be of higher quality than for (2); they also tend to participate in trade fairs abroad, and similar events. They are involved in designing, weaving, marketing, and selling their own products, and also buy and resell finished products from small-scale weavers (1). They are also registered (formal sector). During their first two years of operation, SMEs do not need to register with the district offices, and are therefore exempt from paying taxes. This is a policy incentive for the establishment of SMEs, as it gives them more time to set up their operations, hire workers, and maybe scale up before they have to begin paying taxes.

¹⁵ BAFIS is the German acronym for Occupation-oriented Vocational Education and Further Training for Target Groups from the Informal Sector (Beschaeftigungsorientierte Ausund Fortbildung fuer Zielgruppen aus dem Informellen Sektor).

Training for Rural Economic Empowerment (TREE) Programme of the ILO, and adapting it to the local context.

11. Technical cooperation projects and education on TVET

There has been significant donor involvement in the TVET sector in the Lao People's Democratic Republic in recent years. The largest project in scope is undoubtedly the ADB's S-TVET, which has been in place since 2010 and seeks to improve the quality of, and access to, formal TVET in the Lao People's Democratic Republic, focusing on certificate and diploma courses. The project's expected impact is a more highly skilled and diverse workforce in the country. The main performance target is to increase the number of workers with formal TVET qualifications by 25 per cent overall (and 50 per cent for females) between 2011 and 2021. Its expected outcome is a TVET system that is more accessible and more responsive to labour market needs. The project's expected outputs and components are described in Table 6 below.

Table 6. ADB S-TVET project, expected outputs and components

1. Improved TVET quality	Improving quality of formal TVET in four skills areas by: <ul style="list-style-type: none"> - developing national skills standards; - improving curricula and TVET packages based on national skills standards; - enhancing teacher standards and strengthening TVET pre-service and in-service teacher training; - enhancing career counselling and vocational guidance at the seven public and four private TVET institutions; - initiating a social marketing campaign to promote TVET; and - upgrading equipment and facilities at the seven public TVET institutions for their programmes in the four priority skills areas, at the VEDC and the Polytechnic College.
2. Increased and more equitable access to TVET	Increasing access to formal certificate and diploma TVET for students from remote areas, including girls, by: <ul style="list-style-type: none"> - providing training assistance vouchers to TVET trainees; - increasing access for students, particularly girls, from remote areas by financing the construction of student-friendly dormitory facilities; and - broadening access to vocational training by supporting a review of TVET certificate entry qualifications, procedures for recognizing prior learning, and special assistance programmes.
3. Increased private-sector involvement in TVET strategy and delivery	Increasing private-sector involvement in TVET strategy and delivery, by: <ul style="list-style-type: none"> - strengthening the NTC-PO and increasing its private-sector focus; - establishing or strengthening industry-based trade working groups (TWGs) for the four priority skills areas; - establishing advisory boards at the seven public TVET institutions with at least 25 per cent private sector and 25 per cent female representation; - introducing a contracting scheme for private firms for the delivery of training to teachers and students in specialist skills areas; and - introducing a contracting scheme with private TVET institutions to deliver training to students across a range of skills areas.
4. Improved management and governance of the TVET system	Improving management and governance of the TVET system, by: <ul style="list-style-type: none"> - reviewing and strengthening the policy and regulatory framework for TVET, including increasing flexibility in employment arrangements for TVET teachers, and introducing a unit cost funding system for TVET; - improving quality assurance in the seven public TVET institutions, four private TVET institutions, and the VEDC; - strengthening TVET information systems by developing an education management information system; - establishing an LMIS, including the design and system development, and strengthening capacity to operate and maintain the system; and - strengthening the capacity of management in the MOES's TVET department, VEDC, and the public and private TVET institutions.

Source: ADB S-TVET Project Administration Manual, 2010.

Before the S-TVET project, Germany had been the most-involved donor in the Lao People's Democratic Republic's TVET sector. In particular, Germany has provided technical assistance for the review of the regulatory framework, for public-private cooperation, IVET, and capacity development for TVET staff. GTZ has provided experts for the IVET schools, and contributed financially in the construction of buildings and procurement of equipment for IVET schools in six of the northern provinces. DVV International (the Institute for International Cooperation of the German Adult Education Association [Deutscher Volkshochschul-Verband e.V.]) also provides support, and is currently implementing an EU project (2013–15) in non-formal vocational training (short-term courses, namely life skills and NFE for agriculture), and uses the IVET facilities. Previously, DVV International was involved in TOT at the National University's Faculty of Engineering, but now this is done by GTZ. Furthermore, GTZ is currently supporting the development of the new TVET law.

AusAID is providing assistance with education-sector reform. Luxembourg has also been involved in TVET for several years, and has financially contributed to the development of the TVET school in Khammouane Province, and is currently involved in assisting the tourism and hospitality sector in establishing its own training institution. The Republic of Korea has also been involved by supporting the establishment of the LKSDC and the development of competency standards.

The United Nations Industrial Development Organization (UNIDO) and the United Nations Development Programme (UNDP) have also been involved in training in specific sectors, such as garments, wood processing, and agro processing. UNESCO has been involved in the development of an NQF and the promotion of non-formal and informal training. Specifically, UNESCO has provided funding to a project with the NFED, offering vocational skills training (short-term, non-degree) for the out-of-school population (e.g. skills in growing mushrooms). The NFED conducts the training from CLCs, which are essentially small houses in local communities, where they provide life-long learning activities.

The ILO has been involved in supporting competency standards development at the MOLSW, the establishment of employment services at the provincial level, and through the KAB programme.

Given the large number of donors involved in TVET, the scope of the work to be done in the sector within a relatively short timeframe, donor coordination and communication is a key issue in order to avoid duplication.

12. Recommendations

This assessment study has identified a number of challenges in TVET in the Lao People's Democratic Republic, as well as government and donor initiatives to address many of these. The recommendations listed in this section will focus on the remaining gap areas.

Skills training in rural areas for agricultural workers and handicrafts workers (weavers) in the informal sector

The first gap area is the limited access to skills training by rural people in remote areas, and those employed in the informal sector. Specifically, there is a need to reach the rural workforce engaged in subsistence agriculture, and provide them with skills development. This could be done by expanding agriculture programmes (e.g. using the curricula of the training centres under the Ministry of Agriculture) to all institutions and training centres in the provinces. Alternatively, short courses could be delivered at the CLCs in the provinces. A TOT programme in agriculture could be provided in each province, and trainers would then be sent across the province to deliver

training to the local populations. A similar approach could be used to reach weavers in the provinces, and provide them with training.

Scaling up the KAB programme at the national level

The KAB programme has already been adapted to the local context and is being piloted in one province. Financial and technical support can be provided to scale up the programme to the national level, as recommended in the TVET Master Plan.

Policy support for SMEs to train their workers and to take on interns or apprentices

Another gap area is the limited access to skills training for SME workers, particularly in some sectors like restaurants. Support can be given to industry organizations, for instance, to provide training for SME workers. The government could develop guidelines and legislation regarding industry-TVET institution agreements and apprenticeship practices, and provide policy incentives for SMEs to take on apprentices.

Training of TVET school managers in TVET concepts and approaches

A capacity-building workshop can be organized to train TVET school managers in TVET concepts and approaches (CBT and module-based curricula among other things) and in building and maintaining linkages with private companies.

Capacity building for labour market information and analysis (LMIA) at the MOLSW

The ADB will be providing capacity building for the LMIS unit in terms of data collection, processing, and dissemination. However, additional training activities around LMI and analysis could be organized.

References

Asian Development Bank (ADB). 2010. *Lao People's Democratic Republic: Strengthening Technical and Vocational Education and Training Project*, Project administration manual (Manila).

Ministry of Education and Sports (MOES). 2007. *Strategic Plan for the Development of Technical and Vocational Education and Training from 2006 until 2020* (Vientiane).

Ministry of Education and Sports (MOES). 2008. *Master Plan: Development of TVET from 2008 until 2015* (Vientiane).

Ministry of Labour and Social Welfare (MOLSW). 2009. *Labour Law of the Lao People's Democratic Republic* (Vientiane).

Ministry of Labour and Social Welfare (MOLSW). 2011. *Decree on Technical and Vocational Education and Training and Skills Development* (Vientiane).

Annex 1 List of interviewees

In-person interviews:

Ms Bournlivone Phafong, Director of the Garment Textile Training Centre.

Mr Hansana Sisane, President of the Lao Handicraft Association.

Mr Onesy Boutsivongsackd, President of the Lao Textile Association.

Mr Phouvanh Chanthavong, Director of skills development and employment, MOLSW.

Director of the Lao-Korean Skills Development Centre.

Ms Chanthachone Vongsay, Vice President of the Lao Businesswomen's Association.

Mr Somlith Virivong, Director of the Lao-German Technical School.

Deputy Director-General of the Youth Development Department, the Lao Youth Union.

Deputy Director of the TVET Department, MOES.

Mr Somboun Phasouvan, Director of UNESCO Project, MOES.

Dr Phouvong Fafeaugchan, Director-General of the Lao Federation of Trade Unions Training Centre.

Mr Khamsant Philaphandeth, President of KP Group Company, at KP Company.

Mr Oudet Souvannavong, Vice President of the LNCCI.

Questionnaires:

Loung Nam Tha Province Vocational Training Centre.

Bolikhamxay Province Training Centre.

Champasak TVET School.

Hoaphanh Vocational Training Centre.

Annex 2 Questionnaires for TVET centres in the provinces

A. General

1. How long has this centre been established?
2. How was it established? Through grant or donor fund? Is it under the MOES or MOLSW?
3. What training programmes are provided? What occupations or trades?
4. What is the duration of the programmes and the skills level associated with them?
5. How many trainees are there annually?
6. How many teachers/staff?
7. How is the centre managed? Is there a board of directors? Does it report to a ministry?

B. Quality of training

1. Are the facilities and equipment used adequate?
2. Are the courses module-based, using different modules?
3. Are the courses and curricula based on national, regional, or international standards?
4. Does the centre use performance indicators to monitor progress? In particular, does it monitor:
 - a. Drop-out rates?
 - b. Graduation rates?
 - c. Employability rate of trainees who complete the programmes?
 - d. Unit cost of training? Average training cost per student?
5. Does it report on these indicators? Example: does it have an annual report? To who is it submitted?

C. Training funding

1. How are the training costs covered? By government? Through fees paid by students?
2. Is the budget sufficient to cover training costs and update equipment?
3. Is the centre allowed by law to generate its own revenue in the market? Through fees or by charging companies for the services performed by students?

D. Private-sector links

1. Does the centre have partnerships with private-sector companies?
 - a. For student placements/internships/apprenticeship?
 - b. To employ students after graduation?
2. Do private companies participate in the development of curricula?
3. Do private companies provide any funding or support through donations of equipment and other items?

E. Access and equity

1. Who are the students? In general, are they secondary school graduates? Are they poor? Are they retired people that want new skills?

2. Does everybody have equal access to the training provided? Are there any groups that are excluded or disadvantaged (for example, women or ethnic minorities)?
3. Do the training costs constitute a barrier for anyone who wants to be trained at the centre?
4. Are training arrangements flexible? Do they allow a balance between working and studying?

F. Laws and legislation

1. Are the labour and education laws clear when it comes to TVET and issues that concern the centre?
2. Do these laws provide an enabling environment for the centre to operate?
3. Do the laws pose any challenges, or are there elements of the laws that should be changed?

G. Trends

1. What trends have you observed in recent years in terms of enrolment rates? Programmes of study? Graduation rates? Employability rates?

Mongolia:

An assessment of the TVET system in Mongolia: Policies, structure, outputs, implications, and recommendations for the country's employment and socio-economic development

Souleima El Achkar Hilal
June 2011

1. Introduction

1.1 Background and objectives of the study

In the aftermath of the recent global economic crisis, labour markets around the world continue to face challenges. While many countries have experienced a recovery in terms of output growth, employment growth continues to lag behind. One of the reasons behind this lag is the existence of a skills mismatch, which occurs because the skills that job-seekers possess (skills supply) do not meet the requirements of employers (skills demand). In this situation, there can be both high unemployment and labour shortages, both of which constitute major constraints to economic growth and poverty reduction.

The Global Jobs Pact (GJP), launched at the International Labour Conference in 2009, in order to assist countries in achieving a job-rich recovery, highlighted the critical role that skills development plays in improving productivity and employability, and in addressing the skills mismatch issue. Many countries have attempted to address this issue by improving industry participation to make the skills development system more responsive to market demand.

In February 2011, a Regional Workshop on Addressing Skills Mismatch through Public-Private Partnerships was organized by the ILO Regional Skills Programme and the Japanese Ministry of Health, Labour, and Welfare (MOHLW), to share experiences and best practices. Issues discussed in the workshop included developing effective partnerships between employers, workers, and government to address the skills mismatch; to improve TVET and workplace learning; the role of PPPs; and promoting inclusive approaches to address the needs of gender and vulnerable groups. The workshop was attended by tripartite delegations from Asia-Pacific countries including Mongolia. At the end of the workshop, an action plan was proposed by each country.

This study is conducted for the ILO, under the first activity listed in the proposed action plan, which involves assessing the current status of skills development in Mongolia in the framework of the GJP, including the legal framework and implementation system, PPP involvement in TVET, and the capacity of social partners to determine future actions.

The objectives of this study are to provide a critical assessment of the current state of the TVET system in Mongolia, its social and labour-market implications, to identify potential areas that need to be addressed, and to provide recommendations for strategies and actions. The recommendations are to serve as inputs into the country's GJP and the ILO's strategy on skills and employability under Mongolia's DWCP, and to provide guidance in developing action proposals and technical cooperation projects.

1.2 Methodology

The study is based on both primary and secondary information, involving a desk review and stakeholder interviews. Data was collected from available reports and databases, and compiled from labour force survey (LFS) and household income and expenditure survey (HIES) micro datasets.

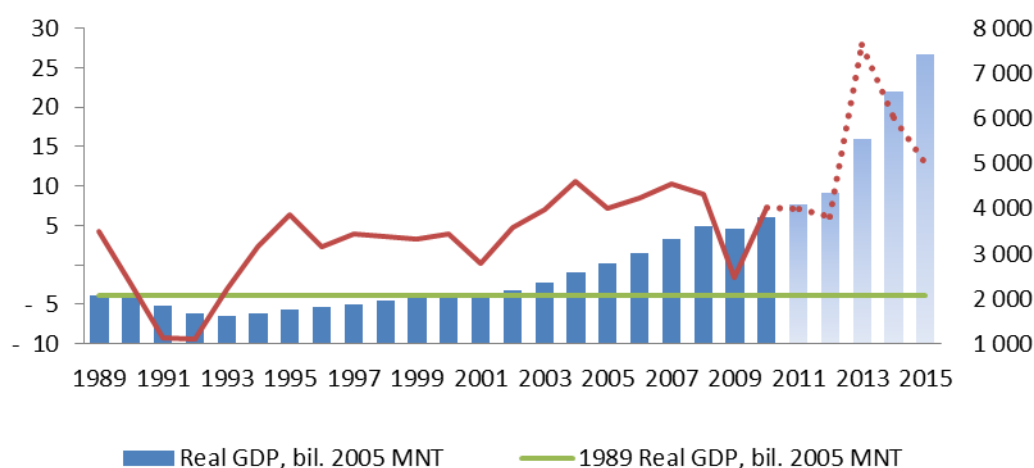
Meetings and interviews were conducted with key stakeholders and institutions, including relevant government departments and agencies, representatives of employers, unions, and training institutions, and international organizations. A list of the people and organizations interviewed is available in Annex 1.

2. Mongolia's labour market and skills demand

2.1 Economic situation and labour-market situation

The transition from a centrally planned to market economy has been challenging for Mongolia, and has had significant social and labour-market consequences. Before the transition, every working-age citizen in Mongolia was provided with employment, social protection, and benefits. During the transition, structural adjustment resulted in a number of public enterprises closing down, and a removal of subsidies and social safety nets. During the first years of the transition, economic growth plummeted and unemployment increased. Many people who lost their jobs and found themselves without social protection started small businesses as own-account workers, leading to a rise in the number of workers in vulnerable employment and in the informal sector, characterized by low productivity and poor working conditions.

Figure 1. Real GDP and real GDP growth rate for Mongolia, billion 2005 MNT, 1989–2015*



*Estimates and projections start after 2009.

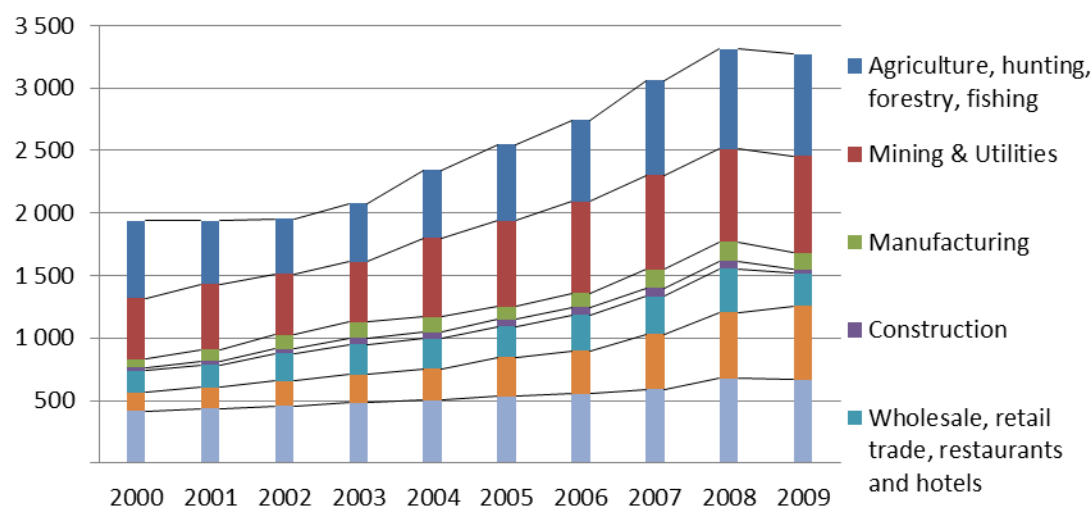
Source: International Monetary Fund (IMF), World Economic Outlook (WEO), October 2010.

Although positive growth resumed by 1994, it took another six years for Mongolia's GDP to return to its 1989 level, as shown in figure 1. Between 2002 and the onset of the recent global economic crisis in 2008, Mongolia had very high economic growth rates, driven largely by a boom in the mining sector, and by steady growth in agriculture. However, growth in other sectors that have the potential to generate productive employment, such as manufacturing, has been slow, as shown in figure 2.

In Mongolia, which has a very small proportion of arable land, the agriculture sector consists mainly of animal husbandry and herding. In recent years in particular, the high economic growth rates have been largely due to increased world prices of minerals and agricultural raw materials. Between 2002 and 2008, Mongolia's employment growth (average annual rate of 1.3 per cent) was considerably slower than output growth (average annual growth rate of 8.8 per cent), as reflected by the high labour productivity growth (average annual growth of 7.3 per cent) during this period. Despite the rise in

productivity, and a small decrease in the vulnerable employment rate, the share of workers in vulnerable employment remained high (57.5 per cent in 2008, down from 60.1 per cent in 2002).¹⁶ This suggests that recent economic growth has not created decent and productive employment opportunities on a sufficient enough scale to reduce poverty.

Figure 2. Value added by economic activity, billion 2005 MNT, 2000–09



Source: Mongolia National Accounts Data, NDIC.

In 2008, nearly 900,000 people, or approximately 35 per cent of the population, were living below the national poverty line.¹⁷ The working poverty rate was 32 per cent, which means that almost one-third of Mongolia's workers were living with their families below the national poverty line. This suggests a high incidence of vulnerable, low-productivity employment. Mongolia's poverty rate is likely to have increased to 38.7 per cent in 2009, due to the economic crisis and to the occurrence of a severe *dzud* (severe winter) that resulted in the loss of 22 per cent of the country's livestock.¹⁸ The heavy reliance of Mongolia's economy on the mining and animal husbandry sectors make it highly vulnerable to economic shocks in terms of world price fluctuations and natural disasters such as droughts and *dzud*, with significant implications in terms of employment and poverty.

In 2008, there were approximately 1.7 million people of working age in Mongolia, of whom 28 per cent were youth (between the ages of 15 and 24), and 72 per cent were adults. A relatively young workforce and a working-age population that has been growing faster than the overall population (due to high fertility rates in the 1970s and 1980s) is referred to as a "demographic window" in Mongolia. The changing age structure presents both opportunities (increased labour supply) and challenges (job

¹⁶ LFS, 2002–03 and 2008–09.

¹⁷ HIES, 2007–08. Note that poverty rates calculated at the \$ 1.25/day and \$ 2.00/day international poverty lines for Mongolia are significantly lower (1.7 per cent at the \$ 1.25/day line, and 12.6 per cent at the \$ 2.00/day line in 2008). This may simply be due to the fact that although poverty is widespread, there is little extreme poverty in Mongolia, and almost everyone has a minimal social floor (for instance, each citizen receives a certain amount every month, which the government distributes from mining revenues). It may also be that the purchasing power parity (PPP) conversion factor for Mongolia is not adequately reflecting the cost of living in the country. The World Bank's International Comparison Programme (ICP) is currently in the process of reviewing the PPP conversion factor for Mongolia.

¹⁸ ILO: *Mongolia country paper for the ILO-Japan Regional Workshop*.

creation for the new labour-market entrants). In recent years, employment growth has not kept up with working-age population growth, as reflected by a small decrease in the employment-to-population ratio (EPR) from 56.0 in 2002 to 55.0 in 2008, as shown in table 1.

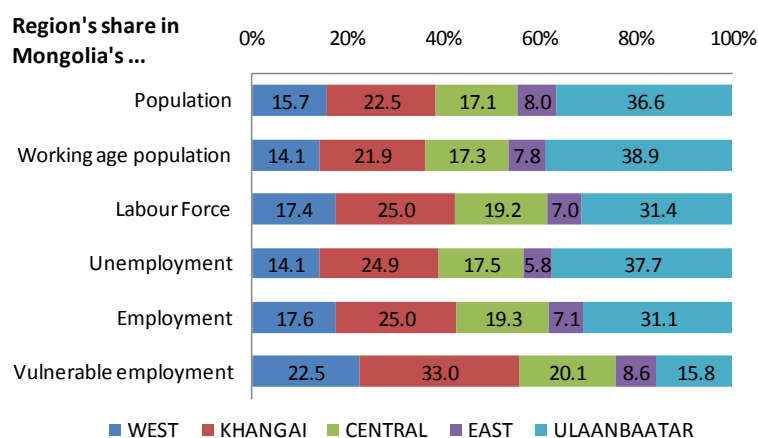
Table 1. Selected labour-market data, 2008

	Urban	Rural	Male		Female		National	
	Total (15+)	Total (15+)	Youth (15-24)	Adults (25+)	Total (15+)	Youth (15-24)	Adults (25+)	Total (15+)
Employed	459 474	474 385	76 111	411 099	487 210	62 303	384 345	446 648
Unemployed	42 717	15 412	8 132	20 662	28 793	7 504	21 832	29 336
Labour force	502 190	489 797	84 243	431 761	516 004	69 806	406 177	475 983
Not in labour force	510 944	193 647	155 649	141 012	296 660	172 392	235 539	407 931
Working-age Population	1 013 135	683 443	239 892	572 772	812 664	242 198	641 716	883 914
EPR	45.4	69.4	31.7	71.8	60.0	25.7	59.9	50.5
UR	8.5	3.1	9.7	4.8	5.6	10.7	5.4	6.2
LFPR	49.6	71.7	35.1	75.4	63.5	28.8	63.3	53.8

Source: LFS, 2008–09.

In 2008, the labour-force participation rate (LFPR) was 63.5 for men and 53.8 per cent for women; in total nearly 59 per cent of the working-age people in Mongolia were economically active (table 1). The LFPR is also higher in rural areas (71.7 per cent) than in urban areas (49.6 per cent), due to a relatively high employment rate among nomadic herding households, and more limited access to education. Indeed, unemployment is relatively lower in rural areas, at 3.1 per cent in 2008, compared to 8.5 per cent in urban areas. At the national level, the unemployment rate was 5.6 per cent.¹⁹ Unemployment incidence in Mongolia is higher among women than men, and higher among youth than adults.

Figure 3. Regional distribution of labour-market variables, 2008



Source: LFS, 2008–09.

¹⁹ Calculated from the 2008–09 LFS according to the ILO definition. This rate is significantly lower than that reported by the Ministry of Social Welfare and Labour (MSWL), which is based on the number of unemployed persons registered in employment offices.

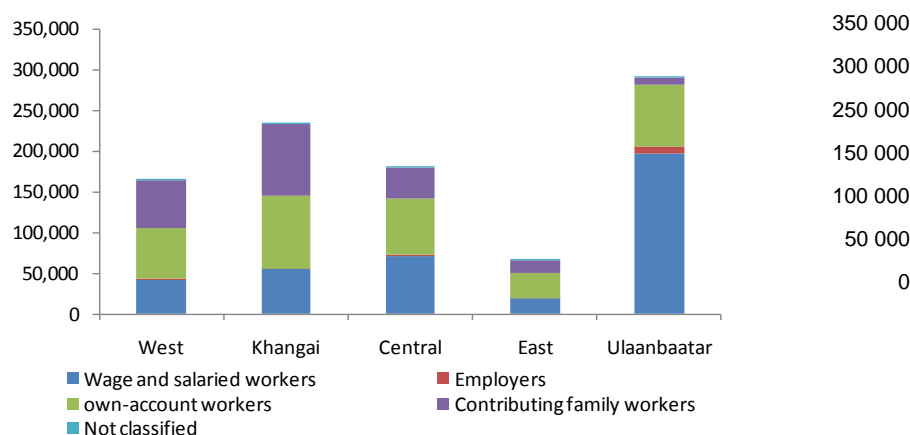
Mongolia is divided into five regions and 22 major administrative units, including the capital, Ulaanbaatar, and 21 *aimags* (provinces). Mongolia has seen significant rural to urban migration in recent years. A large number of low-skilled young people are migrating to urban areas, which poses labour-market challenges. These young migrants face difficulties finding work, and become unemployed, or take on low-productivity work in the informal sector. In 2008, 74 per cent of Mongolia's population lived in urban areas, and nearly 37 per cent lived in Ulaanbaatar, as shown in figure 3. Outside the capital, however, approximately two-thirds of the population lived in rural areas, as shown in Table 2. The regions, therefore, have a lower unemployment rate than the capital, and a higher employment-to-population ratio. The vulnerable employment rate is considerably higher for the regions, where a high proportion of the population are own-account workers or contributing family workers employed in herding households (table 2). In Ulaanbaatar, wage and salaried workers represented 68 per cent of employment, as shown in figure 4.

Table 2. Selected labour-market indicators by region (%), 2008

	Urban share of population	LFPR	EPR	UR	VER
West	29.9	72.1	68.7	4.7	73.6
Khangai	34.6	66.7	62.8	5.8	76.0
Central	33.5	64.9	61.4	5.3	60.0
East	32.5	52.4	49.9	4.9	70.1
Ulaanbaatar	100.0	47.3	44.0	7.0	29.2

Source: LFS, 2008–09.

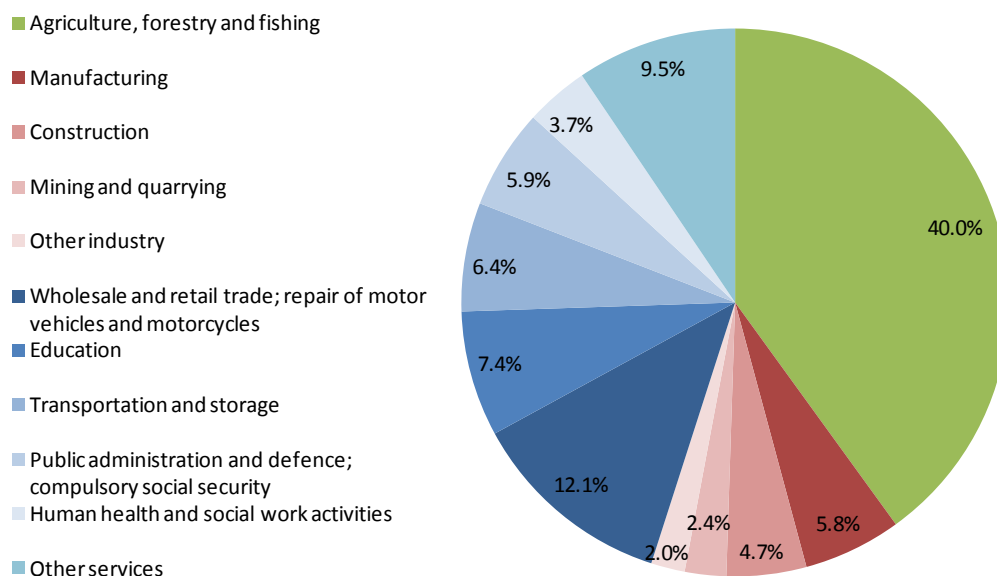
Figure 4. Employment by status distribution by region, 2008



Source: LFS, 2008–09

The agriculture sector (animal husbandry and herding) remains the most significant sector in terms of employment. In 2008, 40 per cent of workers in Mongolia were employed in agriculture, forestry, and fishing, and approximately 15 per cent were employed in industry, including 5.8 per cent in manufacturing, 4.7 per cent in construction, and 2.4 per cent in mining. Employment in the mining sector has increased in recent years, and is expected to increase at a higher pace in the coming years.

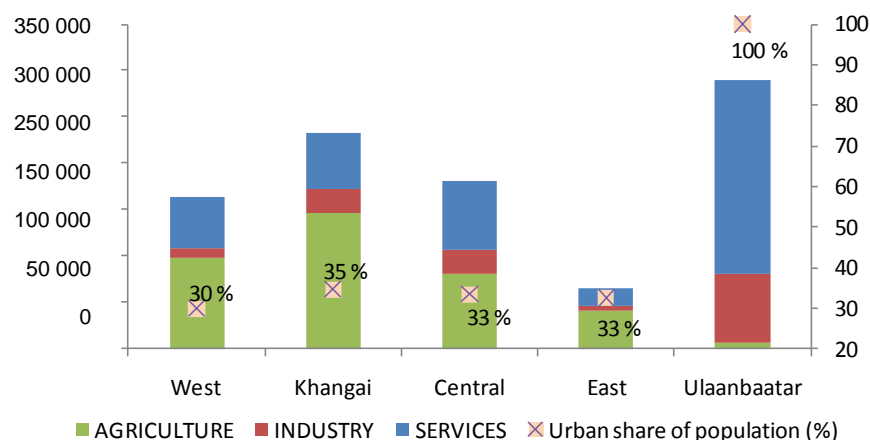
Figure 5. Employment by economic sector, 2008



Source: LFS, 2008–09

The services sector accounted for 45 per cent of the country's employment in 2008, including 12 per cent in wholesale and retail trade, 7.4 per cent in education, 6.4 per cent in transportation and storage, 5.9 per cent in public administration and defence, and 3.7 per cent in health and social work, as shown in figure 5.

Figure 6. Employment by broad economic sector, by region, 2008



Source: LFS, 2008–09

In the West, East, and Khangai regions, approximately 60 per cent of workers were employed in agriculture, approximately 30 per cent in services, and approximately 10 per cent in industry, as shown in figure 6. In the Central region, workers in agriculture accounted for 45 per cent of

employment, workers in services accounted for 41 per cent of workers, and the remaining 14 per cent were employed in industry. Finally, in Ulaanbaatar, 72 per cent of workers were employed in services, 26 per cent in industry, and only 2 per cent were employed in agriculture.

2.2 Mongolia's growth outlook and skills demand

Mongolia's economic growth was expected to return to its pre-crisis levels between 2010 and 2012, and to be in the two-digit levels between 2013 and 2015 (figure 1), when the large mining projects began operating. A significant amount of investment of nearly US\$10 billion (twice the country's GDP), mainly in the form of foreign direct investment (FDI) and PPPs, are forecast over the next five years, in the mining and related sectors. The lack of human resources has been identified as a constraint to growth, however. Mongolia's mid-term, five-year plan, entitled the National Priorities for Economic and Social Development for 2010–15, was prepared by the National Development and Innovation Committee (NDIC). The plan has identified the following five priority areas:

- a) development of the mining sector through the exploitation of large mining resources and the building of the bases for heavy industry;
- b) intensification and modernization of agriculture, not least animal husbandry, and implementation of an industrialization policy;
- c) infrastructure development;
- d) human development and environmentally sustainable development; and
- e) improved governance, business environment, and private-sector support.

The challenge for Mongolia in the coming years is to improve its competitiveness and to avoid a “resource curse” scenario. In addressing this challenge, the plan highlights the importance of human resource development, innovation and technology, as well as economic diversification, export promotion, and import substitution. Mongolia must be proactive in responding to the implications of growth driven by the mining sector, not just in terms of demand for mining skills and TVET. Economic diversification, in particular, will be important for Mongolia, to reduce the country's vulnerability to economic shocks, and to broaden employment creation. Revenues from mining are also expected to improve the budget balance, and are to contribute to the modernization of the economy. Under the Law on the Human Development Fund, approved in November 2009, a share of mining profits is distributed to every citizen in Mongolia.

Mongolia has a young workforce that needs to be trained and provided with skills so that it can be used efficiently. Although a plan for national human resource development has not yet been prepared, the NDIC has been working in collaboration with the Ministry of Education, Culture, and Science (MECS) and the Ministry of Social Welfare and Labour (MSWL) in addressing this issue.

2.2.1 Current versus future skills demand

Currently, the mining sector has a significant and urgent need for a skilled workforce, which is not being met by the skills supply available in Mongolia. As a result, a large number of skilled workers in the mining sector, such as heavy machinery operators and conductors, are being brought in from China and elsewhere, despite the fact that there are unemployed workers who expect to find employment in occupations in Mongolia.

One reason for this skills mismatch problem is the low quality and employability of graduates from TVET programmes, who often lack “employability skills” such as communication skills, interpersonal relationship skills, teamwork ability, language proficiency, computer literacy, and “soft skills” or “people skills” such as discipline, flexibility, responsibility, commitment, and a positive attitude.

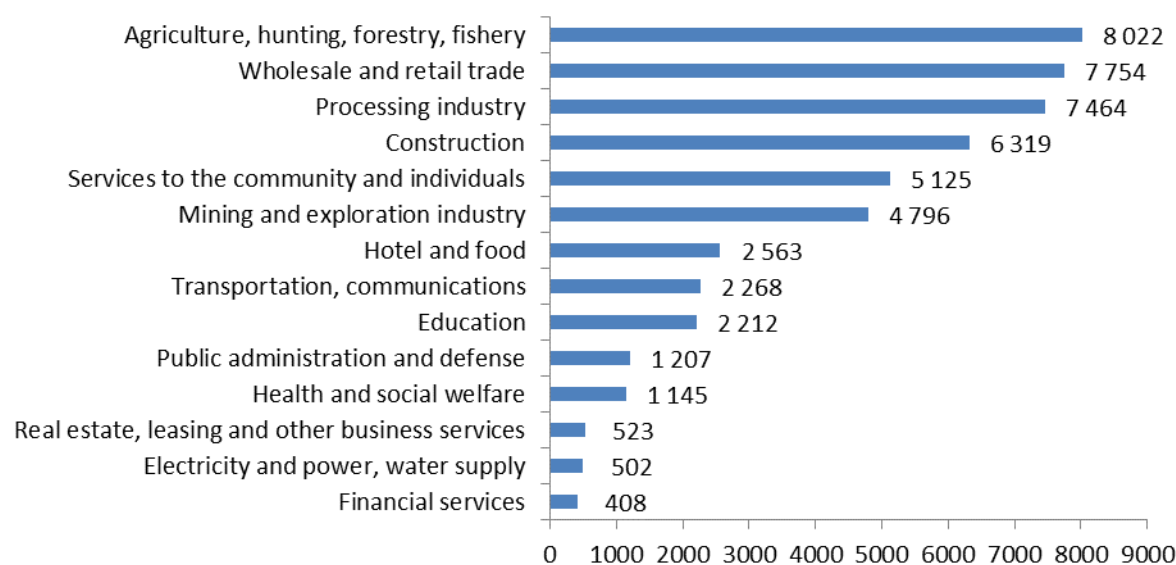
Employers argue that these skills are sometimes even more important than technical skills, which can be improved through on-the-job training and experience; employability skills are more difficult to develop if they are not already established.

The limited employability skills of TVET graduates in Mongolia is one of the reasons that employers prefer to hire workers from abroad; for instance, not only do Chinese workers require lower salaries, they also tend to be more disciplined. On the other hand, a “brain drain” problem has been observed among Mongolian workers who do possess these skills; they leave to work abroad, where they can receive higher pay.

A labour-market study conducted in 2010, funded by the Millennium Challenge Account, indicated that 7,500 workers would be needed in Mongolia in the coming months, and identified 20 occupations as being most in demand. Among these occupations, at least eight were linked to the mining and construction sectors, including mining engineers; motor vehicle mechanics; bus, heavy truck, and lorry drivers; plasterers; cabinet makers; plumbers; electricians; welders; bricklayers; and concrete placers.

In the long-term however, the capital intensive mining sector has limited employment generation potential. More significant employment creation is expected along the mining supply chain however, and through spill-over effects to related sectors in industry and services, including the creation of a number of SMEs. For instance, in light industry, knitting and sewing in particular have picked up due to a demand for mining uniforms and apparel, etc. But this industry has high turnover, due to low pay and poor working conditions, a cyclical demand and other factors, and does not create sustainable jobs. Several services industries and occupations (including restaurants and hotels, drivers, barbers, equipment repair, camping services, petrol services) are also growing, but are also subject to cyclical fluctuations in terms of employment. In terms of sustainable higher productivity jobs, some progress has been noted in the banking sector, in construction and in the electricity sector.

Figure 7. New jobs by economic sector in Mongolia, 2009

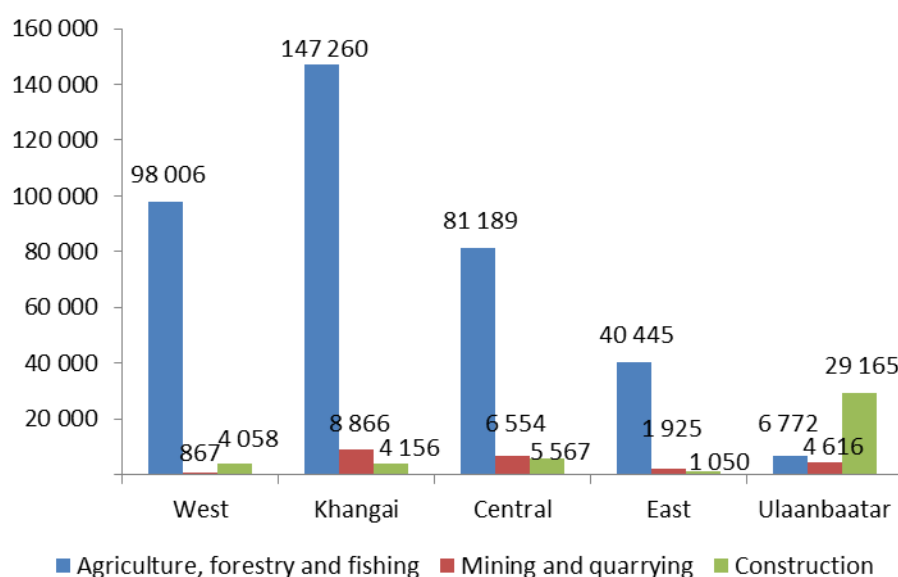


Source: MSWL, Annual Report, 2009.

Out of the 50,000 or so new jobs registered with the MSWL in 2009 (through www.ejob.mn) 16 per cent were in agriculture, hunting, forestry, and fishery (approximately 8,000 jobs); some 15 per cent were in wholesale and retail trade; and another 15 per cent were in the processing industry, as shown in figure 7.

The construction and mining sectors accounted for 13 per cent and 10 per cent of new jobs, respectively. The animal husbandry and herding sector, and related industries such as food processing, cannot be ignored in terms of employment generation potential in Mongolia. Figure 8 illustrates employment by region in agriculture, relative to the two growing industries of mining and construction. In 2008, nearly 8,900 workers were employed in mining in the Khangai region, approximately 6,500 in the Central region, and 4,600 in Ulaanbaatar. Almost 30,000 workers were employed in construction in the capital region, 5,600 in the Central region, and some 4,000 in each of the West and Khangai regions.

Figure 8. Employment in agriculture, mining, and construction, by region, 2008



Source: LFS, 2008–09.

The emphasis on having the TVET system in Mongolia meet immediate market demand is causing a concern among some stakeholders. Because of a time lag between enrolment in education and training programmes and completion of the programmes and labour market entry, a focus on meeting immediate skills demand can result in a mismatch in the longer run. For instance, if many TVET programmes focus on the current needs of the mining industry at the expense of other industries, and subsequently the mining sector slows down, then Mongolia would have an oversupply of skilled mining workers and a shortage of skilled workers in other sectors.

Although the two objectives of reducing unemployment in the short-run and ensuring that skills training is consistent with the country's long-term development plans are not mutually exclusive; there can be a trade-off between them to some extent; care should be taken to ensure that one objective is not pursued at the expense of the other. Specifically, there is a need to ensure that “demand-driven” TVET refers to training that is consistent with both current demand and future demand, as determined

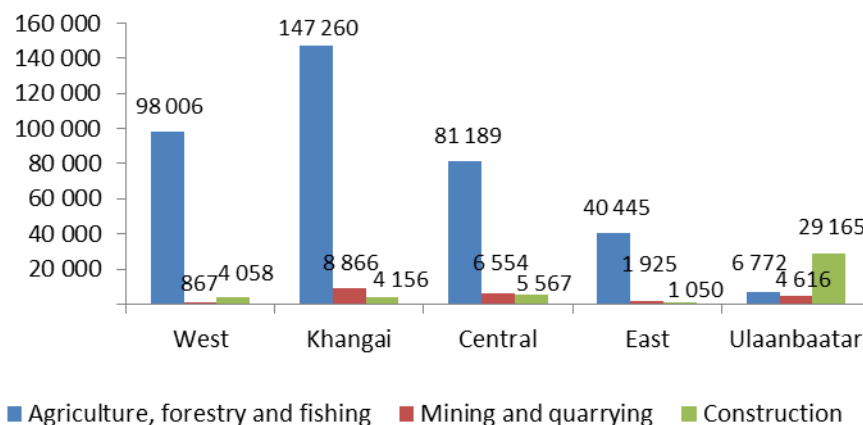
by economic and employment trends and strategic development objectives, including economic diversification.

2.3 TVET trends

This section describes TVET trends based on statistics from the MECS. The data therefore refers to the TVET institutions that are part of the formal education system in Mongolia. The country's TVET system includes a large number of TVET and skills training centres that are outside the formal education system, and are therefore not included in MECS statistics.

The number of TVET institutions (formal education sector) and student enrolment in these institutions has increased significantly in recent years. The number of public TVET institutions increased from 35 to 44, in between 2005 and 2010, and the number of private institutions grew from 3 to 19 during this period, as shown in figure 9.

Figure 9. Number of private and public TVET institutions and enrolment figures, 2005–10

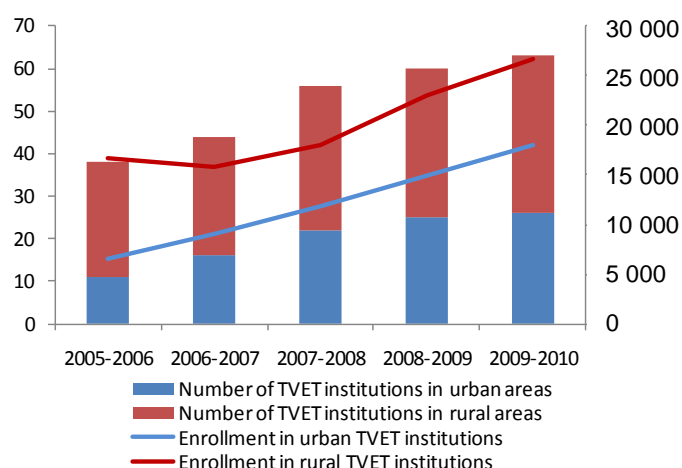


Source: MECS Education Statistics, 2009–2010.

The number of students enrolled at public TVET institutions increased at an average annual rate of 11 per cent during this period. The number of students enrolled in private institutions went from less than 1,000 in 2005–06 to 11,300 in 2009–10.

The recent growth in TVET institutions and student enrolment took place in both urban and rural areas, but has been more significant in urban areas. In 2005–06, nearly 30 per cent of TVET institutions were in urban areas, a share that increased to approximately 40 per cent in 2009–2010, as shown in figure 10.

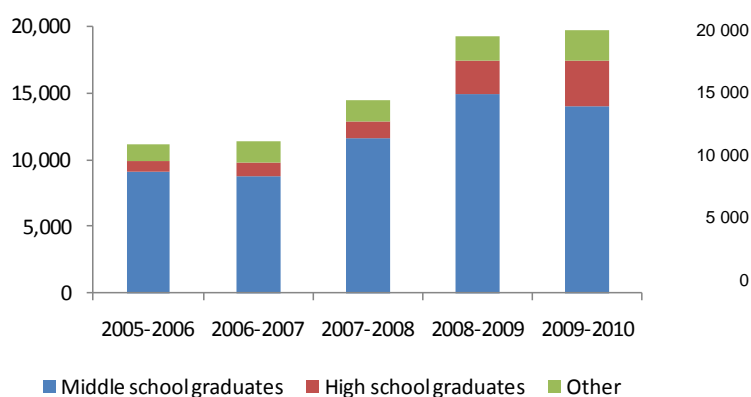
Figure 10. Number of TVET institutions and student enrolment in urban and rural areas, 2005–10



Source: MECS Education Statistics, 2009–2010.

The positive trends in terms of student enrolment in TVET reflects the high demand for technical and vocational skills in Mongolia's labour market, as well as improved perceptions of the sector linked to a growing awareness of TVET benefits in terms of securing productive employment. These factors are also reflected in the rise in recent years of new entrants from secondary schools, and from elsewhere including tertiary education and the non-formal education sector, as shown in figure 11. Because the training provided at vocational education institutions is a continuation of formal education however, middle schools (basic education) graduates still represent the largest share of new entrants.

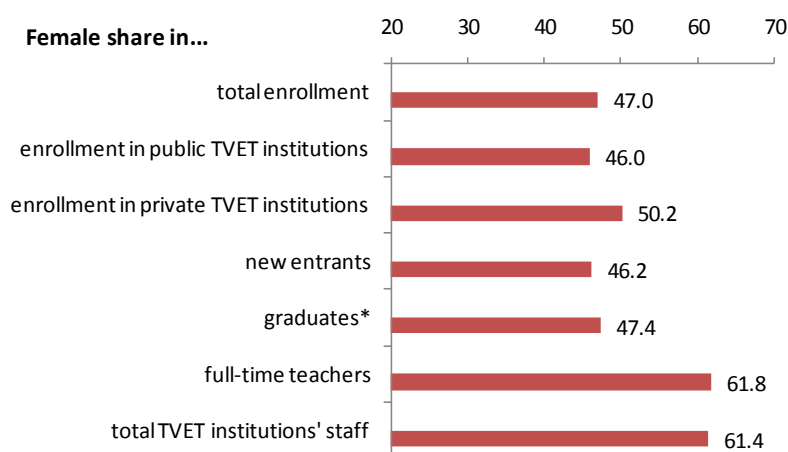
Figure 11. New entrants to TVET institutions from the formal education stream



Source: MECS Education Statistics, 2009–10.

Women represented 47 per cent of total enrolment in TVET institutions in 2009–2010, and 46 per cent of new entrants, as shown in figure 12. In 2008–2009, they represented 47 per cent of graduates from these institutions. Women accounted for some 62 per cent of full-time teachers, and 61 per cent of all staff at these TVET institutions.

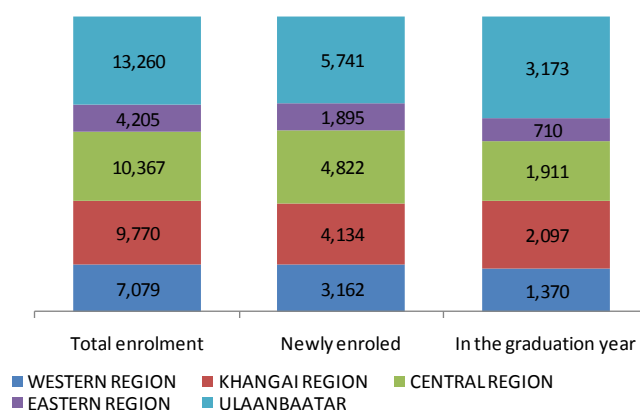
Figure 12. Gender statistics in TVET institutions, 2009–10



*Refers to academic year 2008–09.
Source: MECS Education Statistics, 2009–2010.

In terms of geographic distribution, Ulaanbaatar accounted for approximately 30 per cent of TVET enrolment, 29 per cent of newly enrolled students, and 34 per cent of students in the graduation year, as shown in figure 13. The central and Khangai regions each accounted for more than 20 per cent of total enrolment, new entrants, and students in the graduating year.

Figure 13. Enrolled students, newly enrolled, and in graduating year, 2009-10



Source: MECS Education Statistics, 2009–2010

2.4 Labour-market outcomes for TVET graduates

A major challenge for Mongolia is addressing the skills mismatch issue, which is reflected in high unemployment despite the availability of employment opportunities, and even despite the urgent need for workers in some sectors. This section provides a labour-market profile of TVET certificate or

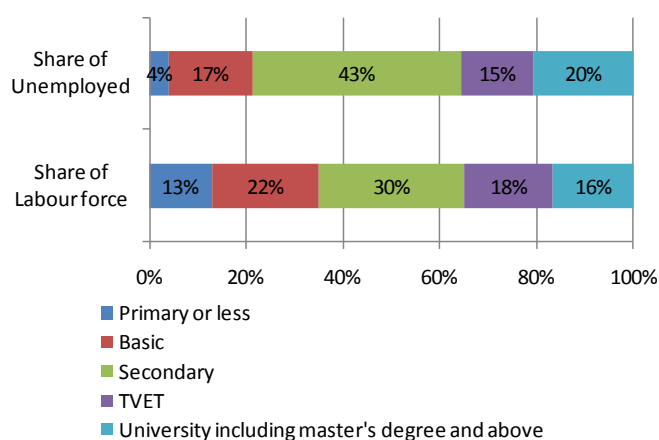
diploma holders, or people that have enrolled in TVET programmes in recent years in Mongolia, in order to analyse their short-term as well as long-term labour-market outcomes.

In this section, the shorthand notation “TVET GRAD” refers to people who hold an initial or secondary TVET certificate or diploma as their highest level of educational attainment, and “TVET last five years” refers to people who have attended any TVET programme in the last five years, including recent graduates who hold TVET certificates or diplomas. Therefore TVET GRAD excludes recent graduates who have attended TVET programmes in the last five years, in order to avoid double-counting them. Except when otherwise specified, “TVET graduates,” “overall TVET graduates,” or “all TVET graduates” refers to both groups combined. Data used in this section are aggregates from the LFS 2008–09, and therefore the five-year period refers to 2003–2008.

2.4.1 Labour force and unemployment distribution by level of attainment

In 2008, 25 per cent of Mongolia’s labour force had less than a secondary school degree, and 30 per cent had graduated from secondary school, as shown in figure 14. Some 18 per cent of the labour force had an initial or full TVET certificate or diploma as their highest level of educational attainment, while 16 per cent had completed university studies.

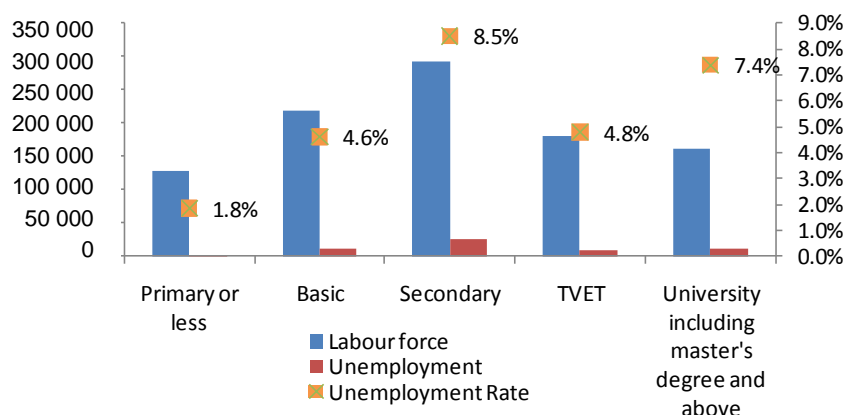
Figure 14. Labour force and unemployment distribution by level of attainment, 2008



Source: LFS, 2008–09.

The largest share of unemployed people in Mongolia (45 per cent) had completed secondary school as their highest level of educational attainment, and 20 per cent had university degrees (figure 14). The unemployment rate for these two groups was also highest, with 8.5 per cent for secondary school graduates and 7.4 per cent for university graduates, as shown in figure 15. TVET certificate or diploma holders accounted for 15 per cent of the country’s unemployed, and had a relatively lower unemployment rate (4.8 per cent).

Figure 15. Labour force, unemployment, and unemployment rate by level of attainment

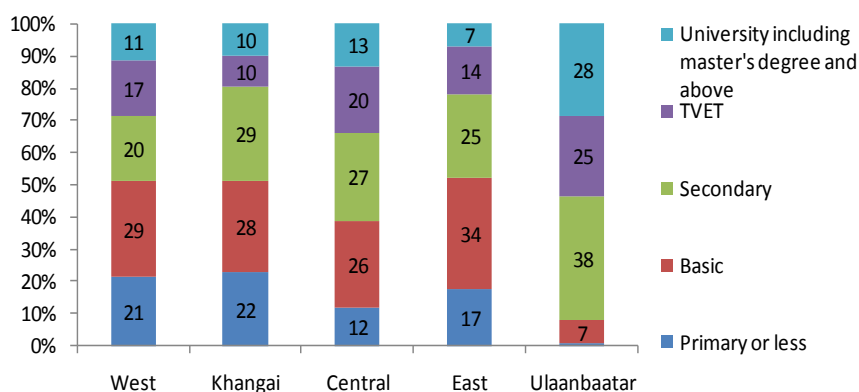


Source: LFS 2008–09.

Low unemployment rates among people with less than secondary education are not unusual, because these low-skilled people often cannot afford to be unemployed; instead, they work in low-productivity employment, often in the informal sector. Higher-skilled people are more reluctant to take on any type of employment, and are more likely to be unemployed, searching for an opportunity that matches their skill set. High unemployment among university graduates may be due to a lack of opportunities for high-skilled workers or oversupply of graduates with certain degrees, but may also be due to the low quality of education or training.

Approximately one-quarter of the workforce in Ulaanbaatar holds an initial or secondary TVET certificate or diploma, approximately 20 per cent of the workforce in the Central region, 17 per cent in the West region, 14 per cent in the East, and 10 per cent in the Khangai region, as shown in figure 16. However, the educational distribution of the workforce does not provide a comprehensive picture of all TVET graduates and trainees, partly because some TVET graduates may not be in the labour force, but also because there are a significant number of people with other levels of educational attainment that may enrol in TVET programmes to gain technical skills.

Figure 16. Educational distribution of the labour force by region, 2008



Source: LFS, 2008–09.

Although in Ulaanbaatar, 60 per cent of those who have attended TVET programmes in the last five years have a secondary school degree, another 26 per cent hold an undergraduate university degree, and 2 per cent even hold master's degrees, as shown in table 3. The proportions of people who have attended TVET programmes in the last five years are as high as 44 per cent in the West region, and 37 per cent in the Khangai region. This suggests that a lack of labour-market opportunities for highly educated people in Mongolia is prompting a number of them to enrol in TVET and acquire practical skills and find employment.

2.4.2 Profile of TVET graduates

Overall, more than 150,000 people in Ulaanbaatar, and more than 190,000 people in the *aimags* hold either a TVET certificate or diploma, or have attended a TVET training programme in the past five years, as shown in table 3.

Table 3. Number of people with a TVET qualification or who have attended a TVET programme in the last five years, by region, 2008

	West	Khangai	Central	East	Ulaanbaatar
People holding TVET certificate or diploma:	35 892	30 314	50 798	16 206	132 941
Among whom, recent graduates (who attended TVET programmes in last five years, %)	15	13	10	6	4
People with other levels of educational attainment, who have attended a TVET programme in last five years (including current students)	14 738	22,010	18 209	5,210	18 540
Among whom, people with the educational attainment level, %:					
None, primary, or basic	25	21	35	37	11
Secondary	31	42	34	35	60
University (undergraduate)	39	36	29	28	26
University (master's)	5	1	2	0	2
Total number of people with TVET certificate or diploma, or attended a TVET programme in the last five years	50 630	52 325	69 007	21 416	151 481

Source: LFS, 2008–09

Women account for over half (56 per cent) of TVET certificate or diploma holders who have not attended TVET programmes in the last five years, and 52 per cent of people who have attended TVET training in recent years, as shown in table 4. Young people (age 15–24) represent nearly 25 per cent of people who attended TVET programmes in the past five years. Nationally, the share of people who have attended TVET programmes in the past five years and live in urban areas (61 per cent) is lower than the share of TVET graduates who live in urban areas. The national average hides regional differences, however; in the West and Khangai regions, the share of people who have attended TVET in the last five years and live in urban areas is greater than the share of TVET GRADS in urban areas.

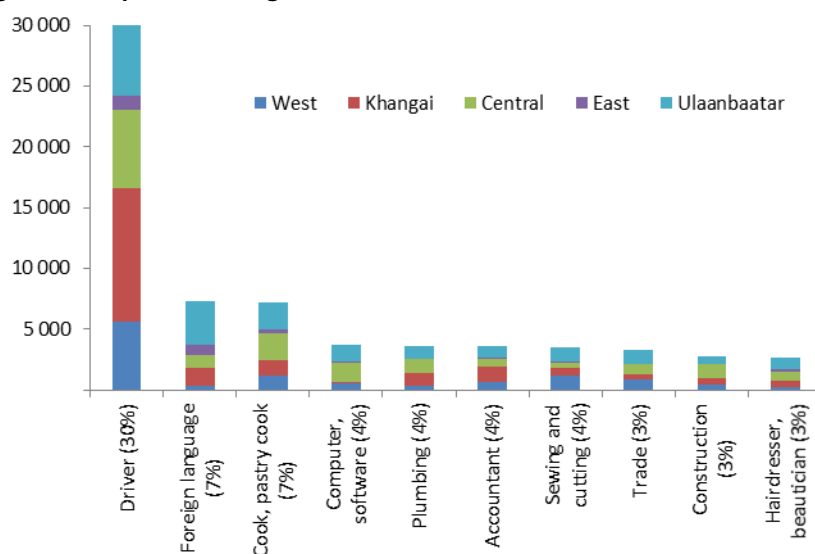
Table 4. Demographic characteristics of TVET GRADS and those who have attended TVET programmes in the last five years (%)

	Female		Youth		Urban	
	TVET GRAD	TVET last five years	TVET GRAD	TVET last five years	TVET GRAD	TVET last five years
West	55	53	8	14	48	51
Khangai	59	47	5	18	46	65
Central	55	55	9	22	41	31
East	54	50	8	33	54	42
Ulaanbaatar	56	52	5	39	100	100
National	56	52	6	24	74	61

Source: LFS, 2008–09.

Among those who have attended a TVET programme in the last five years, 30,000 people, or approximately 30 per cent, were being trained as drivers, 7 per cent were being trained in foreign languages, and another 7 per cent were being trained as cooks, as shown in figure 17. Another 4 per cent were being trained in each of the areas of computer and software skills, plumbing, accounting, and sewing and cutting. Another 3 per cent were being trained in trade, 3 per cent in construction occupations, and 3 per cent as hairdressers or beauticians.

Figure 17. Topic of training for those who have attended TVET in the last five years



Source: LFS, 2008–09.

2.4.3 Labour-force status of TVET graduates

In 2008, 63 per cent of TVET certificate or diploma holders (who completed their training more than five years previously) and 73 per cent of people who graduated from or attended TVET programmes in the last five years were employed in Mongolia, as shown in table 5. In Ulaanbaatar and in the East region, the share of employed TVET graduates is lower than in the other regions. However, the share of unemployed is relatively lower as well, and some 40 per cent of TVET graduates are not in the labour force. In Ulaanbaatar, this may be due to a higher share of TVET graduates who go on to pursue university studies, and therefore remain out of the labour force. It may also be due to the discouraged worker effect.

Table 5. Labour-force status of TVET graduates and people who have attended TVET programmes in the last five years (%)

	TVET GRAD			TVET last five years		
	Employed	Unemployed	Not in LF	Employed	Unemployed	Not in LF
West	76	5	19	81	5	14
Khangai	72	4	25	78	9	13
Central	72	4	24	78	7	15
East	58	3	40	68	0	32
Ulaanbaatar	56	2	41	57	9	35
National	63	3	34	73	7	20

Source: LFS, 2008–09.

Among those who have attended TVET programmes in the last five years, including recent graduates who hold certificates or diplomas, a relatively higher share (7 per cent) are unemployed, and a relatively smaller share (20 per cent) are not in the labour force. This suggests that a number of people who recently attended TVET programmes are unemployed and have enrolled in these programmes in order to find employment. Therefore, a high proportion of this group is either employed or actively seeking work. Another indicator that people are seeking work is registration at an employment office. At the national level, 41 per cent of unemployed people who had attended TVET programmes in the past five years, and 37 per cent of unemployed people with TVET certificates or diplomas and had not had vocational education or training in the last five years were registered at an employment office in 2008, as shown in table 6. The share of unemployed TVET graduates or people who have had vocational or technical training in the past five years who are registered in employment offices is in general lower in Ulaanbaatar than in other regions.

Table 6. Unemployed and registered unemployed TVET graduates and people who have attended TVET programmes in the last five years

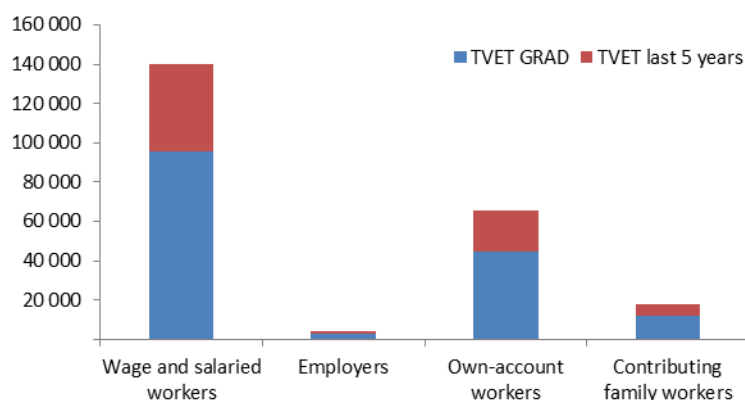
	TVET GRAD		TVET last five years	
	Unemployed (total)	Registered (%)	Unemployed (total)	Registered (%)
West	1 666	63	1 083	77
Khangai	1 048	66	2 300	25
Central	1 837	7	1 694	58
East	384	28	-	-
Ulaanbaatar	2 876	33	2 064	25
National	7 812	37	7 141	41

Source: LFS, 2008–09.

2.4.4 Employment by status, by sector and by occupation

In Mongolia, some 60 per cent of employed TVET certificate or diploma holders, or people who have attended a TVET programme in the past five years are wage and salaried workers, some 30 per cent are own-account workers, 8 per cent are contributing family workers, and approximately 2 per cent are employers, as shown in figure 18. Therefore, more than a third of these workers are in vulnerable employment.

Figure 18. Employment by status for TVET graduates and people who have attended TVET programmes in the last five years, national level



Source: LFS, 2008–09.

The employment-by-status distribution at the regional level differs for TVET graduates who completed their training more than five years ago, than for those who have recently attended TVET programmes, as shown in table 7.

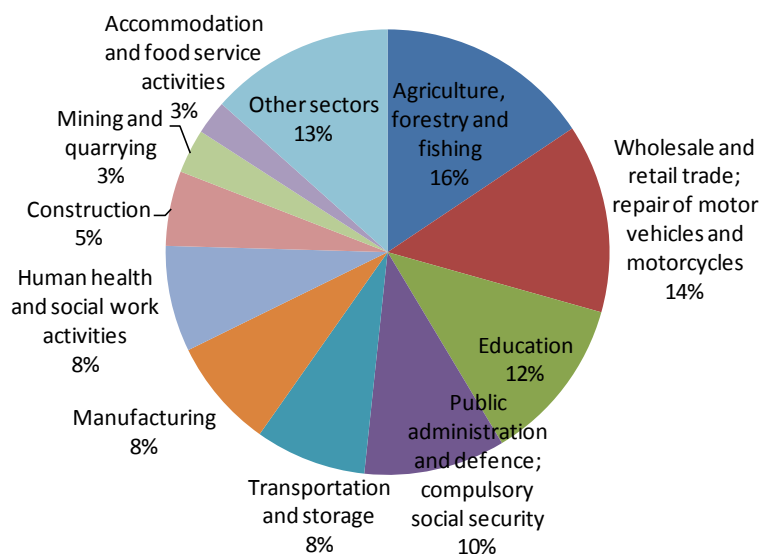
Table 7. Employment by status for TVET graduates and people who have attended TVET programmes in the last five years, national level (%)

	TVET GRAD				TVET last five years			
	Wage and salaried workers	Employers	Own-account workers	Contributing family workers	Wage and salaried workers	Employers	Own-account workers	Contributing family workers
West	43	0	38	17	65	2	25	7
Khangai	53	1	31	14	56	0	36	7
Central	54	1	34	11	60	1	24	15
East	67	2	26	5	56	0	32	12
Ulaanbaatar	72	3	23	1	69	1	28	1
National	61	2	29	8	61	1	29	8

Source: LFS, 2008–09.

In the West, Khangai, and Central regions, the share of wage and salaried workers is higher for those who have recently completed vocational education or training than for those who had TVET training more than five years earlier. In the East region and in Ulaanbaatar, the opposite is true, and a relatively higher share of workers who have recently attended TVET programmes are own-account workers than is the case for workers who completed their TVET training five years earlier. This suggests that while productive wage employment opportunities have increased in recent years in the West, Khangai, and Central regions, limited paid employment opportunities in the East and capital regions may have resulted in an increase in own-account work.

Figure 19. Employment by sector for TVET graduates and people who have attended TVET programmes in the last five years



Source: LFS, 2008–09.

In 2008, approximately 16 per cent of workers with TVET certificates or diplomas, or who had attended TVET programmes in recent years were employed in animal husbandry and herding, 14 per cent in trade, 12 per cent in education, and 10 per cent in public administration, as shown in figure 19. The transportation and storage sector, manufacturing, and the health and social work sector each accounted for 8 per cent of workers with TVET certificates or diplomas, or who had attended TVET programmes in recent years. Another 5 per cent of these workers were employed in construction, 3 per cent in mining and quarrying, and 3 per cent in accommodation and food services.

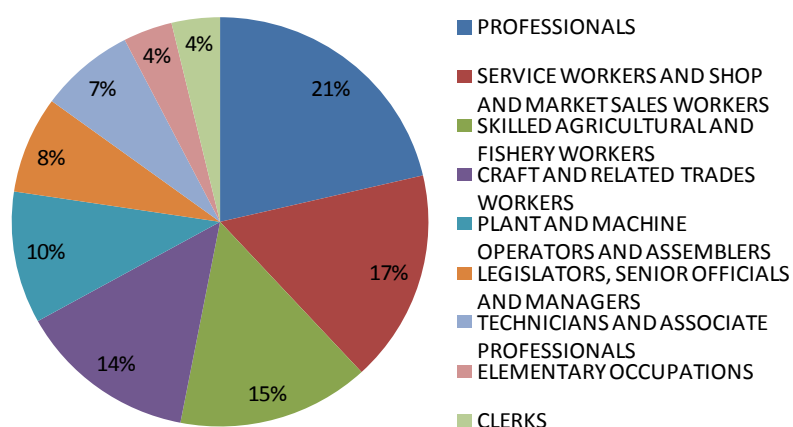
Out of the ten largest industry sectors in terms of employment for all TVET graduates, mining and quarrying, public administration, and accommodation and food services stand out as emerging sectors that have been employing an increasing number of TVET graduates in recent years; 40 per cent to 50 per cent of workers that have had vocational training in these industries are recent graduates or have attended a TVET programme in the last five years.

Table 8. Top ten employment sectors for TVET graduates and people who have attended TVET programmes in the last five years

	All employed with TVET certificate, diploma, or recent TVET training	TVET last five years	Rank	TVET last five years (% of all employed with TVET training)	Rank
Agriculture, forestry, and fishing	35 625	12 238	1	34	4
Wholesale and retail trade; repair of motor vehicles and motorcycles	31 269	8 573	4	27	7
Education	27 418	9 221	3	34	5
Public administration and defence; compulsory social security	23 471	9 616	2	41	2
Transportation and storage	18 457	5 267	5	29	6
Manufacturing	18 172	3 990	7	22	9
Human health and social work activities	17 542	4 738	6	27	8
Construction	12 389	2 452	9	20	10
Mining and quarrying	7 316	3 509	8	48	1
Accommodation and food service activities	5 655	2 017	10	36	3

Source: LFS, 2008–09.

Figure 20. Distribution of workers with TVET qualification or have attended TVET programmes in the last five years



Source: LFS, 2008–09.

The largest share of TVET graduates and people who have recently attended TVET programmes among occupational categories is that of professionals (21 per cent), followed by service and sales workers (17 per cent), skilled agriculture workers (15 per cent), and craft and related trades workers (14 per cent), as shown in figure 20. Ten per cent of workers who have TVET certificates or diplomas, or who have attended TVET programmes in the last five years, are plant and machine operators; 8 per cent are legislators, senior officials, and managers; and 7 per cent are technicians and associate professionals. The elementary occupations and clerk categories each account for 4 per cent of employment of all workers that have had vocational training.

Table 9. Industry-occupation matrix for workers with TVET qualification or who have attended TVET programmes in the last five years (%)

	Legislators, senior officials, and managers	Professionals	Technicians and associate professionals	Clerks	Service workers and shop and market sales workers	Skilled agricultural and fishery workers	Craft and related trades workers	Plant and machine operators and assemblers	Elementary occupations*
Agriculture, forestry, and fishing	1	0	0	0	1	99	1	3	2
Mining and quarrying	2	1	1	4	1	0	9	6	10
Manufacturing	9	2	3	7	2	0	35	9	6
Construction	8	3	1	0	1	0	24	2	10
Wholesale and retail trade; repair of motor vehicles and motorcycles	15	3	2	15	55	0	10	1	13
Transportation and storage	3	1	1	13	1	0	3	59	7
Accommodation and food service activities	4	0	0	2	10	0	1	0	5
Public administration and defence; compulsory social security	27	14	23	20	10	0	1	6	12
Education	6	38	17	13	4	0	1	3	13
Human health and social work activities	4	17	33	5	5	0	0	3	4
Other industries	21	20	19	21	11	0	15	7	17
Total	100	100	100	100	100	100	100	100	100

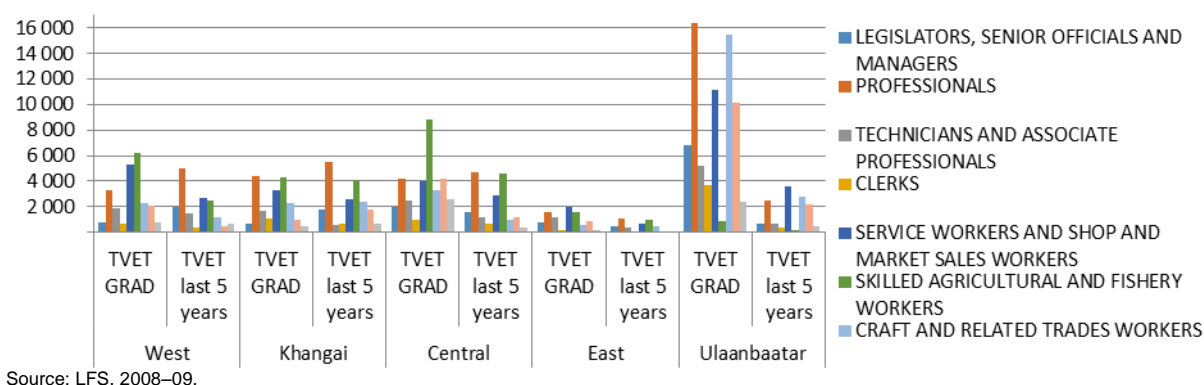
Source: LFS, 2008–09.

* Elementary occupations consist of simple and routine tasks that mainly require the use of hand-held tools and often some physical effort. This major group includes sales and service elementary occupations; agricultural, fishery, and related labourers; and labourers in mining, construction, and transport (ISCO, ILO Bureau of Statistics).

Professionals with a TVET certificate or diploma, or who have had vocational education and training in the last five years are employed primarily in education (38 per cent), health and social work (17 per cent), and public administration (14 per cent), as shown in table 9. Service and sales workers are employed mainly in wholesale and retail trade (55 per cent), while 10 per cent are employed in accommodation and food services, and another 10 per cent in public administration and defence. Craft and related workers are employed mainly in manufacturing (35 per cent), construction (24 per cent), and trade (10 per cent). Nearly 60 per cent of plant and machine operators are employed in transportation and storage.

Although Ulaanbaatar accounts for the largest share of legislators, senior officials, and managers, and of professionals, the share of workers in these occupational groups who are recent TVET graduates or have attended TVET programmes in the last five years has been the highest in the West and Khangai regions, as shown in figure 21, which may suggest some decentralization of government functions away from the capital city.

Figure 21. Employment of workers with TVET qualification, or who have attended TVET programmes in the last five years by occupational category, by region



At a more disaggregated occupation distribution level (two-digit ISCO), skilled agriculture workers, drivers, salespersons and demonstrators, teaching and other professionals, as well as personal and protective service workers are the occupations that employ the largest number of workers with TVET certificates or diplomas, and workers who have had TVET training in the last five years, as shown in table 10. Other significant occupations in terms of employment are extraction and building trades workers, other craft and related trades workers, corporate managers, and health professionals.

Table 10. Top ten occupations (highest employment) for TVET graduates and people who have attended TVET programmes in the last five years

	All employed with TVET certificate, diploma, or recent TVET training	TVET last five years	Rank	TVET last five years (% of all employed with TVET training)	Rank
Market-oriented skilled agricultural and fishery workers	33 993	12 294	1	36	3
Drivers and mobile-plant operators	20 789	5 209	6	25	8
Models, salespersons, and demonstrators	20 508	6 214	4	30	6
Teaching professionals	17 547	6 664	3	38	2
Personal and protective services workers	16 284	5 847	5	36	4
Other professionals	16 221	6 885	2	42	1
Extraction and building trades workers	12 011	2 801	9	23	10
Other craft and related trades workers	11 271	2 799	10	25	9
Corporate managers	10 371	2 946	8	28	7
Life science and health professionals	9 354	3 177	7	34	5

Source: LFS, 2008–09.

Workers holding TVET certificates or diplomas, or who have attended vocational education or training in the last five years are not all working in their area of specialization. Whether or not they are employed in their area of specialization varies across occupational categories. Professionals are very likely to be working in their area of specialization (90 per cent to 97 per cent of professionals are working in their area of specialization, as are technicians and associate professionals). On the other hand, less than 40 per cent of workers in elementary occupations, and of skilled agriculture workers (skilled workers in animal husbandry and herding in Mongolia's case) are working in their area of specialization, as shown in table 11.

Table 11. Share of workers with TVET qualification or who have attended TVET programmes in the last five years, employed in their area of specialization, by occupation (%)

Professionals		Crafts and related trades workers		Service workers and shop and market sales workers	
Physics, maths, and engineering science professionals	97%	Metal, machinery, and related trades workers	89%	Other salespersons not classified elsewhere	93%
Life science and health professionals	97%	Extraction and building trades workers	81%	Personal and protective services workers	62%
Teaching professionals	96%	Precision, handicraft, printing, and related trades workers	69%	Models, salespersons, and demonstrators	23%
Other professionals	91%	Other craft and related trades workers	58%		
Technicians and assoc. professionals		Legislators, senior officials, and managers		Elementary occupations	
Teaching associate professionals	96%	Hotel and restaurant managers	79%	Labourers in mining, construction, manufacturing and transport	38%
Life science and health associate professionals	94%	Corporate managers	76%	Sales and elementary service occupations	18%
Physics, maths, and engineering science associate professionals	85%	Legislators and senior officials	71%	Agriculture, fishery and related labourers	0%
Other associate professionals	76%	General managers	65%	Skilled agricultural and fishery workers	
Plant and machine operators and assemblers		Clerks			
Machine operators and assemblers	94%	Office clerks	71%	Market-oriented skilled agricultural and fishery workers	37%
Drivers and mobile-plant operators	88%	Customer service clerks	58%		
Stationary-plant and related operators	54%				

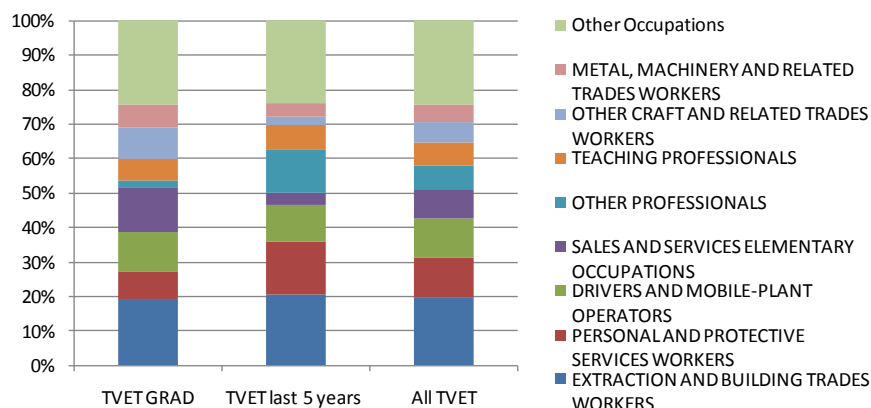
The likelihood of being employed in one's area of specialization varies within occupational categories as well. While plant and machine operators and assemblers, and drivers and mobile-plant operators, have a high probability of being employed in their area of specialization, only 54 per cent of stationary-plant and related operators are employed in their area of specialization. Similarly, 89 per cent of metal and machinery and related trades workers are employed in their area of specialization, compared to only 58 per cent for other craft and related workers. Among clerks, 71 per cent of office clerks are employed in their specialization area, compared to 58 per cent for customer service clerks.

2.4.5 Expected occupations of unemployed TVET graduates

That many skilled workers are not employed in their area of specialization is another manifestation of the skills mismatch problem. The expected occupation of unemployed people with TVET certificates or diplomas, or who have recently attended a TVET programme, provides insights. On the one hand, unemployed people expecting to find employment in a certain occupation may be facing difficulties in finding employment in that occupation due to a skills mismatch problem. On the other hand, they may be undertaking skills training in areas that they perceive as having better employment opportunities.

In 2008, approximately 20 per cent of unemployed people with a TVET certificate or diploma, or who attended TVET programmes in the previous five years expected to be employed as extraction and building trades workers; 11 per cent expected to work in personal and protective services; and 11 per cent as drivers and mobile-plant operators, as shown in figure 22. Approximately 45 per cent of unemployed people having attended TVET programmes in the last five years expected to find occupations in these three occupational groups, reflecting high expectations regarding growing employment opportunities in the mining sector. Another 20 per cent of unemployed people having recently graduated from or attended TVET programmes expect to be teachers or other types of professionals.

Figure 22. Expected occupations of unemployed people with TVET qualification or who have attended TVET programmes in the last five years



Source: LFS, 2008–09.

3. National policy framework for TVET

3.1 Regulatory framework for TVET in Mongolia

The TVET system in Mongolia dates back to the 1960s, and has always played a major role as a provider of technical and skilled workers. Responsibility for TVET initially fell under several ministries, including agriculture, industry, education, and infrastructure. Until 1990, TVET was provided through a centrally planned system. The specific programmes were not developed in response to market demand. During the first decade that followed the transition, and as the country struggled to find some stability, little attention was paid to the TVET sector. By the early 2000s, as the country reoriented its economic strategies, the need to amend TVET policy became evident.

In 2002, a law on TVET was introduced as part of a general education law package. This law was aimed at establishing a TVET system that corresponds to market needs. The TVET Law introduced many important changes, namely with respect to including employers in the policy process and implementation; mechanisms such as tax incentives to encourage employer investment in TVET; and accountability and responsibility of employers through the introduction of the TVET Promotion Fund, to which employers contribute a certain percentage of remuneration.

However, one part of the TVET system was regulated by another law, the Employment Promotion Law of 2001, and funded by the Employment Promotion Fund under this second law. This part consists of vocational and skills training activities that support employment promotion initiatives. Specifically, short-term skills development programmes are provided to help unemployed people and vulnerable groups find employment. The Employment Promotion Law established the National Employment Council (NEC), a tripartite body consisting of representatives from government and from national organizations representing the legal rights and interests of workers and employers. The NEC is headed by the Cabinet member in charge of labour issues (see Section 4.2).

In 2007, another milestone in Mongolia's TVET policy was achieved, with the signing of a memorandum of understanding (MOU) by all social partners including government, employers, and unions, which emphasized the importance of cooperation between them in developing the country's TVET system. Discussions on further revisions to the TVET Law were held among the social actors.

In 2009, the new TVET Law was removed from the overall education law package and introduced as a separate law. The new law aims to establish a demand-driven, private-sector-led, competency-based vocational training system in Mongolia. It has been further revised in line with labour-market requirements, and established several institutions responsible for the development and implementation of TVET policy, including the National Council on Vocational Education and Training (NCVET) and its Secretariat, the TVET Agency, implementing agency of the government (see Section 4.2 for more information about these institutions).

When the proposal was submitted to parliament for revisions to the TVET Law, it included a provision to merge the Employment Promotion Fund and the TVET Promotion Fund. This provision was requested by the MECS, with the aim of integrating skills training activities supported by the two funds, and avoiding overlap. The MSWL opposed this proposed merger, arguing that the Employment Promotion Fund also covers other elements of employment, including social protection. As a result, the two funds were kept separate in the revised 2009 TVET Law. This is the one issue that makes the revised 2009 law sub-optimal from the MECS perspective.

More recently, however, a proposal for revisions to the Employment Promotion Law, which has been submitted to parliament and is to be discussed by standing committees, explicitly states what falls under the Employment Promotion Fund. This is expected to provide more clarity as to the activities that fall under each fund. The proposed revisions consist of a number of structural changes and practical changes, and innovations that would make the Employment Promotion Law more dynamic and flexible, and make its implementation more feasible. These proposed revisions include the reform of short-term training programmes based on the feedback of people who have attended them, in order to improve the quality and consistency of these programmes.

The TVET system in Mongolia is therefore currently still regulated by two laws: the Employment Promotion Law of 2001, which was amended in 2006 and is currently being revised, and the TVET Law of 2009. The former law falls under the responsibility of the MSWL, and the latter under the responsibility of the MECS.

The objective of the Employment Promotion Law is “to create the legal framework for types, forms, scope, and financing of employment promotion activities, as well as employment offices, and to regulate the relations on their implementation.”²⁰ In addition to this law, employment promotion legislation in Mongolia includes the Constitution,²¹ the Labour Law,²² the Social Insurance Act, and other acts issued in consistency with these laws. The TVET Law aims “to determine the content, objective, and structure of professional education and training, and their management and organization, to organize training which provides citizens with professional education and skills, and enhances it, meeting the labour market need and demand, employers' subscription, and to regulate the relations related to the rights and responsibilities of the participants in this activity.”²³

²⁰ Law of Mongolia on Employment Promotion, 2001, Chapter 1 (Law of 19 April 2001).

²¹ The Constitution of Mongolia, published in the *State Information Bulletin*, Number 1, 1992.

²² Labour Law, published in the *State Information Bulletin*, Number 25, 1999.

²³ Law of Mongolia on Professional Education and Training, 2009, Chapter 1.

In addition to this law, legislation on professional education and training in Mongolia consists of the Constitution of Mongolia, the Law on Education,²⁴ the Law on Primary and Secondary Education,²⁵ the Law on Higher Education,²⁶ the Labour law, the Law on Employment Promotion, and acts issued in consistency with these laws.

3.2 Implementation mechanisms

The TVET law established the TVET Agency in response to a clear need for such a body to be responsible for TVET policy implementation and for inter-ministry coordination. The TVET Agency is the Secretariat of the NCVET. The TVET Agency has been working in several areas of TVET reform, and several initiatives, but does not have a specific implementation plan as yet.

Currently, there are a number of barriers to implementation. Specifically, the law established a new TVET system structure, with new institutions and new relationships and connections between employers and government, and between employers and skills training institutions. Mongolia has limited experience with these structures and relationships. There is, therefore, a need for the regulation governing these institutions and relationships to be clear and well-understood by all actors involved, in particular by the TVET Agency and the TVET schools, but also the MSWL and employers. The Employers Federation of Mongolia (MONEF) has pointed out that its members (employers) have a very limited understanding of the new TVET policy, and of their roles and the implications for them. Although at the level of the employers' federation there is a solid understanding of the new law, the MONEF does not have the capacity to explain it to employers. In sum, at this point, social partners (employers, unions, and ministries) are not well-equipped and lack the capacity to implement the changes required by the TVET Law. Disagreements between ministries are impeding the policy process, and the division of authority between them remains a point of contention.

Building upon the MOU signed in 2007, social partners have established a working group on the development of concepts and definitions for TVET sector reform, which has prepared a draft framework. The framework provides details of financing structures and methodologies (including how labour-market surveys are to be used, and how teachers are to be trained), and quality assurance measures, among other things. Once agreed upon, the framework will be presented to the NCVET. The framework will provide the basis for a mid-term action plan, based on which they will proceed with the mapping of schools by region and in accordance with economic sectors.

3.3 Policy support for equitable access to the TVET system and target groups

Both the Employment Promotion Law and the TVET Law provide policy support for equitable access to the TVET system. Specifically, the former law calls for “non-discrimination of citizens involved in employment promotion activities by nationality, ethnic origin, language, race, age, sex, financial status, education, social origin and status, religion, and political opinion” (Article 4.2.1), and for the “creation of favourable conditions for equal and accessible employment promotion activities, and open and transparent information on job vacancies” (Article 4.2.2). Similarly, the TVET Law (Article 15.5) states that all citizens interested in acquiring new skills or enhancing their skills should be provided training at TVET institutions, regardless of their age or education level.

²⁴ Law on Education, published in the *State Information Bulletin*, Number 19, 2002.

²⁵ Law on Primary and Secondary Education, published in the *State Information Bulletin*, Number 19, 2002.

²⁶ Law on Higher Education, published in the *State Information Bulletin*, Number 19, 2002.

Although in theory these laws promote equity, in practice there are significant disparities in terms of access in Mongolia's TVET system. In particular, the formal vocational training system mainly targets youth that have completed secondary school, or have completed basic education (Grade 9 in Mongolia) and are enrolled in vocational training as part of their secondary school training. This constitutes a continuity of the traditional system developed during the Russian era, when only school graders could continue their education through the TVET system. Recently, there have been people returning to TVET after their university degree, to gain practical skills and improve their employability. This requires revising TVET policy so that it does not disadvantage older students. Another discrepancy in terms of access to the formal vocational education system is between urban and rural area TVET institutions. To eliminate this disparity, there are attempts at training more teachers from rural areas.

While the vocational education system targets youth, the non-formal vocational training side (short-term training programmes under the MSWL) targets unemployed people registered at local labour and social welfare offices, adults with limited skills who dropped out of school, or adults whose skills are no longer relevant (have become redundant) in the new economy, former military servicemen, and vulnerable groups such as female heads of households, older persons not entitled to old-age pensions, and migrant workers from rural areas, to help them find employment.

Specifically, Article 9 of the Employment Promotion Law calls for employment offices, in cooperation with vocational training institutions, to provide training for unskilled or low-skilled unemployed citizens belonging to a vulnerable group; job-seekers or workers who are "threatened by unemployment" and in need of acquiring new skills due to a lack of opportunities in their occupation, or because they have had a workplace accident; citizens who become unemployed before entitlement to old-age pension due to the specifics of their occupation; and graduates of basic or secondary schools, or youth demobilized from military service who are not employed and not studying. These citizens may be involved in re-training a second time, two years after having completed the first round of first training. In addition, entrepreneurial and business skills training may be provided to citizens who want to be self-employed.

The emphasis of the TVET sector in Mongolia is on improving the employability of future workers (formal vocational education) and of the unemployed (non-formal vocational training), but the system does not adequately address the needs of vulnerable workers engaged in low-productivity jobs, or workers who need skills development from the perspective of lifelong learning and continuous skills development.

3.4 Monitoring and follow-up mechanisms

The Employment Promotion Law and TVET Law make broad references to monitoring mechanisms for policy implementation. Specifically, under Article 23 of the Employment Promotion Law, the monitoring of compliance with employment promotion legislation is the responsibility of the parliament, government, and all local governors and authorized agencies at the national level, and of the *aimag*, capital city, or district governors and their inspection agencies at the local level. Under Article 26 of the TVET Law, a specialized inspection organization is to be set up to oversee the implementation of TVET laws on policies. However, actual mechanisms are yet to be established, and little monitoring takes place in practice. This is an issue that the TVET Agency recognizes as a weak point for which it requires assistance.

3.5 Assessment of TVET laws

Although it may be too early to assess the new TVET Law in terms of outcomes, the revisions have brought about several positive developments, including improved participation of employers and unions in the policy process, and the establishment of the NCVET and the TVET Agency, among others. Furthermore, how well the new policies will be implemented given the challenges mentioned above, and whether an adequate monitoring process will be established, remain to be seen.

The TVET Law (Article 20) describes a social partnership to be formed, and cooperation on TVET issues, including policy development, improving the training environment, training content, standards, and certification. The process of cooperation between the private and public sectors, and between the private sector and the training institutions is new to Mongolia, and social partners are not experienced in working together.

4. The TVET training system

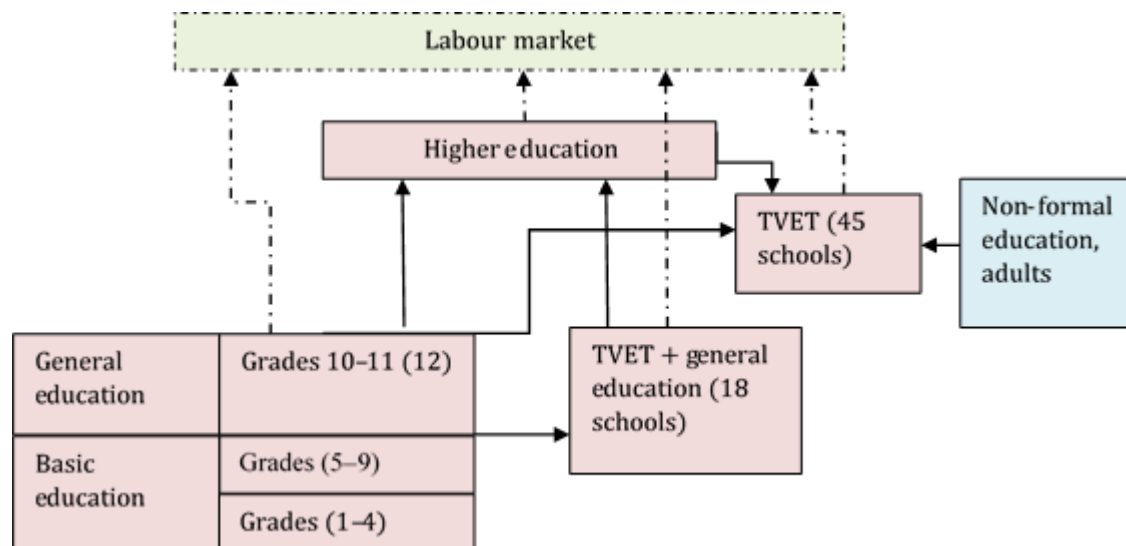
4.1 Mongolia's TVET system: the two streams

Mongolia's TVET system is divided into two streams according to specific definitions stated in the TVET Law. This constitutes a compromise in which vocational education that is part of the formal education system (run in parallel to the secondary school system) falls under the responsibility of the MECS, while short-term skills training that is not part of the formal education system falls under the responsibility of the MSWL. There has been talk of integrating the two streams under a dual system model, such as that of Switzerland or Germany, but there have been no serious steps or decisions made so far.

The first stream, formal vocational education and training, constitutes a part of Mongolia's overall education system and, as such, falls under the responsibility of the MECS. The duration of programmes in this stream is two years and over. This stream includes 63 TVET centres or institutions across Mongolia, including at least one in every *aimag*. Of these institutions, 41 are public and 22 are private, including four that are funded by foreign investment (two Japanese, one from the Republic of Korea, and one funded by a missionary group but which does not provide any religious education). These institutions have a total of 2,300 staff including managers. Approximately 10,000 students enrol, and 10,000 students graduate each year. Of the 63 institutions, 45 are schools where students may come from tertiary education or after having completed secondary school, while the rest are part of the secondary school system, following basic education, as shown in figure 23.²⁷

²⁷ TVET Agency.

Figure 23. Mongolia's formal education system



In 2011, there were a total of 46,000 students enrolled in vocational education schools nationwide, almost equally distributed in terms of geography. The overall gender ratio was close to 50 per cent. Of these students, 70 per cent were secondary school graduates, 20 per cent were general education graduates, and approximately 10 per cent were adults, coming from university or after having completed university.

Significant donor assistance has been provided to institutions within this stream in recent years, notably through the Millennium challenge Account- Mongolia (MCA-M) TVET programme, which is the largest TVET technical assistance programme in Mongolia. In general, the state-owned vocational education institutions tend to have better infrastructure than private ones, but even these public-school buildings are old. There is a need for refurbishing and, in some cases, for new schools.

The second stream consists of the short-term skills training centres, which are not a part of the formal education system, and are the responsibility of the Labour and Social Welfare Office (LSWO) of the MSWL. Some of these centres are funded under the Employment Promotion Fund. The training provided by these vocational training centres (VTCs) is short term (less than a year), mainly in services and in industry. The short programme duration is partly due to cost considerations, and because unemployed people want short programmes and to be employed as soon as possible. This stream includes over 1,500 skills development and VTCs officially registered with the LSWO and its local branches. These cover a wide range of skills and professions, and constitute a large spectrum in terms of quality of training provided, and resources available. Some are well-established, while others are less so. Unlike the formal vocational education institutions, VTCs in this stream have not received significant technical assistance (software, hardware, or capacity building) from donors in recent years.

In 2011, there were 152 VTCs selected for funding under the Employment Promotion Law (through a bidding process), and 60 schools were selected as business incubation and development centres. These institutions are providing training for some 18,000 adults in 26 occupations. The most popular areas in terms of enrolment are chef or cook, hairdresser, salesperson, sewing machine operator, mason, plumber, electrician, and other construction trades.

There are, on average, two or three VTCs delivering these short-term skills programmes in each *aimag*, in addition to the vocational education training schools or centres, and 50 VTCs in Ulaanbaatar. The format for the skills training delivery undertaken by the LSWO differs between Ulaanbaatar and the *aimags*. In Ulaanbaatar, potential trainees are allocated vouchers, and they choose the VTC that they wish to attend. In the *aimags*, potential trainees are organized into groups of people who are interested in the same occupation, and then a VTC is invited.

4.2 TVET agencies and institutions: structure and governance

Training institutions providing vocational education are those belonging to the two streams of the TVET system. They are of various types, including polytechnic colleges, vocational training and production centres, and educational centres for employment, among others. These institutions must meet certain conditions and have special permission to provide training. Specifically, the TVET Law (Article 14) states that private vocational training institutions may be established by a legal entity with special permission, in accordance with the Law on Special Permission for Business Activity;²⁸ similarly, short-term vocational skills training and training organized in accordance with the Employment Promotion Law may be conducted by legal entities that have been registered properly.

The TVET Law also stipulates that government officials in charge of education and labour must jointly approve regulation on the registration of skills training institutions and on training requirements. Vocational education institutions must have a governing board, responsible for their management. The establishment and operations of the governing board are regulated by the Law on Education (articles 33 and 36). These institutions are mandated by law to provide technical and vocational education that meets labour-market demands.

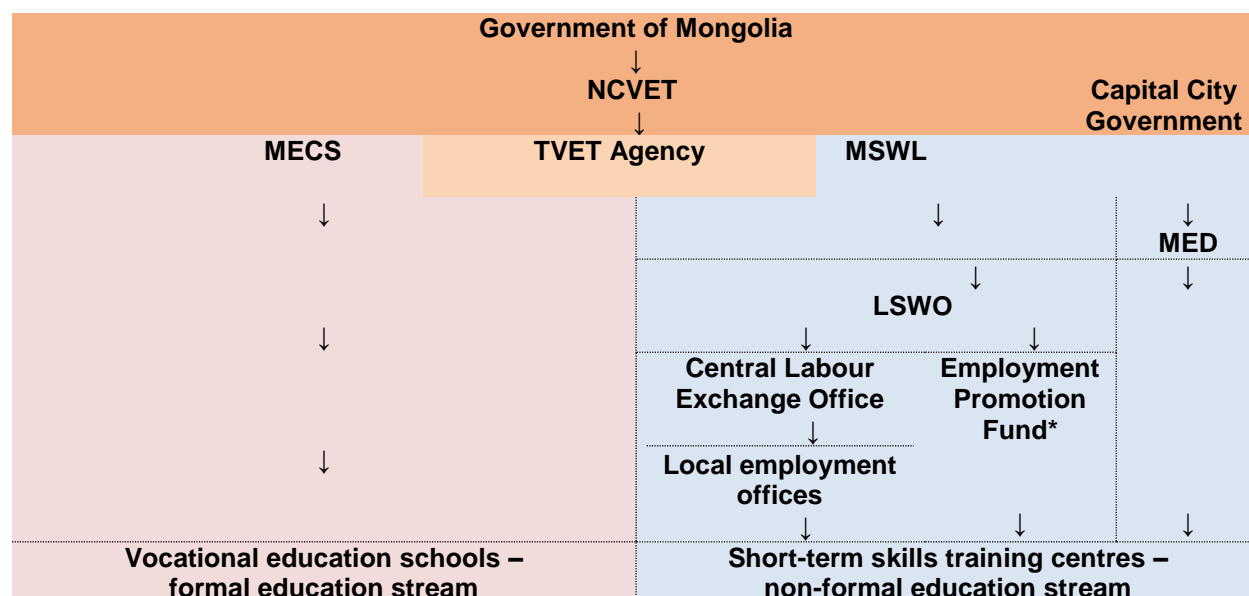
The membership of the Vocational Training Association (VTA) consists mainly of entities selected by the LSWO to receive funding from the Employment Promotion Fund.

In addition to the skills training providers, a number of agencies and institutions are also involved in Mongolia's TVET system. Most of these institutions have either recently been created, or have recently been restructured or reoriented in accordance with the new TVET policy framework. Figure 24 illustrates the linkages between these institutions and their places within Mongolia's TVET system.

The first such institution was the NCVET, a bipartite body consisting of eight government representatives and eight private-sector representatives, established by the 2009 TVET Law (Article 6). The private-sector representatives are elected during a session jointly organized by employers and the Chamber of Commerce and Industry. The proposed composition of the council is then approved by the government. The NCVET chairmanship is held on a rotational basis between the public and private sectors. Its responsibilities include discussing, making decisions, and providing guidance on programmes and policies for TVET development and implementation; coordination of TVET activities between training providers and employers; and monitoring of the expenditure of the TVET Fund. The NCVET is also responsible for decisions on the national occupational classification system, and tasked to examine and make a proposal for Mongolia's accession to international treaties or conventions on TVET.

²⁸ Law on Special Permission for Business Activity, published in the *State Information Bulletin*, Number 6, 2001.

Figure 24. Organizational structure and linkages between TVET agencies and institutions



* The Employment Promotion Fund is not an organization, but constitutes a direct link between the LSWO and the short-term skills training centres.

The TVET Agency was introduced by the TVET Law (Article 8) to help formulate TVET policy that conforms to labour-market demand and trends, and to coordinate implementation. As mentioned, the TVET Agency is the Secretariat of the NCVET. It began its functions in April 2010 and currently has a staff of 20. Its powers and responsibilities include changing or suspending the activities of public and private training institutions; appointing (based on the results of a selection process) or dismissing (on grounds specified by the law) directors of these institutions; providing support and guidance to TVET institutions; implementing measures to promote the use of new methods and technologies in training; organizing the provision of training materials and textbooks; organizing training institution accreditation and teacher certification; determining curriculum content, including practical training activities; developing occupational standards (with the participation of professional organizations, associations, and federations) for skills assessment and testing; organizing independent audits; and developing and maintaining an integrated system and database of statistics and information pertaining to TVET. The TVET Agency is also responsible for Mongolia's compliance with international treaties, conventions, and agreements on TVET issues.

The NEC is a tripartite body established under Article 20 of the Employment Promotion Law, to discuss and submit proposals and recommendations on issues pertaining to employment promotion activities, and to monitor employment policy implementation and the income and expenditure of the Employment Promotion Fund. Government, employers, and workers have equal representation in the NEC: three representatives from government (specifically representatives of the three areas of labour, education, and finance), three trade union representatives, and three members from employers' organizations. The composition of the NEC is approved by the prime minister for four-year terms, based on the parties' proposals. The NEC chair is held by the Cabinet member in charge of labour issues.

The LSWO is the agency under the MSWL that is responsible for employment promotion and unemployment insurance. Its responsibilities include providing support to institutions that provide training and services to the unemployed (mainly those registered in district offices) through local employment offices, and coordinating the activities of local offices. The LSWO is responsible for the Employment Promotion Fund allocations according to the approved budget, and for monitoring the use of these funds. The LSWO is also responsible for collecting and analysing labour-market trends. The Central Labour Exchange Office (CLEO) was set up under the LSWO to conduct these activities, and to develop a labour-market information system (LMIS) for Mongolia.

The CLEO is a new institution, established in 2009 (and therefore is still in a learning stage), to fulfil the functions of collecting, processing, analysing, and disseminating labour-market information (LMI) to unemployed people, employers, and to the public institutions, to feed into policy. Currently, the CLEO has three departments (information and technology, career guidance services, and labour mediation services), two service divisions, and a total of 57 employees.

The CLEO collects data from the local employment offices (or local social welfare and labour offices), which are the district level offices responsible for the registration of unemployed people, and for activities under the Employment Promotion Law. Resources from the Employment Promotion Fund are channelled directly to these local employment offices, which are then responsible for the management of these funds. This direct channelling of resources to the local level is seen by the MSWL as a more efficient way of reaching the end targets. However, with the recent establishment of the Metropolitan Employment Department (MED), there is a need to reconsider the current structure, specifically if the districts should continue to be reached directly, or if they should be reached through the MED. The MED is the capital city government's implementing agency for labour policy and strategies. Between 2007 and 2009 it operated as a labour exchange office. Since 2009, it has been operating as the labour department responsible for all labour market-related issues, including assisting Ulaanbaatar's unemployed people find employment. Some 50 per cent to 60 per cent of Mongolia's unemployed reside in Ulaanbaatar, and approximately half of them are registered jobseekers. One strategy used by the MED is to target unemployed people and involve them in the projects under the city's development plans, such as "greening" projects and road improvement, among others.

The direct channel between the LSWO and the local employment offices is, in effect, by-passing the city agency (MED). Furthermore, there is a certain inconsistency in that while the two functions of labour-market services and social welfare services are tied together and provided by the labour exchange offices (under the LSWO) at the local level, they have now been separated at the city level through the establishment of a separate department for labour (the MED) and for social services. The MED would like a more decentralized governance structure that would require splitting the current district-level offices into two: labour offices and separate social welfare offices. The labour offices in Ulaanbaatar would then fall under the MED, while the rest would continue reporting to the LSWO. The issue of splitting the district-level offices in two, to separate labour and social welfare activities, is not straightforward, however. Although the areas have now been separated at the city level, they remain merged at the national level. This is currently a disputed issue. Proponents of this decentralized structure argue that it would promote accountability and improve the efficiency of service delivery. Arguments against it include cost considerations (for example, additional staffing required). Furthermore, the MSWL is reluctant to transfer the responsibilities and the corresponding funding to the city level, arguing that the newly established MED lacks the capacity to handle the required work and responsibilities, including managing the funds. Under the proposed transfer, over 50 per cent of employment promotion funds would fall under the responsibility of the MED. Such a transfer would therefore have to be done gradually, argue MSWL officials.

The MED has made recommendations for reform of the Employment Promotion Law, which include structural reforms that would enable it to play more of a coordination role at the city level, including in terms of interactions between government and the TVET system. However, the MSWL does not expect major structural changes to be made through the current revisions to the Employment Promotion Law. Such issues may have been discussed, but are not on the agenda at present, as they may cause delays and complications in passing the law. The current priority is to have the revised law approved. At a later stage, maybe after the next elections, major structural reforms may be proposed. Ideas being discussed include the establishment of an employment promotion agency, merging the SME Agency (currently under the Ministry of Food, Agriculture, and Light Industry) and the TVET Agency.

4.3 Training capacity versus demand (industry and students)

The TVET sector in Mongolia is undergoing major changes. For the first time, the system is being transformed and developed to respond to demand, in terms of both market demand and the demands of students. The MSWL is conducting labour-market surveys to assess market demand, and perception surveys have also been conducted to analyse the demands of current and prospective TVET students. For this important shift to take place, there is a need to revise the TVET curriculums, content, and learning environment, all of which require substantial resources. The MECS, TVET Agency, and other actors are trying to make the vocational education curricula consistent with the results of these surveys and studies. Other actors from the private sector and donor agencies (namely the MCA-M TVET project) are involved in the process. Whereas considerable resources are being allocated to the vocational education stream in order to improve training providers' capacity to respond to demand, limited support and resources are available for short-term training providers.

Although the capacity of the TVET system to respond to demand is likely to improve in the medium- to long-term, as a result of recent policy changes, projects, and initiatives, there are concerns that it will not be sufficient in the short term. Currently, there is an urgent need for workers in some sectors in Mongolia, but there are an insufficient number of teachers capable of delivering the required training within a short timeframe. This is a major challenge for Mongolia. The NDIC has made a proposal to the MECS with regard to bringing in skilled and highly qualified teachers from abroad in response to the urgent need for trainers.

The real or perceived limited capacity of the TVET system to respond to the demand for skilled workers in the short term has prompted industry actors to provide their own training, and has caused companies to hire workers from abroad. This has also been one of the motivations for the Confederation of Mongolian Trade Unions (CMTU) project to establish their own vocational training centre (see Section 8.2).

5. Labour-market information and training planning

5.1 Labour-market information system

The lack of LMI has been recognized as one of the reasons behind the skills mismatch (the existence of both a large number of vacancies and high unemployment), and as a major constraint for policy-making in Mongolia. Although Mongolia does not yet have an integrated LMIS in place, an initiative

funded by the MCA-M TVET project is underway in order to establish such a system, in collaboration with the CLEO, under the LSWO. A company has been contracted to develop the system and identify needs (software, hardware) and build capacity in many areas. The company (German) was expected to arrive in Ulaanbaatar in March 2011, and to begin its work shortly thereafter.

Currently, several agencies collect and process labour-market data independently. Through the local offices, the CLEO collects all data pertaining to the registered unemployed population, and to job vacancies. Specifically, the CLEO is currently establishing a large central database on unemployment, which would gather all statistics pertaining to registered unemployment (e.g. number of unemployed who have received employment mediation services) by merging in data collected at local employment offices across the country. The information and technology department of the CLEO is in charge of LMI collection and the development of the LMI software and database, which is a priority issue for the CLEO. So far, six out of nine districts in Ulaanbaatar have been connected to the network, and by May 2011 the CLEO aimed to have all nine Ulaanbaatar districts and all 21 *aimags* connected. The database aims to improve transparency, and provide as much information as possible. At this stage, however, it is still somewhat cumbersome to use. Two officers from the MED have been trained in using the CLEO database to input the profiles of unemployed people registered at the city level, but it takes these officers about 15 minutes to enter the data for one unemployed person. The MED have a list of 1,800 vacancies on behalf of more than 500 entities that have consistently interacted with the city agency for many years. They need to have their own database feed into the CLEO database.

Through the CLEO and the MED, both unemployed people and employers have access to LMI, and to labour mediation services including skills development and job placement. The CLEO was also planning to have in place a hotline telephone service by April 2011, to provide information on job vacancies and occupations that are in demand. Another intervention that the CLEO is considering is to use social workers as a channel for distributing information on employment opportunities. Specifically, they would set up, in each urban *khoroо* (small administrative unit) where there is a social worker, an information kiosk with details of vacancies in the area or elsewhere in the city. This idea is inspired from a previous initiative to distribute free in some community centres, a classified newspaper listing job vacancies. There was a very high demand for these newspapers, which were picked up very rapidly.

Within the CLEO information and technology department, there is a research unit headed by an LMI expert, with five employees, which constitutes the first specialized research unit on labour market issues that has ever been formed in Mongolia, and is tasked to produce labour market studies. This unit has been undertaking labour-market and comparative studies, has carried out barometer surveys, and cooperated on a labour market study undertaken by Cambridge University (funded by the MCA). In 2011, they conducted a labour-market study on their own. Although data from these studies has been used by the MSWL for the purpose of strategic planning of employment and TVET policy, data from the LFSs undertaken by the National Statistics Office (NSO) have rarely been used. Although officials at the MSWL and the LSWO are aware of the existence of the LFSs, they believe that barometer surveys are more useful in providing detailed information about “concrete” labour market issues and “real demand sectors.” They also use establishment-based surveys, which of course do not reflect the entire labour-market situation of the country. The NSO conducts dissemination workshops and shares the results of the LFS, HIES, and other surveys with other ministries and public organizations. However, there are no follow-up activities or interaction, and the ministries seem to lack the capacity and knowledge to make use of, and analyse, NSO data. The CLEO, however, is expected to become specialized in this area of LMI.

The NSO does not intervene in the surveys conducted or data gathered by other ministries, except when asked for assistance or capacity building. The NSO started conducting the LFSs in 2002–03.

The methodology used is based on international standards, and is provisioned by the Law on Statistics. There is also a specific labour-market chapter in the *Mongolia Statistics Yearbook*, which uses LFS data and also data from establishment surveys conducted by the MSWL. Last year, the NSO piloted a survey on wages, based on an approach that has been agreed upon by ministries.

Although there is recognition of the importance of involving the NSO in the development of an integrated LMIS for Mongolia, the details of how this is to be done have not yet been decided. The CLEO would like to see an agreement at the policy level, drawing out who is responsible for producing what data, and how the activities and products under the NSO and under the MSWL are to be integrated. Other actors would need to be connected to this system as well, such as the Social Insurance Agency, the Labour Migration Office (recently taken over by the government), and the Border Authority, all of whom collect relevant data. Other entities that need to better cooperate with the CLEO in terms of information sharing (by having their data fed into the database) are 20 or so private labour mediation entities that have been identified, in addition to the ones already cooperating with the office. These private mediation entities obtain their operation permits from the CLEO or LSWO.

The MSWL uses the LMI gathered by the CLEO in its analysis and for policy-making purposes. The MECS also receives some information from industry (e.g. broad figures on needs by occupation), and attempts to integrate it into its planning. At the national level, the NDIC produces simple forecasts of labour demand by occupation, which are sent to the MECS to feed into education plans.

5.2 Career and vocational guidance

The Employment Promotion Law (Article 7) places vocational orientation and guidance, as well as the provision of LMI for this purpose, under the responsibility of local employment offices that provide counselling on an individual or group basis, funded by the Employment Promotion Fund.

Three public institutions are involved in career guidance: the LSWO, the CLEO and its Career Guidance Services Department, and the MED in Ulaanbaatar, with its Student Employment Exchange Department. Only recently did the career guidance issue begin to be discussed, with a view to establishing a system for the provision of these services. Career guidance activities have been conducted on an ad hoc basis and upon request by students in schools, universities, institutions, and colleges, and by unemployed people and job-seekers through public employment services.

An integrated vocational guidance framework is still largely missing in Mongolia's education and TVET systems, and teachers remain ill-equipped to play a career guidance role. Recommendations made for amendments to the Employment Promotion Law include provisions to strengthen career guidance services. A pilot project implemented by the MED with the help of the ILO in 2009 revealed the need to improve these services and for training counsellors. Five core areas of career guidance services are reflected in the proposals. The MED has also proposed the reorganization of career guidance services in order to target Ulaanbaatar, by having the capital city as a centre of coordination.

In 2011, career guidance services (at the Twelfth Grade-level) were being piloted in three schools in distant districts, using both group and individual guidance based on "western approaches." Two officers from the CLEO were trained by the ILO in 2010 to provide these guidance services. The CLEO uses the ILO website and tries to engage its employees in short-term training.

Challenges in improving career guidance services in Mongolia include the low quality and availability of LMI, the lack of private-sector support (in the form of PPPs), and the lack of strategic planning and coordination in career guidance provision efforts.

6. Quality of education and training

Depending on which side of the debate they stand, stakeholders believe that, in general, one or the other of the two TVET streams provides better training quality, which is more tailored to market demand. Vocational education schools (formal stream) are criticised for having a learning environment that is very different from the actual work environment (including labs and equipment that are different from those used in industry), and for having largely theoretical curriculum content. Therefore training at these schools is often inadequate compared to the actual equipment and tasks and responsibilities required on the job. From this perspective, industry-based training, and training offered by short-term specialized skills training providers, constitutes a more effective approach, more practical and useful than the TVET offered in schools. The content of the short-term skills training programmes is approximately 70 per cent to 80 per cent practical, and 20 per cent to 30 per cent theoretical.

On the other hand, there is the view that short-term programmes provide training that is relatively narrow in scope and limited in terms of overall worker formation (does not provide workers with skills that are more general and convertible, that make them flexible and able to adapt to changing industry and labour-market realities). Vocational education institutions tend to offer programmes that are more in line with the country's strategic objectives and priorities.

In general, however, it seems that in both streams of Mongolia's TVET system, the quality of education and training varies across institutions and sectors. Some vocational education schools give poor training (for instance, although the construction sector in Mongolia is booming, some graduates in construction trades cannot find employment) while others provide very good training quality. For instance, the vocational school supported by the Republic of Korea trains very good knitters, but it is sometimes the case that after graduation, an entire class will be employed outside the country, where they are paid more. There is also a spectrum in the quality of training at the vocational training centres that provide short-term programmes (non-formal stream). Some provide high-quality training (for instance, some cashmere factories have their own training facilities, where they provide training for up to two months and then test the trainees who have completed the programme, and employ them afterwards) while others provide a low quality of training that results in unqualified graduates and low employability rates (sometimes less than 50 per cent, for instance in some schools for chefs and cooks).

One initiative that the TVET Agency is undertaking with MCA-M support, to promote higher training quality, involves selecting the VTCs and establishing them as centres of excellence in certain occupations or sectors. These centres of excellence then serve as an example, and set a standard, for other schools to meet. These centres can then also be used as skills testing institutions for certification in relevant occupations.

Among the factors affecting training quality are funding mechanisms, mainly in the short-term skills training providers (non-formal education stream), and private-sector participation (in both streams). The effect of the funding mechanism on short-term vocational training providers is explained in Section 7.2.

6.1 TVET course and curriculum process

Currently, Mongolia is in the process of reforming both TVET programme contents and standards. Curriculums are being revised in accordance with competency-based training (CBT) methods. The CBT approach is holistic, going beyond technical skills, and provides future workers with everything they need to perform well, including in terms of attitude, behaviour, safety, and work environment. The DACUM approach is used in developing CBT curricula. The approach consists of having experienced workers from industry contribute to the curriculum development process by identifying the specific skills and competencies needed to perform in their occupation (please refer to Annex 4 for the competency-based curriculum template).

Although the MCA-M TVET project has been working in this area, they are only developing the CBT curriculum for 30 out of approximately 400 occupations, selected based on market demand and the country's economic priorities. The MCA-M TVET project has already trained 11 DACUM facilitators. So far, 11 curricula have been completed and are being prepared for piloting. The progress of the MCA-M project in the area is perceived as being too slow. A CBT curriculum template was also prepared by the TVET Agency (with the assistance of Temasek Foundation and Singapore Polytechnic), and merged with the template used by the MCA-M TVET project. A final template was agreed upon and is now being used by both the MCA-M and the TVET Agency.

The TVET Agency is also training some facilitators in DACUM, and is currently working on curriculum development for 18 additional occupations identified as most in demand in the labour-market survey. Some 420 skilled workers from industry have participated in the curriculum development process so far. This is the first time in Mongolia that industry has been involved in curriculum development, to ensure that the curriculums are consistent with market demands. Previously, only the Education Ministry was involved in developing these curriculums, which were then too academic and theoretical. In contrast, the new curriculum content will be 70 per cent practical, and 30 per cent theoretical. The new curricula was to be piloted in September 2011, and to be used in all 63 schools in the vocational education system. Learning materials were to be developed before September 2011. CBT assessment is to be conducted by trainers for their classes throughout the training. The piloting phase will therefore allow identifying gaps and improving materials.

An important related issue is that of teacher training. Previously, TVET teacher training was done according to traditional methods, often abroad in Russia or the former Czechoslovakia. Teachers now need to be trained (or re-trained) in the new methods and approaches, and need to shift their mind-sets from traditional approaches towards CBT ideas. Specifically, teachers have to learn to see themselves as moderators (as classrooms may include a large variety of students in terms of experience and academic attainment) and to consider schools as student centres. With the new approaches, there is an emphasis on providing trainees with a flexible skill set, including “soft skills” and skills that allow graduates to sustain themselves in their occupations or to remain in business, such as business planning and development skills. The TVET Agency has already provided teacher training in CBT for 54 teachers, over six consecutive sessions. The MCA-M TVET project aims to train 1,500 TVET teachers in CBT methods, but has not yet started this training.

Whereas in the vocational education stream (with which the NCVET and TVET Agency are mainly concerned, and where most international donors are involved) the curricula are being revised, teachers are being trained, and the infrastructure is in place, it is not the case for the short-term skills training stream. Although there is a move towards CBT and modular programmes in the short-term stream as well, and towards industry industry-based programmes (using industry facilities), there is no

framework within which these changes can take place. The MONEF has been pushing the MSWL to implement a shift towards CBT in the short-term skills training system, and wants to engage the short-term skills training providers to bridge the gap between them and the TVET institutions. The TVET Agency and the vocational education schools should create linkages with short-term skills providers to enable them to improve the quality of training they provide as well.

6.2 National vocational qualification system

A national qualification framework (NQF) or system does not exist yet in Mongolia, although preliminary work is underway to establish one. In particular, the MCA-M TVET project has been working on developing occupational standards and an NQF. A draft framework has been developed and was to be discussed in March 2011 by the social partners (tripartite context). Recently, there has been increased involvement by the MONEF in developing this framework. Only a basic structure has been created at this stage; the draft framework includes six occupational levels, and occupational descriptions and indicators are being defined. This is challenging because the framework needs to cover all vocational training streams, including long-term, short-term, and informal education. The final draft of the qualification framework will also include details on testing (to be organized by the TVET Agency) and certification.

An important step in developing the NQF has been the adoption of the International Standard Classification of Occupations (ISCO) system for Mongolia (YAMAT in Mongolia). The classification codes were translated by the MSWL, and financed by the ILO, but only a few copies have been printed. These codes are now being used within the new TVET system. Previously, no standard occupation codes were used; some occupations were given different codes at different schools, while the ministry had yet another code for the same occupations.

A functional NQF with the ISCO system for occupations is crucial to regulate labour migration. Without it, Mongolia would have no means to compare and validate the qualifications and certification of foreign workers. Talks have been held with the European Union to develop an NQF involving industry (a project of €7 million over 2011–13). This would include support for TVET for sustainable education and the protection of the environment, and quality assurance mechanisms.

6.3 Skills assessment and certification process

In accordance with the TVET Law (Article 16), the skills assessment of TVET trainees is conducted by the teachers and training institutions, and by specialized evaluation agencies. Non-state organizations that have concluded agreements with the MSWL may organize skills examinations for certain occupations.

Upon successful completion of training requirements and examinations, the training institution must provide graduates with a professional certificate (for those who have completed a package of modules pertaining to the occupation), a professional (vocational) education certificate (for those who have studied 2.5 years or more after obtaining basic education), or a professional diploma (for those who have completed technical education – for example, at a polytechnic school). The vocational education certificate is equivalent to a secondary school degree.

In the short-term skills training stream, graduates are also awarded a certificate from the training institution. Optionally, however, graduates can undergo testing and be certified by the LSWO. Employers participate in the testing organized by the LSWO to ensure that the graduate's skills meet

as closely as possible the needs of the employer. The LSWO would like to strengthen the independent testing capacity of these institutions.

The VTA, which represents short-term skills training providers funded under the Employment Promotion Fund, has expressed concerns regarding the testing and certification process. Specifically, the cost of the testing that must be borne by the graduate is often quite high (relative to the training costs), and the graduate sometimes has to bring the equipment to the testing institution, incurring additional costs. Furthermore, sometimes the people administering the testing are not very competent, and certificates obtained are sometimes not recognized by employers.

The MONEF argues that the assessment of the qualification and certification process should be done by employers (professional federations), and that this should be clearly stated in government policy. The final draft of the NQF will include details on testing and certification. Currently, the testing is being done by schools, but with the CBT approach, employers should be playing a major role in curriculum development, in the actual teaching, setting standards, and testing (i.e. they should be involved in the entire process).

6.4 Performance measurement, quality assurance, and accreditation

Performance agreement contracts are signed between the MECS and every TVET school, which should make the schools accountable for the quality of training provided. Many performance measurements are used, but evaluation is not done thoroughly. For instance, TVET schools have to answer a survey on the employability rates of graduates. For the 63 schools, the average employability rate is 74 per cent, but there are large differences between schools. For instance, some construction schools report 100 per cent employability rates, while some training schools in occupations such as secretaries have significantly lower rates, some as low as 34 per cent.

There is a need for an independent agency to monitor and evaluate the performance of TVET institutions and the consistency with the performance agreements, but the recently established TVET Agency currently does not have the capacity (in terms of human resources) to carry out these functions. Furthermore, there is no reporting system (tracing system or studies) to track the employment of TVET graduates. Such a system would help assess the training courses and programmes' success in meeting labour-market demand.

The European Union project to support the establishment of an NQF will also address the issue of quality assurance mechanisms. Although there are accreditation institutions for higher education in Mongolia, it is not clear whether there are such mechanisms at the TVET level. The MCA-M TVET and TVET Agency have designated three centres of excellence – specifically, one in health (nursing college), one in mining, and one in construction – to receive assistance in terms of technology, infrastructure, and equipment, in order to have them regionally accredited (in the Asia-Pacific region).

7. Training funding, efficiency, and accountability

7.1 Funding mechanisms

TVET funding in Mongolia comes mainly from state contributions through two major channels: the Employment Promotion Fund and the fund to support professional education and training (the TVET Fund). Under the TVET Law (Article 20.3), entities and organizations may contribute to the TVET Fund a certain percentage of their remuneration funds (payrolls), to be decided by the NCVET. Annex 1 describes the income and expenditure of the two funds.

The TVET Fund is used to cover some or all of the training expenses at TVET institutions (formal education system). The TVET Agency is responsible for the management of the TVET Fund. Currently, funding for TVET centres is based on a fixed cost per student, regardless of the programme of study, despite the fact that some training programmes involve relatively higher costs per student (e.g. training on heavy industry equipment). The MECS is trying to reform this funding structure, to account for the differences in training costs for different occupations. Funding as per the current TVET Law is quite centralized. There has not been much flexibility for TVET institutions to generate their own funding in the market. However, there are discussions underway on this issue.

A monthly stipend of 45,000 Mongolian tugriks (MNT) is provided to every student below the age of 25 enrolled in a public or private TVET centre. The fact that this stipend is only given to youth has implications in terms of equity. There are some students who were previously in the military and who return to TVET after having obtained a university degree, who are then adults, and are not entitled to a stipend under the current policy.

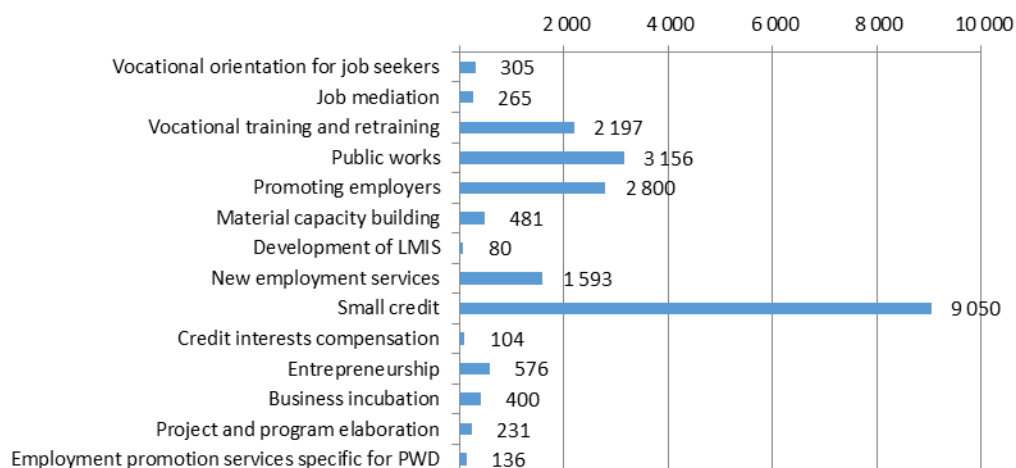
The Employment Promotion Fund is used solely for financing employment promotion activities, including the skills training provided by short-term skills training centres (non-formal education stream) to unemployed people, and to those wanting to acquire new skills or upgrade their skills in order to improve their employability. The funding allocated to the short-term skills training institutions is based on a contract concluded between the local employment office, the training institution, and employers; a set amount per trainee is allocated, which is determined by the government. The short-term skills training institutions that receive funding from the Employment Promotion Fund are selected through a bidding process.

In 2010, 150 out of the 1,500 or so VTCs registered with the LSWO were selected. These VTCs provide training in the 20 skills or occupations identified by a study of the MCA-M TVET project as being most in demand in Mongolia. The criteria for selecting these VTCs included being registered with the LSWO or its local branches, having adequate human resources, facilities, and environment, and providing evidence of operating successfully for at least one year. On average, the employment rate of graduates from these VTCs was 70 per cent to 80 per cent. These VTCs receive from MNT 30,000 to MNT220,000 per student from the Employment Promotion Fund, depending on the skill or occupation in which they provide training.

7.2 Funding accountability and efficiency

In 2009, 42 per cent of the resources went to small loans, 15 per cent to public works, and 13 per cent to employers promoting activities. Only 10 per cent of the fund's resources were spent on vocational training and re-training, as shown in figure 25. Although the MSWL provides some information, in its annual report, on the resources spent from the Employment Promotion Fund, many stakeholders find that the resource allocation system under the fund is not sufficiently transparent, and is not efficient. For instance, the CMTU considers that spending is spread out too thin, and argues that having a more focused fund allocation would result in improved efficiency and higher training quality.

Figure 25. Resources spent (billion MNT) from the Employment Promotion Fund, 2009



Source: MSWL Annual Report 2009.

The MED argues that the funding should not be channelled directly to the district offices, effectively by-passing the city level. A large share of services to job-seekers are actually conducted at the city level, and the current funding allocation system should account for this by allowing some of the funding from the Employment Promotion Fund to go to the city for the provision of these services.

The MONEF and the VTA are most critical of the fund allocations for skills training in particular, arguing that the incentive structure set up by the current policy is not conducive to improving the quality of training; rather it is resulting in a decline in quality. Specifically, any VTC that fulfils certain minimum criteria is eligible for funding by the Employment Promotion Fund, and all VTCs receive the same funding per student for the same occupation, regardless of the quality of training they provide. For instance, Futur, the private VTC owned and run by the president of the VTA, which has been operating since 2003, has been receiving money from the Employment Promotion Fund since 2005, and has now expanded to 13 *aimags*; it receives the same amount of funding per student as other VTCs that were established later, are less experienced, and provide significantly lower quality of training. Futur trains workers in various skills including computer skills, hairdressing and beauty care, sewing, and handicrafts. Furthermore, under the current funding system, quotas are allocated for each VTC; when its quota is filled, a VTC that provides better quality cannot take on additional trainees, who then have to get trained at other (lower quality) VTCs that have not yet filled their quotas. The quota system and funding are also not based on realistic cost calculations; for instance, the quota system may require a number of people to be trained by a VTC in a distant *aimag* without accounting

for the additional costs that the training provider incurs to operate in that area (e.g. transportation cost for trainers, among others).

Initially, when the quota system was introduced, it was viewed as a positive initiative that promoted competitiveness. But later on, there was a shift to thinking that it was better to have more entities providing this training. The minimal threshold to qualify for funding under the Employment Promotion Fund then prompted a large number of VTCs to enter the market, resulting in a decline in training quality. Therefore, this funding system is resulting in a sort of “race to the bottom,” because even the good training providers’ quality is decreasing due to inadequate funding and the need to be competitive in terms of costs with new entities that are providing lower quality of training at lower cost.

The number of short-skills providers receiving funding by the Employment Promotion Fund has increased from 30 VTCs to approximately 160 VTCs in recent years. Some of these VTCs offer poor quality of training, but no distinction is made between them in terms of funding allocation. This increase in the number of VTCs is not to the benefit of the trainees, and is perceived as a waste of money; According to one stakeholder – “What is the purpose of the Employment Promotion Fund bidding process if bad-quality VTCs are selected?” – some 80 per cent of the funded VTCs provide poor training and just survive on government funding, while some 20 per cent provide good training quality, and have good interaction with the private sector and with non-governmental organizations (NGOs). The current system is subsidizing the poor quality VTCs, allowing them to survive in a market they would otherwise not remain in.

The MSWL is somewhat aware of these criticisms, and is in the process of reviewing its policy. One factor that may be affecting the quality of training supported by the Employment Promotion Fund is that training providers must be selected under the Procurement Law on provisions of goods and services by public budgets. Through this law, the government lists a package that it wants to purchase, and then entities are selected through a bidding process; therefore, those who are able to provide the required services at a lower cost are selected. The proposed amendments to the Employment Promotion Law involve abolishing the clause on the use of this Procurement Law and bidding process in the case of the Employment Promotion Fund. Additionally, proposed amendments involve introducing and supporting other training modalities, such as apprenticeships, on-the-job training, and individual training. The aim of these proposed changes is to decentralize the selection of training providers, so that local authorities have more power, more of a say in choosing the training providers, based on local needs and the quality of training provided. Whether substantial reforms to the Employment Promotion Fund allocations will be made remains to be seen, but some stakeholders have expressed their doubts in this regard.

Box 1

Challenges for short-term skills providers

Short-term training providers operate without having a clear legislative framework, qualifications framework, standards, or monitoring systems in place. They have high operating costs, have to survive in a competitive environment, fulfil a number of social roles beyond their mandates, and are not provided with adequate or sufficient funding. They need the legislative environment to be made clear and to provide them with adequate support, particularly the entities that are struggling to continue providing a high quality of training.

The operating costs of short-term training providers are high because of equipment costs, and because many of them (approximately 90 per cent) have to rent their premises. The funding they receive from the Employment Promotion Fund is often insufficient to cover their costs, and some have had to make trainers redundant.

In addition to providing skills training, these VTCs are also conducting activities that would fall under social welfare services, such as seeking out unemployed people, and, after training them, helping them get certified (by the MSWL and employers) and to find employment. This is because in order to be eligible for funding the following year, VTCs have to maintain a certain employability rate of their graduates. However, graduates face a number of challenges in getting certified and finding employment. For instance, while VTCs receive MNT70,000 per student for the sewing occupation, the cost of the certification test that needs to be passed by the graduates is MNT35,000. The testing cost is borne by the graduate, and, in addition, the graduate has to bring the equipment to the testing institution. Furthermore, sometimes the people administering the testing are not very competent; sometimes certificates obtained are not recognized by employers, and graduates then have to start their own business.

Government policy is preventing short-term skills training centres from having the benefits of performing well in the private market, because it is enabling lower-quality institutions to enter, which increases competition and affects the quality of training provided. Furthermore, there is also a loophole in the policy framework due to a provision under the NGO Law, which allows NGOs to deliver skills training; because NGOs are exempted from paying taxes, many training providers are choosing to be registered as NGOs. This has competitive implications, as previously established training institutions such as Futur are registered as small or medium sized enterprises (SMEs) and must pay taxes.

Small, short-term skills providers therefore struggle to survive within this environment. This has important social consequences because this sector (short-term skills providers and the non-formal education sector) is the one that handles unemployed people, poor workers, and vulnerable and informal-sector workers; whereas the vocational education system, which is highly subsidized, mainly targets youth. For instance, many disabled people who have learned handicrafts work and have been able to sustain themselves were trained by these centres. The target group that they have to deal with is very difficult, and includes disabled people, mentally challenged people, former prisoners, and people suffering from drug or alcohol abuse, among others. There is, therefore, a lot of additional work involved, including social work, which requires VTCs to liaise with social workers and religious organizations, and there are particular challenges in ensuring the employability of these trainees. These additional pressures are difficult to handle, and distract VTCs from focusing solely on skills training and on the quality of skills provided to their trainees. These VTCs, therefore, play a crucial social role, but have no adequate support from the government.

In sum, although the government puts a lot of pressure on short-term skills training institutions for improved training quality, it does not provide them with sufficient funding, nor is it setting up a proper incentives structure. These VTCs are trying to meet market demand and improve their equipment and training quality, but it is very difficult to do so in the current environment. Funding conditions under the Employment Promotion Fund are to some extent transferring the burden of social functions of government onto these private organizations, without providing them with adequate support. Nevertheless, blame is often directed at the VTCs for having poor training quality, and little consideration is made regarding the role that policy is playing in all of this.

8. Tripartite structures and social partnerships in TVET

Tripartite structures and the involvement of social partners in the policy process are relatively new in the context of Mongolia. In recent years, key policy documents such as the country's socio-economic guidelines (prepared by the NDIC) and the annual budget (prepared by the Finance Department) are submitted to social partners for comments and contributions through parliamentary committees and working groups established for this purpose. Tripartite bodies such as the NEC, the NCVET, and their subcommittees are part of these working groups.

Tripartite cooperation agreements at the national level are renewed every two years. Consistently, with national-level agreement, tripartite agreements are formed at the local level as well. The CMTU submitted proposals for revisions to the tripartite cooperation agreement for 2010–12, including provisions regarding TVET, which are currently being discussed by social partners. A standard approach to developing partnership agreements between government, TVET institutions, and the private sector is also currently being discussed by parliamentary committees, and needs to be approved by the NEC and its subcommittees.

The NCVET was established as a bipartite structure, mainly because technical and vocational education students and trainees are not yet working, and not yet part of unions. Union representation on the NCVET is not completely absent, but is very limited. There are union representatives sitting on NCVET subcommittees, but their ratio is small (one union representative out of six subcommittee members). Although the NCVET subcommittees are meant to be tripartite bodies, the CMTU argues that union representation on these subcommittees is only symbolic.

The CMTU believes that in general, trade union representation in tripartite structures in Mongolia is not very strong. Although the channels exist in terms of the CMTU voicing concerns, there are doubts as to whether these concerns are accounted for in terms of policy responses. For instance, there are currently negotiations underway for minimum wages in the mining sector, in which government and employers seem to have formed a bloc, and unions find themselves disadvantaged. The CMTU would like to have stronger “real” tripartite structures in Mongolia, with equal representation from social partners, and would like to be better involved in TVET in terms of policy development, funding allocations, and monitoring. The MSWL also believes that union representation on the NCVET should be improved, and that these newly established institutions should change and evolve.

8.1 Industry investment and participation in TVET

Mongolia's skills mismatch problem has been largely attributed to poor training quality or to the shortage of skills that meet employer demands. After completing the training programmes, graduates have often found themselves not adequately prepared for the job requirements. This problem is partly due to the limited industry involvement in the training process. In addition to direct participation through the provision of training, equipment, or infrastructure, the private sector must have closer ties with TVET institutions; employers must define and convey their needs more clearly, not only the number of workers by occupation, but in terms of the actual skills that they require.

The CLEO has held several meetings with employers and representatives from industry to discuss various issues and cooperation, and to obtain information regarding the short-term and long-term

needs of employers. The CLEO has organized job fairs in which employers and potential workers come together, and share information on skills needs and employment opportunities. During the first fair, more than 200 employers made an agreement with the CLEO on areas of cooperation. The MED also organizes job fairs in cooperation with industry sectors.

In recent years, there has been growing awareness of the important role of industry in ensuring that the training provided meets high standards in terms of quality and relevance; that without industry participation in TVET, the training provided is unlikely to meet market demand. The need to promote private-sector involvement in TVET has also increased as a result of urgent needs for skilled workers in certain sectors, particularly in mining and construction.

A number of policy incentives to promote private-sector participation are in place. Under the Employment Promotion Law (Article 11), subsidies are provided to employers who hire a person who has been registered as unemployed at an employment office for over a year and provide them with sustainable employment for at least six months; employers who train an unemployed person on their own premises and then provide them with employment for more than three months; and to employers who re-train a worker threatened by unemployment in order to keep them employed.

Currently, there is also good policy support for companies to provide their own training programmes, and to establish their own training centres. Under the Employment Promotion Law, vocational training providers must be officially registered legal entities. For this reason, it is sometimes more efficient for industries to establish their own VTCs as a response to a skills shortage. Concepts such as PPPs have recently been introduced in Mongolia and are gaining momentum. In 2010, a new concession law on PPPs was passed, and a committee responsible for PPPs was established. The government has already approved some projects to be funded as PPP promotion initiatives.

The growing awareness of the role of industry in training, and the favourable policy environment, have resulted in positive trends in terms of private-sector investment and participation in TVET. This improved participation should help align the TVET system with market demand. One initiative often cited as a good model of cooperation between the private sector and the TVET sector is that of Oyu Tolgoi, a Canadian-Mongolian mining project that is providing funding for some 3,300 people above the age of 24 to undertake a two-year training programme in priority occupations that will be needed in the short-term (welders, heavy truck operators of various types, among others). Oyu Tolgoi has already covered the training costs of 955 trainees who have graduated from vocational education training institutions. Trained workers are not all guaranteed to be employed by the project. Some of them will probably be employed there, while some may be employed elsewhere.

The MED has found that although large companies have been successful in participating in training provision, small entities often lack the capacity to do so. Some large companies in Mongolia provide on-the-job training to their workers, and some even send workers abroad for training. The MED has been interacting with the large actors in growth sectors such as mining (including Oyu Tolgoi), construction, and road construction, in order to promote their involvement in training provision. The LSWO has also implemented pilot on-the-job training projects in these three sectors. Other on-the-job training pilot projects were implemented by the MCA-M TVET project as well, specifically in four construction and mining occupations (rooftop builders, glass, asphalt, and mining). These projects have all revealed clear advantages of this type of training, including the availability of better facilities and equipment for providing practical skills and knowledge. In many cases, industry-based or on-the-job training is considered the most efficient type of training that is most likely to meet the demand of employers. For this reason, those who have had on-the-job training are considered to have better employment opportunities than those who have had other types of training. There is a shortcoming of on-the-job training, however, which is that employers sometimes treat trainees as full-fledged

employees and neglect part of the curriculum (they do not teach them everything, but only what they need to fulfil specific tasks as employees).

On-the-job training is particularly important in sectors where training costs are very high (e.g. sectors where equipment is very expensive and constitutes a barrier for VTCs to enter the market). In these sectors, such as mining, it makes a lot of sense for companies to provide on-the-job training, or run their own training centres. In the future, the LSWO would like to see the private-sector companies organize themselves and pull their resources together to provide cluster-based training centres. This cluster-based approach would allow the industry to set standards.

8.2 Unions participation in TVET

Over the past five years, CMTU activities have been increasing in terms of involvement in on-the-job training of workers, particularly through sector unions, which are involved in training provision using the facilities of some private entities. These training activities help the CMTU improve the visibility of unions, and workers' awareness of the role of unions.

The CMTU is in the process of establishing its own VTC, the need for which had been identified long ago, partly due to a perceived limited capacity in the existing vocational training system. Starting in 1999–2000, the CMTU, supported by the Danish International Development Agency (DANIDA) initiated a process to strengthen the TVET system, which included the establishment of a VTC. However, the authorities did not grant them permission to do so. The issue of establishing this training centre re-emerged in 2005, but due to bureaucratic barriers was again put on the backburner. Finally, in 2009, with the support of DANIDA, the CMTU prepared a project proposal to establish a training centre that focuses on mining and construction, the two areas that unions have identified as being most in need in terms of aligning TVET with workers' and employers' needs.

This centre is to be established in collaboration with the MONEF (it would be a bipartite organization), and an MOU has been signed between the partners and the MECS. The government will also be represented through the inclusion of the NCVET and its subcommittees in the governing body of the proposed VTC. Although the DANIDA is offering technical assistance, the overall costs are to be borne by other projects, such as the MCA. The CMTU has approached the MCA-M TVET project, and has been met with a positive response. They are in the process of preparing a project proposal which should be finalized by June 2011. The target group for this centre would not be solely union members, but anyone who wishes to develop their skills. Part of the curriculum, however, will involve the role of unions.

Unions are also concerned because capacity in the existing vocational training system is causing companies to hire workers from abroad. In addition to its usual activities in promoting workers' rights and helping workers to organize, the CMTU views the VTC as a direct way to support workers, and future workers, by providing them with services such as skills upgrading and career development opportunities. Improving worker skills would provide an additional basis for collective bargaining for higher wages (justifying wage increases through improved skill levels). For all these reasons, unions need to be involved, and have an important role to play in the skills development of their future workers. Although unions will continue to push for closer connections between the TVET system and employers and workers, it is important for the CMTU to develop its own training provision capacity. The CMTU argues that unions have a comparative advantage over the formal education sector, because they are more concerned with the continuous skills development and career progression of workers. Even employers are less concerned in this regard because of their incentive structure, which

often makes them deliver rapid skills training at a lower cost, rather than in providing them with a good learning environment and working conditions.

9. Skills training for employment promotion in the informal sector

Skills training initiatives for employment promotion in the informal sector in Mongolia target two main groups: workers in agriculture, animal husbandry and herders, and own-account workers in the peri-urban *ger* (traditional tent) areas around Ulaanbaatar.

9.1 Skills training for informal-sector employment in the *ger* areas

Between 2003 and 2009, the Development Solutions (DS) NGO – a spin-off of CHF International – implemented a project called the Ger Initiative, funded by the United States Agency for International Development (USAID), which focused on employment promotion in the peri-urban areas surrounding Ulaanbaatar. The initiative involved providing support to micro-entrepreneurs in terms of training provision and employment services, and helping to match registered unemployed people with jobs that are suitable for them. Specifically, Development Solutions would make an appraisal of the skills of the people before matching them with employers. In some cases, the NGO simply provided them with short training (one or two hours) in soft skills such as preparing CVs, for example. Often however, registered unemployed people have a low skill level, and Development Solutions would send them to a technical or vocational training centre providing short-term training, assess their skills after programme completion, and then match them with employers. The Ger Initiative ended in 2009, but Development Solutions continued providing services under the Mongolian Agriculture Support Programme (MASP), funded by the US Department of Agriculture (USDA). Currently, services are provided in seven provinces and at seven branches or business development centres in different *ger* areas of Ulaanbaatar.

Development Solutions also conducts outreach activities to inform target groups about its services, and also works in cooperation with *khoro*-level government on information exchange and dissemination. Development Solutions also receives funds from the Employment Promotion Fund, but this money (MNT10 million to MNT15 million per year over the last two years) represents a small part of its funding. Employment matching services are very expensive (because they are “one-to-one” services) and therefore require continuous donor funding. Currently, these services are funded by USAID and the USDA.

Other initiatives for employment promotion for people living in the *ger* areas include mobile employment mediation services by the MED, whereby a van drives around the areas and provides people with information on work opportunities.

9.2 The Start and Improve Your Business and Know About Business programmes

The Start and Improve your Business (SIYB) Programme targets entrepreneurs who want to start their own business, and, often, small entrepreneurs in the informal sector. The programme was introduced in Mongolia in 2002, and after two years of preparatory work, implementation began in 2004. Since

then, training of trainers (TOT) sessions have been conducted on 20 occasions, which represents 289 trained trainers nationwide (from all *aimags*), and over 400 standard SIYB training sessions were conducted, providing training to nearly 6,000 participants. In addition, approximately twice as many sessions were conducted using non-standard SIYB packages, which include a subset of the material or modules from the standard packages (e.g. only the cost-analysis module, or the financial planning module).

These non-standard SIYB training packages have been taken up and used by a variety of training providers, including the Asian Development Bank (ADB), the World Bank, the German Organization for Technical Cooperation (GTZ), the World Wildlife Fund, and others. Banks, and in particular microfinance providers, have also taken a significant interest in the programme, as they have found that loan repayment rates are higher among clients that have been through SIYB training. It is estimated that 15,000 or 16,000 participants in total have been provided with SIYB training since 2004 in Mongolia, using either the standard package or a non-standard package.

In 2011, Start Your Business (SYB) training sessions were planned to be delivered in 180 *sums* (districts) out of the country's 329 *sums*, which would cover 2,700–2,800 participants from rural areas, and Improve Your Business (IYB) sessions were planned in 75 *sums*, which would represent 1,100 business entrepreneurs from rural areas, including some successful herders. Once the training providers were selected (through a bidding process), the *sum* selection was made at the *aimag* level (the *sums* considered most in need were also identified at the *aimag* level).

Because SIYB targets entrepreneurs who want to start businesses, this has raised the issue of business ethics training, and has led to the introduction of the Know About Business (KAB) Programme in Mongolia. At the secondary school level in Mongolia, there are three options (possible streams): the general secondary school system; TVET; and the non-formal education system, which includes literacy courses, adult education centres, and lifelong learning centres, among others. The third channel (non-formal education) has proven to be the best channel for the provision of the KAB Programme.

In 2007, 24 trainers were trained in KAB from the above three streams. In 2009, KAB training was provided on five occasions (five ten-day sessions), resulting in 119 trained trainers (all but one *aimag* was covered; the other *aimag* was not excluded but the participant was unable to complete the training). One of these occasions specifically targeted trainers from the non-formal education system. In 2009 also, four rounds of SIYB training (60 days for each session) were provided.

Some NGOs and international organizations working in the areas of child labour and the informal economy have trained trainers in KAB in Mongolia, including in the ILO International Programme on the Elimination of Child Labour (IPEC), and using the ILO Gender and Entrepreneurship Together (GET) Ahead resource kit, adapted for Mongolia.

There has been significant policy support for SIYB and KAB in Mongolia. The government's National Industrialization Programme has a provision for KAB training to be introduced at all mainstream secondary schools, and the Employment Promotion Fund has a provision for SIYB to be integrated in short-term training programmes. There is a national committee on the introduction of KAB, which is a bipartite body headed by the state secretary of the MECS. An employers' representative occupies the position of deputy head of the committee. This committee has had difficulty convening meetings, however.

Although the KAB Programme has now become an integral part of the mainstream vocational education curriculum, only 20 per cent (15 out of 75) of the vocational training schools have trained

trainers, which makes the MECS and TVET agency less strict (slow) on implementing this policy. KAB programmes have been introduced in 96 secondary schools across the country (of approximately 205 secondary schools).

The SIYB and KAB programmes have not received any financial support from the ILO over the past two years, but the work has been ongoing. The success of the programmes is partly due to the enthusiasm of trainers. The programs have been relying on funding from the projects and programmes of the international organizations and NGOs cited above, and from the Employment Promotion Fund, which provides funding for training delivered by KAB-trained trainers at some 62 training centres providing short-term training programmes, including employment promotion centres and business development centres. There is a strong demand for KAB programmes from potential trainees (with high competition to enrol, as only 20 students are selected from each school) and from various areas, most of which have expressed quite urgent needs (e.g. *aimags* that have been severely affected by climate conditions).

Although the SIYB and KAB programmes are well-established in Mongolia, and KAB in particular has become part of the vocational education curriculum, there are concerns about the sustainability of the programmes. There is only one master trainer for nearly 500 SIYB trainers in Mongolia, and only two KAB facilitators (master trainer assistants). The programme coordinator, who is also the only master trainer in Mongolia, is also the official in charge of SMEs at the Ministry of Food, Agriculture, and Light Industry (MAFLI), and does not have time to respond to all of the demand (for training workshops, for requests for information, and follow-up questions from trainers, among other things). Furthermore, he uses his contacts as a government official to establish a network used to disseminate the programme and maintain linkages between trainers. The lack of a project team means that there is no capacity to gather and consolidate data, and there is no mechanism for the coordinator to pass on institutional memory after his retirement; no structure is in place that will ensure continuity.

ILO support is needed in carrying-out monitoring and quality assessment of the SIYB and KAB programmes, and for the continued development of trainers. Although the ILO has done a general assessment study of its overall involvement in Mongolia, no monitoring exercises have been done for these programmes specifically. In terms of technical cooperation projects, the ILO should also provide another round of master trainer training in Mongolia.

9.3 Skills training for employment promotion among herders, animal husbandry, and agriculture workers

In January 2009, the MSWL and the MAFLI adopted the Herders' Employment Promotion Programme, which aims to improve the skills of herders, in order to promote business sustainability, protect them from risk, and increase their income. Under this programme, herding households in 30 *sums* and ten *aimags* participated in identifying their needs, and some 1,200 herders participated in 17 types of training.²⁹

Training in the agriculture, animal husbandry, and herding sector has typically consisted of on-the-job training. It is particularly difficult to integrate these workers into the formal training system, and even the short-term skills training sector has not been able to reach them, to provide them with entrepreneurial skills or other skills that may be useful to them. These informal-sector workers form the next target group that the LSWO wants to focus on. Reaching these workers and providing them

²⁹ MSWL, Annual Report 2009.

with skills training is very challenging, however, and it is difficult to find the right mechanisms. The office has now opened a bidding process for the establishment of business development centres to help with business start-ups, which will be funded under the Employment Promotion Fund.

Best practices from other countries cannot be easily adopted in Mongolia, where herders are nomadic. Furthermore, a national standard curriculum for their training cannot be used because skills required for herders from the north of the country differ to those needed by herders from the south, for instance. The LSWO is undertaking a pilot training project for young herders, which involves linking them (pairing them up) with experienced herders in their region. This method, which is based on the same idea as an apprenticeship, allows for experienced herders to pass their knowledge on to youth beyond their family members and those close to them.

The lack of knowledge of basic business and management concepts has been identified as a major challenge for these workers. Many herders have already participated in KAB training sessions conducted in rural areas. Under the MASP, Development Solutions provides both business training and linkage services (linking purchasers of products with the micro-enterprises that can provide them). The MASP coverage has been expanded from micro-enterprises to SMEs, which has allowed Development Solutions to raise funds and improve the programme's sustainability by charging some fees for the training material that they provide (bookkeeping material, among other things).

The Swiss Development Cooperation Agency (SDC), in cooperation with a local NGO, VET-NET, implemented a pilot project of training veterinarians in rural areas. The project involved training selected herders, who then would go on to share their knowledge with others. No set curriculum was used; the training content would change from year to year based on needs.

The government has approved and began implementing a programme called Mongolian Livestock, with the aim of supporting the nomadic existence of herders. It targets herders in terms of building their skills related to animal husbandry, such as the processing of raw materials (animal skins), so that they can get higher value added, more benefits. Training is also provided on "intensified-animal husbandry," which involves the development of farm-like, farm-based animal husbandry methods, to raise productivity. Indeed, because of climate change, nomadic people in Mongolia may be shifting to a semi-nomadic, settlement-based lifestyle.

Box 2
Agriculture, animal husbandry, and herding: current issues

Animal husbandry and herding remains a key economic and employment sector in Mongolia. The issue of turning the 170,000 herding households into legal entities (SMEs) has been under discussion at the MAFLI. Currently, herding workers are in the informal sector, and are not covered by any social protection. There are attempts at registering them as SMEs, so that workers can benefit from social protection and other government benefit schemes, including the distribution of a share of the profits from large mining projects.

There is a spectrum of herders, some of whom are very wealthy and can afford to send their family members to study, and employ other herders to help. Registering them would enable the government to regulate them, and therefore have some oversight on labour relations at that level. On the other hand, wealthy herders are employers, and provide a source of employment income to those less successful herders who are not reached by government programmes (a gap area). The government may also want to support them in this employment provision role. Furthermore, these wealthy herders may have skills that have enabled them to succeed and that can be passed on to others.

Another important issue for animal husbandry has been that of organizing herders into cooperatives. Attempts in this regard have not been successful, partly because of Mongolia's past experience (a negative perception of cooperatives due to association with the communist era) and also due to the lack of legislative framework. The cooperatives sector has been organized by the Mongolian Cooperatives Association (NGO), an umbrella organization, and until recently the government has not been involved in this process. More recently, however, cooperatives began to be considered as an important area, and some government policies now include provisions that require the involvement and active participation of cooperatives.

A priority objective for animal husbandry in particular is establishing some commodity exchange system for raw materials related to animal husbandry, which would set prices and balance supply and demand (as in the mining industry). This would help ensure fair prices for herders. Currently, because market access for herders is limited, there are intermediaries who take advantage of this, and benefit at the expense of herders. A draft law has been prepared in this regard over the last two years, and is to be submitted to parliament.

10. Technical cooperation projects on education and TVET

10.1 The MCA-M TVET project

The most significant technical cooperation project on TVET in Mongolia is the project being implemented by the Millennium Challenge Account-Mongolia (MCA-M), the implementing agency for the Millennium Challenge Corporation (MCC). The overarching goal of the programme is to help youth get skills in order to find employment, which will ultimately lead to poverty reduction. The total budget of the project is US\$47.6 million.

The MCA-M began its work in 2008. During that year, it had to define objectives and strategies, and fulfil certain pre-conditions before project implementation. These pre-conditions included the establishment of an enabling environment with respect to legal and operational reforms, including the passing of the new TVET Law. The MCA-M therefore provided inputs, assisted in the TVET reform process, and pushed for the new law to be enacted.

When the law was passed in 2009, it established new institutions and mechanisms for the governance of the TVET system. The MCA-M TVET project's first component (**reforms to TVET policy and operational framework**) addressed this issue. A German company was contracted to assist in the

establishment of the NCVET and of the TVET Agency. This work was carried out during the first year, and has now been completed. However, there is still a need to ensure the sustainability of these institutions. The MCA-M is currently in the process of bidding for a capacity building project for the TVET Agency, NCVET, and for TVET teachers. This project would provide a framework for assisting in building capacity and improving the sustainability of these institutions.

Under the first component of the project, the MCA-M is also running the National Competitive Grants Programme, which involves two types of grants: one for promoting best practices, and one for promoting PPPs, an important element of the demand-driven system. For the first type of grant, TVET schools make a proposal in which they detail their best practices and how they intend to disseminate these concepts. For the second type of grant, TVET schools should have at least three industry employers as partners, and receive a contribution of at least MNT 10 million from each partner. Partners are expected to contribute not just in terms of funds, but in terms of curriculum development. There have been two rounds of this programme so far. In the first round, 17 out of 48 schools that submitted proposals were selected. In the second round, 11 out of 37 schools were selected. Overall, 28 schools have received grants under this programme.

Under the second and third project components (**creation of skills standards and a CBT system**), the TVET project is currently working on developing the CBT curriculum for 30 occupations, selected based on market demand and the country's economic priorities, and on developing occupational standards and an NQF (see Sections 6.1 and 6.2). Another component involves teacher training in CBT methods; the objective is to train 1,500 TVET teachers, but this work has not yet started.

Other MCA-M TVET project initiatives have included piloting on-the-job training in four construction and mining occupations (rooftop builders, glass, asphalt, and mining). This training is module-based and may constitute a good model to be used in short-term training courses. Another initiative has involved the designation and strengthening of three centres of excellence, specifically one in health (nursing college), one in mining, and one in construction. The centres of excellence receive assistance in terms of technology, infrastructure, and equipment, in order to have them regionally accredited (the Asia-Pacific region). These centres will also be provided with teacher training. The MCA-M is looking for partners from abroad for each of the centres of excellence, but there are some challenges in this regard (e.g. the issue of what language to be used for the training). The long-run goal is to spread this centre of excellence model.

The fourth component of the MCA-M TVET project involves **career guidance and LMIS development**. A German company has been contracted to develop an LMIS for Mongolia, in collaboration with the CLEO and the LSWO (see Section 5.1).

Under the fifth component (**improvement of learning environments**), 15 schools and three centres of excellence have been selected as direct beneficiaries, and will be given equipment (simulators for mining, among other things), IT assistance, and will have infrastructure rehabilitation (e.g. some workshops in mining and in construction will be refurbished). So far, all the nursing colleges have been equipped, including five labs (immunology labs and blood testing, among others.)

The final component is public outreach to promote the MCA-M TVET project and to raise public awareness on TVET reform and on the importance of TVET in relation to the new economy, and on the benefits of the system. This outreach programme is mainly targeting high-school graduates, students, parents, and the general public. The MCA considers that this outreach programme is very effective; it has conducted a perception survey and has found that perception of TVET is improving.

10.2 Other technical cooperation projects underway

In terms of involvement in TVET, the ADB, in partnership with the MECS and the TVET Agency, is implementing (between 2007 and 2012) a project to support the improvement of six pilot model schools, selected from different parts of Mongolia. The selected TVET institutions provide training in selected agriculture and construction occupations in the East and West regions; in tourism and food production in the North; in food production and general technical education in the East Gobi region; and in construction and general technical education in the Central region. These schools are provided with equipment, as well as training in terms of management and disseminating practices to other schools. The ADB has also previously funded small projects providing support to short-term training providers under the MSWL, particularly targeting unemployed youth. More recently, the ADB has been working closely with the MCA-M and other donors including GTZ and the Korea International Cooperation Agency (KOICA) on sharing information and best practices on TVET.

The USAID is not directly involved in the TVET sector in Mongolia. It is currently funding (jointly with the USDA) two programmes – the MASP that has evolved from the Ger Initiative (see Section 9.1), and the Rural Agribusiness Support Programme (RASP), which is being implemented in ten *aimags* by Mercy Corps. The latter programme involves employment creation and loan facilitation (linking between banks and clients). These two programmes coordinate with local-level social welfare and labour offices and with VTCs in *aimags*.

The largest World Bank development programme in Mongolia at the moment is a rural sustainable livelihoods project and a livestock index-based insurance project. The latter project involves establishing a system whereby insurance is indexed to the loss of livestock affecting the area as a whole. The Education, Health, and Social Protection Department of the World Bank in Mongolia has a relatively small portfolio. The World Bank has not had any direct involvement in TVET projects in Mongolia, but has made a study of higher and tertiary education, which had a small feature on TVET. Currently, it is working on basic, primary education and, to a lesser extent, on pre-school education. It has recently started a technical assistance project in social protection, because the fiscal sustainability of the social protection and social welfare system has been brought to the forefront with the recent global economic crisis. The World Bank is currently developing its partnership strategy with Mongolia for the next five years.

The Japanese International Cooperation Agency (JICA), which is the largest bilateral donor for Mongolia, has also not been directly involved in the TVET sector, but has focused instead on primary education (school building and teacher training, among other things). JICA provided short-term skills training courses (one week to two years) in Japan for a large range of professional and skilled workers from Mongolia. These courses have included business and entrepreneurship courses, and Japanese language courses. Some difficulties have been encountered in that the courses have so far been given in English; JICA is now considering delivering these courses in Mongolian. Because the development discourse in Mongolia is currently focusing on the mining sector, JICA is considering prospective projects for employment creation in other sectors, including SMEs and agriculture.

10.3 Projects in the pipeline

There are currently two major donor projects in the pipeline for TVET in Mongolia: an SDC project, and a large European Union (EU) project, both of which are still at the conceptual stage.

The prospective EU project, “Supporting Technical Vocational Education and Training for Sustainable Livelihoods and Protection of the Environment,” is currently being discussed with the TVET Agency. The €7 million project (2011–13) would involve the development of an NQF with the participation of industry, support for TVET for sustainable education and the protection of the environment, and quality assurance mechanisms

For the SDC, TVET is a new work area in Mongolia, although it has had TVET projects in many other countries. In 2010, during its mid-term strategy review, the SDC identified TVET as one of the two programme areas that it wants to focus on (the second area was governance). The SDC undertook a feasibility study and found that it would take six to seven years to implement the prospective project in order to produce tangible results. It is currently working on a project proposal and expects to finalize the project design by the third quarter of 2011. The local consultant hired to work on the project design has previously worked on the MCA-M TVET project, and also on other skills development projects for the government. Although the specific focus area for the TVET project has not yet been determined, the SDC is considering the areas of agriculture, crop production, and animal husbandry; light industry (e.g. meat processing); and construction. Activities would be on the labour supply side, such as apprenticeships and working with training centres. This project would focus on the Western region of the country.

11. Recommendations

Although many changes have taken place, and more developments are underway with the aim of improving TVET in Mongolia, this study has identified a number of remaining gap areas. This section provides recommendations for Mongolia’s policy-makers for improving the country’s TVET system by addressing these gaps. Recommendations are grouped under five major areas:

- a) strengthening the policy framework for improved coordination and implementation;
- b) building the capacity of TVET institutions and of the overall TVET system in Mongolia;
- c) strengthening the linkages between the TVET system and the labour market;
- d) improving access to social dialogue and tripartite involvement in TVET; and
- e) improving TVET access for vulnerable groups such as disabled persons and informal-sector workers.

This section also provides recommendations for the ILO on potential areas for assistance, from the perspective of building upon and complementing the work done by the government agencies and other donors. Specifically, recommendations marked by an asterisk represent areas where ILO involvement would constitute significant value added.

11.1 Policy framework

The policy environment for TVET has improved substantially with the revisions included in the TVET Law, and should further improve with the ongoing revisions to the Employment Promotion Law. However, improved policy coordination and inter-ministerial cooperation, specifically between the MECS and the MSWL, is needed to address some of the weaknesses of the TVET system, such as the gap between the formal and non-formal TVET providers. One way to improved policy coordination could be through the development and implementation of a national skills strategy. Such a strategy may be jointly developed by the NDIC, the MECS and the MSWL, and would present specific policies, strategies, and programmes for improved TVET delivery; it would clearly state each

ministry's roles and responsibilities, and include a strategy for policy coordination and joint implementation.

In addition to improved coordination and clearer mandates, agencies need to have sufficient capacity to implement policies. The TVET Law introduced the TVET Agency and the NCVET and its sub-national councils, but these newly formed bodies still have weak institutional capacity, particularly at the local level and in rural areas. Other newly formed bodies such as the NDIC and the CLEO also play major roles and would benefit from capacity building to better fulfil their functions. Mongolia's government should strive to develop and increase the capacity of these newly established institutions.

Recommendation 1

Review laws and policies to ensure better complementarities of government agencies' functions and responsibilities in TVET.

Recommendation 2

Work towards a more coordinated approach on TVET and improved inter-ministerial cooperation between the MECS and the MSWL; develop a national skills strategy; and support the NDIC's work in achieving inter-ministerial cooperation.

Recommendation 3*

Improve the capacity of newly established TVET institutions (the NCVET and its local level sub-committees, and the TVET Agency) and other relevant agencies (the NDIC and the CLEO).

11.2 Capacity of TVET institutions and systems

Important work is currently underway by the TVET Agency and by donors in a number of TVET areas including curriculum development, testing and certification, and establishing an NQF. Notably, the MCA-M TVET project has been heavily involved in the CBT curriculum development process, and a forthcoming EU project will focus on the development of an NQF. The government should ensure that this work progresses and is completed as soon as possible.

There is a need for an independent agency to monitor and evaluate the performance of vocational training institutions and consistency with the performance agreements, but the recently established TVET Agency currently does not have the capacity (in terms of human resources) to conduct these functions. Furthermore, there is no reporting system (tracing system or studies) to track the employment of TVET graduates. Such a system would help assess the training courses and programmes' success in meeting labour-market demand.

A substantial amount of funding – notably through the MCA-M TVET project and the forthcoming EU project – is currently being channelled to the vocational education stream in Mongolia, to improve these areas of TVET. Private-sector support and investment have also been largely going to vocational training institutions in the formal education stream. On the other hand, very little support is being provided to the short-term TVET institutions in the non-formal education stream (that fall under the MSWL) in terms of funding or in terms of capacity building (TOT, improvement of learning environment, materials and equipment, among others). As a result, short-term providers are very much at a competitive disadvantage. The MONEF has highlighted the need to improve the capacity of short-term training courses and help bridge the gap between them and the vocational education institutions.

Recommendation 4

Develop competency standards (as a basis for CBT) and an NQF.

Recommendation 5

Improve the skills testing and certification process.

Recommendation 6

Establish an independent agency to monitor and evaluate the performance of vocational training institutions, or improve the TVET Agency's capacity to fulfil this role; and undertake tracer studies of TVET graduates.

Recommendation 7

Implement a comprehensive capacity building programme for TVET providers, including both formal and non-formal institutions, to improve training capacity in both streams and bridge the gap between them.

Recommendation 8

Review the funding allocation structure and mechanisms for VTCs offering short-term training programmes under the Employment Promotion Fund; and improve the incentive structure for the provision of higher quality training.

11.3 Linkages between the TVET system and the labour market

Recent policy revisions constitute important steps towards reducing the existing mismatch between the skills supply and demand in Mongolia. Specifically, policy revisions have emphasized the important role of the private sector and of PPPs in training provision. Other measures such as the involvement of industry in the TVET curricula development process should also go a long way to ensuring that the skills supplied correspond to market demand.

Better linkages between the TVET system and the labour market also require the availability and use of LMI in training planning and in career guidance and employment promotion services. The importance of establishing an LMIS, and of undertaking data-driven research and analysis for policy-making, is emphasized by many stakeholders in Mongolia. This has led to the recent formation of the CLEO and its labour-market research unit, and to the CLEO MCA-M initiative of establishing an integrated LMIS.

The MSWL, the LSWO, and the CLEO have all requested ILO assistance in terms of technical and statistical capacity building for the CLEO, to improve their ability to undertake data-driven research. They have also requested assistance in the area of career guidance, specifically in training career guidance counsellors on how to identify demand areas, methods, and approaches. Two officers from the CLEO were trained by the ILO in 2010 to provide career guidance services. The CLEO uses the ILO website and tries to engage its employees in short-term training.

The MSWL and the NSO have reported needing capacity building in conducting their surveys, and also in analysis and linking survey results with policy. In 2010, the NSO sent two officers for training by the ILO, but they would like to send more people, and would like the ILO to provide training in Mongolia. Currently, government departments and agencies, including the NSO, the MSWL (through the CLEO), and the MECS collect their own data and conduct their own analysis. There is very little data sharing and cooperation between them in terms of producing policy-relevant analyses.

Given the rapid structural changes in Mongolia's economy and labour market in recent years, human resource development (HRD) and workforce training has become a priority issue for the government. The NDIC, responsible for strategic planning and inter-ministerial cooperation, has submitted a proposal to the MECS for HRD focus areas, which include projections of occupational demand, based on employment needs and mid-term projections (up to 2015). These projections involve basic trends analysis by economic sector, and are meant to provide some guidance in terms of quotas for each sector. The NDIC has only recently been established, and is still in the process of building its capacity to fulfil its functions. So far, it has had several meetings with the ILO regarding technical assistance and capacity building activities on employment projections (econometric modelling). A follow-up activity (a workshop on employment projection models) was held in June 2011. The NDIC believes that technical assistance in terms of econometric modelling from the ILO will be very helpful in strategic planning. The NDIC also recommends involving the School of Economics of the National University in the employment projection training. Both the CLEO and the NSO have also expressed interest in capacity building for employment projections.

Meanwhile, the VTA has requested that short-term skills providers should be assisted in dealing with the government, and in reaching out and building linkages with the private sector.

Recommendation 9*

Support private-sector involvement in training; promote linkages between VTCs and the private sector; and PPPs for TVET.

Recommendation 10*

Improve the LMI analysis capacity of relevant agencies; data collection and analytical methods (including employment projection models and forecasting of skills demand); and improve data-driven policy-making.

Recommendation 11*

Improve linkages between the TVET system and employment services, including through improved career guidance services.

11.4 Social dialogue and tripartite involvement in TVET

Tripartite structures are new to Mongolia; social partners (government, employers, and unions) have limited experience in working with each other, and do not have a clear understanding of their respective roles, responsibilities, and contributions. Capacity building for social partners would improve the efficiency of the policy-making process and policy coordination (by facilitating national consensus around disputed issues). This is an area where ILO assistance would be highly valuable.

For skills development and TVET in particular, ILO technical assistance can be provided to the social partners to improve their understanding of the TVET Law and of their role and engagement in the TVET system in accordance with this law. Social partners also need assistance in terms of capacity building for policy implementation, particularly in managing the transition to a demand-driven TVET system. For instance, the ILO can help build the private sector's capacity to identify its own demands, to help in the areas of workforce planning and needs assessment. Private-sector associations are newly established institutions in Mongolia, and need this kind of support. Both the government and the private sector need to improve their understanding of concepts such as PPPs and tripartism, which are also relatively new to Mongolia. The MONEF is requesting further assistance from the ILO SKILLS-AP Programme for social actors in Mongolia, in terms of the sharing of best practices and experiences in building social partnerships.

Although private-sector involvement in TVET is increasing in Mongolia, unions are less involved. Union representation on the NCVET is not completely absent, but is very limited; only one out of six NCVET sub-national committee members is a union representative. According to the CMTU, at the *aimag* level, TVET centres do not work in cooperation with unions, which are considered as outsiders (not involved in the training process) due to the fact that trainees are generally not yet employed and not yet union members.

Small, independent, short-term VTCs have no access to social dialogue (either through unions or employers) and cannot voice their concerns to government because they cannot afford to lose their funding. Trade unions and professional associations play a role in voicing the concerns of their own occupations, but not the concerns relating to the overall short-term training system and its funding structure. The government should ensure that short-term skills providers in the non-formal education sector have a channel for voicing their concerns and providing input for the development of TVET policy.

Recommendation 12*

Improve social partners' understanding of their roles and responsibilities under the TVET Law, including with respect to PPPs.

Recommendation 13*

Strengthen tripartite approaches to TVET, and tripartite involvement in the policy process; and ensure adequate union representation.

Recommendation 14

Ensure that the concerns of short-term skills providers are heard and addressed.

11.5 Improving access to TVET by vulnerable groups including the disabled and informal-sector workers

TVET plays a crucial role in providing people with skills that are needed in the labour market, enabling them to find decent employment or improve their working conditions. Access to TVET is therefore particularly important for the most vulnerable or disadvantaged groups among the population. In Mongolia, vulnerable groups include unemployed people and youth in particular, informal-sector workers, particularly those residing in *ger* areas around the capital, and poor workers in rural areas, as well as disabled persons. In 2009, there were an estimated 80,800 disabled persons in Mongolia, of whom 79 per cent were of working age, and 54 per cent were female.³⁰

Because these vulnerable groups constitute the target group of short-term skills training providers (non-formal education stream), support for these training providers should be among the priorities of Mongolia's government. In addition to revising the funding allocation mechanism under the Employment Promotion Fund (see Recommendation 8), the government should provide support in terms of direct funding (subsidies or investment in equipment) or capacity building (teacher training, or in building linkages with the private sector). The ILO can also provide support to short-term training centres that provide skills training to disabled persons. This is a crucial area in which the ILO would provide significant value added.

³⁰ Ministry of Social Welfare and Labour: Annual Report 2009.

Another possible approach would be to support the VTCs that provide a good quality of training, with a view to helping them become centres of excellence, following a similar approach as the one being implemented in the vocational education (formal) stream by the TVET Agency and the MCA-M TVET project. According to the VTA, such an initiative would set up a much-needed positive incentive structure for VTCs, and reward the ones that are performing well – something that the current policy environment and funding structure are not doing.

Support to VTCs providing short-term skills training to informal-sector workers can be done in terms of TOT in the SIYB and KAB programmes, for instance. This can be done in cooperation with local employment offices, and linked to employment mediation services. Currently, the KAB is part of the vocational education curriculum, but training institutions do not have sufficient capacity to provide this training. Future steps in terms of expanding the SIYB and KAB programmes should include support for non-formal-sector VTCs.

Recommendation 15*

Support the activities of VTCs that provide short-term skills training to vulnerable groups (unemployed people, disabled persons, among others).

Recommendation 16*

Support the activities of VTCs in providing short-term skills training to informal-sector workers, including through the SIYB and KAB programmes.

11.6 Recommendations for the ILO

The findings of this study provide support for the activities listed under the Action Plan for Mongolia from the ILO-Japan Regional Workshop on Addressing Skills Mismatch through Public-Private Partnerships. These include capacity building for social partners, tripartite involvement in skills development and with respect to PPPs, and strengthening the national and local-level councils on TVET. Several of the recommendations listed in this section are highlighted as potential areas for ILO assistance to Mongolia, including:

- a) capacity building activities for social partners to improve their understanding of their roles and responsibilities under the TVET Law, including with respect to PPPs;
- b) capacity building for the NCVET and its local-level subcommittees, to improve tripartite mechanisms and involvement in the policy process;
- c) capacity building for the MSWL, the CLEO, the NSO, and the NDIC in LMI and analysis, particularly in the area of statistical analysis and employment projection models and forecasting skills demand;
- d) capacity building for the CLEO in improving the career and vocational guidance system;
- e) support for short-term skills training providers (non-formal education stream) in building linkages with the private sector and improving their access to social dialogue, and in providing services for informal-sector workers and disabled persons.

The recommendations made here are consistent with ILO objectives and priorities stated in Mongolia's Decent Work Country Programme (DCWP) for 2006–2010: strengthening tripartism to support social and economic policy development, implementation, and policy reform; and supporting employment promotion strategies for sustainable livelihoods and poverty alleviation in the formal and informal economy. Therefore, these priority areas and objectives are still relevant and will continue to be important in the coming years.

References

- Asian Development Bank (ADB). 2009. *Private sector assessment for Mongolia* (Manila).
- Ministry of Education, Culture, and Science (MECS); Chimid, T. 2009. Mongolia Country Paper for the International Experts' Meeting on Reorienting TVET Policy Towards Education for Sustainable Development, Berlin, Aug. 2009.
- Chimid, T., et al. 2009. *TVET response to poverty alleviation in sub-regional Asia-Pacific Countries (the Philippines, Malaysia, Mongolia, and Myanmar)* (Manila).
- International Labour Organization (ILO). 2011. Skills and Employability Programme for Asia and the Pacific (SKILLS-AP)/Japan Regional Workshop on Addressing Skills Mismatch through Public Private Partnerships: Background note, *Mongolia Country Paper and Action Plan, Skills and Employability Network Updates*, June 2011, Issue#2 (Bangkok).
- International Labour Organization (ILO). *Decent Work Country Programme for Mongolia 2006–2010* (Bangkok)
- International Labour Organization (ILO); Ronnas, P. 2010. *Constraints and challenges for achieving inclusive job-rich growth in Mongolia: Initial diagnostics* (Geneva).
- International Labour Organization (ILO); Morris, E. 2001. *The informal sector in Mongolia: Profiles, needs and strategies* (Geneva).
- Millennium Challenge Account-Mongolia (MCA-Mongolia). 2010. *Labour market study in support of the Technical and Vocational Education Project: Final report* (Ulaanbaatar).
- Millennium Challenge Account-Mongolia (MCA-Mongolia). 2010. *Public perception survey of the Technical and Vocational Education and Training Project: Final report – data and analysis* (Paris).
- Millennium Challenge Account-Mongolia (MCA-Mongolia). 2009. *TVET Project quarterly progress reports* (Washington, DC).
- Ministry of Social Welfare and Labour (MSWL). 2009. *Annual report* (Ulaanbaatar).
- World Bank, East Asia and Pacific. 2007. *Building the skills for the new economy*, Report No. 40118 (Washington, DC.).

Annex 1 Stakeholders interviewed

Ministry of Social Welfare and Labour (MSWL)

Ms Nyam Ayush	Director, Strategic Planning Department
Ms Baasansuren Alimaa	Deputy Director, Strategic Planning Department
Mr Khadkhuu Damdinsuren	Senior Officer, Policy Coordinating Department
Mr Sodnomdorj Dambii	Officer in Charge of Employment and Vocational Training Policy, Strategic Planning Department

Ministry of Education, Culture, and Science (MECS)

Mr Ulziimend Ganbold	Senior Officer, Department of Higher and Vocational Education
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TVET Agency, implementing agency of the government of Mongolia

Mr Byambasuren Natsagdorj	Chairman
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Ministry of Food, Agriculture, and Light Industry (MAFLI)

Mr Balgansuren Yadam	Senior Officer, Department of Coordination of Light Industrial Policy Implementation
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National Statistical Office (NSO)

Ms Saranchimeg Byamba	Deputy Director, Population and Social Statistics Department
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National Development and Innovation Committee (NDIC)

Ms Chardag Enkhtuya	Officer, Innovation Policy Department
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Metropolitan Employment Department (MED), implementing agency of the Capital City Government

Mr Batsaikhan Gonchigbat	Chairman
Ms Gan-Oyun. D	Staff for Project, NGO and Cooperation
Ms Oyungerel D.	Head of Employment Sector

Central Labour Exchange Office (CLEO)

Ms Otgonsuren Yondon	Deputy Director
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Mongolian Employers' Federation (MONEF)

Mr Kh. Ganbaatar	Vice President, Executive Director
Mr Damdinjav Narmandakh	Head of Industrial Relations Department

Confederation of Mongolian Trade Unions (CMTU)

Mr Amarsanaa Enebish	Head of International Cooperation Department
Vocational Training Association (VTA)	

Ms S. Bolor-Erdene	President, Future Training Centre Director
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International organizations, donor agencies, and NGOs

Mr Sergelen Battulga	LMI specialist, MCA-M
Mr Bilguun Ganbat	National Programme Officer, SDC
Mr R. Bandii	Executive Director, Education Sector Development Programme Office (MECS, ADB, WB)
Ms Michelle Bahk	Private Enterprise Officer, USAID
Mr Tuguldur Baavai	Development Assistance Specialist, USAID
Ms Tungalag Chuluun	Human Development Operations Officer, World Bank
Ms Serjmaa Bavuudorj	CEO, Development Solutions (NGO)

Annex 2 Income and expenditure of the Employment Promotion Fund and TVET Fund

	Employment Promotion Fund	TVET Fund
Income (financing) sources	Funds allocated from state and local budgets; funds from unemployment insurance contributions (as stated by laws); interest on bank deposits of the fund's means; loans from foreign countries or international organizations for the purpose of employment promotion; and grants or donations from foreign countries, international organizations, or from foreign or national enterprises, NGOs, or individuals, and other sources.	Funds allocated from state and local budgets; loans from foreign countries or international organizations for the purpose of employment promotion; and grants or donations from foreign countries, international organizations, or from foreign or national enterprises, NGOs or individuals; contributions of economic entities or organizations as the percentage of worker salaries determined by the NCVET; other sources.
Expenditure	<p>Funds allocated from the state budget must be used for:</p> <ul style="list-style-type: none"> • vocational orientation, counseling, and information; • job mediation; • training or re-training of citizens not covered by unemployment insurance; • entrepreneurial skills training for self-employed citizens; • organization of public works; and • support for citizens engaged in self-employment or running businesses in the forms of partnership or cooperatives. <p>Fund allocated from the unemployment insurance contribution must be spent as stipulated by the Law on Payment of Unemployment Benefit from the Social Insurance Fund; other employment promotion measures must be funded from the other income sources for the fund (listed above).</p>	Funds must be allocated for the fixed expenses of state-owned training institutions and student dormitories; variable expenses per student, based on the cost of the training, for both state-owned and private institutions; expenses of providers of business skills and methods; expenses of organizing skills training on-site.
Revenue and expenditure budget	At least 0.3 per cent of the state budget revenue must be allocated annually to the Employment Promotion Fund. The amount to be allocated must be approved and included in the state budget, taking into consideration several factors such as the unemployment rate, inflation, and labour-force participation. The amount of funds to be allocated from local budgets must be included in local budget reports and approved by the <i>aimags</i> and capital city. The annual revenue and expenditure budget of the fund must be approved by the MSWL based on	The amount of funding to be provided from the state and local governments must be included in the respective annual budgets. The TVET Fund's revenue and expenditure budget must be approved by the NCVET, based on proposals by the TVET Agency.

proposals from the CLEO.

**Balance
sheet and
reporting**

A quarterly revenue and expenditure report must be submitted by the *sum* officer in charge of labour issues to the *aimag* employment office, and by the district employment office to the capital city within five days of the first month of the following quarter. The *aimag* or capital city employment office must submit the report to CLEO within 15 days of the first month of the following quarter. The CLEO must submit the aggregated quarterly report within five days of the second month of the following quarter, and an annual report before 15 February of the next year to the Ministry of Finance, to the NEC, and to the central social insurance authority.

Quarterly and annual reports on the TVET Fund budget must be prepared by the TVET Agency and submitted to the NCVET, and to the ministries of Labour, Finance, and Education within five days of the second month of the next quarter (for quarterly reports) and before 15 February of the next year (for the annual, end-of-year report).

Sources

Employment Promotion Law, Chapter 4.

TVET Law, Chapter 5.

Annex 3 Action Plan for Mongolia

This Action Plan was developed from the ILO/SKILLS-AP/Japan/Regional Workshop and Study Programme on “Addressing Skills Mismatch through Public Private Partnerships” (14–18 February 2011)

Objective/ activities	Brief description	Outputs/outcomes	Timeframe and resources	
			2011–12	Resources
Assessment of current status on skills development in Mongolia in the framework of the Global Jobs Pact (GJP)	Legal framework, implementation system.	Current status will be determined.	2011	ILO
	PPP in TVET.	Further actions and activities will be proposed.		
	Capacity of social partners.			
	Advantage and disadvantages of skills developments in Mongolia.			
Capacity building workshop/seminar on PPP in skills development	Determination of further actions.			
	Capacity building of tripartite partners in LMI.	Social partners understanding on PPP will be increased.	2011	ILO, government of Mongolia
	Skills development.	Cooperation and supportive functions between social partners will be enhanced in skills development.		
	Skills standards and qualifications.	Roles and contributions of social partners in skills development be ensured.		
Project on strengthening national and local vocational education and training councils	Technical assistance from ILO on:	Implementation of TVET Law will be improved.	2011–12	ILO
	<ul style="list-style-type: none"> • sharing international experiences; • strengthening cooperation between national and local councils; and • improving the mechanisms and activities of councils. 	Functioning tripartite structures on training and skills issues at national, sectoral, and local levels are ensured.		

Annex 4 Competency-based curriculum templates

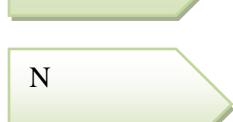
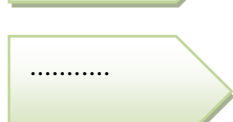
The CBT templates consist of the following:

- I. Occupational analysis**
 - ✓ Task inventory
- II. Competency-based curriculum:**
 - ✓ Cover page
 - ✓ Definition of “competency unit”
 - ✓ Definition of “competency elements”
- III. Requirements for training environment:**
 - ✓ General requirements for facilities, workshops, and laboratories
 - ✓ Training equipment list
 - ✓ Training media list
 - ✓ Training models and simulators’ list
 - ✓ List of hand tools
 - ✓ List of furniture
- IV. Requirements for trainers**
- V. Trainer’s Guide**
 - ✓ Programme structure
 - ✓ Competency unit course structure
 - ✓ Lesson plan – theory session
 - ✓ Lesson plan – practice session
 - ✓ Job sheet/learning activities guide
 - ✓ List of reference materials
- VI. Learner’s Guide:**
 - ✓ Competency unit course structure
 - ✓ Lesson plan – theory session
 - ✓ Lesson plan – practice session
 - ✓ Job sheet/learning activities guide
 - ✓ List of reference materials
- VII. Assessment**

I. Occupational analysis

Occupation-task inventory

Duty



Task

A1	A2	A3	.....	A_n
B1	B2	B3	.....	B_n
C1	C2	C3	.....	C_n
D1	D2	D3	.....	D_n
E1	E2	E3	.....	E_n
.....
N1	N2	N3	.....	N_n



**GOVERNMENT IMPLEMENTING AGENCY FOR THE
TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING**

COMPETENCY-BASED CURRICULUM

(Pilot- Version 2)

Industry : *ISCO-08*

Occupation Title : *ISCO-08*

Occupation Code : *ISCO-08*

Effective Date :

Review Date :

ULAANBAATAR

2011

OccupationTitle :

Occupation Descriptor :

:

Competency Level

Duration : hour /by month/

Credit hour :

Version Number :

Issuance Authority : ATVET

Working Group on developing competency-based curriculum development templates:

Reviewed by:

Working Group on analyzing the competency-based curriculum development templates:

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LIST OF COMPETENCY UNITS

[illegible]

Competency unit title:
Competency unit vode:
Competency unit descriptor:
List of competency elements:
Pre-requisite Knowledge, Skills and Attitudes:

Competency unit title:
Competency unit code:

Content of competency elements

Competency element 1 title:
Performance criteria
Essential knowledge
Range and condition of application
Evidences Sources for assessment

III. Requirements for training environment

General requirements for construction, facilities, workshops and laboratories

Item/Descriptions		Norms/Specifications	
Other essential requirement	Ventilation	i)	All laboratories, workshops should be air-conditioned to prevent damages to the sophisticated equipment by dust particles and air vapour.
	Type of flooring	i)	The laboratory should have raised floor so that electrical wire can be configured under the raised floor. Alternatively, the floor could be vinyl-tiled to reduce dust further. Both recommendations if used could help to improve electrical insulation conditions.
	Lighting	i)	Standard ceiling fluorescent lightings of an intensity of illumination of 25 w/m ² .
		ii)	Lightings should be sectionalised so as to avoid unnecessary lighting when certain work area are not utilised.
		iii)	One emergency lighting system for the laboratory with a duration of operation for approximately 3-4 hours.
	Electrical installation	i)	Residual Current Circuit Breaker (RCCB) protection is to be provided.
		ii)	All electrical Installations must comply with latest regulations.
		iii)	One 13A <u>twin</u> socket outlet for each training equipment bench should be provided.
		iv)	Six 13A switched socket outlet surface mounted should be provided for general use at <u>each of the laboratory</u> .
		v)	Two emergency stop-buttons are to be provided at each laboratory / workshop.
		vi)	If preparation room is setup, Three 13A switched socket outlets should be put in place.
	Fire fighting/ Prevention facilities	i)	Portable fire extinguishers should be provided.
		ii)	To ensure requirements to meet the building control regulations and emergency evacuation.
	First-Aid facilities	i)	First-Aid box of standard features is to be provided.
	Others	i)	Air-main supply should be of 40mm diameter pipe c/w air servicing unit.
		ii)	Air supply outlet point should be provided for by a 12.5mm diameter pipe.
		iii)	Key box of standard feature is to be provided.
		iv)	1 wall clock is to be provided.
		v)	In winter, should be provided with the heating system to provide not less than 20C indoor temperature.

Competency unit title:	Number of Learners:
Competency unit code:	
Name of practical facility:	

i. List of training equipment

	<u>Description</u>	<u>Qty</u>	<u>Unit</u>	<u>Unit Price (US\$)</u>	<u>Total Price (US\$)</u>	<u>Remarks</u>
1						
2						
...						
N						
Sub Total						

ii. List of training media

	<u>Description</u>	<u>Qty</u>	<u>Unit</u>	<u>Unit Price (US\$)</u>	<u>Total Price (US\$)</u>	<u>Remarks</u>
1						
2						
...						
N						
Subtotal						

iii. Training model/simulator

				Unit	Total	
	Description	Qty	Unit	Price (US\$)	Price (US\$)	Remarks
1						
2						
...						
N						
Subtotal						

iv. List of hand tools

	<u>Description</u>	<u>Qty</u>	<u>Unit</u>	<u>Unit Price (US\$)</u>	<u>Total Price (US\$)</u>	<u>Remarks</u>
1						
2						
...						
N						
Subtotal						

v. List of furniture

	<u>Description</u>	<u>Qty</u>	<u>Unit</u>	<u>Unit Price (US\$)</u>	<u>Total Price (US\$)</u>	<u>Remarks</u>
1						
2						
...						
N						
Subtotal						
Total						

IV. Requirements for trainers

1. General requirements for trainers:

- ✓ Communication Skills
- ✓ Skills to use mathematics and science principles in technical training
- ✓ Skills to implement and apply environment friendly technology
- ✓ Advanced knowledge on information technology
- ✓ Good teamwork skills
- ✓ Ability to apply the teachers' code of ethics and value the quality and the output of the work
- ✓ Knowledge and ability to apply the technical and vocational education and training sector development programs and master plan
- ✓ Advanced skills to instruct and learn
- ✓ Ability to observe the labour safety and health requirements
- ✓ Self motivation and professional knowledge enhancement skills
- ✓ Understanding on the labour market and skills to analyze the relevant information
- ✓ Respect for others and willingness to learn from peers
- ✓ Ability to work under pressure and overtime when required

2. Core competency pre-requisites for the trainers:

Teacher, advisor	Trainer	Master teacher	Researcher teacher
Develop and implement curriculum	Facilitate among all stakeholders of the Technical & Vocational Education & Training Institutions	Ensure training and production linkage and strengthen and encourage integrated relationship	Acquired knowledge on the research methods
Assist and stimulate the learners to create knowledge during their learning	Develop and support the review of training policies, rules and regulations		Analyze the research results and propose the recommendation
Perform quality assessment	Develop competency-based curriculum, organize training on the pedagogy for other teachers	Initiate training cost and value reduction proposals and recommendations	Assist colleagues, teachers and management officials to carry out the research and studies
Prepare and use the training media	Develop textbooks and instructional materials		
Prepare and use the e-instructional media for training	Conduct monitoring and assessment for training and examinations	Acquired skills to improve the knowledge and vocational skills of the sector-workers	Acquired knowledge on monitoring, research and evaluation methods
Recognize adult learning methodology	Calculate training cost and value		

V. Trainer’s guide

Programme structure

[illegible]

Course structure for competency unit

	CU title:	Qualification level:		CU code:	
	CU descriptor:				
	Recommended max and min class size:	20-25	Credit value: <i>15 hrs of training hours is considered to be 1 credit.</i>		
	General instructional objectives	Specific instructional objectives	Recommended hours:		
			Theory	Practice	
1	CE1	1.1 1.2 ... 1.n			
2	CE2	2.1 2.2 ... 2.n			
3	CE3	3.1 3.2 ... 3.n			
...		...			
n		n.1 n.2 ... n.y			
	Assessment criteria: <i>Refer to document XXXX (document #, date)</i>				
	Suggested assessment methods: <i>Refer to document XXXX (document #, date)</i>				
	Training environment: <i>Refer to Section III, Requirements for training environment</i>				
	Instructors' qualifications: <i>Refer to Section IV, Requirements for instructors</i> <i>Instructor's Qualification general,</i> <i>Instructor's Qualification specific,</i> <i>Relevant industry working experience</i>				
	References: <i>Specific books, Textbooks, Website, Standards etc.</i>				

Lesson Plan – Theory session

CU title:	
GIO:	
SIO:	
Lesson title:	Lesson duration:
Teaching aids:	
References:	
Method:	
<i>Example:</i> Introduction: (Duration = X min)	
<i>Example:</i> Lecture: (Duration = X min) <ul style="list-style-type: none"> - Model - Principle - Concept - Application - Key Points 	
<i>Example:</i> Demonstration by trainer (Duration = X min)	
<i>Example:</i> Learning activities: (Duration = X min)	
Learning activities 1 Learning activities 2 Etc...	
1. Assessment (Duration = X min)	
Summary:	
Comments:	

Lesson plan –Practical lesson

Competency unit title:	
GIO:	
SIO:	
Lesson title:	Lesson duration:
Tools and equipment:	
Training consumables:	
Teaching aids:	
References:	
Method:	
1. <i>Example:</i> Introduction (Duration= X mins):	
2. <i>Example:</i> Demonstration of practical session (Duration = X mins)	
<i>Steps</i>	<i>Key points</i>
3. Application (practice by learners under close supervision)	
Assessment (performance of competency to required standards)	
Summary:	
Comments:	

Job sheet/Learning activity guide

Title	
Reference:	<i>CE1, PC1.1-1.5</i>
Objective	
Job number	
Instruction	
Conditions:	
Equipment, tools and materials	
Safety precautions	
Pre-requisite SKA	
Learner response, notes, comments	
Trainer's comments	
Marking scheme (See Annex A to be developed later)	
List of reference materials:	

VI. Learner's guide
Course structure for competency unit:

	CU title:	Qualification level:	CU code:	
	CU descriptor:			
	Recommended max and min class size:	20-25	Credit value: <i>15 hrs of training hours is considered to be 1 credit.</i>	
	General instructional objectives	Specific instructional objectives	Recommended hours:	
			Theory	Practice
1	CE1	1.1 1.2 ... 1.n		
2	CE2	2.1 2.2 ... 2.n		
3	CE3	3.1 3.2 ... 3.n		
...		...		
n		n.1 n.2 ... n.y		
	Assessment criteria: <i>Refer to document XXXX (document #, date)</i>			
	Suggested assessment methods: <i>Refer to document XXXX (document #, date)</i>			
	Training environment: <i>Refer to Section III, Requirements for training environment</i>			
	Instructors' Qualifications: <i>Refer to Section IV, Requirements for instructors</i> <i>Instructor's Qualification general,</i> <i>Instructor's Qualification specific,</i> <i>Relevant industry working experience</i>			
	References: <i>Specific books, Textbooks, Website, Standards etc.</i>			

Lesson plan – Theory session

CU title:	
GIO:	
SIO:	
Lesson title:	Lesson duration:
Teaching aids:	
References:	
Method:	
<i>Example:</i> Introduction: (Duration = X min)	
<i>Example:</i> Lecture: (Duration = X min) <ul style="list-style-type: none"> - Model - Principle - Concept - Application - Key Points 	
<i>Example:</i> Demonstration by trainer (Duration = X min)	
<i>Example: Learning activities: (Duration = X min)</i>	
Learning activities 1 Learning activities 2 Etc...	
2. Assessment (Duration = X min)	
Summary:	
Comments:	

Lesson plan –Practical lesson

Competency unit title:	
GIO:	
SIO:	
Lesson title:	Lesson duration:
Tools and equipment:	
Training consumables:	
Teaching aids:	
References:	
Method:	
4. <i>Example:</i> Introduction (Duration= X mins):	
5. <i>Example:</i> Demonstration of practical session (Duration = X mins)	
<i>Steps</i>	<i>Key points</i>
6. Application (practice by learners under close supervision)	
Assessment (performance of competency to required standards)	
Summary:	
Comments:	

Job sheet/Learning activity guide

Title	
Reference:	<i>CE1, PC1.1-1.5</i>
Objective	
Job number	
Instruction	
Conditions:	
Equipment, tools and materials	
Safety precautions	
Pre-requisite SKA	
Learner response, notes, comments	
Trainer's comments	
Marking scheme (See Annex A to be developed later)	
List of reference materials:	

The Philippines:

A review of the TVET system in the Philippines

Leonardo A. Lanzona, Jr.
December 2013

1. Introduction

While higher education has been the focus of government attention since the 1970s, the Philippines has also intensified its efforts to reform and upgrade technical and vocational education and training (TVET). In 1994, the government created the Technical Education and Skills Development Authority (TESDA), signifying its commitment to improve industry and economic growth by developing and nurturing specific skills for those already in the labour force, as well as those about to enter. Since then, TVET has become a key component of the Medium-Term Philippine Development Plan (MTPDP).

The heightened attention given to TVET and skills development can be attributed to greater appreciation of the value of market-oriented skills development. Increasingly, TVET programmes have been formulated and initiated to generate employment. While the first-cycle National Technical Education and Skills Development Plan (NTESDP) initiated a number of TVET reforms, the second-cycle plan (2005–09) focused on the quality and effectiveness of TVET through a revised industry-based training programme. The plans offered a framework to unify all TVET initiatives and help build a well-trained and competitive workforce conducive to both foreign investment attraction and domestic human capital formation. The second-cycle NTESDP in particular focused on the quality and effectiveness of TVET by recognizing the vital role of partnerships and convergence among stakeholders

However, despite these plans, TVET has remained weak in facilitating greater employment, particularly to poorer households, and in forming skills needed by the industry. To a large extent, this constitutes the paradox in the Philippines' TVET system. Despite seemingly impressive gains in building the architecture for a responsive and proactive education and training programme, the TVET system still requires better ways to achieve productive employment that is necessary to create an internationally competitive economy and inclusive economic growth.

This paper attempts to analyse this issue by taking into consideration three other main areas that relate to the relevance of TVET. The first is the area of finance, which refers to the financial resources, governance, and other inputs that are provided to the TVET system. The second relates to the quality of TVET programmes, which is the content, learning, and teaching of technical education courses, as well as training offered by firms. The last area points to the issue of accessibility – the extent to which the workers who need these programmes are able to access them. These areas relate to one another in the effort to bring about an effective and relevant TVET system that will achieve the goals of employability.

The economy's failure to industrialize underpins much of the poor performance of the TVET system in facilitating employment. Given the lack of work opportunities in manufacturing, the system is forced to engage and develop programmes in sectors such as services, and in self-employment. The increase in employment resulting from such efforts has proved to be substantial, but remains insufficient in the face of the enormous supply of workers. The low labour demand, especially for semi-skilled and less-educated workers, persists, and much of the skills development effort continues to have very limited consequences.

Nevertheless, this paper will focus not on structural mismatches, but on skills mismatches.³¹ The former pertain to the case where individuals with tertiary and secondary schooling cannot find work after graduation. The mismatch in this case is between the education or skills level of an individual,

³¹ Annex 1 discusses the Philippine labour market environment and explains why a structural mismatch also exists, specifically the failure of manufacturing. This is one cause of unemployment that cannot be attributed to the TVET sector.

and the requirements of the job. While this situation exists, there are situations of aggregate or sectoral mismatching that can also give rise to an overall skills shortage in which the demand for a particular type of skill exceeds the supply of available people with that skill, or a skills surplus, where the supply of a particular type of skill exceeds the demand for people with that skill. These types of skills mismatches among employees can take place in two ways. The first is a vertical mismatch, in which the level of skill is less or more than the required level (the latter often referred to as “over-education”). The second is a horizontal mismatch, in which an employee is unable to find work in the field in which she or he has been educated or trained. This is sometimes called a “field-of-study” mismatch. Vertical mismatch seems to be a common problem in many countries; evidence of horizontal mismatch is also not hard to find.

While it is beyond the scope of this paper to distinguish these forms of mismatch, it will attempt to explain why factors internal to the TVET system can contribute to the problem of skills mismatches. The paper will mainly look at the internal factors affecting the TVET sector, and propose certain recommendations.

The rest of the paper consists of the following: Section 2 discusses the conceptual framework. Section 3 describes the structure of the TVET system. Sections 4, 5, and 6 analyse the problem in terms of the three main TVET areas – quality, access, and finance, respectively. Section 7 examines the relevance of the TVET system to the labour market. The last section provides concluding remarks and recommendations.

2. Conceptual framework

The International Labour Organization (ILO) Working Group Indicators (WGI) Report (ILO, 2012) cited four major areas where TVET can be reviewed. These are: finance, access, quality, and relevance. These areas are factors that can be used to assess TVET. Using a conceptual framework, shown in figure 1 (WGI Report, page 6), policy-makers and stakeholders are expected to combine optimal priorities related to the last three components (relevance, equity, quality) “by giving adequate financial resources available within a given context of institutional settings and governance.” Indicators, including those that are not readily available, have been created based on this given framework (see Annex 2). What is aimed at is a simultaneous achievement of these multiple goals.

Figure 1. Conceptual framework of the WGI Report



Source: European Training Foundation (ETF), ILO, United Nations Educational, Scientific, and Cultural Organization (UNESCO), 2012.

What links the major areas of finance, quality, and access to relevance are policy priorities that either enhance or diminish the ability of TVET to match worker skills to industry requirements. Underlying all of these is a set of governance rules or structures that govern the engagements in the TVET sector. Conventional economic theory postulates that labour markets should not suffer from skill mismatches, given a number of assumptions such as the presence of perfectly rational individuals and firms, perfect information, and perfect mobility.

These assumptions are, however, hardly realistic, even in a developed economy. For a start, as the new institutional economics has shown, individuals are endowed with bounded rationality – people have limited capacity to process complex information. Moreover, market economies are plagued by information gaps and asymmetries that reduce the likelihood of perfect matching. Both vertical and horizontal mismatches are usually widespread as a consequence of these market failures. In addition, transaction costs, such as the costs of searching on the housing market, may also reduce the efficiency of the job-matching process. This last factor may give rise to regional mismatches, leading to frictional unemployment, requiring local as well as national solutions. Finally, large-scale structural and technological change may make previously adequate skills obsolete and thus create structural unemployment.

The role, then, of the TVET system is to offer a solution to these market imperfections. In effect, the TVET system should serve as guide for both workers and firms in deciding in which direction both agents should take, and ultimately reduce these mismatches. For instance, while the market seems to indicate a strong demand for labour in the service sector, the TVET system should be able to weigh in the costs and benefits of further engaging in this sector. It is likely that these changes may become too costly and unsustainable in the future. Additional options should be made available to workers, and firms should be able to employ the kind of workers they require. Information about these issues should be widely accessible to both workers and firms.

A thorough analysis of the TVET market needs to be conducted, as the observed mismatch can be an indicator only of the low industry demand for TVET. Table 1 provides a summary of the demand and supply by occupation and priority sectors from 2005 to 2010. Through a series of consultation processes using the policy-oriented, sector-focused, area-based, and labour market-driven (PSALM) approach to TVET, the priority sectors were outlined in the provincial skills priorities (PSPs) and are consistent with the MTPDP.

A particular skill or occupation identified in a priority sector is defined as critical if it is essential and indispensable in the operations of a firm or an industry. The TESDA NTESDP in 2005 identified 23 priority sectors. The last (fifth) column of table 1 measures the difference between the projected supply of labour (including accredited workers) and demand, while the fourth column estimates the skills gap in terms of the discrepancy between projected demand and the current stock of accredited workers.

Several points are important. First, while information and communications technology (ICT) and health and community services seem to remain as top sources of work, the combined demand coming from the manufacturing sectors are clearly close alternatives for generating jobs. This refers particularly to processed food and beverages, electronics, and metals and engineering. The current service courses such as ICT and health services would thus seem to be inefficient.

Second, the current stock of certified workers in the manufacturing sectors is quite small, suggesting an immediate need to increase the number of qualified workers. Except for the maritime and heat ventilation sectors, the stock of certified workers in 2005 was lower than the total demand in all the other sectors.

Third, the significant oversupply of workers in ICT and health services represents some degree of structural mismatch, as the demand for workers in this sector is no longer increasing.³² While the demand for workers in ICT and the health sector is the highest among all the sectors, a long-term assessment is needed to determine which sector needs to be developed. The demand for certain high skills continues to increase, and the quality of workers has not kept pace.

Fourth, agriculture and tourism indicate both a shortage of workers and a lack of skilled workers. These two sectors are expected to generate much employment from the marginalized sector. One crucial issue, then, is the access of poor households to the TVET programmes. It is, however, likely that the returns from training in these sectors are not significant. In which case, the costs of training may be too high for either the technical vocational institutes or the students.

Fifth, for the Manufacturing sectors, an oversupply is also indicated. But this is not due to an increased number of workers of workers looking for work (as seen in the ICT industry), but mainly to limited demand for these types of workers in the manufacturing subsectors. Hence, these workers need to be “re-skilled” in the areas where demand is expected to increase.

Finally, given the recorded high unemployment rate, the oversupply of available workers shows the need to upgrade or to enhance skills. In certain sectors like manufacturing, the issue is the adequate amount of skill that seems to be missing, while for ICT and electronics, the problem is the quality of skills that are needed by firms. Given the varying needs and demand of industries, it is important for the TVET system to link closely with industries.

³² The number of certified data encoders is seen to be less than the demand, but an oversupply of workers is also projected in the long term.

Table1. Summary of demand and supply by occupation and priority sectors, 2005–10

Sector/critical skills	Projected demand (2005–10)	Projected supply (2005–10)	Current stock of certified workers	Gap (projected demand to current stock)	Oversupply/ (shortage)
Agriculture	4 349 764	950 676	165	4 349 599	(3 398 923)
Poultry farm worker	5 435	1 188	5	5 430	(4 242)
Fish farm worker	4 773	1 043	35	4 738	(3 695)
Livestock farmer	826	181	75	751	(570)
Swine production	2 822	617	50	2 772	(2,155)
Others	4 335 908	947 648	-	4 335 908	(3 388 260)
Health, social, and community services	78 079	722 443	19 604	58 475	663 968
Cosmetologist	1 581	14 629	4 087	(2 506)	17 135
Caregiver	29 458	272 567	15 034	14 424	258 143
Domestic helper	1 897	17 552	255	1 642	15,910
Security guard	1 265	11 705	-	1 265	10,440
Others	43 878	405 991	228	43 650	362,341
ICT	368 435	1 206 768	32,919	335 516	871,252
Data encoder	6 037	19 772	22 490	(16 453)	36,226
Computer service technician	14 466	47 383	9 713	4 753	42,629
Computer programmer	8 790	28 792	653	8 137	20,655
Auto CAD	1 636	5 358	11	1 625	3,733
Others	337 506	1 105 464	52	337 454	768,010
Tourism	451 922	334 214	20,221	431 701	(97,487)
Food and beverage attendant	98 359	72 740	5,833	92 526	(19,786)
Cooks	84 212	62 278	4,287	79 925	(17,647)
Chambermaid/housekeepers	81 164	60 024	166	80 998	(20,974)
Bartenders	26 020	19 243	489	25 531	(6,288)
Waiters	28 741	21 255	975	27 766	(6,511)
Front desk clerk	26 697	19 743	67	26 630	(6,887)
Baker	7 302	5 400	7,396	(94)	5,494
Pastry maker	4 321	3 196	150	4 171	(975)
Others	95 106	70 335	858	94 248	(23,913)
Decorative crafts	42 586	253 773	364	42 222	211,551
Ceramics	2 241	13 352	364	1 877	11,476
Jewellery	4 753	28 325	-	4 753	23,572
Gifts, toys, and house ware	35 592	212 094	-	35 592	176,503
Construction	333 315	282 479	36,838	296 477	(13,998)
Finish carpenter	7 493	6 350	831	6 662	(312)
Rough carpenter	8 950	7 585	720	8 230	(645)
Draftsman	312	264	2 130	(1 818)	2 082
General carpenter	1 572	1 332	1 074	498	834
General mason	85 815	72 727	1 425	84 390	(11 663)
Plumber	33 001	27 968	1 802	31 199	(3 231)
Construction painter	1 771	1 501	568	1 203	298
Pipefitter/fabricator	609	516	301	308	208
HEO-bulldozer	776	658	288	488	170
HEO-crane	198	168	92	106	62
HEO-wheel loader	4 497	3 811	1 011	3 486	325
HEO-motor grader	697	591	175	522	69
HEO-payloader	63	54	52	11	42
Heavy equipment operator	38 567	32 684	289	38 278	(5 593)

Sector/critical skills	Projected demand (2005–10)	Projected supply (2005–10)	Current stock of certified workers	Gap (projected demand to current stock)	Oversupply/ (shortage)
Steel (rebar)	6 309	5,347	87	6,222	(875)
Building wiring electrician	16 804	14 241	20 994	(4 190)	18 431
Industrial electrician	1 567	1 328	1 942	(375)	1 703
General electrician	4 837	4 099	64	4 773	(674)
Rigger	421	356	34	387	(30)
Others (rig rapping, electric motor re-winder etc.)	119 056	100 898	2 959	116 097	(15 199)
Automotive	37 443	315 732	25 083	12 360	303 372
Auto body painter	228	1 920	20	208	1 712
Auto body repairman	339	2 862	18	321	2 540
Auto electrician	2 894	24 405	536	2 358	22 047
Automotive mechanic	5 025	42 375	19 118	(14 093)	56 468
Automotive servicing	9 142	77 089	223	8 919	68 170
Diesel engine mechanic	211	1 777	2 328	(2 117)	3 895
Driver	2 281	19 232	1 401	880	18 352
Diesel fuel injection technician	25	213	28	(3)	216
Heavy equipment mechanic	42	354	137	(95)	449
Motorcycle mechanic	3 267	27 549	110	3 157	24 392
Small engine mechanic	750	6 324	57	693	5 631
Others	13 239	111 637	1 107	12 132	99 505
Electronics	81 439	270 100	12 854	68 585	201 515
Electric repair technician	538	1 783	53	485	1 298
Electronics assembler	565	1 874	45	520	1 354
Appliance service technician	1 709	5 670	11	1 698	3 971
Consumer electrician mechanic	37 462	124 246	12 185	25 277	98 969
Others	41 165	136 527	560	40 605	95 922
Metals and engineering	24 466	78 400	8 041	16 425	61 975
Lathe machine operator	2 209	7 079	1 899	310	6 769
General machinist	3 088	9 895	187	2 901	6 994
Electric arc welder – SMAW	14 214	45 548	5 734	8 480	37 068
Gas welder	263	843	32	231	612
Plant maintenance mechanic	333	1 067	5	328	739
Others	4 359	13 969	184	4 175	9 794
Processed food and beverages	107 020	207 221	1 357	105 663	101 558
Meat curer	460	891	226	234	657
Smoke fish processor	44 772	86 691	720	44 052	42 639
Fruit processing	1 435	2 779	29	1 406	1 373
Others	60 353	116 860	382	59 971	56 889
Maritime	25 632	41 389	200 567	(174 935)	216 324
Deck rating	796	1 285	115 473	(114 677)	115 962
Engine rating	278	449	59 426	(59 148)	59 597
Catering/stewarding	2 677	4 323	25 668	(22 991)	27 314
Others	21 881	35 332	-	21 881	13 451
Garments	102 741	606 674	6 655	96 086	510 588
Dressmaker	1 594	9 412	3 864	(2 270)	11 682
Industrial sewing machine operator	20 868	123 223	390	20 478	102 745
Garments sewer	63 420	374 488	2 134	61 286	313 202
Tailor	575	3 395	230	345	3 050
Others	16 284	96 155	37	16 247	79 908

Sector/critical skills	Projected demand (2005–10)	Projected supply (2005–10)	Current stock of certified workers	Gap (projected demand to current stock)	Oversupply/ (shortage)
Furniture and fixtures	45 594	30 062	1 074	44 520	(14 458)
Furniture and cabinet Maker	5 272	3 476	480	4 792	(1 316)
Upholsterer	299	197	594	(295)	492
Wood carving	3 354	2 211	-	3 354	(1 143)
Others	36 669	24 178	-	36 669	(12 491)
Heat ventilation air-con/refrigeration (HVAC/R)	1 250	42 424	6 322	(5 072)	47 496
Refrigeration mechanic	42	1 425	889	(847)	2 272
Commercial RAC mechanic	36	1 222	12	24	1 198
Window type AC/domestic ref	584	19 820	64	520	19 300
RAC service transport AC & Ref.	398	13 508	10	388	13 120
RAC service centralized air-con mech.	-	-	-	-	-
Others	190	6 448	5 347	(5 157)	11 605
Other sectors	199 332	2 856 164	147 611	51 721	2 804 443
	6 249 019	8 198 520	519 675	5 729 344	2 469 176

Note: *Including overseas performing artists (OPAS); assessed (198,663) and certified (145,680).
Sources: Provincial Skills Priorities 2005–07; Registry of Workers Assessed and Certified, 2000–05.

Finally, TVET programmes can significantly increase employment if both services and manufacturing assume a more active posture. If the Philippines is to make a stake in manufacturing, then training and vocational education to provide skills to several industries may be needed, apart from making these industries more competitive. Success in education reform is fundamentally based on making it an integral part of the whole economic reform programme. At the same time, the degree to which the country responds to changes in the formation of skills will depend on the regional characteristics. While other regions can respond to demands for improvement in skills immediately, others would not be able to so because of their productive capability and their institutional capacity. It is important, then, that the skills they learn are relevant to their respective regions.

3. Structure of the TVET system

In the Philippines, there are three major methods of TVET delivery. First are the institute-based training programmes provided by school-based institutes and centre-based units. The former offer TVET programmes between one and three years in duration, while the latter provide short-term training in TESDA centres throughout the country. The second mode points to enterprise-based programmes where apprenticeships and on-the-job training are delivered by firms or industries. Last are community-based training programmes that specifically teach skills in selected communities that will lead to self-employment. Over the years, this mode has not contributed much to employment. These refer to short-term programmes conducted or coordinated by non-governmental organizations (NGOs), local government units (LGUs), training centres, and other TVET providers, which are intended to address the specific needs of a community. Such programmes are often conducted in informal settings such as *barangay* (village or district) halls, basketball courts, and other available venues in a local community. Because of its informal nature, the evaluation of this mode, particularly its quality, has hardly been given enough attention.

TVET programmes are aimed at developing the competencies (knowledge, skills, and aptitude) of prospective members of the labour force, to enhance their employability and job readiness when they

enter the labour market. Technical education and skills development in the Philippines was born from the passage of two laws in Congress in 1994, namely: a) the Republic Act No. 7722, creating the Commission on Higher Education (CHED); and b) the Republic Act No. 7798, creating the TESDA. This left the then monolithic Department of Education (DED) to concentrate only on the administration, supervision, and regulation of basic education. It is now known as the Department of Basic Education (DepEd). This development gave rise to the “trifocalization” of education, so-called because three government agencies are overseeing the country's entire education system. DepEd covers elementary and high school education; the CHED covers tertiary education; and the TESDA covers middle-level technical and technical education and training.

The CHED and the TESDA both heavily promote a variety of education programmes. However, it is private organizations – schools, churches, civic organizations, and foundations – that have been the most active implementers of TVET in the country. They provide skills development through workshops, assemblies, television and radio broadcasts, and correspondence courses, among other activities.

The Technical Education and Skills Development Act of 1994 also provides for the establishment of national trade skills standards by TESDA-accredited industry committees, as well as the development of a national certification and accreditation system in cooperation with private industry groups, trade associations, and local governments. The power to issue national skills certification is vested in the TESDA. A board of directors managed by a secretariat provides leadership to the TESDA. The board of directors is the highest TVET policy-making body in the Philippines, and is chaired by the Department of Labor and Employment (DOLE), and co-chaired by the DepEd and the Department of Trade and Industry (DTI). Board members include representatives of:

- a) TESDA Secretariat;
- b) CHED;
- c) Department of Interior and Local Government (DILG);
- d) Department of Science and Technology (DST);
- e) Department of Agriculture;
- f) industry and labour representatives;
- g) employers; and
- h) private TVET institutes.

Note that employers are part of the board of directors and, as such, the demands of employers for skills should be considered in the deliberations of the board.

Part of the internal weakness of the TVET system is its somewhat hierarchical structure, which can limit its ability to respond adequately to local market conditions. The TESDA has 17 regional, 79 provincial, and six district offices, each headed by a regional, provincial, and district director, respectively. It operates 121 technology institutes that deliver formal and non-formal TVET programmes; 15 regional training centres, 45 provincial training centres, 57 TESDA-administered schools, and four specialized training centres. Despite the broad coverage by the TESDA, only the Central Office has the power to develop policies and to approve the accreditations of the TVET programmes. Table 2 is a summary of the delegation of authority and set roles and responsibilities of each level of government. Two points are important. First, as we shall see later, the ability of the system to develop new programmes may be constrained by this level of centralization. Second, apart from implementing the TVET programmes, the local governments seem to have very little control over the development of TVET in their respective regions.

Table 2. Summary of delegation of authority in the TESDA across regional offices

National government and TESDA Central Office	TESDA regional office	TESDA provincial office	Local government
Policy-making, planning, standards setting, regulation, and quality assurance of all TVET programmes.	Supervising, coordinating, and integrating TVET programmes in the region.	Providing technical assistance, particularly to local government units (LGUs) for effective TVET provision at local levels,	Establishing, financing, and administering local colleges and universities.
Developing and implementing programmes to support TVET provision.	Developing and implementing regional TVET programmes.	Developing and implementing local TVET programmes.	Implementing community-based TVET programmes.
Developing accreditation of TVET programmes.	Approving registration of TVET programmes. Facilitating accreditation of TVET programmes.	Facilitating mandatory registration of TVET programmes.	

Source: Australian government (2012), *Philippines Regulatory Fact Sheet*.

4. Quality of TVET

Under the TVET subsector, all institutes are required to register their courses to ensure that they meet the minimum standards defined under the training regulations. Programme registration in the Unified TVET Programme Registration and Accreditation System (UTPRAS) ensures compliance with the minimum requirements as prescribed under the promulgated training regulations. Approximately 3,000 programmes have been audited, while at the same time over 1,700 institute-based and over 100 enterprise-based programmes have been registered. The TESDA pursues the assessment and certification of the competencies of middle-level skilled workers through the Philippine TVET Qualifications and Certification System (PTQACS). The assessment process determines whether a graduate worker can perform to the standards expected in the workplace, based on defined industry competencies.

However, at the same time, the TESDA allows courses to exist even if they do not comply with the training regulations. This is intended as a response to changing conditions in the community. In any case, the TESDA has been mandated to establish these training regulations for every emerging subsector, to ensure the quality of training.

Table 3 presents information of the number of promulgated training regulations. A training regulation (TR) is a TESDA-promulgated document that serves as basis from which the competency-based curriculum and instructional materials and competency assessment tools are developed. Representing a specific qualification, the process of how the competencies can be gained, assessed, and be given recognition is detailed in this promulgated document. The absence of training regulation can signal also the absence of quality of instruction, in cases when this specific qualification can be taught. Training regulations in services constitute more than half (55 per cent) of the total number, manufacturing regulations cover only a little more than one-third (38 per cent), and agriculture less than one-tenth (6 per cent). This could mean that the formation of quality training in manufacturing and agriculture can be more difficult compared to services. This could be due to the limited demand for such programmes due to the poor state of manufacturing in the Philippines.

Table 3. List of promulgated training regulations (TRs) by sector, 2010–11

Sector	2010				2011			
	No. of promulgated TRs	No. of TRs with registered programmes	No. of TRs without registered programmes	Percentage of utilization	No. of promulgated TRs	No. of TRs with Registered programmes	No. of TRs without registered programmes	Percentage of utilization
Agriculture and fisheries	14	11	3	78.6	14	13	1	92.9
Manufacturing								
Automotive	34	15	19	44.1	37	21	16	56.8
Decorative crafts					2	0	2	-
Furniture and fixtures	1	1	0	100.0	1	1	-	100.0
Electronics	9	9	0	100.0	9	9	-	100.0
Footwear and leather goods	1	0	1		1	0	1	-
Garments	2	2	0	100.0	3	2	1	66.7
Metals and engineering	28	24	4	85.7	28	24	4	85.7
Processed food and beverages	6	3	3	50.0	6	5	1	83.3
Pyrotechnics	1	0	1		1	0	1	-
Services								
Construction	45	31	14	68.9	45	35	10	77.8
Health, social, and other community development services	29	23	6	79.3	31	23	8	74.2
Heating, ventilation, air-conditioning, and refrigeration	5	4	1	80.0	5	4	1	80.0
Information and communications technology	12	11	1	91.7	13	11	2	84.6
Land transport/aviation	2	2	0	100.0		0	-	-
Maritime	7	6	1	85.7	5	0	5	-
Tourism (hotels and restaurants)	17	15	2	88.2	17	17	-	100.0
TVET					2	2	-	100.0
Utilities	5	0	5		6	0	6	
Wholesale and retail trading					1	1	-	
Total	218	157	61	72.0	227	168	59	74.0

Source: TESDA Current Data and Related Statistics, 2010.

At the same time, a substantial portion of the training regulations are not being utilized. There is only a 70 per cent and 74 per cent rate of utilization for manufacturing and services, respectively. This implies that some of these training regulations are not useful or appropriate for the industries, and that the demand for such skills is not present.

The training regulations are intended to ensure quality and maintain the basic minimum standards set by the TESDA on a nationwide basis. However, many technical and vocational institutes (TVIs) and employers in the provinces often implement the programmes haphazardly while trying to keep up with the minimum basic standards under the regulations. In certain cases, non-registered programmes are allowed by the TESDA to be taught in order to address specific community needs. In effect, multiform programmes are implemented by these schools, even with some not even fulfilling the basic requirements of the training regulations. The variance of training delivery can also be noted from the significant differences in qualities of personnel across regions and TVET providers. Various studies have written about the lack of standards in terms of personnel per institute (see di Gropello, et al., 2010). Certain regions of the country have significant numbers of institutes but have fewer personnel than other regions with fewer numbers of institutes. A key theme emerging from these patterns, then, is that the efficiency and quality of the TVET system varies drastically across TVIs despite the training regulations. The apparent lack of a uniform application of TRs – arising from the differences in resources and facilities – is likely contributing to this problem.

The training regulations, however, may be a two-edged sword. TVIs that comply with the training regulations complain that the rigid national training regulation prevent them from developing programmes that are suited to their specific conditions. According to them, these regulations coming from the TESDA Central Office are designed mainly for the schools found in the urbanized areas like Metro Manila, where adequate facilities and good trainers are readily available. As a result, accredited programmes cannot respond adequately to the emerging industries in their respective regions. In certain cases, while the training regulations may exist for a certain subsector, the training regulations do not match the indigenous qualities of the same sector in their respective communities. Sectors that possess indigenous and unique ways of operating are, in effect, penalized by the system. In the process, the TVIs may religiously follow the training regulation even if these are not relevant to the similar, but not identical, conditions in their communities. Hence, as already mentioned, the TESDA may register programmes with no training regulations in order to give TVIs more leeway.

The position of employers on the training regulations is mixed. The construction sector in particular accepts the value of the training regulations and the certification that the TESDA eventually confers to graduates, presumably based on the widely accepted training regulations in the industry. In fact, one of the requirements for hiring workers in this industry is the TESDA certification. Other employers, especially in the ICT sector, however, complain that in situations where they wish to amend the training regulations, the format of the training regulations makes modifications difficult. In an industry where technological changes occur rapidly, the regulations may no longer apply. In particular, the tools and processes needed for ICT often change very quickly, and so the tools and processes found in the training regulations may no longer hold.

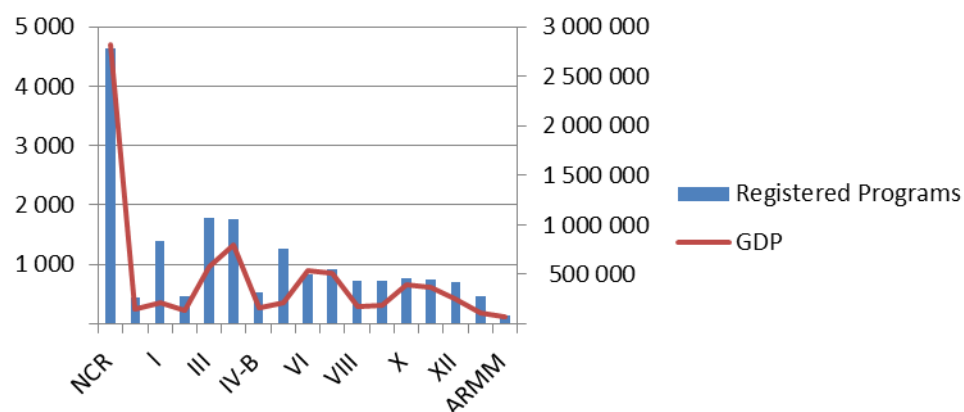
Table 4 presents the total number of registered programmes, including those without training regulations, per region in 2011. Two points are important. First, these programmes are concentrated mostly in the Luzon area, followed by the Visayas and Mindanao. Moreover, figure 2 indicates a high correlation between the gross domestic product (GDP) of the region and the number of registered programmes in 2011. This reflects the present goal of the TESDA to make skills development accessible in areas where economic activity is prevalent. This also shows the desire of the TVET system to respond quickly to the changes in the economy. Most programmes are in services, as the more urbanized and wealthier areas are also those where the business process outsourcing (BPO) sector has boomed.

Table 4. Registered programmes by region, 2011

Region	Description	Registered programmes		Total
		with training regulation	No training regulation	
Luzon				
NCR	National Capital Region	3 093	1 547	4 640
CAR	Cordillera Administrative Region	308	141	449
I	Ilocos Region	1 348	55	1,403
II	Cagayan Valley	461	11	472
III	Central Luzon	1 337	444	1 781
IV-A	CALABARZON	1 588	183	1 771
IV-B	MIMAROPA	512	13	525
V	Bicol Region	1 147	108	1 255
Sub-total		9 794	2 502	12 296
Visayas				
VI	Western Visayas	761	78	839
VII	Central Visayas	667	257	924
VIII	Eastern Visayas	671	50	721
Sub-total		2 099	385	2 484
Mindanao				
IX	Zamboanga Peninsula	712	16	728
X	Northern Mindanao	747	27	774
XI	Davao Region	722	23	745
XII	SOCCSARGEN	696	2	698
XIII	CARAGA	435	37	472
ARMM	Autonomous Region of Muslim Mindanao	144	6	150
Sub-total		3 456	111	3 567
Total		15 349	2 998	18 347

Source: TESDA, Philippine TVET Statistics, 2005–2011.

Figure 2. Relationship between registered programmes and GDP per region



Source: National Statistical Coordination Board (NSCB) and TESDA.

Second, there were fewer than 3,000 registered programmes with no training regulation at the end of 2009, and most of those had no assessment tools at that time. According to the 2008 Impact Evaluation Study, 24 per cent of the graduates during that survey year came from programmes with no training regulations (NTR), and correspondingly were not covered by national competency assessment and certification. Table 5 indicates the total number of registered programmes with and without training regulations, by key sector. It can be seen that those sectors with the most number of programmes without training regulations were also those that had the most number of training regulations. This can mean that the existing TRs are not yet sufficient in addressing the needs of the industries for quality training. Furthermore, most of the training regulations are in the service sectors such as ICT, health and community services, and tourism, reflecting the high demand for such courses in those markets.

Table 5. Registered programmes with or without training regulations, by sector, 2011

	With training regulations	Without training regulations
Agriculture and fisheries	252	10
Automotive	840	7
Construction	1 227	34
Decorative crafts	1	3
Furniture and fixtures	4	2
Electronics	651	47
Garments	233	9
Health, social, and other community development services	3 440	1 485
Heating, ventilation, air-conditioning, and refrigeration	223	4
Information and communications technology	4 125	822
Land transport/aviation	194	70
Maritime	175	38
Metals and engineering	923	21
Processed food and beverages	117	2
TVET	17	-
Tourism (hotels and restaurants)	5 272	52
Wholesale and retail trading	4	-
Total	17 698	2 607

Source: TESDA, Philippine TVET Statistics, 2005–2011.

There is a need to re-examine the training regulations in the context of two main areas of concern. The first is whether the training regulations are at par with industry requirements, particularly ICT and others like electronics, where technology is continually evolving. Second is whether the training regulations are flexible enough to address the needs of emerging industries and local communities without reducing the established standards of the TESDA. The key issue is the level with which certain goals or standards can be traded off in order to be responsive to community conditions.

Apart from the training regulations, another input for the TVET system is the quality of trainers. Table 6 presents the total number of trainers who had passed the National TVET Trainers and Assessors Qualification Programme (NTTAQP) and possessed a trainer's certificate. TQ/AQ certificates have a validity of five years. Upon expiration of the certificate, trainers undergo a new assessment process to be conducted by an expert panel. The data in this table reflects mainly the new

trainers and those whose certificates were due in 2006 and about to expire. These groups constitute the main bulk of trainers in the present system.

Table 6. Number of TVET trainers assessed and certified by type of institute and region, 2006

Region	Private	Public	Total
NCR	4 777	445	5 222
CAR	606	563	1 169
L	1 832	975	2 807
LI	939	790	1 729
III	1 012	590	1 602
IV-A	2 489	802	3 291
IV-B	545	429	974
V	1 514	764	2 278
VI	1 272	903	2 175
VII	1 892	627	2 519
VIII	624	793	1 417
IX	1 066	743	1 809
X	1 123	675	1 798
XI	1 636	600	2 236
CARAGA	617	609	1 226
ARMM	143	63	206
Total	23 644	10 776	34 420

Source: TESDA, Philippine TVET Statistics, 2005–11.

Several key points are found in this table. First, most of the certified trainers are found in the urbanized areas like the National Capital Region (NCR) and Region IV-A (CALABARZON). This indicates an unequal distribution of instruction quality, since those in the rural areas have lesser-qualified trainers. Second, the private sector has more than two times the number of accredited trainers than the public. This reflects the fact that there are more private than public institutes. Since the public sector accounts for only 10 per cent of the total number of TVET providers, the number of qualified instructors is greater in public than in private institutes. Third, given that the average number of students enrolled in 2011 was 1.5 million, the ratio of qualified trainers per student was only 0.02, or roughly one trainer per 50 students. Since other courses such as tourism and ICT have more students than others, it is likely that trainers with no accreditation are employed in these schools. Employers, meanwhile, note that despite these assessments, most of the trainers continue to be unqualified and unaware of the changing technologies in their industries. They suggest that industry should be allowed to play a more active role in these assessments.

While it is difficult to assess the quality of TVET in the country, this section will nonetheless consider the internal indicators of the system and the number of certified students as measures of quality. As already mentioned, certification is provided to those who meet the competency standards, and so ensures the productivity, quality, and global competitiveness of middle-level workers. Table 7 features the certification rates given to students (number who passed the requirements) per region from 2005 to 2009. The following points can be made. First, the number of certified graduates has increased by a substantial amount, even by more than two times in Mindanao, in a short period. The Visayas also improved significantly, and as result had the same certification rate as Luzon in 2009. Second, most of the certified students are based in Luzon, where most of the graduates are found. This can suggest that either the quality of training has improved, and that graduates now are presumably well-trained, or that the degree of difficulty of the examinations has decreased, making it easier for

most of the students.³³ Most of those who were certified also were in those regions where more non-training regulation programmes are found. Third, the more impressive gains are found in areas where poverty conditions are generally prevalent. These are in CARAGA, Region IX, and Region IV-B. This partly indicates the high motivation of individuals in these areas to improve their lives through TVET. This suggests that the demand for TVET in these areas is encouraging, and the returns on investments in TVET here should be greater.

Table 7. Certification rates by region, 2005–11

Region		2005	2006	2007	2008	2009	2010	2011
Luzon	NCR	85.1	88.9	96.3	95.7	93.8	94.3	90.7
	CAR	46.0	59.5	66.8	71.2	76.9	75.2	81.2
	I	35.9	45	52.6	74.6	84.2	86.4	86.9
	II	34.4	34.4	62.2	72.7	82.4	88.5	82.5
	III	67.1	73.4	77.1	77.4	73.5	74.2	83.7
	IV-A	40.3	59.4	67.2	65.3	73.4	76.9	79.6
	IV-B	12.5	36.9	61.3	77.4	83.5	80.4	87.3
	V	34.6	40.2	59.7	77.7	78.1	73.2	75.6
Average for Luzon		44.5	54.7	67.9	76.5	80.7	81.1	83.4
Visayas	VI	23.4	39.9	65.5	52.9	66.9	67.6	72.7
	VII	51.6	62.3	54.9	81.4	87.2	82.9	88.0
	VIII	48.5	82.6	68.4	64.5	88.0	92.9	94.0
Average for Visayas		41.2	61.6	62.9	66.3	80.7	81.1	84.9
Mindanao	IX	17.7	22.7	66.1	75.1	77.7	77.8	70.9
	X	39.9	49.7	83.8	64.5	84.5	85.3	83.2
	XI	23.8	43.0	60.6	78.9	76.1	81.8	85.7
	XII	26.2	40.1	62.7	80.7	81.3	70.5	81.1
	CARAGA	9.0	20.5	74.9	72.1	77.3	80.8	77.5
	ARMM	59.0		56.3	53.4	60.2	69.6	68.4
	Average for Mindanao	29.3	35.2	67.4	70.8	76.2	77.6	77.8
		48.4	62.4	73.5	78.5	82.6	83.0	84.2

Source: TESDA, Philippine TVET Statistics, 2005–11.

TESDA certification rates of accredited schools have been increasing since 2005, but are still rather low for technologically-advanced sectors. Another indicator of quality is the number of students that the TESDA certifies as being competent in their field (according to quality standards defined by industry) upon completing TVET training. Table 8 provides a record of certification by sector from 2005 to 2012. During those years, 1.7 million Filipino skilled workers were certified out of the 2.27 million assessed, representing a certification rate of 74.26 per cent. However, the technologically-advanced sectors including electronics and ICT have a lower certification rate, and of these sectors, ICT had the lowest certification rate – only 51.5 per cent – in the period 2005–09. The low ICT results could be due to the fact that more students enrolled in the service-oriented courses. Although the Philippines has been successful in attracting FDI to the electronics industry, this has not translated into a deepening of industrial capabilities, fundamentally due to the lack of highly-skilled individuals.

³³ This rate falls below the TESDA target of mandatory assessment of 100 per cent.

Table 8. Certification rates by sector, 2005–12

Sector	2005	2006	2007	2008	2009	2010	2011	2012
Agriculture and fisheries	33.1	49.2	74.1	86.4	93.1	70.3	89.2	90.0
Automotive	33.2	46.7	55.2	76.0	78.1	76.1	79.0	84.5
Construction	43.3	53.5	71.2	84.6	82.5	82.9	85.9	88.3
Electronics	37.9	48.1	51.0	71.6	70.3	66.8	70.6	72.5
Footwear and leather goods					100.0			
Furniture	42.1	52.8	68.4	100.0		100.0	100.0	99.2
Garments	45.3	58.6	57.8	78.5	80.2	80.4	81.4	85.0
Health	65.5	82.8	90.1	94.8	92.5	90.8	89.7	92.4
HVAC-R	50.0	62.0	74.9	84.9	83.3	86.7	85.6	87.9
ICT	19.1	27.6	51.8	59.1	71.5	53.4	54.8	58.8
Maritime	93.2	91.6	95.1	96.2	95.9	97.3	93.2	90.5
Metals and engineering	41.5	51.9	69.8	79.7	81.0	80.9	83.3	86.3
Tourism	38.0	54.5	68.8	85.6	84.4	85.0	88.1	93.1
Processed foods					92.3	92.5	85.3	88.1
Utilities	62.2	57.7	84.5				98.9	100.0
TVET								94.2
Others	95.5			63.1				
Total	48.4	62.4	73.5	78.1	82.6	83.0	84.2	85.7

Source: TESDA Current Data and Related Statistics, 2012.

In their survey of the Philippine employers, di Gropello, et al. (2012) noted that skill-delivery gaps remain in TVET. Post-secondary TVET graduates in the Philippines lack relevant certifications in some technologically-advanced fields, are of varying quality, and often need re-training. Employers, while acknowledging higher overall relevance to labour-market needs compared to formal tertiary education, highlighted the limitations of post-secondary TVET education in several fields of study, and the quality of teaching. Also, areas that scored as weaknesses are facilities quality, research capacity, and labour-market adaptability.

The 2008 impact assessment conducted by the TESDA also cited that although there is a positive relationship between the certification rate and employment rate of TVET graduates – i.e. although certified graduates are more likely to become employed than uncertified graduates – the relationship is not statistically significant. This clearly seen in table 9, which shows the employment record by level of certification. A substantial number of non-certified TVET graduates also found employment, inasmuch as more than half of the certified graduates are unemployed. The employment rate of the certified TVET graduates was 46.6 per cent, higher than those who failed (39.1 per cent). However, the graduates who did not take the competency assessment also demonstrated a good employment rate, at 41.6 per cent. This could indicate that the TESDA certification is not necessarily a requirement for getting a job. This then places the issue of how qualified the trainers are, and how relevant the courses are to the needs of the industries.

Table 9. Relationship between employment rate and certification rate, 2008

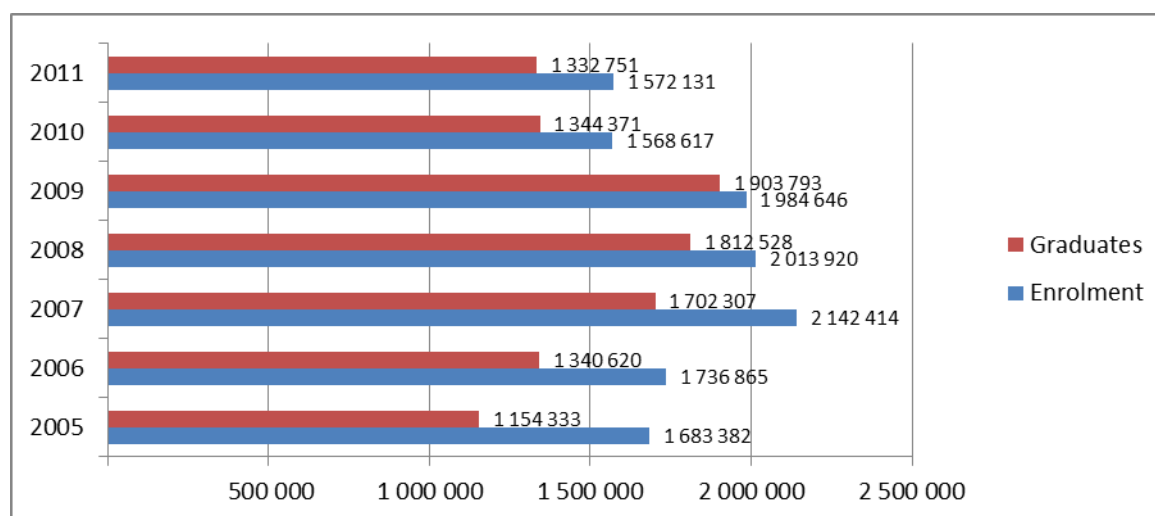
Certification	Employed	Unemployed	Total	Percentage employed
Passed	28 395	32 505	60 899	46.6
Failed	3 966	6 178	10 143	39.1
Did not take competency assessment	32 938	46 323	79 260	41.6
No indication of having competency assessment	62	270	333	18.7
Not indicated	424	593	1 017	41.7
Total	65 784	85 868	151 653	43.4

Source: 2008 Impact Evaluation Study, TESDA.

Moreover, according to this survey, as well as the succeeding evaluation, certification is still not a good predictor of higher income levels for employed graduates, as the evaluation survey results showed that there is not much difference between the earnings of certified graduates compared with those who did not take the assessment. In fact, there is no established relationship between the possession of competency certificates and the level of income of employed TVET graduates. The 2008 survey results showed that among those earning more than 10,000 Philippine pesos (PHP) a month, 33.04 per cent did not take the assessment, and only 28.01 per cent were certified. For other income levels, there was not much difference in the share of TVET graduates who did not take the assessment and those who passed.

5. Access and participation in TVET

The number of enrolled and graduated TVET students is presented in figure 3. Note that over the last few years, the number of students enrolled has decreased, after reaching a peak in 2007. This can be explained in large part by the increased enrolment in tertiary education, as more students opt to attend college. Total enrolment in higher (tertiary) education for school years 2009 to 2010 grew by about 6 per cent, resulting in an average of 2,770,965 students, which is about 1.7 times higher than the enrolment in TVET (see table 10). The most number of enrolled students in higher education were in medical and allied courses; ICT; and engineering technology. All of these courses are initially taught in the TVET sector, but more students are taking these courses in universities, as the quality of education in higher education is perceived both by employers and students to be better than TVET.

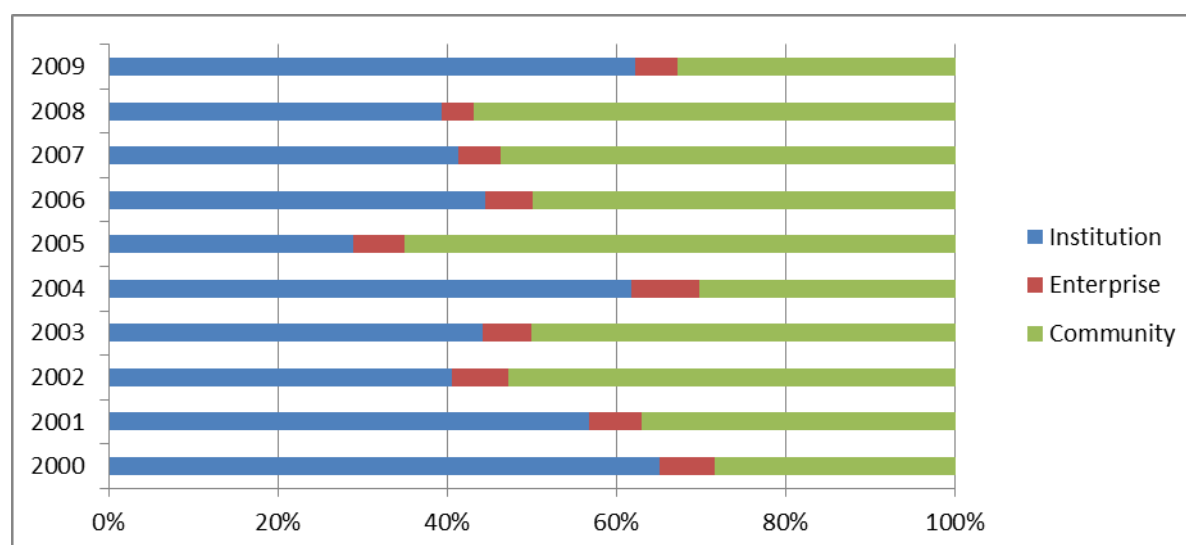
Figure 3. Number of students enrolled in, and graduates in TVET, 2005–11

Source: Philippine TVET Statistics, 2005–11.

Table 10. Enrolment by school levels, 2005–11

School level	School year					
	2005–06	2006–07	2007–08	2008–09	2009–10	2010–11
Higher education	2 483 645	2 604 449	2 654 294	2 625 385	2 770 965	2 625 385
TVET	1 736 865	2 142 414	2 013 920	1 984 646	1 568 617	1 572 131
Secondary	6 298 612	6 363 002	6 506 176	6 763 858	6 755 954	6 813 651
Elementary	13 006 647	13 145 210	13 411 286	13 686 643	13 914 549	14 015 598

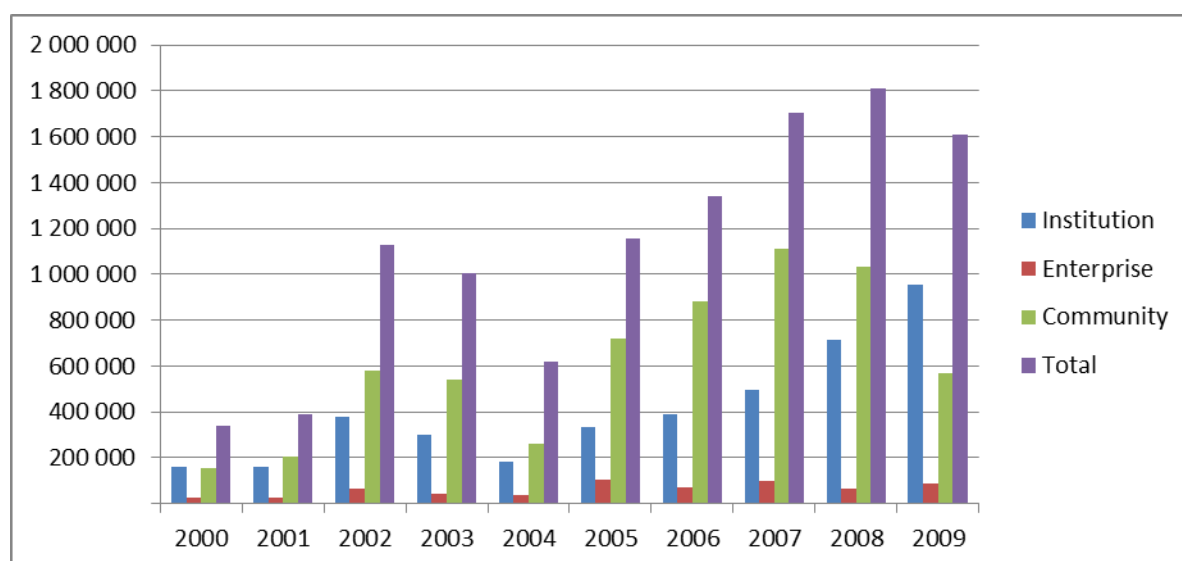
Figure 4 shows information on the distribution of enrollees among the three delivery modes. In most years, community-based training modes represented the largest share of enrolment, followed by school-based programmes. However, although the government encourages community-based modes, the funding for these programmes is dependent on the availability of local funds, and the share of community-based modes can decline significantly. In 2009, its share had fallen to 33 per cent from a high of 57 per cent in 2008. What is remarkable is the low share of enterprise-based enrolment that is registered with the TESDA, despite the perceived relevance of technical education, and training is quite low.

Figure 4. Distribution of TVET enrollees by delivery mode, 2000–09

Note: 2009 figures are preliminary. Data for 2008 are normalized with 2007 and previous years' output.
Source: TESDA Current Data and Related Statistics, 2010.

Figure 5 gives information on the number of graduates by delivery mode from 2000 to 2009. The data indicate that institute-based programmes have increased their enrolments over time, while community-based programmes have had smaller increases since 2005. However, enterprise-based programmes, which are more responsive to market conditions because the students are trained by the companies themselves, had the lowest enrolments for the whole period. However, the total number of graduates actually declined, indicating, to some extent, the decrease in demand for TVET.

Figure 5. Number of TVET graduates by delivery mode, 2000–09



See note in figure 4.

Source: TESDA Current Data and Related Statistics, 2010.

Tables 11 and 12 present the breakdown of enrollees and graduates by region. Several points are important. First, the more urbanized areas like NCR, Region III (Central Luzon), and Region IV-A (the CALABARZON industrial area) tend to have greater TVET enrollees and graduates than the other regions. Second, variance across time is not too significant, but variance across regions is high, with the coefficient of variation greater than one-half. This suggests that the enrolment gap between urban and rural areas has not been reduced over time. Third, the ratio of graduates to enrollees across regions, reflecting the overall drop-out rate,³⁴ tends to be slightly higher in less urbanized areas, as students in these areas seem more intent in receiving their certificates of completion compared to their counterparts in the urban areas. In any case, the lower number of enrollees in the rural areas allows their respective schools to keep better track of their students.

Table 11. Number of TVET enrollees by region, 2005–09

Region	2005	2006	2007	2008*	2009	2010	2011
NCR	315 819	296 016	346 094	394 836	373 661	305 336	244 668
CAR	38 334	49 512	70 547	83 300	57 704	40 954	49 783
I	85 974	90 788	105 633	168 574	60 557	67 479	75 343
II	62 440	84 861	102 922	83 300	110 484	74 667	73 955
III	140 650	179 242	203 892	168 115	152 937	123 168	184 213
IV-A	161 707	161 717	184 289	214 262	234 830	251 000	190 170
IV-B	61 326	62 081	67 743	88 126	73 898	61 330	72 380
V	105 345	112 392	135 494	83 300	37 432	56 418	50 574
VI	195 035	144 539	202 872	83 300	106 174	67 788	69 208
VII	94 540	114 063	157 328	84 317	209 849	176 603	204 162
VIII	67 349	68 606	91 940	83 918	95 982	54 086	40 093
IX	63 875	64 666	88 085	87 866	117 060	82 742	74 789
X	91 283	91 083	117 403	105 914	91 861	66 091	79 586
XI	104 708	112 079	125 931	87 966	48 208	34 964	42 370

³⁴ Further discussion of the drop-out rate can be found later.

XII	49 371	53 276	64 840	83 300	80 460	64 460	56 461
CARAGA	45 626	45 854	68 115	83 300	113 278	41 531	64 376
ARMM	-	6 090	9 286	30 226	18 060	-	-
Total	1 683 382	1 736 865	2 142 414	2 013 920	1 982 435	1 568 617	1 572 131

Notes: CV refers to coefficient of variation across regions per year. *Normalized with 2007 and previous years' output.
Source: TESDA, Current Data and Related Statistics, 2010.

Table 12. Number of TVET graduates by region, 2005–09

Region	2005	2006	2007	2008*	2009	2010	2011
NCR	180 744	172 604	205 785	349 727	335 376	232 661	91 223
CAR	29 727	43 337	63 282	75 727	57 289	40 780	48 854
I	60 937	75 953	95 316	153 249	57 915	62 559	81 022
II	57 515	77 240	92 245	75 727	112 426	69 882	69 583
III	83 915	126 738	134 590	152 832	168 841	131 287	169 943
IV-A	89 995	107 217	138 814	185 693	242 861	222 242	136 108
IV-B	50 947	57 389	67 752	80 114	79 956	52 736	63 137
V	77 841	95 999	117 242	75 727	36 393	41 669	44 725
VI	149 773	124 341	166 512	75 727	59 397	50 977	51 ,269
VII	87 293	115 264	157 564	76 652	211 249	142 498	66 613
VIII	50 969	62 033	80 351	76 289	88 840	50 835	35 219
IX	41 428	53 025	75 339	79 878	104 109	72 330	64 999
X	68 313	64 432	97 398	96 285	105 290	57 990	71 429
XI	62 499	76 302	98 729	79 969	38 008	22 330	33 383
XII	31 008	42 137	45 390	75 727	69 615	54 689	46 097
CARAGA	31 430	40 605	56 739	75 727	117 598	38 906	59 147
ARMM		6 004	9 259	27 478	18 630	-	-
Total	1 154 333	1 340 620	1 702 307	1 812 528	1 903 793	1 344 371	1 332 751

See note in table 11.
Source: TESDA, Current Data and Related Statistics, 2010.

The different types of TVET programmes are delivered by a diverse and highly decentralized set of individual training providers. Table 13 provides the distribution of TVET providers in 2005. Note that there were 4,510 TVET providers, more than 60 per cent of which were private. The public TVET providers for that period included 121 TESDA-supervised providers, including 57 technology institutes, 15 regional training centres (RTCs), 45 provincial training centres (PTCs), and four specialized training centres. From the table, it can be seen that most of the graduates came from the community-based institutions (41 per cent), the TESDA technological institutes (7.89 per cent), and the enterprise-based centres (7.51 per cent). As a whole, both public and private schools covered 17 per cent of the total graduates. Note that while the TESDA technology institutes and TESDA training centres constituted only 2.68 per cent of the total TVET providers, they contributed 21.7 per cent of the total number of graduates, or 75.64 per cent of the total school-based graduates, indicating the dominance of the TESDA schools in the TVET sector.

Table 13. Distribution of TVET providers by delivery mode, 2005

Delivery mode	No. of Providers	Graduates				
		Percentage	TVET sector	TESDA institutes	Grand total	Percentage
Total	4 510				1 354 322	
School-based		44.66	227 424			16.79
TESDA technology institutes	57	1.26		106 811		7.89
Private TVIs	974	21.60				
DepEd supervised schools	259	5.74				
HEIs with non-degree programmes	724	16.05				
Centre-based (15 RTCs, 45 PTCs, four specialized TCs)	64	1.42		65 214	65 214	4.82
Enterprise-based	1 031	22.86	101 650		101 650	7.51
Community-based (LGUs, NGOs)	1 057	23.44	555 272		555 272	41.00
Others/not classified	344	7.63	297 951		297 951	22.00

Source: Philippine TVET Outlook, 2005–2010.

Table 14 shows the distribution of TVET providers by region and by sector in 2009. Note that the number of providers slightly changed, with the number lower at 4,041 compared to 4,510 in 2005. Moreover, the dominance of the private sector became greater, with a 90 per cent share compared to the 60 per cent share in 2005. The table also indicates the unequal distribution of the TVET providers across regions. More than a third (68 per cent) of TVIs were located in Luzon, with around half situated in the National Capital Region (NCR) (28 per cent), Region IV-A (10 per cent), and Region III (9 per cent) combined. As expected, the regional distribution of providers also corresponds to the regional distribution of TVET graduates.

Table 14. Distribution of TVET institutes by region and sector, 2009

Region	TVET Institutes			
	Private	Public	Total	Per cent
NCR	1 085	32	1 117	27.6
CAR	122	13	135	3.3
I	223	27	250	6.2
II	77	23	100	2.5
III	355	25	380	9.4
IV-A	394	23	417	10.3
IV-B	76	17	93	2.3
V	183	38	221	5.5
VI	176	38	214	5.3
VII	185	40	225	5.6
VIII	91	40	131	3.2
IX	107	21	128	3.2
X	139	20	159	3.9
XI	181	16	197	4.9
XII	142	4	146	3.6
CARAGA	32	8	40	1.0
ARMM	60	28	88	2.2
Total	3 628	413	4 041	
Per cent	90	10		

Source: TESDA Current Data and Related Statistics, 2010

There are two major scholarships being implemented by the TESDA: the Training for Work Scholarship Programme (TWSP) and the Private Education Student Financial Assistance (PESFA). These two scholarships accounted for 73 per cent of the number of scholars among the TVET graduates in 2007 (TESDA, 2010).

Created in 1994, the PESFA aims to improve equity and access to TVET opportunities, as well as to ensure immediate employment among its beneficiaries. At the more aggregate level, the programme seeks to induce investments in TVET, and to encourage TVIs to offer courses that are more responsive to labour-market demands. Grantees are expected to pass the applicable pre-training qualifications required by the prospective training programme the student wishes to enrol in. Selection of beneficiaries is determined in TESDA local offices. Training providers in this case must be any private TVIs with TESDA-registered programmes.

Table 15 provides information on two TESDA scholarship programmes, namely the PESFA and the TWSP. The following points can be noted. First, the two scholarships reflect the two main client groups of TVET: the poor and the unemployed. The PESFA caters to the former, while the TWSP to the latter. The TWSP is really intended to “pump-prime” the economy. Whether or not such dual purposes make for good technical training is problematic. Given the high costs of training in the more technically advanced sectors, it is wiser to pool these resources together to ensure that the needed manpower requirements of the firms are met.

Table 15. Summary of TESDA scholarship programmes, PESFA and TWSP

		PESFA	TWSP
Scope	Qualification/ programme	All qualifications and clusters of competencies with training regulations as provided by various TESDA issuances. Critical competencies/qualifications approved by the TESDA that respond to emerging and highly in-demand job requirements in the local and overseas labour market.	
	Training providers	All private TVET institutes with TESDA-registered programmes.	All public and private TVET institutes and enterprise-based training providers with TESDA-registered programmes.
Scholar's qualification	General	Has taken NCAE or YP4SC; has passed the applicable pre-training. Assessment/entry-level requirements of the qualification.	
	Specific	At least 18 years old at completion of training. Annual family income of not more than PHP 120,000; high-school graduate (TESDA Circular No. 08, s. 2010).	At least 15 years old.
Benefits	General	Free career profiling; free full training; cost per approved cost schedule; employment referral.	
	Specific	Student allowance equivalent to PHP 2.80 multiplied by the prescribed training hours. Book allowance ranging from P100–500 depending on number of months of prescribed training (TESDA Circular No. 08, s. 2010).	Income support fund for displaced workers at half the daily minimum wage per training day. Training support fund for others at PHP 60.00 per training day. Provision of tool kit as per approved cost schedule for select training programmes. Free competency assessment.
	Containment policy	Yes (TESDA Circular No. 08, s. 2010).	No.
	Multiple availment	No (TESDA Circular No. 08, s. 2010).	Yes.
Geographic allocation	Basis	Number of high school graduates. Poverty incidence. Allocation proportionate to the expected number of poor high-school graduates in area.	Labour-market demand per qualification. Area, sectoral capacity. Priorities set by the economic programme.
	Basic allocation unit	Legislative district.	Province/district.
Performance		Employment rate of 55 per cent within six months after training; 84 per cent certification rate (TESDA Circular No. 08, s. 2010).	Sixty per cent year within one year after training; 75 per cent certification rate.
Year started		1999	2006

Source: Orbeta and Abrigo, 2010.

Second, there are different forms of provisions. The PESFA is given directly by the TESDA, but the TWSP is coursed through local government officials in the form of vouchers. The PHP200 million annual PESFA budget is allocated by the TESDA Central Office to the different local TESDA units, i.e. regional and provincial/district offices, proportional to the expected number of poor high-school graduates in each congressional district covered by the respective TESDA unit. The TWSP is administered as a voucher system. Unlike in the PESFA, however, the restriction on single availability of the TWSP per person was lifted in March 2009 in support of the government's Economic Resiliency Programme in response to the 2009 global economic crisis. After March 2009, interested students may benefit from two related training programmes plus an optional language course. Another difference between the TWSP and the PESFA is the portability of the scholarship grant across

regions, which has been maintained by the TWSP since its introduction in 2006. This means that TWSP vouchers issued in one region may be used by students for enrolment in any other region, where the voucher will be credited. Because of this, the vouchers are often offered to local officials, who will then distribute them to their constituents, possibly for their own political interests.

Third, given the rather ad hoc way in which TWSP is administered, one would have expected the PESFA to be more effective in generating employment. Unfortunately, the results are not conclusive. While PESFA students are able to work within a short period of time compared to the TWSP beneficiaries, and are able to obtain significantly higher certification rates, only 55 per cent of the students are able to get work (See Orbeta and Abrigo, 2010).

PESFA participation of private TVIs in the programme is conditional on their ability to meet the minimum performance standards set by the TESDA. In 2010, TVIs had to have at least: a) a 55 per cent employment rate within six months after the end of training; and b) an 84 per cent certification rate among its graduates.

Introduced in 2006, the TWSP was intended to address structural unemployment and to pump-prime the economy. Unlike the school-based procedures in the PESFA, the TWSP is more focused on skills training directly connected to existing jobs. Because of this, the eligibility requirements for TWSP are more general than those for the PESFA. These include: a) at least 15 years old; b) has taken the National Career Assessment Examination (NCAE) or the Youth Profiling for Starring Careers (YP4SC);³⁵ and c) has passed the relevant pre-training assessment or entry-level requirements. Prospective grantees are recommended by the TESDA local offices and are chosen by the TESDA Central Office. The local units base their recommendations on the following parameters: a) labour-market demand by skill type; b) geographical sectoral capacity; and c) priorities set by the government economic programme.

For this scholarship, all public and private TVET institutes and enterprise-based centres with TESDA-registered programmes can be the training providers. Subsequent participation of TVIs is based on their ability to meet the minimum performance standards set by the TESDA. In general, the requirements are more relaxed than those imposed in the PESFA. The performance indicators include: a) 60 per cent employment rate within one year after the end of training; and b) 75 per cent certification rate among its graduates.

Table 16 shows the number of enrollees and graduates between the two scholarships programmes. Apart from the dwindling number of scholarships being offered, note the clear disparity between these programmes, with the TWSP, which does not cater to students belonging to the lower-income classes, having more than 14 times more students. This is further verified by figure 6, which shows that most of the scholarships in 2011 went to the relatively better-off regions such as Region 3 (Central Luzon, agricultural areas), Region IV-B (Palawan-Mindoro, mainly tourism areas), and Region VII (Cebu, ICT areas). This somehow reflects the priority of the TESDA, which is to reach the areas with greater business activities, as opposed to reaching the poor.

³⁵ Measuring general scholastic and technical-vocational aptitude, entrepreneurial skills, and non-verbal ability, the NCAE is a test administered by the DepEd to graduating students from both public and private high schools nationwide, and is conducted in assigned venues.

Table 16. Number of enrollees and graduates for scholarship programmes, 2006–11

Year	TWSP		PESFA	
	Enrollees	Graduates	Enrollees	Graduates
2006–07	222 698	215 418	30 725	30 725
2008	450 189	345 286	15 929	15 929
2009	772 466	759 244	23 229	16 886
2010	97 144	67 360	22 774	13 406
2011	47 558	30 085	17 962	11 196
Total	1 590 055	1 417 393	110 619	88 142

Source: TVET Statistics, 2005–2011.

Figure 6. Number of TWSP and PESFA enrolled students and graduates, 2011

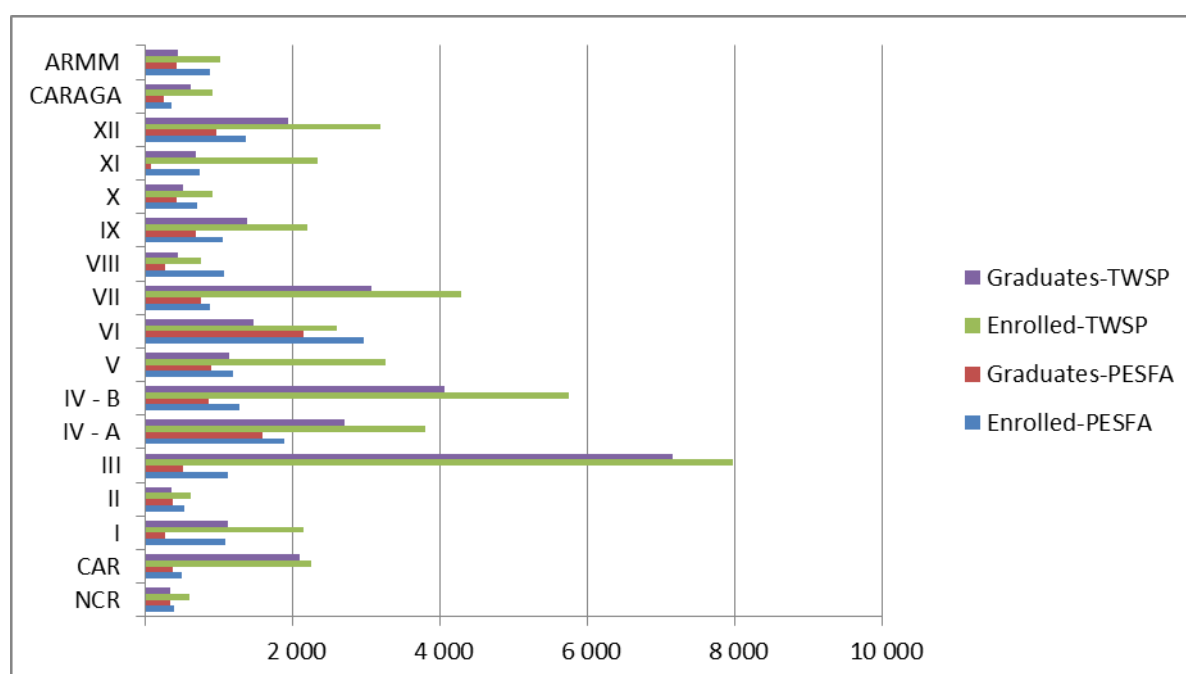
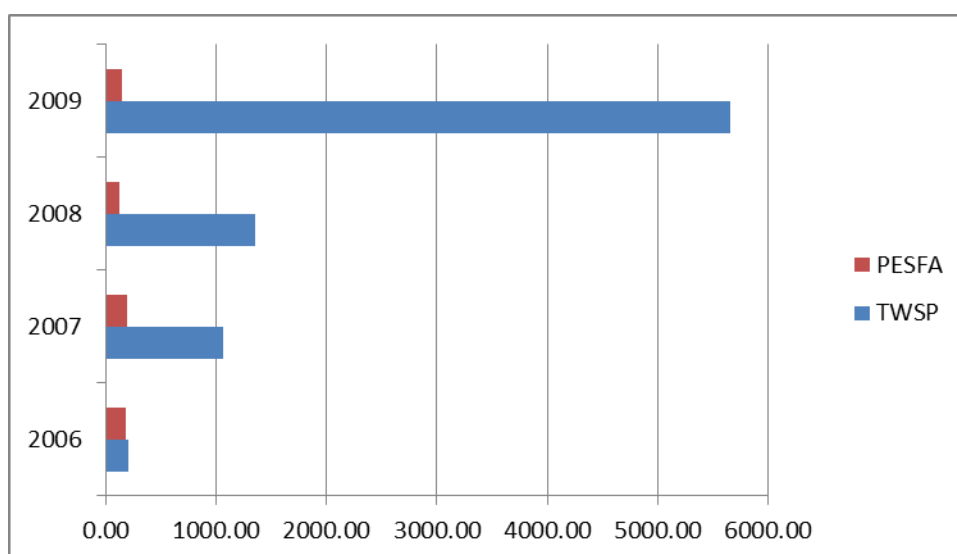


Figure 7 shows the total amount of funds spent for each of the scholarship programmes. Note the significant and disproportionate increases found in the TWSP relative to the PESFA. This not only reflects the substantial increases in the budget devoted to the former, but the relative ease with which these funds are actually spent. Furthermore, while private TVIs can legally be chosen as training providers, the fact that the grantees are chosen based on local-economy priorities makes it more likely that the public institutes are chosen as the providers. This is possible given the lowered standards that the programme requires, not only for its institute providers, but also for its students.

Figure 7. Expenditures for PESFA and TWSP, 2006–07, in million Philippine pesos



Source: Orbeta and Abrigo, 2012, from TESDA-TWSP Project Monitoring Office.

More importantly, the TWSP was much larger than the PESFA. The PESFA fund had remained unchanged over time (i.e. PHP200 million), catering to specific clients who met the criteria for the scholarship, such as grades, parents' income, and other requirements, which obviously limits the beneficiaries for the PESFA. On one hand, the continued increase in the budget for the TWSP is driven by two factors. First, the TWSP has a broader base of clients than the PESFA. Second, the TWSP facilitates the provision of skilled workers as demanded by industries. Since the TWSP was not concerned with equity, more students were able to take advantage of these scholarships. The TVI's can also benefit from the TWSP by offering and developing training curriculums that falls under the priority areas of the industries. These features of the TWSP provide some sort of an incentive to the potential employees, through subsidized tuition fees, and the TVIs through increased enrolment in fields demanded by the industries. Whether this strategy has led to more employment is a question that can be tackled later.

Following an evaluation of both programmes, the government in 2012 actually reduced the budget for the TWSP to PHP700 million, while the PESFA was increased only slightly to PHP200 million. This reflected the need to provide incentives to private TVIs to improve their programmes and, at the same time, the importance of placing more of the government's budget into basic education. The budget for basic education was increased to PHP238.8 billion in 2012, a 15.2 per cent increase from the previous year.

In order to evaluate the accessibility of TVET to various income groups, it may be useful to relate the TVET enrolment to poverty. Figure 8 shows the relationship between the number of enrollees per region and the number of poor households. Note that the share of the region to the total enrolment in TVET is negatively correlated with the regional poverty incidence rate. A higher poverty incidence is associated with a lower share in the total TVET enrolment, suggesting lower enrolment and access in TVET programmes for poorer communities. Private schools are mostly located in the urban areas. Consequently, some less-developed and poorer regions are not served by any vocational and training school, whereas more prosperous regions have experienced a proliferation of schools.

Employment is the key to reducing poverty, and the TESDA is an important player in poverty reduction, as the government body that oversees the implementation of policies and guidelines for the TVET system. Access to TVET is critical for those who cannot afford higher education. The TESDA provides training support in the form of the PESFA and the TWSP, and has to ensure that TVET graduates join the labour market once they have completed their training programme. Enrolment in

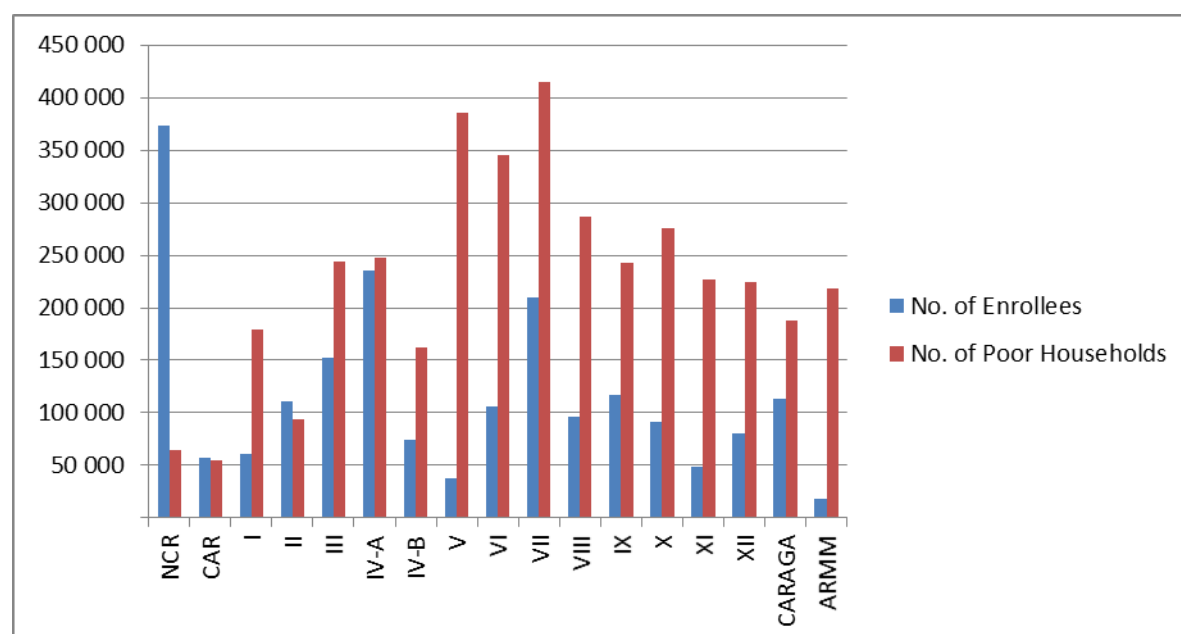
middle-level human resource development via TVET continues to be the main concern of the TESDA, and this can be made possible only by subsidizing TVET courses.

In the process, the TESDA has introduced reforms in the targeting and selection of beneficiaries, for efficient fund disbursement and programme management. For instance, the TWSP focuses the use of public funds on training directed to specific job opportunities indicated by employers. Currently, it prioritizes its training fund support on the key employment generators (KEGs) or the priority sectors determined by the Department of Labor and Employment (DOLE) – namely, BPO, electronics, tourism, construction, and agriculture – over equity concerns. Regular updating on the TWSP guidelines is being done by the TESDA to ensure that the TWSP supports the development of appropriate competencies for workers in the government’s identified priority sectors. Its specific objectives are as follows:

- a) close the skills gaps, particularly in high-demand industries;
- b) extend the reach of TVET to the grassroots; and
- c) contribute to upgrading the quality of TVET programmes, and upgrading of workers.

For the PESFA, one of the criteria in the identification of beneficiaries is family income. The TESDA has directed PESFA beneficiaries on career choices in relation to the critical skills requirements of in-demand jobs in the labour market. Both scholarship programmes address access issues, taking into consideration the income and employability of TVET graduates.

Figure 8. TVET regional enrolment and poverty magnitude, 2009



Source: NSCB and TESDA, 2010.

The private cost of TVET is generally low, since the government, particularly through the TESDA, has subsidized much of the cost of the studies. The private costs of both public and private TVET in 2003 are shown in table 17. The cost of earning a TVET degree in terms of tuition fees is affordable, which contributes to creating a surplus in some trades. However, the cost to society as a whole is much higher in terms of the actual cost of training, including forgone income during training, cost of training on the job to acquire technical, hands-on experience, and employment status or income that is lower than the trained-for level.

Table 17. Trainee cost of TVET

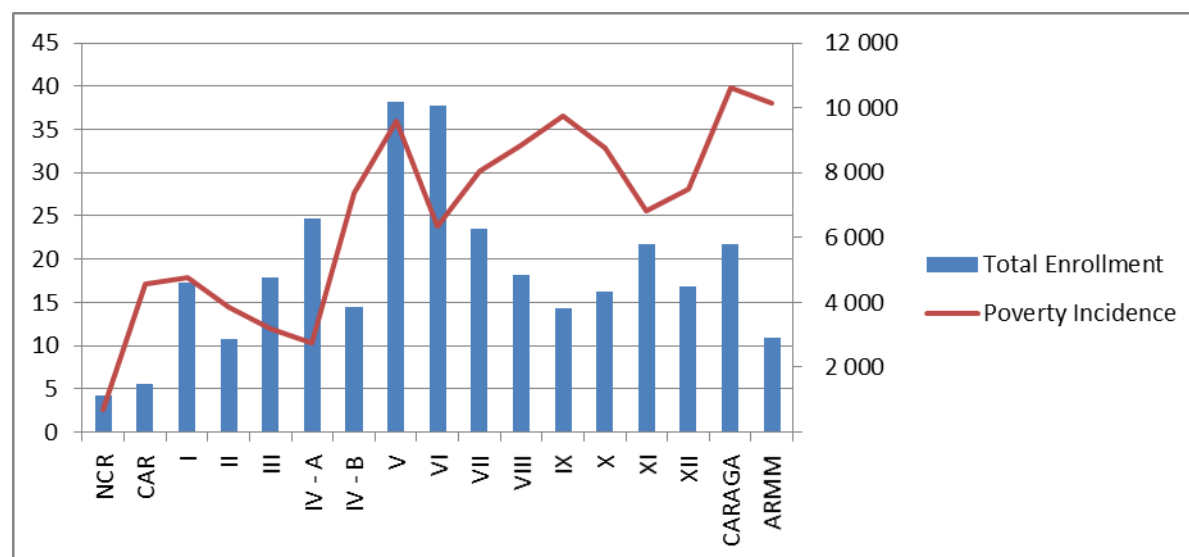
Private cost	Type of provider	Source
US\$250 per year	Public HEI*	Kitaev, et al. (2003).
US\$2000 per year	Private HEI*	Kitaev, et al. (2003).
US\$164 per year	Public schools**	Péano, et al. (2008).

Notes: *Based on representative schools in urban areas.
**Based on surveys of students across the country.

Furthermore, the improved access to public schools is due to tuition fees being heavily subsidized by the government. In 1998, education institutes received an operating budget calculated at a flat rate of PHP2,000 for each enrolled student, regardless of whether the programme in which the student enrolled included practical training (ADB, 1998).³⁶ The sustainability of this programme could then be suspect.

The problem with the lack of employment stems basically from the deficient targeting system, especially in the case of TWSP. However, the case of PESFA may be different. Figure 9 shows the relationship between the number of enrolled PESFA students and the poverty incidence. It can be seen that the correlation is not favourable to the poor. The disconnect can be seen more prominently in the Mindanao area, where poverty incidence has significantly increased but the number of PESFA students was actually lower compared to other regions. This was actually the same pattern seen in figure 9, indicating that many of these results are found in poor areas because the demand for jobs is not found in these areas.

Figure 9. Relationship between total PESFA enrolment (2005–09) and 2009 poverty incidence



Source: NSCB and TESDA, 2010.

³⁶ Technician training tends to be expensive, as equipment, spares, and operating materials are costly (in comparison with other courses, particularly those that do not require any practical training), while enrolment is lower. Therefore, the current allocation mechanism may place technician training at a disadvantage.

6. TVET financing structure

In 2009, the TESDA received approximately 4.3 per cent (up from 2.2 per cent in 2008) of the national education budget, while the DepEd received 83.2 per cent, and the CHED had 0.9 per cent. Large industries in the Philippines have a tradition of undertaking their own training. However, Péano, de Dios, Atchoarena, and Mendoza (2008) estimated the national expenditure for TVET activities in the Philippines to be approximately PHP11.1 billion (roughly US\$216 million) in 2002, which was 0.3 per cent of the GDP.

The TVET subsector is financed by both public and private funds. Within the public funding, apart from the national education budget through the General Appropriations Act, different government agencies contribute to TVET projects, and these include the following:

- a) the TESDA funds a network of 125 TESDA technology institutes (TTIs) nationwide, and assumes the authority role and supervision of the whole TVET sector;
- b) LGUs that fund and organize short-duration TVET courses;
- c) other government departments such as the DILG, Department of Agriculture (DOA), DTI, and Department of Social Welfare and Development (DSWD); and
- d) legislators' contribution through the Invigorating Constituent Assistance in Reinforcing Employment (I-CARE) programme.

Table 18 shows the distribution of public funds by source from 2008 to 2010. Note that about 50 per cent of the funds during this three-year period came from the LGUs and the I-CARE programme. LGUs and legislators provided funding for construction or refurbishment, scholarships, training supplies, and materials and equipment, while the TESDA assigned the trainers, conducted the training programmes, and assisted the graduates in their job placement. Only 0.73 per cent of the funds came from the national government.

Table 18. Sources of TVET public funds (PHP), TESDA

Fund	2008	2009	2010	Total	Percentage
General Appropriations Act (GAA)	3 165,238	2 030 879	2 107 416	7 303 533	0.73
Grants and aid	102 600 ,199	4 390 441	13 382 027	120 372 667	12.09
TESDA Development Fund	62 261 662	75,278 106	54 229 687	191 769 455.00	19.27
Sub-total	168 027 099	81 699 426	69 719 130	319 445 655	32.09
Sariling Sikap Programme*	257 030 000	137 870 000	101 875 000	496 775 000	49.91
Income-generating projects	26 100 828	99 001 391	54 011 745	179 113 964	18.00
Sub-total	283 130 828	236 871 391	155 886 745	675 888 964	67.91
Total	451 157 927	318 570 817	225 605 875	995 334 619	100.00

Note: *Coming from I-CARE, funds from LGUs and legislators.
Source: TESDA NTESDP, 2011.

Meanwhile, there are three main sources of private funds:

- a) trainees who pay fees as contribution, which amounted to 28.6 per cent of the total expenditure, and represented 1.5 times the budget allocated by the TESDA in 2010;
- b) companies that fund apprenticeships and short courses, as well as give allowances to dual training system (DTS) students; and
- c) NGOS that run short courses including foundations that help training institutes.

Historically, TVET has relied heavily on government funds, as the private sector, specifically companies, are reluctant to invest in training, as is evident by the limited number of enterprise-based institutes.³⁷ Moreover, the breakdown of these expenses indicates that much of these government expenses have been devoted to government direct delivery of funds. Table 19 shows the uses and sources of TVET fund providers (by percentage) in 2002.

Table 19. Source of funds of TVET providers by percentage, 2002

TVET provider	TESDA	LGUs	Other govt.	ODA	Sub-total (govt.)	Trainees	NGOs	Companies	Income generation	Total
LGUs	1.3	88.8	4.3	-	94.4	0.5	3.2	0.1	1.9	100
TESDA RTCs	61.6	1.5	-	27.7	90.8	4.6	-	-	4.6	100
TESDA PTCs	94.7	-	-	0.9	95.6	3.5	0.9	-	-	100
TESDA-adm. schools	94.1	-	0.1	2.1	96.3	2.2	0.7	-	0.8	100
ATI/other govt.	-	0.4	97.7	-	98.1	-	1.1	-	0.8	100
SUCs	-	36.4	42.8	-	79.2	20.4	-	-	0.4	100
Sub-total (public providers)	26.4	44.0	21.6	1.0	93.0	4.0	1.7	0.0	1.3	100
NGOs	13.7	3.1	-	-	16.8	1.1	62.1	3.2	16.8	100
Private TVET	3.8	0.1	0.1	-	4.0	68.3	13.3	6.7	7.7	100
Private HEIs	5.6	0.3	0.0	-	5.9	74.8	17.3	0.3	1.7	100
Companies	-	-	-	-	-	0.1	-	99.9	-	100
Sub-total (private providers)	3.5	0.2	0.0	-	3.7	51.3	11.8	29.3	3.9	100
Admin.	56.2	-	-	43.8	100.0	-	-	-	-	100
Total	18.8	13.8	6.8	7.1	46.5	28.6	6.8	15.6	2.5	100

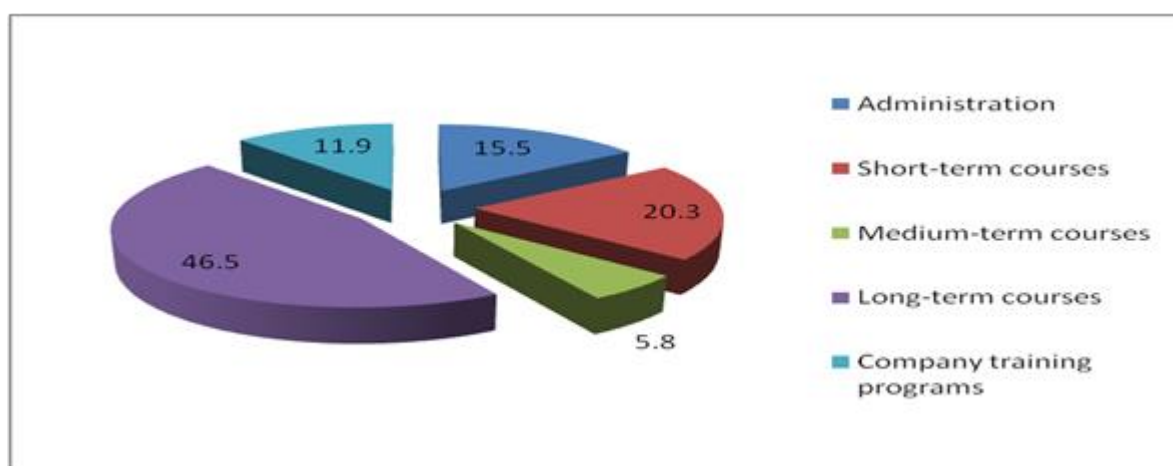
Source: Péano, et al., 2008.

The following points can be noted. First, a considerable amount of TESDA funds have been devoted to the direct service delivery centres, such as the PTCs, RTCs, and TESDA-administered schools. Second, close to half of the funds for TVET have been generated from private sources, and have been spent on private training. This means that the government subsidy in this type of training has been limited to a small degree, roughly 4 per cent of the funds received by private providers. Third, companies have placed practically all of their funds for own-training programmes. These are mainly company-specific forms of training, which serve to complement more general forms of training by the TESDA. Finally, the state universities and colleges (SUCs), which also offer basic training, have been financed mostly by local government and other government agencies apart from the TESDA.

Péano, et al. (2008) noted that courses of one to three years' duration formed the bulk of TVET expenditure in the Philippines, as shown in figure 10. The longer courses (one to three years) were generally offered by private and public school providers, and funded mainly through tuition fees. Short courses were more often offered by public providers – 60 per cent of short courses were funded by LGUs. The cost of to the TESDA in terms of administering the TVET system consisted only of 15.5 per cent of the total TVET funding. This refers to the TESDA budget minus budget allocation for TESDA training centres. This indicates that the funds were used efficiently for the TVET programmes and services.

³⁷ The returns from training do not necessarily go to the firms, as workers can easily move to other firms

Figure 10. Uses of TVET funds by per cent, 2002



Source: Péano, et al., 2008.

Programmes and other strategic responses to address the critical mass and emerging skills are carried out via the “ladderization” system, enterprise-based programmes (particularly apprenticeship and “learnership” programmes), and the scholarships such as the PESFA programme, the Asian Development Bank Technical Education and Skills Development Project (ADB-TESDP) and the Jobs-Directed Scholarship Programme. These are supported primarily through the TESDA development funds, private-sector investments, and the I-CARE.³⁸

Historically, the TESDA was created by consolidating three government units performing TVET functions – the Bureau of Technical and Vocational Education (BTVE) under the DepEd, the National Manpower and Youth Council (NMYC), and the Apprenticeship Programme, both formerly under the DOLE. When the TESDA absorbed these government units, it took on the responsibility of supervising more than 200 training institutes operating under the BTVE and NMYC.

The budget mechanism is then fundamentally based on maintaining the institutes that the TESDA inherited from the other departments. In the case of regional allocation of funds, the decisions for funding have been based primarily on the needs and programmes of the PTCs and RTCs. Meanwhile, public financing of enterprise-based training is nil. The TESDA Act of 1994 specified that the TESDA should eventually devolve the public training institutes, as its direct involvement in training would conflict with its mandate to oversee and evaluate the overall implementation of TVET. In the absence of an impact evaluation of the training institutes, apart from devolution to LGUs, there are no explicit criteria for judging whether or not these centres should be allowed continue or not. Consequently, even redundant institutes, in the sense that these can be provided by the private sector, are given enough funding to continue operations.

The key issue is that although TVET is highly under-financed, a better allocation of funds could be implemented in the face of constraints. The TESDA could perhaps take advantage of several links with key stakeholders to implement its programmes for upgrading courses. In particular, while none of the SUCs have declared themselves to be “tech-voc” schools, only a small proportion of the total enrolment in these institutes is tech-voc. Given the importance of individual spending, much of the low enrolment – despite the apparently high demand for TVET in certain sectors – can be attributed to

³⁸ Rule IX of the Implementing Rules and Regulations of the TESDA Act (R.A 7796) specifically calls for the establishment of the TESDA Development Fund to be administered and managed by the TESDA. The income from the fund will be utilized exclusively in awarding of grants and providing assistance to schools, training institutes, industries, and LGUs for upgrading their capabilities, and to develop and implement technical education and skills development programmes. Unfortunately, clear policies for this fund are not available.

the high unit costs of providing tech-voc. These schools may then require some subsidies that could lead to lower costs. Enterprises could be given certain incentives to invest in training. However, all of these will require some form of policy on the part of the TESDA in order to engage these parties in some kinds of partnership.

An example of a policy that could engage firms in investing further is the dual training system (DTS). Under the Republic Act 7686, the DTS brings together private establishments and educational institutes to share the responsibility of providing students with the best possible job qualifications – the former essentially through practical training and the latter by securing an adequate level of specific, general, and occupation-related theoretical instruction. Schools and firms nationwide can enjoy tax breaks if they agree to offer TVET. These tax incentives are intended to encourage greater private-sector participation in the DTS, to give trainees hands-on experience in the workplace. Establishments that have been accredited by the TESDA to participate in the DTS may take advantage of certain tax incentives.

Empirical data provide evidence that under the DTS the employability of graduates from supported training institutes can be improved, and that the enterprises employ graduates from these institutions. The management and training capacities of the training institutes have been improved considerably by the support measures. However, since the DTS is still relatively new in the Philippines, its schemes and structures are not yet embedded in educational institutes and industries, making its implementation difficult. Moreover, most enterprises in the Philippines believe that conducting in-plant training is an additional expense rather than investment, and turn down most proposals for partnership with educational institutes in implementing the system. Without training places in industries, TVET in the dual system will not survive. From 2005 to 2008, only 166 schools and 1,580 companies implemented the DTS. In 2013, about 500 institutes and establishments were actively participating in the DTS. Most of these were found in the more urbanized regions such as the NCR, Region IV-A, VII, and XII (Philippine Information Agency, 2013).

In effect, with weak financial support from the government, TVIs may become more selective in courses that may not require a high capital outlay, which may neglect skills development in capital-intensive investments but are highly demanded by industries – such as machinists, welding, and automotive workers, for example. The TESDA has to spend on capital outlays that are expensive and may not be afforded by private sector or the TVIs. The creation of the TESDA Development Fund has to be brought into operation to address the need for innovation. Research and development for TVET may be too capital-intensive for the TVIs or the private sector. Funding for a TVET development fund can also create the additional branding that is needed to attract industries to participate more in the TVET process.

Table 20 shows estimates of unit costs for providers offering short-term, medium-term, and long-term courses. Defined as the ratio of total costs and the number of units of training output, the unit costs of the training depend on the trade skill being offered, as well as the duration of the programme. For programmes of the same type, a lower unit cost implies better management of the training costs, and hence greater efficiency. Two measures are considered: the unit cost per batch and the unit cost per trainee. Costs are measured in terms of recurrent costs, which consist of staff salaries, student services, trainee allowances, and facility costs (including electricity and materials). A batch refers to the number of student sections organized per academic year, while the trainee points to an individual student.

Table 20. Unit cost (PHP) by type of course and TVET provider, 2002 survey

Unit cost	TVET Providers									
	Community-based LGUs	Community-based NGOs and foundations	TESDA RTCs and PTCs	TESDA-admin. schools	Agriculture and other GVT training institutes	Public HEIs	Private technical and vocational institutes	Private HEIs	Companies	
A. Short-term courses										
Unit recurrent cost per batch	74 629	35 514	36 492	240 156		97 967	75 240	57 584	10 371	92 083
Unit recurrent cost per trainee	3 027	1 411	2 276	12 586		2 120	6 080	11 401	1 473	5 864
B. Medium-term courses										
Unit recurrent cost per batch	-	-	182 193	69 941		132 285	95 384	129 383	77 290	-
Unit recurrent cost per trainee	-	-	8 715	2 245		5 080	4 746	6 404	2 171	-
B. Long courses										
Unit recurrent cost per batch	-	-	-	575 272		-	207 245	196 412	130 498	-
Unit recurrent cost per trainee	-	-	-	20 308		-	7 437	10 204	8 152	-
Source: Péano, et al., 2008.										

Source: Péano, et al., 2008.

The following points can be made from the above table. First, the unit costs in each of the courses were widely apart due perhaps not only to the high costs of delivering the training, but also to the number of courses being offered. Certain areas required more facilities and more experienced instructors. Hence, the nature of the course was not controlled in the table, therefore accounting for the significant variance in the unit cost. In part, a higher unit cost, particularly captured by the unit cost per batch, may indicate dominance in certain skills.

Second, for short courses (less than three months), the TESDA-administered schools had the highest unit cost. The TESDA schools offered courses in more expensive subsectors (e.g. computer skills). Nevertheless, the private HEIs also carried similar training programmes, but manifested a slightly lower unit cost per trainee. Meanwhile, since the training of companies was more job-specific, the unit costs were explained mainly by higher trainee worker allowance.

Third, for medium-term courses (three to nine months), the PTCs and RTCs, as seen from the unit recurrent costs, seemed to dominate this form of training in terms of the number and the expense of trade courses offered. These courses were often in the areas of health and automotive skills. However, at the same time, the cost per trainee in these centres could probably have been higher than similar courses offered by the private technical and vocational schools.

Finally, for the long-term courses (one to three years), the TESDA-administered schools were seen also to have the highest unit cost per batch, more than twice that of the other providers. The trainees at the time of this survey were enrolled mostly in tourism, electronics, automotive, and maritime courses. It is interesting that the private HEIs, while having the second largest unit cost per batch, registered the lowest cost per trainee, implying perhaps a more efficient way of providing their training.

In all, TESDA-administered schools and centres seem to offer the most number of subsector areas, and in the process have dominated the three types of courses featured in the table. In effect, these

schools also have the highest per unit cost. This indicates that a substantial amount of funding is devoted to the administration of TVET public resources.

Whether or not these institutes provide the more efficient way of delivering the service is an important question, as these schools and centres also have the highest unit cost per trainee. Classification to cost levels is difficult, especially for long-term courses, due to significant variation between private and public providers for several training areas. Moreover, because these institutes are relatively well-funded, the quality of education in these TESDA institutes is generally higher than other private schools. The one thing obvious, though, is that apparently the government is investing a lot in offering these courses. Whether the investment is justified, or these are being offered in a more cost-efficient way, can be inferred from the relevance of TVET or the effect of these schools on employment.

It can be noted that there is clear separation between public provision and financing on the one hand, and private provision and financing on the other hand. When looking at the source of funds (table 18), several points can be noted. It is evident that a large amount of TESDA funding has been allocated to PTCs, RTCs, and TESDA-administered schools. It is also clear that almost half of the funds for TVET generated from private sources have been spent on private training, indicating that the government subsidy to this type of training is very small in practice (about 4 per cent of the funds received by private providers). Furthermore, in order to guarantee a sure return on investments, companies have directed nearly all of their funds to their own training programmes. Overall, there is clear segmentation between public provision and financing on the one side, and private provision and financing on the other, with little overlap.

Because of limited government funds, access to TVET by the poor can then be limited because the poor generally cannot afford private training. As seen also in table 18, the access to external funding of the TESDA, especially of non-government agencies, is also low. Moreover, official development assistance (ODA) funds are only enough to replace old equipment and repair deteriorated training facilities in many public TVET institutes (Peano, et al., 2008). This is a common incidence because annual government budgets are only sufficient to support personnel salaries and maintenance and other operating expenses, leaving very limited funds for reforms³⁹ The government has to provide the additional funding to implement certain measures or to work alongside the private entities that have serious effect on the economy, in order to pool resources and support initiatives that the private sector may not have an incentive to engage in. These include the training of workers in highly critical skills, including manufacturing, and the formulation and provision of incentives to implement innovative training in modern technology.

This reliance of the TVET private institutes on private funds stems from an unwritten policy that the funds coming into the system have to be “market-driven.” That is, based on consultations with the TESDA, the private training has to be paid for by the trainee or the enterprise that will need the skills. The priority of the government is presumably for basic and secondary education, and these leave only a portion of the state budget to TVET. Unfortunately, markets, because of orientation for individual interests, may fail to take account of social needs, hence resulting in market failures.

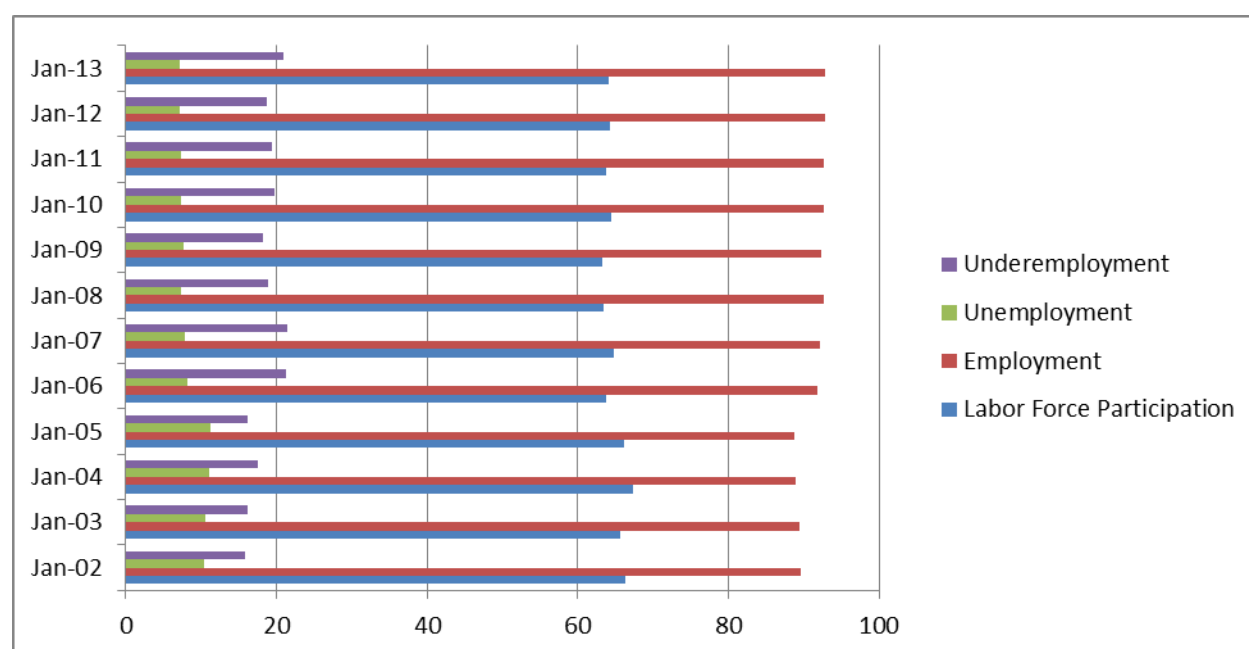
In the face of limited government funds, a joint partnership between private and public institutions can create larger pools of resources that can create scale economies, whereby services can be offered at lower cost. This suggests that the TESDA could encourage a private-public partnership in running its schools. In the same way, pooling all government funds could generate scale of economy in programmes, which could more effectively provide cheaper and quality education and training to students.

³⁹ Various donors have supported the TESDA in developing specific programmes that serve to implement reforms in TVET. For instance, the World Bank provided \$30 million from 1992 to 1998 for the Vocational Training Project (VTP), which established the management information system in the central offices, and conducted new research towards better management of the TVET sector.

7. Relevance of TVET

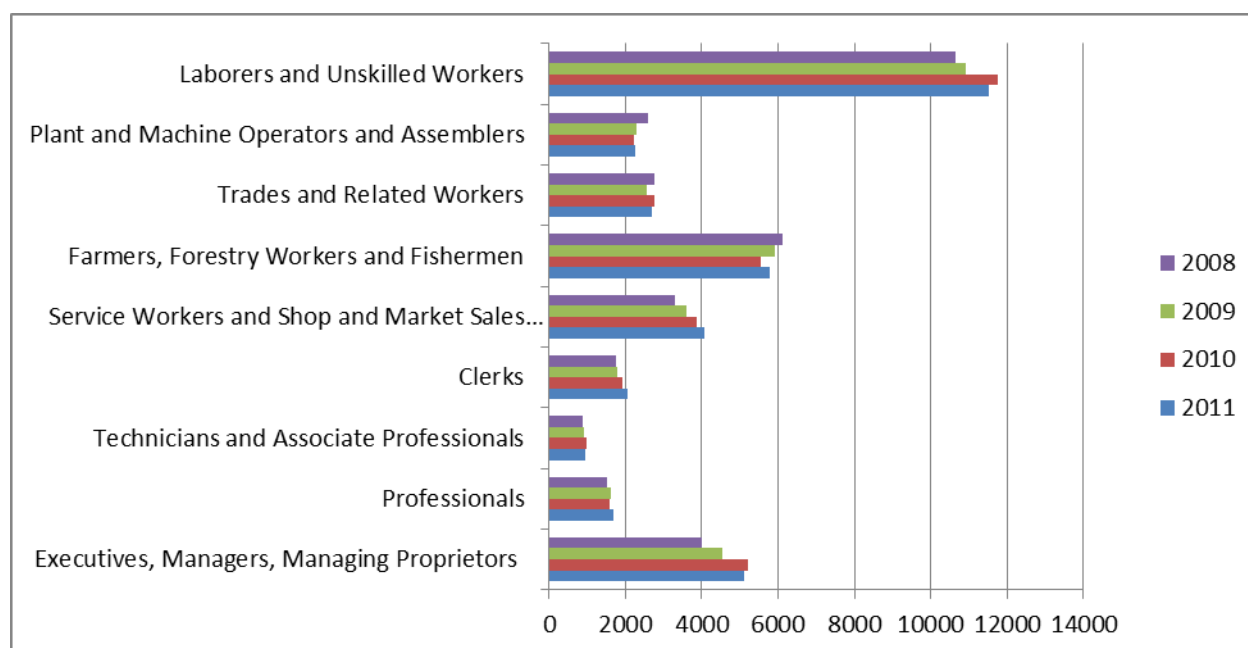
Figure 11 shows the labour-force participation, employment, unemployment, and under-employment rates in the Philippines at the beginning of each year from 2002 to 2013. Labour-force participation has been generally stable, while employment rates have slightly gone up, alongside a slight reduction in unemployment. Under-employment, however, seems to have increased, as the quality of work seems to have declined. Figure 12 shows the distribution of workers by major occupation group. Labourers and unskilled workers constituted more than 30 per cent of workers, while trade and related workers, as well as plant and machine operators, covered only 6 to 8 per cent of the total employment. This finding suggests that skills are generally unavailable or, if available, there are limited employment opportunities.

Figure 11. Labour-force participation, employment, unemployment, and under-employment, 2002–13



Source: NSO, labour force surveys, 2002–13.

Figure 12. Employed workers by major occupation groups, 2008–11

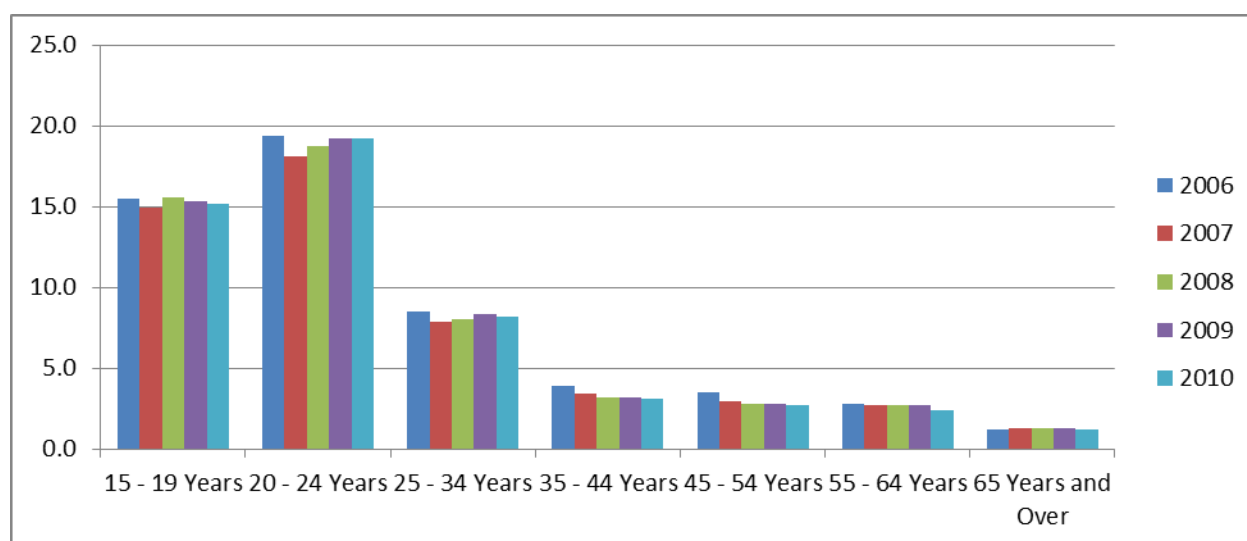


Source: NSO, labour force surveys, 2002–13.

One reason for increasing under-employment and the relatively stable unemployment rate can be traced to the poor in the TVET sector.⁴⁰ The large numbers of unemployed youth in the country imply a large market for TVET. Those aged 15–24 constitute the highest concentration of unemployed (figure 13), and youth make up roughly 50 per cent of those who are unemployed. The large number of unemployed youth can partly be explained by the low demand for workers, and also the fact that most unemployed youth do not possess the necessary skills for job openings in the labour market. This finding, together with the fact that unemployment rates tend to increase with the schooling level (figure 14), suggest that there is a potentially strong demand for skills upgrading and enhancement through TVET.

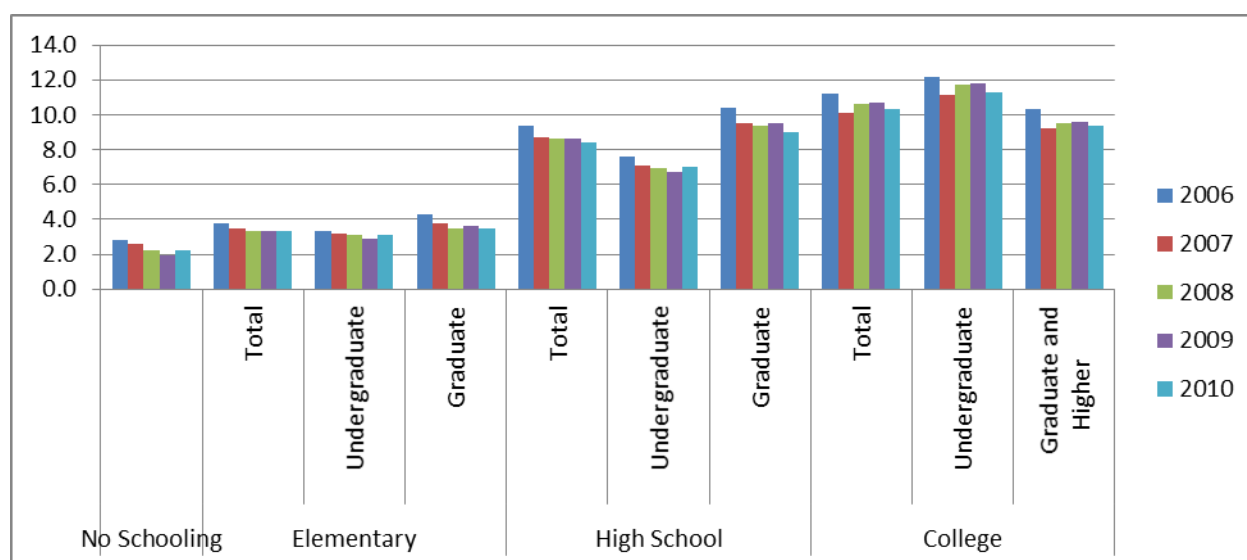
⁴⁰ Annex A indicates that the lack of industrial policy could be another factor.

Figure 13. Unemployment rates by age, 2006–10



Source: Bureau of Labour and Employment statistics.

Figure 14. Unemployment rates by educational level, 2006–07



Source: Bureau of Labour and Employment statistics.

Another main feature of the labour market is its regional dimension. Table 21 shows the unemployment rates by region from 2006 to 2011. The variation in the average unemployment rate went from 3 per cent up to 13 per cent, which is a huge difference, suggesting wide disparity in unemployment rates. In fact, the variance for the five-year period is from 5 per cent to 8 per cent. In addition to regional differences in unemployment, there are also differences in labour productivity across the regions. Table 22 shows estimates of labour productivity per region from 2008 to 2009, and one can note the large difference, particularly in the growth rates. This is significant, as large differences in productivity reflect variances ranging from the industrial mixing of the productive structure of each region to the stock of private, public, and human capital. This means that other regions are more technically prepared than others in the event of improvements in skills.

Table 21. Unemployment by region, percentage 2006–11

	2006	2007	2008	2009	2010	2011
Philippines	8.0	7.3	7.4	7.5	7.3	7.0
NCR	14.4	12.2	13	12.8	10.8	11.3
CAR	5.3	4.2	4.5	4.6	5.0	5.0
Region I	8.7	8.4	8.1	8.2	7.9	8.5
Region II	3.2	3.1	3.5	2.8	3.0	2.9
Region III	10.6	10	9.2	9.2	9.0	8.5
Region IV-A	10.0	9.2	10.0	10.4	9.5	9.7
Region IV-B	4.8	4.0	4.2	4.4	4.2	3.9
Region V	5.6	5.3	5.6	5.8	5.1	6.1
Region VI	6.4	6.6	7.0	7.0	6.0	6.7
Region VII	7.5	6.5	7.0	7.5	8.1	6.7
Region VIII	4.8	4.8	4.5	5.4	6.4	5.2
Region IX	3.5	3.7	3.5	3.6	4.6	3.2
Region X	5.6	6.0	4.7	4.9	5.2	4.5
Region XI	7.1	6.0	5.8	5.9	6.0	5.4
Region XII	5.5	4.7	4.5	4.1	5.2	3.9
Caraga	5.5	6.5	5.6	5.8	8.1	6.0
ARMM	4.3	3.8	2.7	2.3	4.0	3.4
Variance	7.9	6.0	7.0	7.3	4.5	5.5

Source: Bureau of Labour and Employment statistics.

Table 22. Labour productivity* by region, 2008–09

Region	2008	2009	Average	Growth rate %
Philippines	41 570	40 846	41 208	-1.74
NCR	114 656	111 864	113 260	-2.44
CAR	46 358	46 461	46 410	0.22
I	22 935	21 761	22 348	-5.12
II	20 473	20 055	20 264	-2.04
III	33 751	32 279	33 015	-4.36
IV-A	40 442	38 478	39 460	-4.85
IV-B	34 237	32 917	33 577	-3.85
V	19 837	21 133	20 485	6.53
VI	36 851	37 895	37 373	2.83
VII	38 602	38 165	38 384	-1.13
VIII	18 596	18 330	18 463	-1.43
IX	27 216	28 106	27 661	3.27
X	39 761	39 982	39 872	0.55
XI	37 716	39 488	38 602	4.70
XII	32 506	31 480	31 993	-3.16
CARAGA	19 418	19 404	19 411	-0.07
ARMM	10 929	10 933	10 931	0.04
Average	34 958	34 631	34 795	-0.61
Standard deviation	22 772	22 186	22 473	3.00
CV	0.6514	0.6406	0.6459	-5.5997

Note: Measured as Regional GDP per Regional Total Employment
Source: Bureau of Labour and Employment statistics.

Labour productivity, which roughly is a measure of labour quality, is actually high in manufacturing relative to other industries in the Philippines. However, it remains puzzling why employment generation is quite low, as high labour productivity is often associated with higher revenues. Assuming that capital build-up is continual, employers in high labour productivity sectors are expected to hire more workers, as more workers generally produce more. Yet, in the case of the Philippine manufacturing, this is not the case. This then, can partially explain the observation of limited growth in employment, or the so-called “jobless growth phenomenon” despite the increases in production experienced in the country.

Another factor that has a regional dimension is the average basic pay per region. Table 23 indicates the regional differences in basic wages. Again, the significant differences across regions can be seen, reflecting differences in the basic institutions of labour markets (like minimum wages and collective bargaining, among other things). Apart from the differences in productive capacity, regions differ in

terms of the bargaining power and influence that labour groups may have. Clearly, the poorer regions are not able to benefit from increases in wages.

Table 23. Average daily basic pay (PHP) by region 2006–10

	2006	2007	2008	2009	2010
Philippines	261.90	266.65	278.93	290.73	306.53
NCR	363.05	382.14	403.70	415.06	439.04
CAR	299.03	305.68	321.95	327.20	341.85
Region I	227.49	231.79	243.66	257.83	279.29
Region II	194.27	197.37	213.07	230.66	241.47
Region III	280.58	271.69	271.30	280.66	297.79
Region IV-A	293.02	309.14	322.91	336.77	351.31
Region IV-B	229.38	221.56	221.54	239.88	255.36
Region V	217.77	212.11	231.56	242.95	251.02
Region VI	192.97	186.15	196.53	212.79	226.82
Region VII	220.14	230.62	239.07	253.00	274.15
Region VIII	196.80	217.11	224.01	238.58	239.88
Region IX	220.55	210.26	224.18	223.60	227.66
Region X	227.26	215.37	228.75	240.96	248.26
Region XI	205.02	215.24	229.10	237.52	249.69
Region XII	194.55	198.26	215.42	227.38	242.30
Caraga	215.37	220.56	226.78	240.05	254.05
ARMM	330.25	261.31	269.97	290.21	312.94
Average	242	240	252	264	278
Standard deviation	51.81	50.92	52.68	52.09	55.75
CV	0.2144	0.2118	0.2091	0.1970	0.2002

Source: Bureau of Labour and Employment statistics.

As unemployment among more-educated youth has risen in recent years, a substantial number of people are pursuing technical and vocational careers. According to the 2011 TESDA impact evaluation study (IES), there was a substantial increase in the number of graduates who had college education, i.e. college undergraduates and college graduates – accounting for 24.7 per cent and 16.0 per cent, respectively. Compared to the 2008 IES results, college undergraduates and college graduates accounted only for 16 per cent and 13 per cent of the total graduates, respectively.

Recently recorded formal employment rates (ERs) from the different TVET programmes look quite satisfactory, and differ across TVET modes. As a percentage of the graduates who were part of the labour force, the employment rate in 2009 was recorded at 60.9 per cent. Enterprise-based institutes have the highest employment rate (83 per cent), followed by institute-based providers (61 per cent). Table 24 lists the employment rates for TVET graduates for both scholarship and regular

programmes, based on the 2009 IES of TVET graduates. Several features of the data are noteworthy. First, employment rates from the different programmes were a substantial improvement from previous data across the board. The 2008 IES of TVET graduates was only 55 per cent employment rate for TVET graduates in the labour force. This can be attributed to improved employment rates of institute-based centres. Second, enterprise-based institutes have the highest enrolment rates and highest employment rates, followed by the institutes. This can be expected because most of those attending the industry and community training programmes are prospective employees of the companies in their communities. It is nonetheless interesting that the community-based centres do not fare much below institute-based providers, considering that the former are generally informal. In much the way that enterprise-based centres are more connected to the needs of the firms, community-based centres are more in tune with the demands of their respective communities. Third, the scholarship programmes have only a slightly higher employment rate than the regular programme. This seems surprising, since one would expect that scholarship programmes are better targeted and should favour those who have greater chances of being employed. These are intended supposedly for deserving students who face financial constraints.

Table 24. Employment rates by delivery mode and programme, 2009

Delivery Mode	Scholarship programme			Regular programme			All programmes		
	Employed	Labour force	Empl. rate	Employed	Labour force	Empl. rate	Employed	Labour force	Empl. rate
Institute-based	222 366	360 947	61.3	85 977	144 091	59.7	308 343	505 039	61.1
Enterprise-based	1 078	1 078	100.0	3 719	4 691	79.3	4 796	5 769	83.1
Community-based	6 866	11 112	61.8	22 505	40 949	55.0	29 371	52 061	56.4
Total	230 309	373 136	61.7	112 201	189 732	59.1	342 510	562 869	60.9

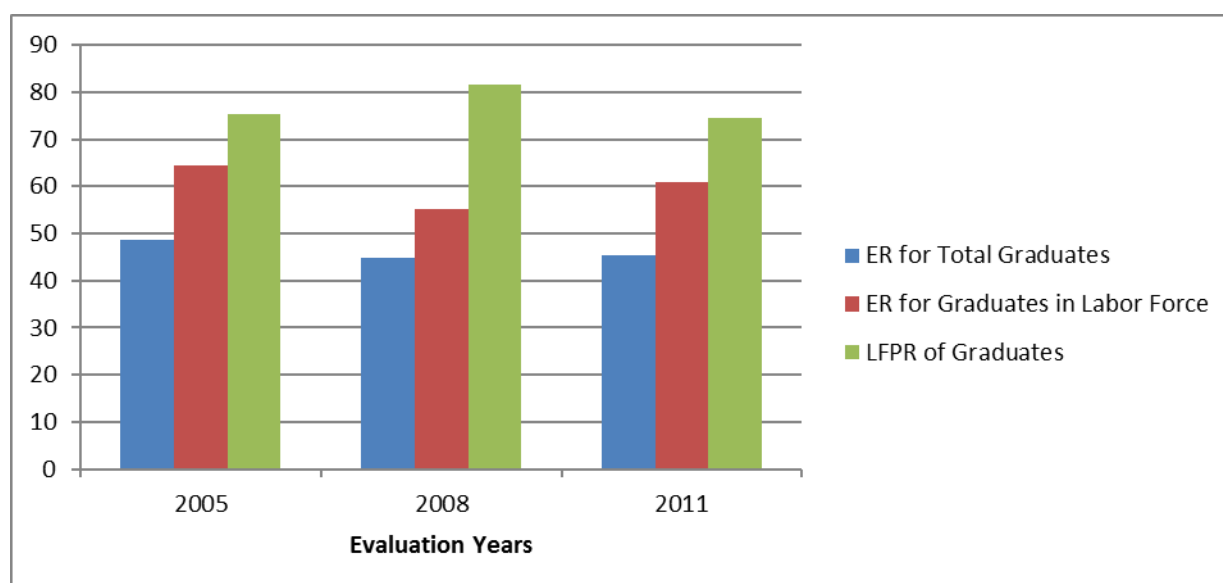
Source: TESDA Current Data and Related Statistics, 2010.

However, while the national average seems quite remarkable, what is often not mentioned is the large number of graduates who have dropped out of the labour force for various reasons. In fact, this low labour market participation explains for the much of increase in the observed employment rates.⁴¹ The overall employment rate of the total number of TVET graduates was recorded at 48.7 per cent in 2005 and 44.9 per cent in 2008, and computed as 45.4 per cent in 2011. However, these overall figures may be misleading. Figure 15 shows the employment rates and labour-force participation rates (LFPR) of TVET graduates surveyed in 2005, 2008, and 2011 (who were graduates in 2003, 2006, and 2008). Note that the employment rate per total number of graduates is not too high. The more recent employment rate for 2009 graduates engaged in the labour market is in fact is lower in comparison to graduates in 2003.⁴²

⁴¹ The ILO concept of the labour force participation was changed in 2006, thereby rectifying the previous methodology. One, in addition to the age requirements (15 years and above) and the condition that one must be looking for work, a working age individual must likewise be currently available for work. Operationally, this means that an individual must be both available and willing to take up work within two weeks given a reference period. Two, in reference to search conditions – the person must have looked for work during the reference period because he or she believes that work is available. He or she must, however, have looked for work at least once in the past six months to be considered unemployed. If not, then he or she is considered not part of the labour force. A reference period for job searching by discouraged workers was not included in the previous methodology.

⁴² The decline can be attributed to many reasons, to include: the effects of the global financial crisis, which slowed down economic activities and resulted in job losses; skills mismatch between the requirements of the available jobs and the skills possessed by those seeking employment; and geographical mismatch between locations of job openings and job-seekers.

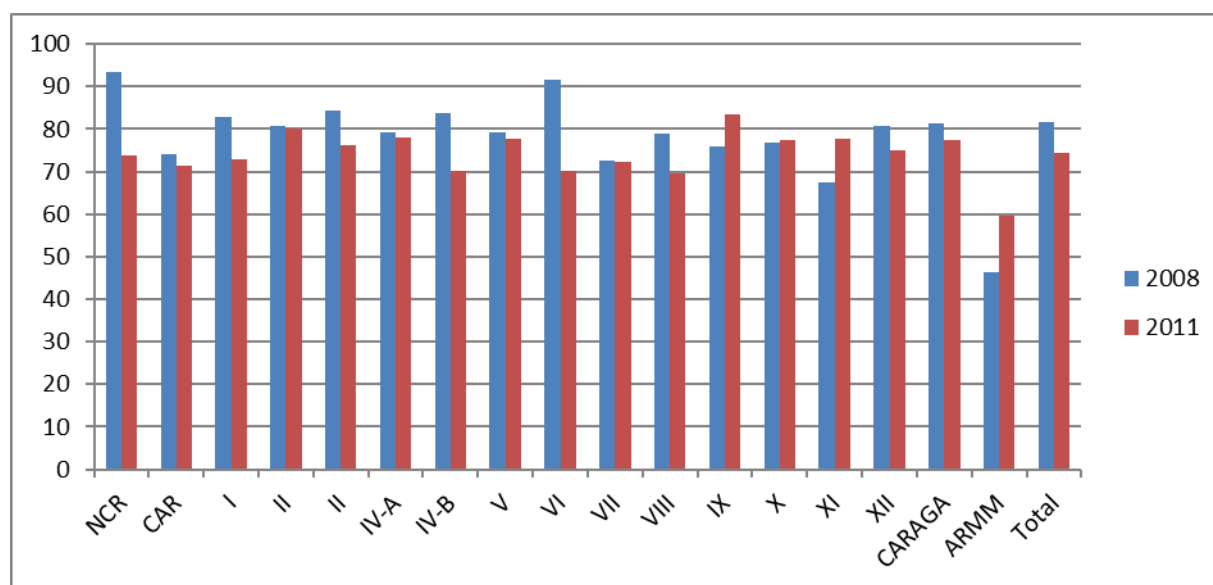
Figure 15. TVET employment rates and labour-force participation rates



Source: TESDA, 2008 and 2011 impact evaluation studies and author's computation.

The declining LFPR of TVET graduates can also be seen regionally. Figure 16 shows a general decline in LFPR, with substantial decreases found for several regions in NCR and Region VIII. It can also be noted that the variance of the LFPR across regions declined significantly from 106 in 2008 to 28 in 2011, suggesting that the reduced LFPR is a nationwide trend.

Figure 16. Labour-force participation of TVET graduates by region, 2008 and 2011



Source: TESDA, impact evaluation studies, 2008–2011.

Further analysis of LFPR is needed, as this could potentially increase national unemployment rates in the future if graduates decide to participate in the labour market. To some extent, the large proportion of people dropping out of the labour force can reflect the difficulty of finding work for particular groups of people. This could also mean that they will require further investments if they are going to set up their own business or migrate to another workplace. Table 25 provides information gathered by the TESDA on labour-force participation by delivery mode. Note that apart from the enterprise-based

providers, all other modes of delivery had a lower participation rate. This adds support to the hypothesis that quick availability of jobs, which is a characteristic of enterprise-based training, matters in improving one's potential participation in the labour market.

Table 25. Labour force participation rate by delivery mode and evaluation year, 2008 and 2011

Delivery Mode	2008			2011		
	In the labour force	Total	LPFR (percentage)	In the labour force	Total graduates	LPFR (percentage)
Community-based	119 843	146 799	81.6	52 061	72 575	71.7
Enterprise-based	46 948	58 024	80.9	5 769	6 478	89.1
Institute-based	10 176	412 117	84.0	505 039	676 190	74.7
Total	176 967	216 940	81.6	562 869	755 242	74.5

Source: TESDA, impact evaluation studies, 2008–2011.

Another hypothesis regarding the low labour force participation is that the TVET programmes are not reaching the poor, who would be in need of immediate work. Table 26 shows the reasons cited by surveyed graduates of why they were not looking for work for the three evaluation years. It is interesting that, further schooling and household duties and chores had been cited as major reasons for not working. These are possible indicators of potentially lower returns from the training, hence making household activities and other investments in human capital more attractive. More importantly, the fact that most of these students can decide to continue their schooling means that they have other sources of livelihood, making it feasible to delay work. This suggests that the low LFPR is related to the poor access of the poor to TVET facilities.

Table 26. Reasons for not working, 2011

Reason	2011	
	Number	Per cent
Schooling	89 809	47.4
Household and family duties	40 787	21.5
Awaiting results of previous application	26 638	14.1
Tired/no work available	12 322	6.5
Waiting for rehire/job recall	8 215	4.3
Too young, old, or retired/permanent disability	5 049	2.7
Temporary illness/disability	3 386	1.8
Bad weather	846	0.4
Others	383	0.2
No answer	2 015	1.1
Total	189 450	100

Source: TESDA, impact evaluation studies, 2011.

To further build on this hypothesis, table 27 presents the distribution of employed TVET graduates by type of work. Note that over the years, wage and salary jobs seem to have been reduced, while the share of self-employment and employer status has increased. Graduates working in private establishment have increased in recent years. Furthermore, these graduates are mostly those who have already taken college courses. Table 28 shows the highest education attainment of the employed

TVET graduates over the years. Note that the proportion of college graduates and undergraduates has been increasing over the years. This could be a result of the increased demand for work in the service sector.

Table 27. TVET employed workers by type of work, 2005 and 2011

Type of work	2005		2011	
	Number	Per cent	Number	Per cent
Wage and Salary Workers	72 777	78.0	288 592	75.0
Private household	10 764	11.5	33 369	8.7
Private establishment	46 886	50.0	216 120	56.4
Government/government corporation	11 658	12.4	30 195	7.9
Family-operated farm or business	3 469	3.7	8 908	2.3
Self-employment	16 846	18.0	81 803	21.0
Own account or self-employed	14 321	15.3	71 605	18.7
Employer with at least one employee	2 525	2.7	10 198	2.7
Work without pay for own family	2 054	2.2	2 813	0.7
Not indicated	2 169	2.3	10 204	2.7
Total	93 846	100.0	383 412	100.0

Source: TESDA, impact evaluation studies, 2005–2011.

Table 28. Distribution of TVET graduates by highest educational attainment, 2005, 2008, and 2011

Highest grade completed	2005		2008		2011	
	Number	Per cent	Number	Per cent	Number	Per cent
Elementary undergraduate/ graduate	4 580	4.9	1 739	1.4	1 699	0.5
High-school undergraduate	6 597	7.0	6 803	5.7	8 847	2.6
High-school graduate	40 097	42.7	10 777	9.0	130 725	38.2
Technical-vocational graduate	9 334	10.0	25 794	21.5	40 986	12.0
College undergraduates	13 126	14.0	35 064	29.2	86 083	25.1
College graduate and beyond	19 226	20.5	28 302	23.6	71 606	20.9
No answer	887	1.0	11 562	9.6	2 564	0.7
Total	93 847	100.0	120 041	100.0	342 510	100.0

Source: TESDA, impact evaluation studies, 2005–2011.

In order to get a sense of where these graduates are finding work, table 29 classifies the sectors where the employed TVET graduates in the three evaluation years were found. Note that a greater proportion of these graduates were employed in the service sector. These include ICT, health and community services, and tourism. The only manufacturing subsector that seemed to show some promise was mining and engineering. These findings then support the idea that while the service sector has a demand for workers and employs a substantial number of people, it favors the more-educated, making it difficult for less-educated workers to be employed.

Table 29. Distribution of employed TVET graduates by sector, 2005, 2008, and 2011

	2005		2008		2011	
	Number	Percent	Number	Percent	Number	Percent
Agriculture and fishery	7 761	8.3	1 039	0.8	3 682	1.1
Aircraft					59	0.0
Automotive	7 704	8.2	8 398	6.1	17 448	5.1
Construction	4 895	5.2	6 135	4.5	26 268	7.7
Electronics	2 795	3.0	44 444	32.3	13 768	4.0
Footwear	947	1.0	66	0.0		
Furniture and fixtures	1 529	1.6	112	0.1		
Cottage and handicrafts					1 196	0.3
Garments	7 302	7.8	1 104	0.8	3 881	1.1
Health and social services	9 844	10.5	20 666	15.0	49 878	14.6
Heating, ventilating and air-conditioning/ refrigeration	2 424	2.6	1 320	1.0	3 280	1.0
Information and communication technology	13 358	14.2	24 236	17.6	76 859	22.4
Land transportation	3 315	3.5	915	0.7	4 547	1.3
Maritime	1 062	1.1	1 010	0.7	806	0.2
Metals and engineering	4 657	5.0	7 549	5.5	35 309	10.3
Processed food and Beverages	5 872	6.3	4 490	3.3	7 696	2.2
Tourism	5 070	5.4	11 388	8.3	81 188	23.7
Others	15 389	16.4	4 681	3.4	10 615	3.1
Not indicated					6 031	1.8
Total	93 847	100.0	137 553	100.0	336 480	100.0

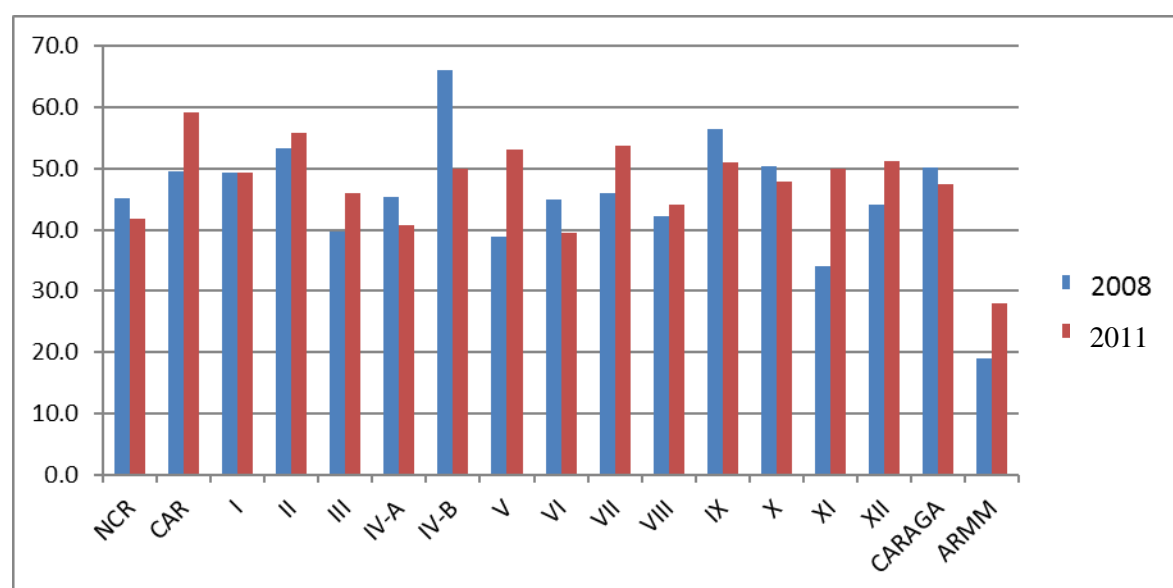
Source: TESDA, impact evaluation studies, 2005–2011.

All of these observations seem to indicate a low responsiveness of the TVET system, and poor coordination between industry and TVET to the market conditions, hence diminishing its relevance. Despite the policies and structures instituted by the TESDA to enhance private-sector participation, interviews with employers, as well as focus group interviews, seem to confirm this. Similarly, a 2009 assessment of the Universal Access to Competitiveness and Trade (U-ACT) – which consists of the collective inputs of firms, agencies, organizations, and institutes from the private and public sectors – emphasizes the need for strengthening coordination with industry in providing the proper market signals, and industry requirements to schools and training institutes. This poor coordination and the corresponding lack of information explains to a large extent the low LFPRs, as graduates eventually realize the limited availability of job opportunities for them.

Surveys of employers conducted by the World Bank (2012) in East Asia indicate a similar trend. As technological structures and the nature of industry evolve, academic qualifications are increasingly taken as indicators of a particular level of academic competence, and of the skills to deal with the demands of a fast-changing work environment. In the Philippines, employers expect tertiary graduates to possess the academic, generic, and technical skills to increase their productivity and growth. Increasingly, employers also expect a smaller group of workers to possess the ability to think, to be creative, and to have the capacity to spur innovation. This is consistent with the increasing labour productivity in manufacturing, as well as emerging research on academic knowledge transfer, which has found that skilled graduates bring to industry attitudes and abilities for acquiring knowledge and using it in novel ways.

The problem is whether the TVET system is able to produce graduates that possess these qualities. For instance, it has been indicated that manufacturing is best able to provide productive employment. Yet, certain TVET institutes continued to highlight training in services, despite the limited employment opportunities. Figure 17 shows the employment rates of TVET graduates across different regions in 2008 and 2011. Two regions had higher employment rates in these two years – CAR and Region II, both of which have strong manufacturing sectors because of the export processing zones in these areas. At the same time, these regions have relatively stable LFPRs, indicating continued economic activity over the years. In the case of the other regions, those that have been able to take advantage of the surge in tourism and ICT were Regions V (Bicol), VII (Central Visayas), and XII (Davao), but their gains have not been as substantial as those that have a strong manufacturing base. A TVET system more attuned to the needs and conditions of the industrial sector, such as those found in CAR and Region II, could have resulted in greater employment for the whole country.

Figure 17. Employment rates of TVET graduates by region, 2008 and 2011



Source: TESDA, impact evaluation studies, 2008–2011.

8. Summary and conclusion

Much TVET delivery is still relatively informal or community-based in nature, which makes assessing the quality difficult. Further, while the majority of TVET providers in the country are private, most TVET graduates attended public programmes. This may indicate that the supply of private TVET is under-performing in terms of its capability. As the number of students increases, the problem of quality becomes greater.

Non-engagement in the labour markets by the TVET system has also been observed, and can be explained by two factors: the poor quality of institutes and the inability of the system to reach the poor. The former has induced TVET graduates to stop searching, but it means that labour participation would be higher if the programmes were more targeted toward the poor. The poor generally are those who will readily look for work. This serves as the basis for upgrading the TVET sector in particular, while making it more accessible to those who drastically need the training and employment.

While external factors can prevent the TESDA from responding well to the needs of the labour market, there are internal factors that need to be addressed. The TESDA will need to change its governance and regulatory framework. The government must clearly create an enabling framework that includes:

- a) defining the place of private providers in the national education strategy, by providing clear incentives to TVIs in linking with industry;
- b) setting clear, objective, and streamlined criteria through the training regulations that the private sector must meet in order to establish and operate schools;
- c) introducing school funding systems that integrate public and private schools, and that are neutral and responsive;
- d) implementing scholarships programmes that are properly targeted and accessible by the poor; and
- e) establishing an effective quality assurance system.

By addressing the various skills mismatches, the TESDA can improve its stewardship by ensuring that private and public providers complement each other, especially in meeting the skills needs of employers. They can ensure favourable policies, clear and efficient regulation and information, and better access of both public and private providers to student loans (and competitive funding for research). The government can also connect firms and providers of skills and research by sharing best practices – from collaborating in curriculum development to setting up university incubators – and by offering the incentives to make these university-industry links work (bringing in intermediaries and providing matching funds).

References

- Di Gropello, E.; Tan, H.; Tandon P. 2010. *Skills for the labour market in the Philippines* (Washington, DC, World Bank).
- Felipe, J.; Hasan, R. 2006. *Labor markets in Asia: Issues and perspectives* (New York, Palgrave Macmillan).
- International Labour Organization (ILO). 2012. *Proposed indicators for assessing technical and vocational education and training: A report of the Inter-Agency Working Group on TVET Indicators* (Geneva).
- Kitaev, I.; Nadurata, T.; Resurrection, V.; Bernal, F. 2013. *Student loans in the Philippines: Lessons from the Past* (Bangkok, UNESCO, International Institute for Educational Planning).
- Lanzona, L. 2008. *Technical, vocational education and training in the Philippines: Background paper for the World Bank skills study* (Washington, DC, World Bank).
- Orbeta, A.; Abrigo, M. 2010. *An assessment of TESDA scholarship programmes* (Manila, Department of Budget and Management).
- Peano, S.; de Dios, B.; Atchoarena D.; Mendoza, U. 2008. *Investment in technical vocational education and training in the Philippines* (Paris, UNESCO, International Institute for Educational Planning).
- Philippine Information Agency. 2013. *Tax incentives await schools, firms in TESDA dual training programme* (Manila).
- Technical Education and Skills Development Authority (TESDA). 2011. *Investing in the 21st century skilled Filipino workforce: The National Technical Education and Skills Development Plan, 2011–2016* (Manila).
- . 2010a. *2008 Impact evaluation study of TVET programmes* (Manila).
- . 2010b. *Current TVET data and related statistics 2005–09* (Manila).
- . (n.d.) *Executive summary of 2011 impact evaluation study of TVET programmes* (Manila).
- . (n.d.) *2005 Impact evaluation study of TVET programmes* (Manila).
- Usui, N. 2012. *Taking the right road to inclusive growth: Industrial upgrading and diversification in the Philippines* (Manila, Asian Development Bank).
- World Bank. 2012. *Putting higher education to work: Skills and research for growth in East Asia* (Washington, DC., World Bank).
- . 2013. *Philippine development report: Creating more and better jobs* (World Bank Philippine Office East Asia and Pacific Region, World Bank).

Annex 1 Background – structural mismatches in TVET

This section discusses the conditions found in the Philippine labour market, with a focus on the limited growth of the manufacturing sector. Instead of replicating the industrial upgrading process that most of its neighbours followed, the Philippine industrialization process floundered. The consequences of this type of development and the possible directions that the country can take will be explored.

Improving the supply of skilled workers in the country is full of challenges (di Gropello, et al., 2010). Along with the continued liberalization reforms, the Philippines has experienced sustained growth over the last twenty years. However, the growth has been interrupted by a number of recessions. The manufacturing sector has been sluggish, and has been replaced by the service sector as the main employment and GDP driver. More significantly, the country seems to have lost its capacity to undertake innovation. Restoring momentum will obviously depend on many factors, but skills have a key role to play – at a minimum to support the growing service sector, help improve the competitiveness of the manufacturing sector, and, in general, enhance the long-term ability of the country to innovate and adapt and assimilate new technologies.

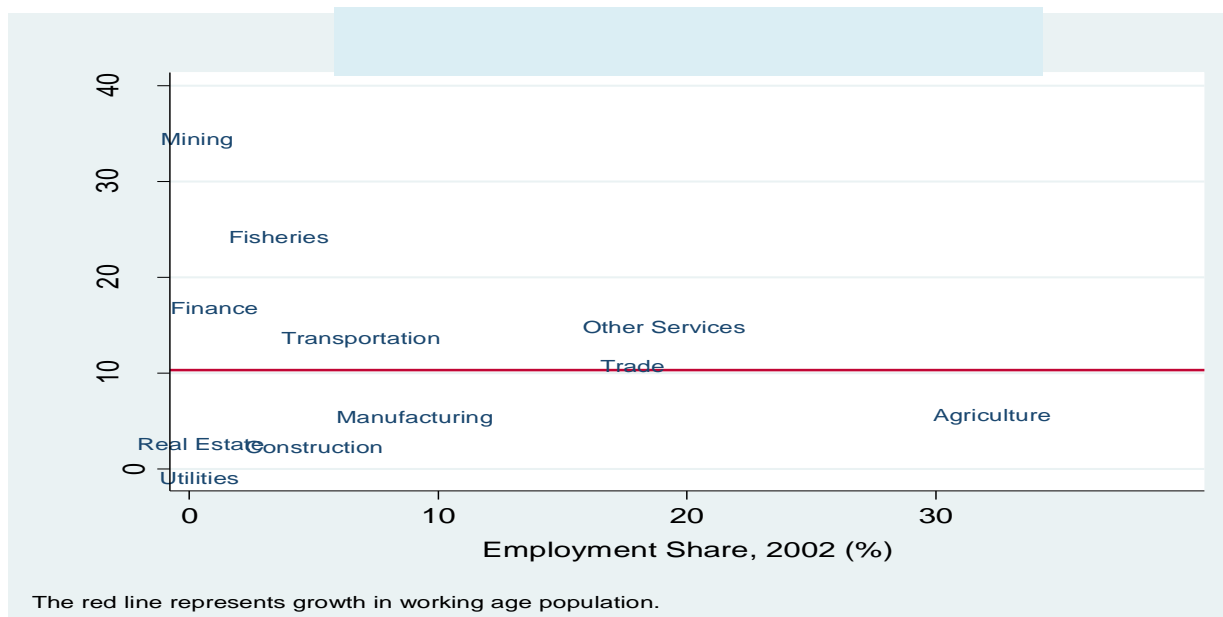
The Philippine economy actually showed solid growth performance during the 2000s. However, the country has not succeeded in translating this into inclusive growth that can benefit the entire population. Despite opportunities created by the economic growth in that period, many people remain poor and unemployed, and investments in the country are still below the regional standard. Identifying and connecting that missing link between economic growth and poverty reduction is the Philippine economy's serious problem. Compared to other ASEAN countries, the country has had the slowest rate of poverty reduction in the past few decades despite its relatively low levels of absolute poverty in the early 1950s. Table A1 shows employment by major industry group from 2005 to 2011.

Table A1. Employment by major industry group, 2005–11

Major industry group	Year						
	2005	2006	2007	2008	2009	2010	2011
All industries	32 313	32 636	33 560	34 089	35 061	36 035	37 191
Agriculture	11 628	11 682	11 785	12 031	12 043	11 956	12 266
Agriculture, hunting, and forestry	10 234	10 254	10 342	10 604	10 582	10 488	10 802
Fishing	1 394	1 428	1 444	1 426	1 461	1 468	1 464
Industry	5 024	4 997	5 121	5 047	5 093	5 399	5 530
Mining and quarrying	123	139	149	158	166	199	211
Manufacturing	3 077	3 053	3 059	2 926	2 894	3 033	3 082
Electricity, gas, and water supply	117	12	135	130	142	150	148
Construction	1 708	1 677	1 778	1 834	1 891	2 017	2 091
Services	15 660	15 957	16 654	17 011	17 925	18 682	19 395
Wholesale and retail trade, repair of motor vehicles, motorcycles, and personnel household goods	6 147	6 202	6 354	6 446	6,736	7,034	7 401
Hotels and restaurants	861	887	907	953	1 010	1 063	1 118
Transport, storage, and communications	2 451	2 483	2 599	2 590	2 679	2,723	2 775
Financial intermediation	341	344	359	368	369	400	434
Real estate, renting, and business activities	734	783	885	953	1 064	1 146	1 257
Public administration and defence, compulsory social security	1 481	1 485	1 551	1 676	1 749	1 847	1 874
Education	978	999	1 035	1 071	1 138	1 176	1 199
Health and social work	375	359	373	392	421	451	452
Other community, social, and personal service activities	775	801	849	833	877	914	933
Private households with employed persons	1 517	1 612	1 740	1 729	1 880	1 926	1 951
Extra-territorial organizations and bodies	1	2	2	1	2	2	2

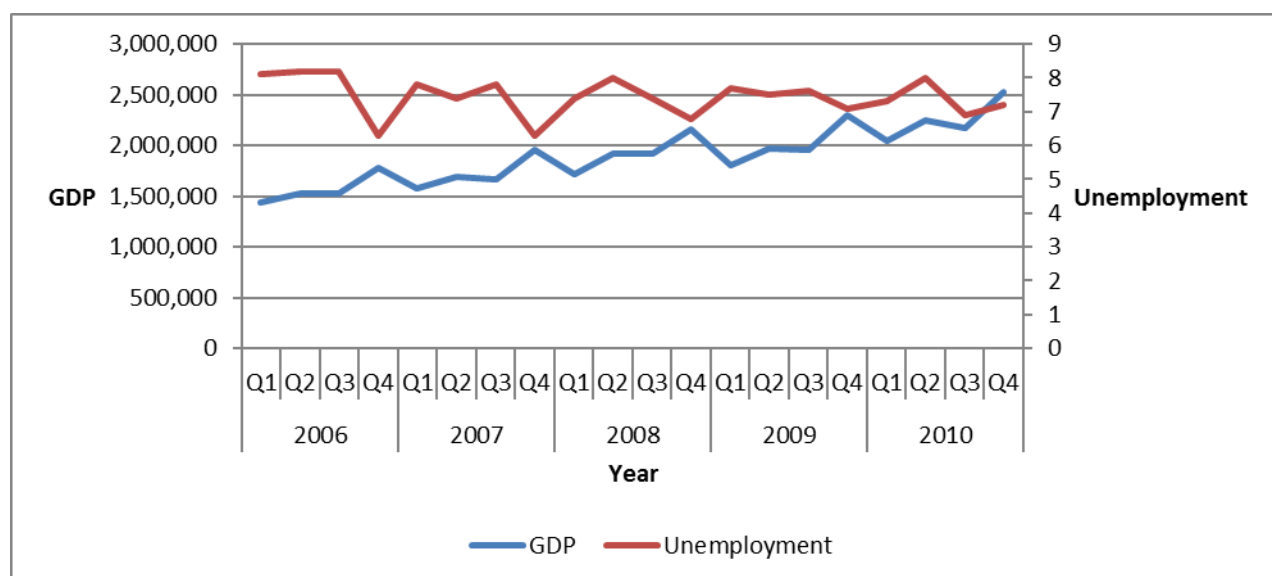
It can be seen that employment in the Philippines was generated mostly in the agricultural sector, but employment growth in agriculture has slowly declined relative to services such as trade, transportation, and finance, as shown in figure A1. What is interesting also is that the sectors that are conventionally driving economic growth, such as manufacturing, are not observed to have contributed significantly to employment (Chua, 2012). Figure A2 shows the relationship between unemployment and GDP by quarter from 2006 to 2010. Note that across quarters, there is significant negative correlation between unemployment and real GDP, such that positive movements in real GDP results in decreases in unemployment. However, much of the movement in unemployment is cyclical in nature, as this has more or less remained constant over the last few years. This is seen even as the GDP has gradually increased over time.

Figure A1. Employment growth and sector size



Source: World Bank, 2013.

Figure A2. Relationship between unemployment rate and real GDP, 2006–10



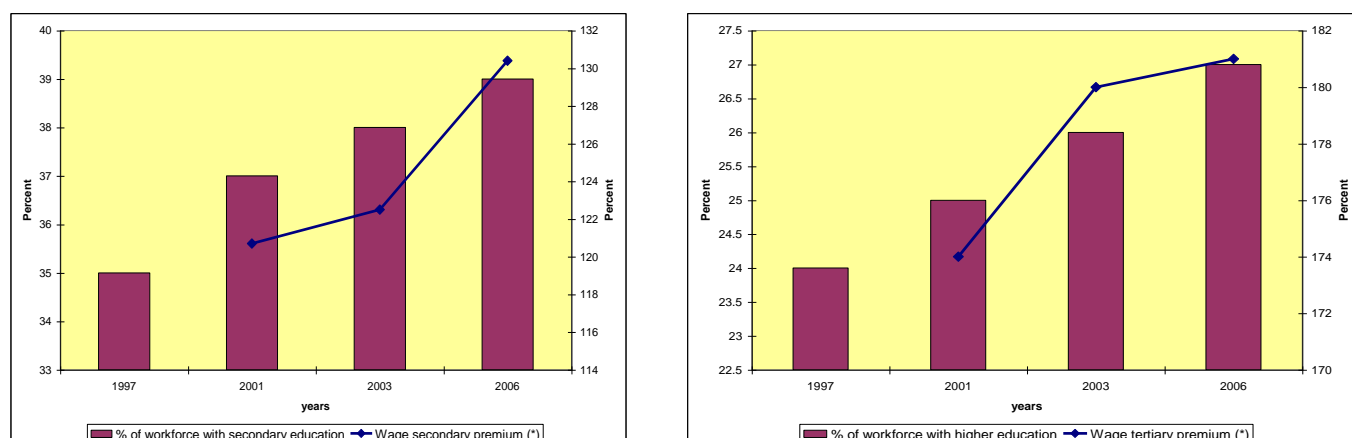
Source: NSO.

Another key feature of the Philippine labour market is the limited mobility from the slow-growth sectors to the high-growth sectors (Chua, 2012). Workers, in other words, cannot easily shift from agriculture to the booming sectors, particularly services. The wage structure is also generally constant, as the share of salaried workers, the self-employed, and unpaid workers remains fixed on average. Nevertheless, there has recently been a growing shift toward lower-quality jobs. In particular, 12 per cent of self-employed individuals in 2006 used to be wage and salaried workers in 2005, and 17 per cent of unpaid workers in 2006 were self-employed in 2005.

What is interesting, though, is that there apparently is a high demand for mid-level (high school) and high-level (college) skills, as shown in figure A3. Data reveal that despite the fact that the supply of

high-school and college graduates has increased, the returns from both levels of schooling have increased over time. This means that employers appreciate the value of workers possessing these higher levels of education even though their supply has increased. It needs to be pointed out, however, that the individuals possessing these skills constitute a lower share of the population. Individuals with secondary schooling constituted only about 40 per cent of the workforce in 2006, from 35 per cent in 2001, while those with higher education comprised only 27 per cent of the total workforce in 2006, from 24 per cent in 2001. What these figures indicate is that high demand for workers is limited only to a limited proportion of the workforce, and, with the premium given to education, seems to be emerging only from the service sector.

Figure A3. Medium- and high-level skills and skilled workforce, selected years



Mid-level skills demand

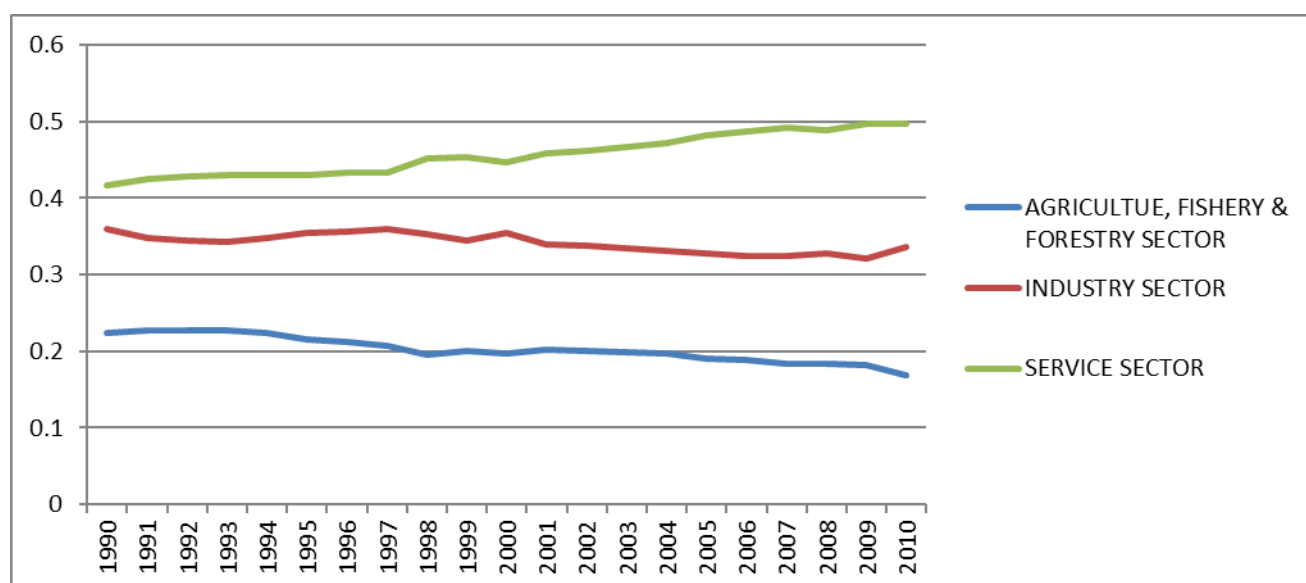
High-levels skill demand

Source: World Bank, 2013.

Much of this observation can be attributed to the fact that services have contributed to over 60 per cent of total GDP growth over the past three decades – the highest in the region. In fact, the services sector in the Philippines makes up over half of the country's total output and employment. This is seen in figure A4, which presents the shares of each sector to GDP. Note that the share of the service sector has significantly increased as the share of industry and agriculture has fallen.

Given the dominance of services in the economy, what are the implications of the service-led growth to the country's skills development? For one, the increased demand for labour in services could result in more training programmes in the service sector. Furthermore, the significant increase in this sector can attract individuals to enroll in courses that cater to the service sector. Finally, individuals who are not qualified for service-sector jobs are likely to be left out of the market. It has been observed that the service sector favours more-educated individuals. But what are its long-term implications?

Figure A4 Percentage share of economic sectors to GDP, 1990–2010



Source: NSCB, various years.

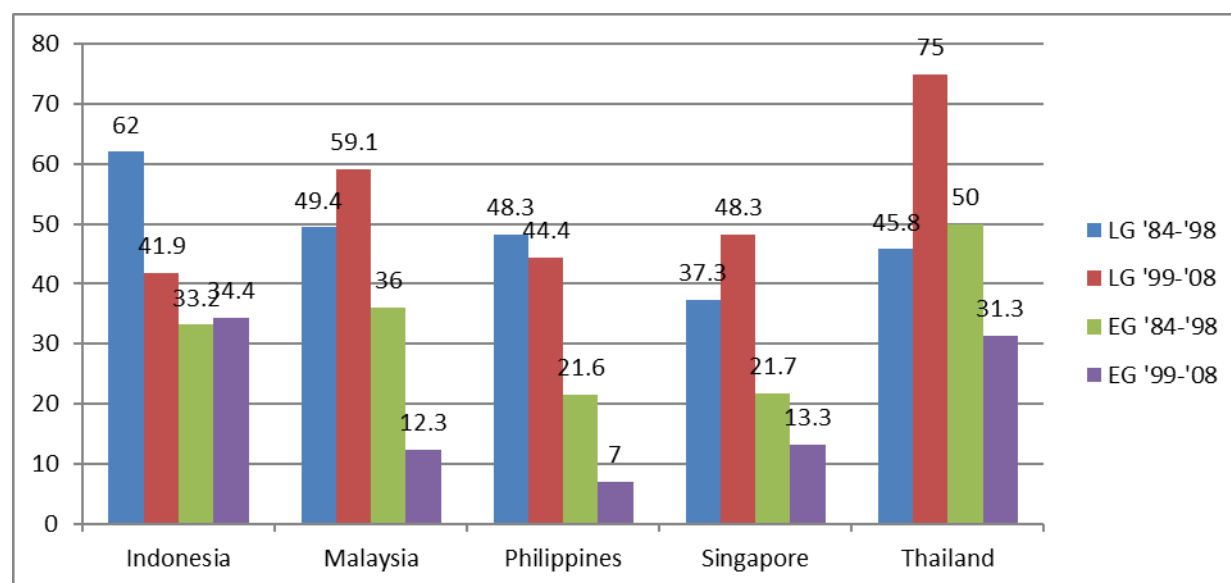
The overall weakness of the manufacturing sector in increasing employment can be seen in figure A5, which shows the percentage contribution of industry⁴³ to labour productivity and employment growth across four members of the Association of Southeast Asian Nations (ASEAN). Note that relative to its neighbours, the Philippine industrial sector has the lowest contribution to employment, and is next to Indonesia as the lowest contributor to labour productivity.

The case of Indonesia is instructive, as the average contribution of the Philippines was about 44 per cent in the period 1999 to 2008, close to Indonesia at 42 per cent, yet the contribution of Philippine industry to employment growth was a low 7 per cent compared to 34 per cent in Indonesia. From 1999 to 2008, it seems that the contribution of the industry sector in most countries increased (except for the Philippines and Indonesia), but this may be due to capital build-up, which resulted then to a reduction in the contribution to employment growth, as labour can be substituted for capital. In the case of the Philippines, in the same period, there was a decline in both labour productivity and employment growth. Since there seems to be no improvement in capital build-up, the insignificant increases in industrial output have resulted in decreases in labour productivity in industry, reductions in labour employment, and also higher unit labour costs for firms.⁴⁴ In contrast, in Indonesia, the increased contribution of the sector to employment growth, despite the decline in labour productivity growth for this sector, implies a growing labour-intensive industry sector.

⁴³ Industry sector includes mining, manufacturing, and construction.

⁴⁴ Unit labour cost, which is a measure of competitiveness, is the ratio of worker compensation to labour productivity, hence resulting in total labour cost per unit of output. A low unit labour cost implies higher profit for the firm.

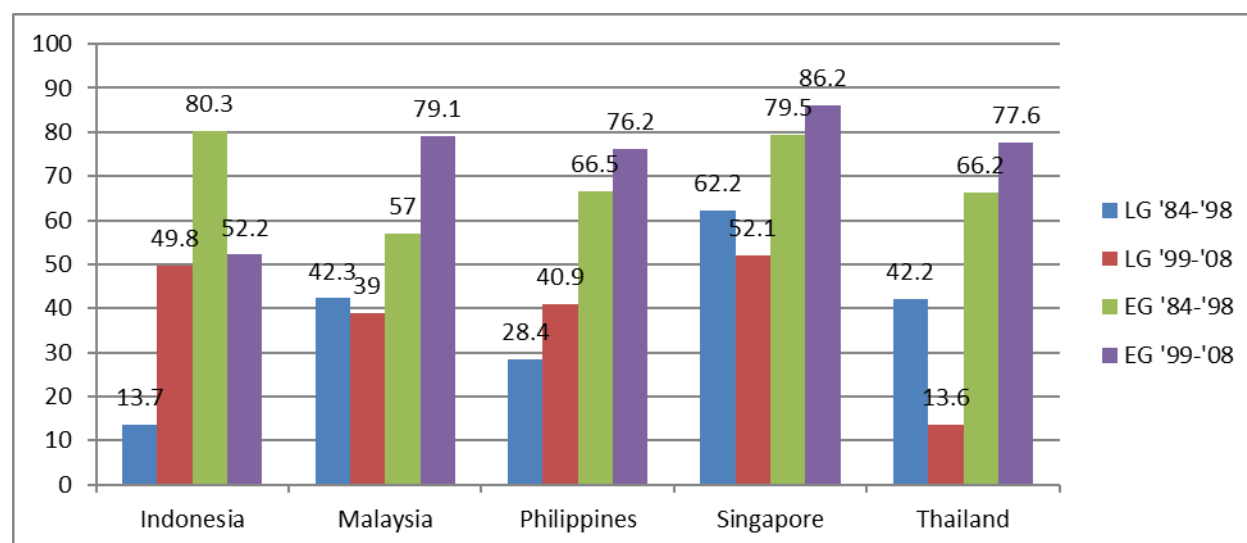
Figure A5. Average contribution by industry to labour productivity and percentage employment growth, 1984–98 and 1999–2008



Note: LG stands for labour productivity growth, which is defined as the change in the ratio of total value added and employment, while EG refers to employment growth.
Source: ILO, 2012.

Figure A6 shows a similar set of data for the service sector. Note that with the exception of Indonesia, all countries recorded substantial increases in the contribution of services in employment growth in the period from 1999 to 2008. However, with the exception of the Philippines, these were accompanied by a decline in the contribution of the sector in labour productivity. The opposite pattern is found in Indonesia, where the decline in the employment growth contribution was accompanied by a decrease in the labour productivity growth contribution. These patterns are consistent with the concept of diminishing productivity. This configuration, however, is not seen in the Philippines, where increases in employment also resulted in improvements in labour productivity contributions. This suggests enhancements in labour productivity, perhaps through training, may have offset the diminishing returns of labour resulting from increased employment. Nevertheless, as can be seen later, although labour productivity in this sector has substantially increased, this remains quite limited, especially in relation to the industry sector. This is due to the limited-scale economies that the service sector conceivably has.

Figure A6. Contribution of the services sector to labour productivity and employment growth, 1984–98 and 1999–2008



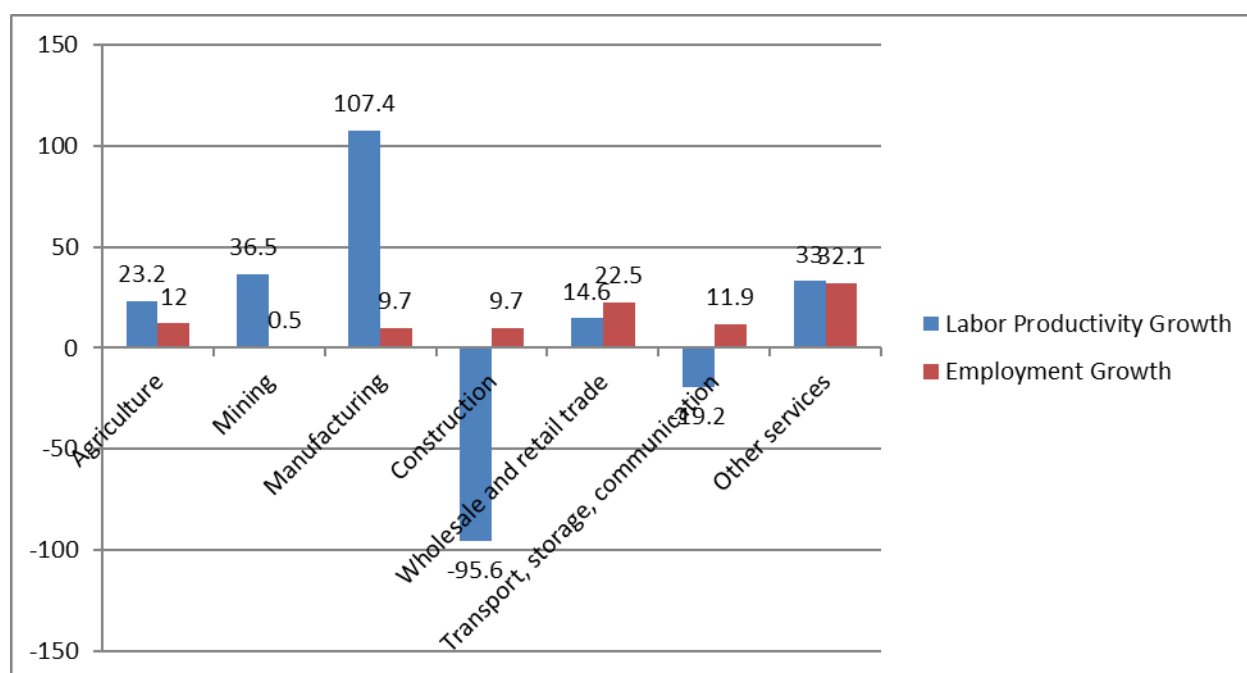
See note in figure A5.
Source: ILO, 2012.

These findings also indicate that much of the problem of joblessness emanates from the fact that manufacturing, which employs more lower-skilled individuals, needs to complement the growth in labour demand found in services. One must remember that jobs are a derived demand. Only if there is demand for the country's output, will the economy demand more skilled workers. Developed countries have all passed through a historical stage of high labour productivity and manufacturing growth. Growth often proceeded from the agricultural sector to manufacturing and then to services. In the case of the Philippines (and also India), the development seems to have shifted from agriculture directly to the services sector. This can cause constraints on output growth and job creation because of two reasons. First, economies of scale are limited in the services sector because its technology can be easily imitated. No matter how large, for instance, the BPO sector has increased in recent years, the GDP growth of the Philippines would have been much larger if the contribution of manufacturing had not waned over the years. Second, the serviced sector requires high levels of schooling because of its emphasis on retail and communication. For those with limited schooling, including those who did not finish college, the opportunities offered by the services sector seem unreachable.

For employment opportunities for all demographic groups to increase, it is therefore necessary to improve the manufacturing sector, especially because its contribution to output is substantial. This seems to be more relevant in recent periods because China appears to have reached diminishing returns in manufacturing, as its now more-educated workforce has demanded higher wages and has shifted gradually to the services sector. The Philippines needs to respond to these changes by trying to fill in the role that China seems to be slowly relinquishing – by taking the lead in manufacturing.

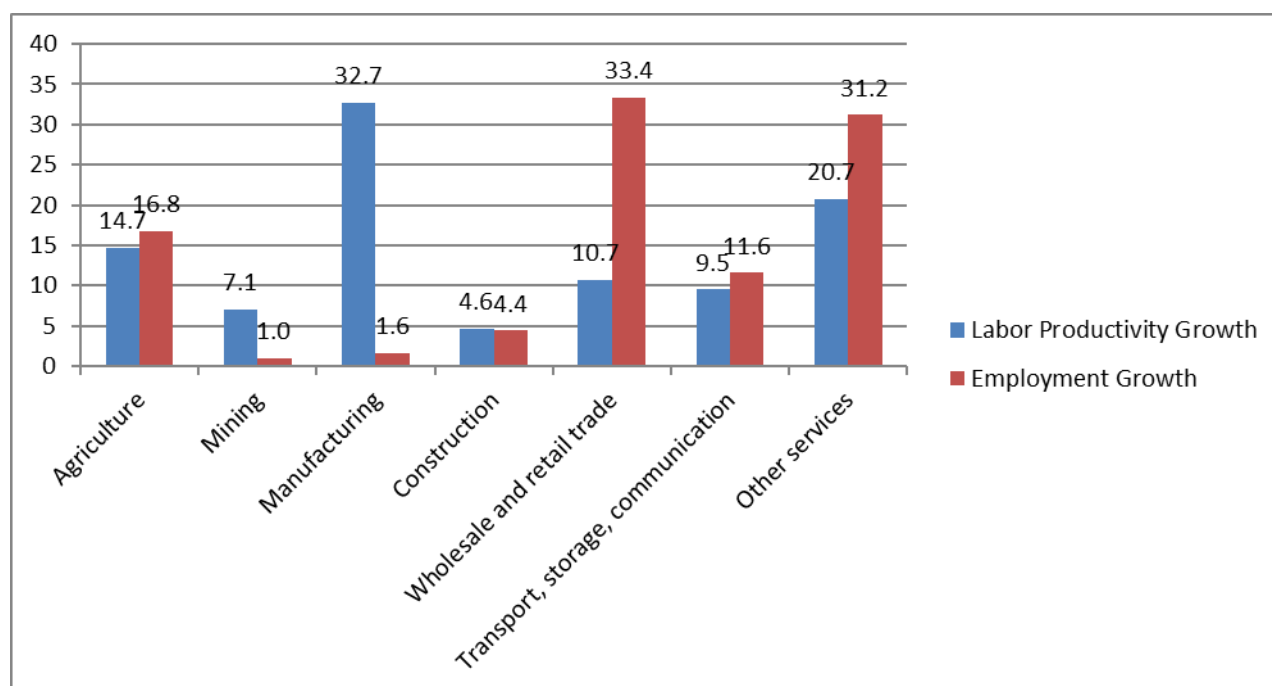
Figures A7 and A8 show the growth in labour productivity and employment for all industries for two periods, 1984–1998 and 1999–2008, respectively. The following points are important. First, manufacturing in both periods had the highest contribution in labour productivity, but a substantial decline can be noted in the later period. Second, in the period from 1999 to 2008, the trade and other services sector registered substantial increases in labour productivity, but the growth was not enough to match the contribution of manufacturing. Third, although manufacturing has the highest contribution to labour productivity, its contribution to employment growth is limited.

Figure A7. Average contributions to labour productivity and employment growth by industry, 1984–98



Source: ILO, 2012.

Figure A8. Average contributions to labour productivity and employment growth by industry, 1999–2008



Source: ILO, 2012.

Hence, despite the 16.3 per cent increase (1.7 per cent annual average) in the services sector's productivity since 2000, its labour productivity has remained less than half of those in industry and manufacturing. This suggests that although the services sector has made the greatest contributions to employment growth, it is not necessarily associated with a rise in productive employment (Usui, 2012). This can mean that the individuals who have enrolled in skills development for the services sector could be frustrated later as job opportunities and the returns from training can prove to be

limited and unsustainable. In developing programmes, it is not only important to consider job creation, but the productivity effects of such programmes on skills.

For instance, with the sharp increase in exports, the BPO industry has significantly contributed to job creation. According to Usui (2012), employment in the BPO industry grew by an unprecedented 34.5 per cent between 2004 and 2009. Total employment in the BPO industry rose to 0.44 million in 2009 from less than 0.1 million in 2004. Although contact centres remain the top employer among the BPO categories, accounting for 57 per cent of total employment, the industry has also been moving up the value chain from voice-based services to knowledge-based businesses such as software development, financial services, accounting, and medical services. However, the BPO industry still employs only about 1.2 per cent of the total labour force of the country, where about 7.5 per cent of the total labour force (2.8 million workers in 2009) were unemployed and 19.1 per cent were under-employed (7.2 million workers in 2009). The BPO industry in the Philippines expects the workforce employed in the sector to increase by 1.3 million by 2016, but the amount of labour employed by the BPO industry will still be less than 3 per cent of the estimated total labour force in 2016. The Philippines' labour force is expected to increase to 52 million by 2030, from 38 million in 2008 (Felipe and Hasan, 2006).

However, one of main problems is the lack of job opportunities relative to the total supply of job-seekers, even as the service sector is recording unprecedented employment growth rates. Manufacturing has been sluggish in the periods covering the study. Because of this, skills formation has been largely concentrated in the services sector, with a disproportionate share of the training programmes being developed in this area. Therefore, while more students are attracted to enrol in these courses, the limited job opportunities would still cause a lower employment rate and LFPR. Moreover, productivity is not enhanced. Indeed, because of this vertical mismatch, much of the higher employment rates were observed also in the areas with large services and BPO activities. Moreover, because of the limited expansion of the labour demand in areas with high poverty incidence, fewer scholarships were observed in these areas.

The main point is that the TVET system should address these mismatches by having a more forward-looking perspective. As such, the goal of the TESDA as the authority in TVET should be to coordinate with key public agencies that are assigned in redirecting and managing the direction of the Philippine manufacturing sector. In addition to linking with industry, it is necessary for the TESDA to harmonize its activities with the government agencies, including local government. In particular, efforts to attract and maintain foreign direct investments (FDI) need to be harmonized with the TESDA programmes, but at the same time, the resources have to be allocated to the proper sectors. By addressing the various skills mismatches, the TESDA can be able to address the unemployment problem more effectively.

Annex 2 Indicators for assessing TVET

The WGI Report specified a number of easily accessible indicators for the major areas where TVET can be reviewed. These are: finance, access, quality, and relevance. These areas supposedly define the qualities of an effective TVET. Given the WGI conceptual framework, shown in figure 1, several indicators have been proposed in order to provide a structure for assessing TVET. The availability of these indicators, including those that were not proposed in the WGI study, are presented in Table B1. Policy-makers and stakeholders are expected to combine optimally priorities related to the last three components (relevance, equity, quality) “by giving adequate financial resources available within a given context of institutional settings and governance.” What is aimed at is a simultaneous achievement of these multiple goals. Table B1. Availability of proposed WGI and additional indicators

Table B1. Availability of proposed WGI and additional indicators

Key area	Definition	Objectively verifiable indicators of achievement	Availability from TESDA TVET statistics	Remarks
Relevance	The aim of responding to the needs of the labour market with the view that the main role of TVET is to raise skills levels and to help matching skills needs at all levels in today's complex and changing labour markets, as well to anticipate future labour markets.	WGI proposed indicators		
		Labour force participation	Available	Discussed in section on relevance
		Employment distribution by industry and sector	Available	Discussed in section on structural mismatch (Annex A)
		Labour productivity (output per worker)	Available	By region discussed in section on relevance
		Unit labour costs (Wage cost per output per worker)	Unavailable	Daily average wage costs was used in the section on relevance
		Employment rates	Available	Discussed in section on relevance
		Unemployment rates	Available	By year discussed in section on relevance By region discussed in section on structural mismatch
		Under-employment rates	Available	Discussed in section on relevance
		Employment distribution by age and gender	Available	Age categories were discussed but not gender, which was not part of the analysis
		Employment distribution by schooling achievement	Available	Discussed in section on relevance
		Employment distribution by major occupation group	Available	Discussed in section on relevance
		Number of discouraged workers	Unavailable	Can be inferred by the under-employment data and labour-force participation data
		Additional Variables		
		Labour-force participation; employment rates of TVET graduates	Available for TVET evaluation years	Discussed in section on relevance

Access and participation	The goal of promoting equity and inclusion, and the implications on expanding learning opportunities for excluded groups.	Highest educational attainment of TVET graduates	Available for TVET evaluation years	Discussed in section on relevance
		Type of work of TVET graduates	Available for TVET evaluation years	Discussed in section on relevance
		Distribution of employed TVET graduates by industry	Available for TVET evaluation years	Discussed in section on relevance
		Employment of TVET graduates by region	Available for TVET evaluation years	Discussed in section on relevance
		Projected labour supply and demand	Available	Discussed in the conceptual framework (Chapter 2)
		WGI proposed indicators		
		Number of TVET schools by region.	Available	Discussed in section on access and participation
		TVET students by income class	Unavailable	Can be inferred by relating TVET regional enrolment and poverty incidence
		Number of scholarships provided to students by region	Available	Focused on the largest two scholarships Discussed in section on access and participation
		Enrolment in vocational education as a percentage of total enrolment in the formal education system	Available	Discussed in section on access and participation
		Enrolment by type of TVET programme	Available	By delivery mode, discussed in access and participation.
		Regional distribution of accredited TVET providers	Available	Discussed in section on access and participation
		Completion or drop-out rate in TVET programmes and in general programmes	Unavailable	Can be inferred from the difference between enrolment and graduates
		Additional indicators		
		Government expenditures on scholarships	TESDA TWSP Monitoring Office	Discussed in section on access and participation to determine the differences in costs
		Trainee cost of TVET	Based on several surveys on students and TVIs	Discussed in section on access and participation, to examine the affordability of the TVET programmes

Quality	The objective of meeting the need for skills, and the capacity of the systems to innovate and ensure that the teaching and learning process is a site of innovation itself.	WGI proposed indicators		
		Certification rates by sector and region	Available	Discussed in section on quality Assessment and certification is only conducted for institute and certain modes of delivery. This can be inferred by the number of assessed and certified trainers by type of institute discussed in section on quality. This can be inferred from the recurrent costs, which include costs of facilities. This is discussed in section on financial structure.
		Certification rate by institute	Unavailable	
		Student/teacher ratio in formal TVET and in general programmes	Unavailable	
		Classroom sizes in school-based institutes.	Unavailable	
		Additional Indicators		
		Number of TVET trainers assessed and certified by region	Availability	TESDA assurance of quality to the students
		Number of registered programmes by region	Available	TESDA standard of quality based on compliance to training regulations
		Number of promulgated training programmes by sector	Available	TESDA basis for ensuring quality in schools and for registering schools
Financial structure	The necessity to provide financial resources that can be allocated to TVET programmes, as well as the structures that will ensure cost effectiveness. Focus on resource mobilization.	WGI proposed indicators		
		Funding sources of TESDA	Available	Discussed in section on financial structure Can be inferred from the uses of TVET funds, discussed in section on financial structure Can be inferred from the uses of TVET funds, discussed in section on financial structure Can be inferred from the unit cost of TVET providers, discussed in section on financial structure
		Investment in training of teachers and trainers	Unavailable	
		Spending in formal TVET	Unavailable	
		Spending on facilities, learning environment	Unavailable	

Additional indicators

Uses of TVET funds	Available in Peano, et al study on TVET investment	Discussed in section on financial structure
Unit cost by type of course and TVET provider	Available in Peano, et al study on TVET investment	Discussed in section on financial structure
Sources of funds of TVET providers	Available in Peano, et al study on TVET investment	Fund sourcing by other institutes, discussed in section on financial structure

Thailand:

Comprehensive research on the general assessment of current skills systems and delivery: Research study on Thailand

Qingrui Huang

December 2012

1. Introduction

1.1 Background of the study

A well-trained workforce equipped with the skills needed for the future, is key to socio-economic development and the realization of decent work for all. However, many countries in the Asia-Pacific region are facing a number of challenges in this regard, stemming from insufficient policies, inefficient training systems, and mismatches and gaps between the output of TVET institutions on one hand and labour-market demand on the other.

With funding from the International Labour Organization (ILO) Partnership Programme with the Republic of Korea, this study will support a review and analysis of national TVET and skills systems, and workplace learning in three countries in the Asia-Pacific region: the Maldives, the Philippines, and Thailand. These countries were selected because they share a number of common challenges, such as the urgency of increasing skills needs in industry and services, needs in preparing the workforce to meet those skills needs, and thus in improving the relevance and effectiveness of the TVET systems. Analysis took place at the national level in the three countries. The study applies a broad common analytical framework and indicators to the extent possible to enable cross-country analysis, so that it can provide benchmarks in measuring national performance, and better identify and prioritize efforts in strengthening the performance of national TVET systems, as well as facilitating knowledge-sharing among the three countries.

This research study will focus on Thailand in particular because TVET in Thailand has not been able to provide a sufficient number of highly-qualified and well-trained technicians for a rapidly changing economy. Since 1997, the manufacturing and services sectors in Thailand have had a significantly increased share in the country's economy; the two sectors represented 39 per cent and 52 per cent of GDP respectively in 2009, according to a report by the National Science and Technology Development Agency (NSTDA). However, workforce capability lags economic growth, and the overall competency of the Thai workforce is still below international standard. The Ministry of Education of Thailand (MOE) has engaged in serious strategic scoping on future reforms in the TVET subsectors, so that it can produce a capable workforce that is needed for the creation of a knowledge-based economy. These circumstances provided the rationale for this research study in Thailand, to provide policy recommendations for strengthening the TVET system and addressing skills gaps, aimed at achieving balanced and sustainable growth.

1.2 Objectives

Research in Thailand and cross-country analysis of the national-level findings and data will equip ILO constituents and other stakeholders with the knowledge to:

- a) identify strengths, weaknesses and policy options in promoting job creation and improving skills development;
- b) strengthen capacities in the formulation of comprehensive skills policies;
- c) improve the quality, effectiveness, efficiency, and capacity of TVET systems; and
- d) address skills gaps between skills provision and labour-market demand.

1.3 Methodology

The study is based on primary and secondary information, involving desk research and stakeholder interviews. Desk research was extensively used in investigating the literature on topics such as Thailand's economic growth, Thailand's sectoral economic outlook, skills shortages and development, and TVET and trends, among others. The literature included evaluations, research,

journal articles, policy papers, opinion pieces, media releases, and books in English, in either electronic or paper versions.

Data collection was conducted by accessing many types of data sources. Some of the important sources of data and statistics included the National Statistical Office of Thailand (NSO) (multi-year labour force surveys [LFS] and skills development surveys), the Bank of Thailand (BOT), the National Economic and Social Development Board (NESDB), the Ministry of Labour (MOL), the MOE, the World Bank, ILO Key Indicators of the Labour Market (KILM) data, and the United Nations Educational, Scientific and Cultural Organization (UNESCO).

Meetings and interviews were conducted with key stakeholders and institutions, including relevant government departments and agencies, representatives, training institutes, employers' associations, and international organizations.

2. The economic and labour market context

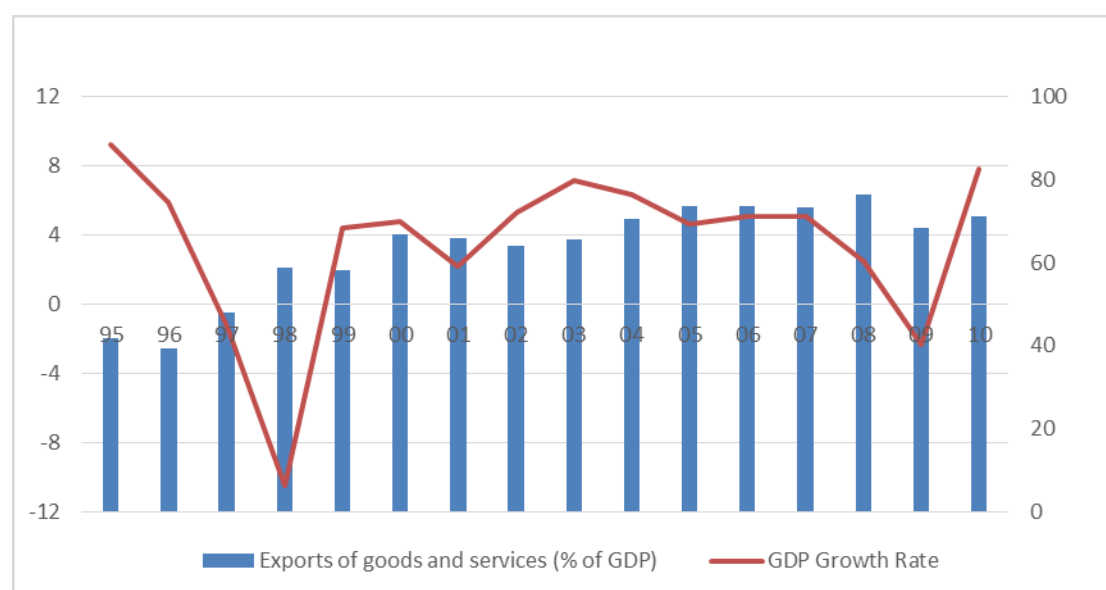
2.1 The Thai economy

From 1995 to 2010, Thailand's economic growth was divided into three periods separated by two main economic crises. In the first period that ended before the Asian Economic Crisis of 1996–98, Thailand experienced one of the world's highest growth rates as a result of the shift in aggregate output production from the agriculture sector to manufacturing, its export promotion policy, and direct investment by multinational corporations (MNCs). The Thai economy kept booming at an average rate of 8–9 per cent per year (World Bank), with the result that the export sector has been a major driving force of Thailand's economic growth ever since (Bank of Thailand, Discussion Paper, p. 3–4).

From 1996 to 1998, triggered by a collapsed exchange rate and the float of the baht, the proportion of exports of goods and services fell to 39 per cent (in 1996), and consequently the GDP growth rate plunged sharply to negative 11 per cent, as shown in figure 1.

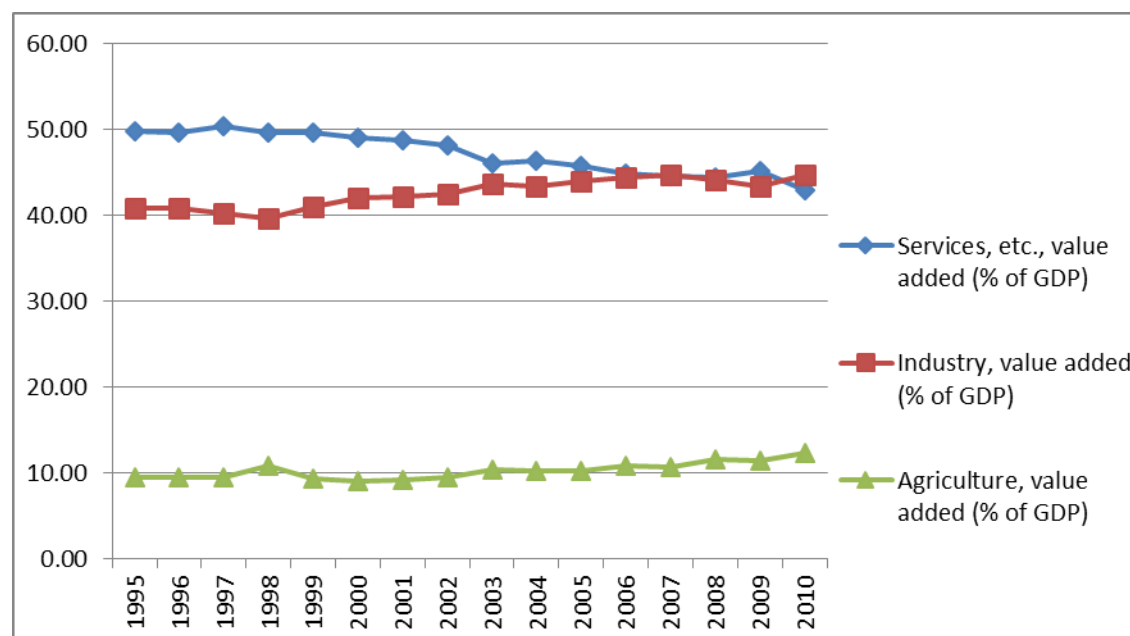
Thailand's economy started to recover after the crisis, expanding by 4.2 per cent in 1999 and 4.4 per cent in 2000, primarily as a result of the recovery of exports – mostly machinery and electronic components, agricultural commodities, and jewellery (CIA World Fact Book, 2012). Although growth weakened to 2.2 per cent in 2001 due to a slowdown in the global economy, increased domestic spending, together with overall strong growth in Asia, put the nation back on the path to recovery, at an average growth rate of 5.6 per cent in subsequent years until the global financial crisis in 2008. Severe cuts in Thailand's exports during the crisis caused double-digit drops in most sectors. GDP growth dropped to 2.5 per cent and then further slumped to negative 2 per cent in two consecutive years. However, in 2010, the exports of goods rebounded, and services equivalent to 71 per cent of GDP led to strong economic expansion at 7.8 per cent, the fastest pace since 1995.

Figure 1. GDP growth rate for Thailand (annual percentage), and exports of goods and services (percentage of GDP), 1995–2010



In terms of GDP share by sector, the services sector has played a dominant role in Thailand's economic development, representing 47 per cent of GDP on average from 1995 to 2010. Services is followed by industry and agriculture, contributing an average of 42 per cent and 10 per cent of GDP respectively, as shown in figure 2, although the industry sector has shown a modest but gradual rising trend in GDP share since 2003, and it exceeded the share of the services sector by roughly 2 per cent by the end of the 2010, at 44.65 per cent.

Figure 2. Value added by economic sector (percentage of GDP), 1995–2010



2.2 Labour force

2.2.1 Demographic structural trends

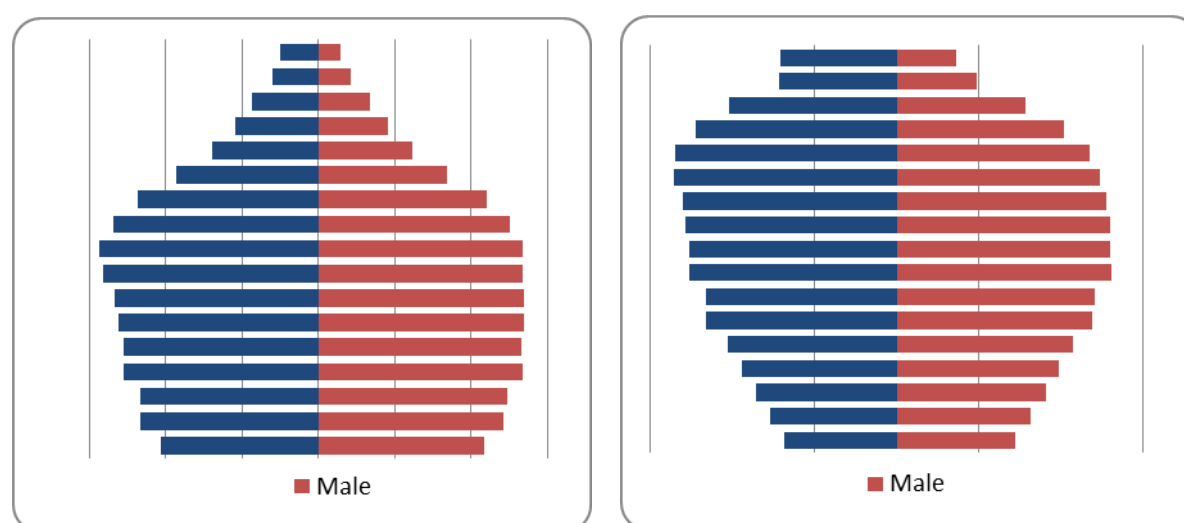
Thailand is undergoing demographic structural change. The country will move from a relatively young society towards an ageing society in the coming two to three decades. Improvements in public health, in urban and rural areas, are contributing to an increased life expectancy for the Thai people. The population of Thailand was 62.2 million in 2000, and will slowly increase to 73.8 million in the next 30 years. The annual average population growth rate was 0.75 per cent between 2000 and 2010. This will gradually decline to 0.42 per cent between 2020 and 2030.

The portion of the population aged 65 and above to the total population increased from 5.7 per cent to 8.9 per cent between 1995 and 2010. During the same period, the population aged 0–14 declined by 6.7 per cent. As mentioned, although the total population grows at an average rate of 1.0 per cent annually, the growth rate itself turned negative in 2002, as shown in table 1. According to the NESDB's estimate, the population group aged 0–14 will decline to 13.5 per cent by 2030, while the group aged 65 and above will rise to 25 per cent, as shown in figure 3, which indicates that the number of old people (65+) will surpass the number of young people (0–14) between 2020 and 2030 (Yongyuth Chalamwong). These demographic structural changes suggest that the labour force will be smaller in the coming decades (Guidebook Thailand 2012, unpublished).

Table 1. Population share by age group

Age group	1995	2000	2005	2010
Population 0–14 (% of total)	27.2	24.0	22.4	20.5
Population 15–64 (% of total)	67.1	69.1	69.6	70.6
Population 65 and above (% of total)	5.7	6.9	8.0	8.9
Population growth (annual %)	0.9	1.2	1.0	0.6
Population, total	59 650,157	63 155,029	66 698,483	69 122,000

Figure 3. Thai demographic structure by age and gender, 2010 and 2030 (projected)



Source: Guidebook Thailand 2012, unpublished.

2.2.2 Literacy rate

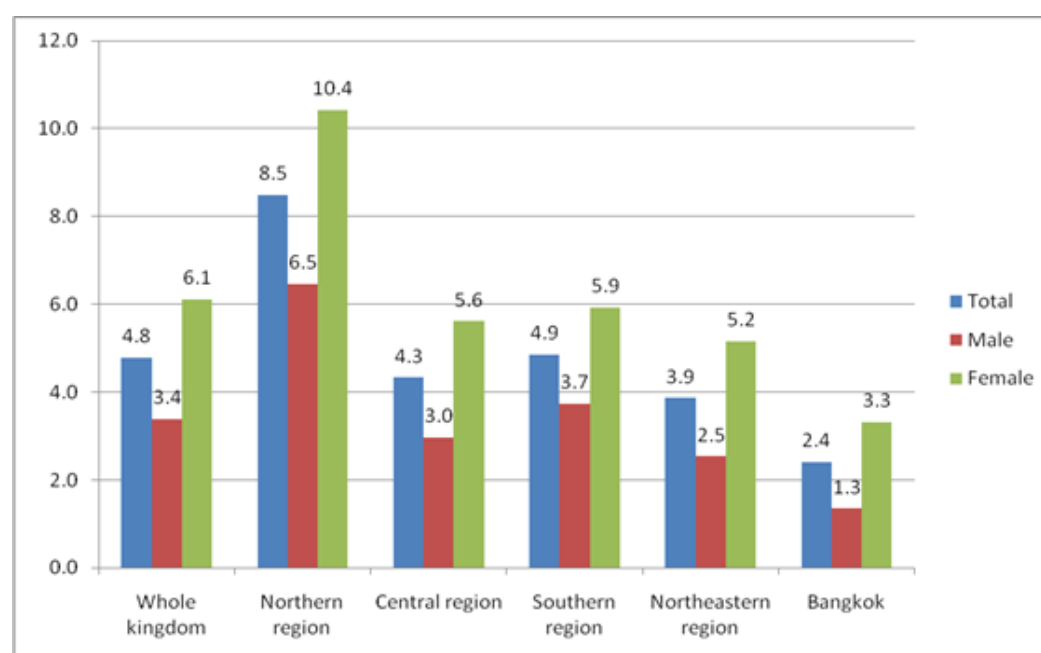
Thailand has a satisfactory, high literacy rate, especially among young people (ages 15–24), attributed to the government’s continuous effort to promote compulsory education. The literacy rates for adults and youth were 93.5 per cent and 98.1 per cent, respectively, in 2005, as shown in table 2. From a gender perspective, however, the female illiteracy rate was almost double that of the male population, especially in the northern areas; one out of ten women was illiterate, as shown in figure 4.

Table 2. Literacy rates for adults and youths, 2000 and 2005

	2000	2005
Literacy rate, adult total (Percentage of people aged 15 and above)	92.64	93.50
Literacy rate, youth total (Percentage of people aged 15–24)	97.97	98.05

Source: World Development Indicators and Global Development Finance, World Bank.

Figure 4. Proportion of population, aged 6 and over, who are illiterate, by region, 2008

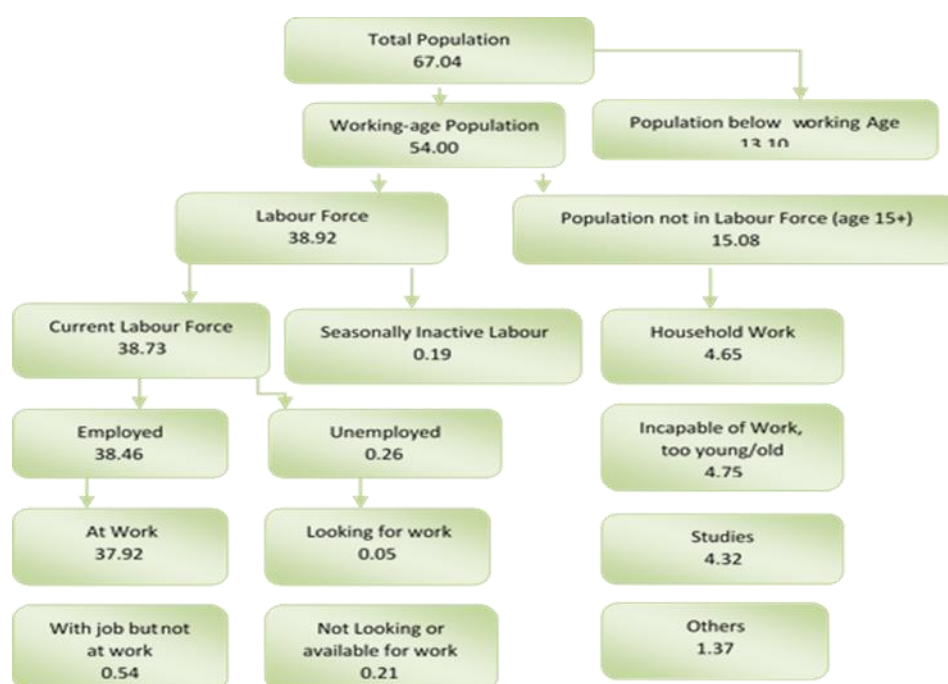


Source: Population survey, 2008, NSO.

2.2.3 Labour participation, unemployment, and under-employment rates

Out of a population of 67.04 million in 2011 (est.), 53.94 million were of working age (above 15), of which 38.79 million were in the labour force, representing a 72.5 per cent labour force participation rate (LFS, 2011). There were 21.2 million men and 18.1 million women in the labour force, representing 53.9 per cent and 46.1 per cent of the total labour force, respectively, shown in figure 5.

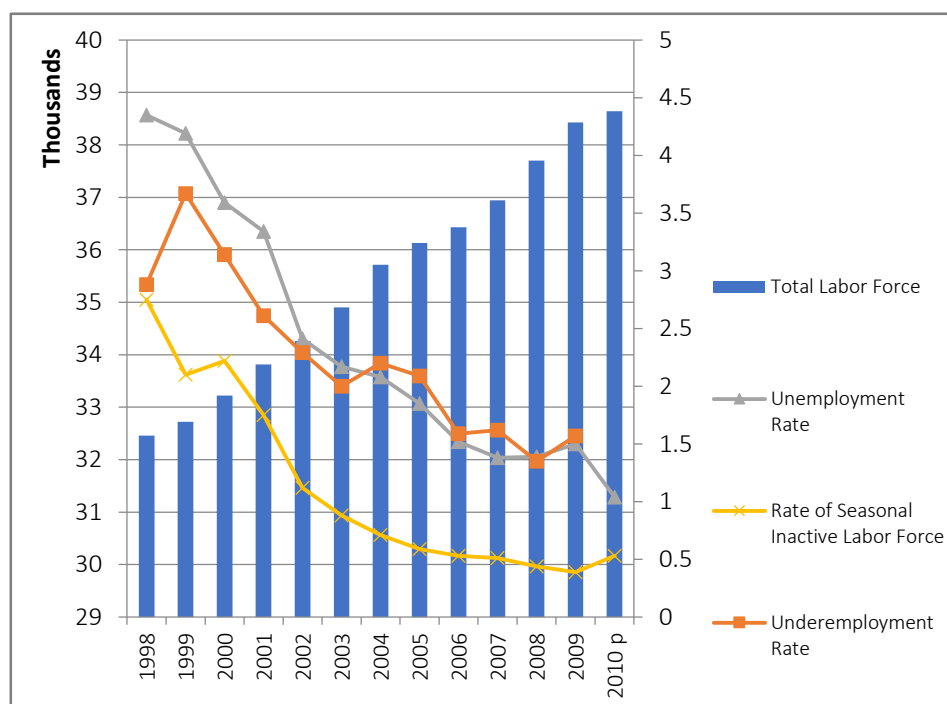
Figure 5. Classifications in the labour force, 2011 (millions)



Source: NSO, 2011.

The unemployment and under-employment rates have been falling and are low. The total labour force of Thailand has grown steadily over the past decade, reaching 38.6 million in 2010, exceeding the figure for 1998 by 19 per cent. During the same period, between 1998 and 2010, the total labour participation rate remained at around 72 per cent, while the unemployment rate fell from a peak of 4.35 per cent in 1998 to 1.04 per cent in 2010, one of the lowest rates in Asia and even the world, although that figure rebounded slightly to 1.5 per cent in 2009 due to the global financial crisis. Meanwhile, the under-employment rate and seasonally inactive labour force rates have seen a similar falling trend from 3.67 to 1.57, and from 2.75 to 0.53, respectively, as shown in figure 6. This indicates that Thailand has been successful in job creation to maintain the constant low unemployment rate.

Figure 6. Labour force participation, unemployment, under-employment, and seasonally inactive labour force rates, 1998–2010⁴⁵

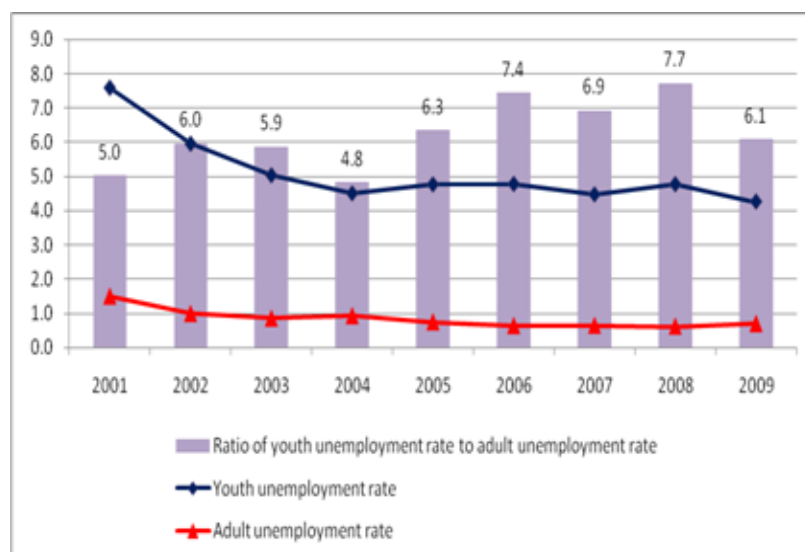


Source: BOT, LFS, accessed 7 May 2012.

Despite the overall low unemployment rate, the youth (age 15–24) unemployment rate was much higher, initially at 7.9 per cent in 2001, but then falling to 3.7 per cent in 2009. Comparing the youth unemployment rate to adult unemployment over the nine-year period 2001 to 2009, the former showed a more fluctuating trend, implying that it is more susceptible to economic cycles. The proportion of youth unemployment to total unemployment, as another key measurement of youth employment, was greater than 50 per cent on average, one of the highest among South-East Asian countries, as shown in figure 7 and figure 8. Given that the youth labour force is much smaller than the adult labour force, the youth unemployment issue should be listed among the priorities in labour market performance.

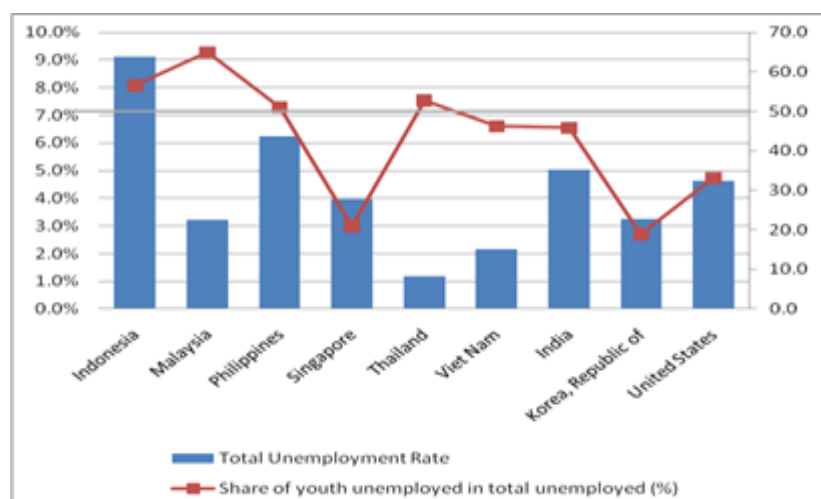
⁴⁵ 1. Labour force refers to persons of 15 years and over. 2. Under-employment here refers to “work less than 35 hours per week and available for additional work” (defined by the Bank of Thailand).

Figure 7. Youth-to-adult unemployment ratio (percentage)



Source: LFS, Whole Kingdom, 2009, cited from Guidebook Thailand 2012, unpublished.

Figure 8. Share of youth unemployed to total unemployed, selected Asian economies, 2007



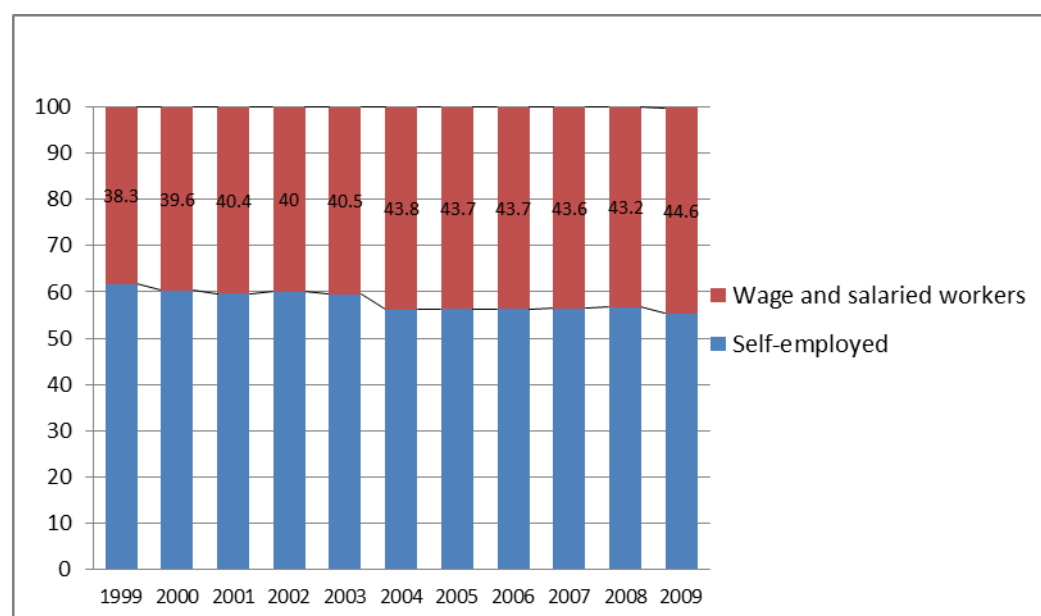
Source: ILO (KILM Sixth Edition), cited from Guidebook Thailand 2012, unpublished.

2.2.4 Employment by economic sector or industry

Although Thailand's unemployment rate has remained low, almost two-thirds of all workers are employed in the informal sector, which has continued to grow since 2006. Based on the ILO concept, the informal sector can be classified into three types: a) "owner-employers of micro-enterprises"; b) "own-account workers"; and (c) "paid or unpaid family workers" (ILO, 2001). The proportion was first at 61.7 per cent in 1999, then slid to 56.2 per cent in 2004 during the recovery from the 1997 crisis; it went further down, slightly, to 55.4 per cent in 2009, yet still largely contributed to Thai employment, as shown in figure 9. Compared to those employed in the formal sector, informal-sector workers have lower educational attainment and are most likely engaged in low- or semi-skilled occupations in agriculture and fisheries, craft and related trades, services, shop sales, and elementary occupations, among others.

Most of these informal sector workers are in the north-eastern and northern regions. While accounting for only one-third of all workers in Bangkok, informal-sector workers accounted for four fifths – the highest proportion – of those in the north-eastern region. More attention is urgently needed to improve the access to training and technical programmes, and to upgrade the skills, of these informal-sector workers, whose work, by the definition of the NSO, does not offer any social security or protection.

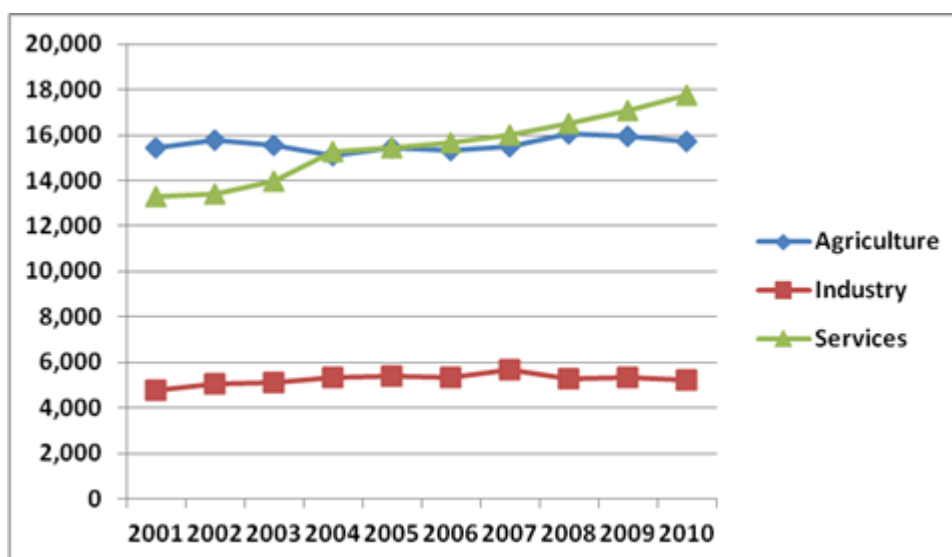
Figure 9. Proportion of waged/salaried workers and self-employed, 1999–2009



Source: LFS, NSO.

Sector-wise, although the agriculture sector is still an important contributor to national employment, a shift has been shown in employment distribution from the agriculture sector to the services sector. In 2001, the share of employment for the agriculture sector was 46 per cent, and for services 39.7 per cent; in 2010, the agriculture sector had declined to 40.7 per cent, while services had climbed to 45.8 per cent, as shown in figure 10. Despite being an important contributor to national employment, it has been argued that a lack of jobs and an absence of income security has triggered the trend of farmers leaving agriculture for the services sector, within which the wholesale and retail trade, hotels and restaurants, education, and real estate have shown an increasing trend of absorbing more workers (Organization for Economic Cooperation and Development [OECD], 2012).

Figure 10. Proportion of waged/salaried workers and self-employed in agriculture, industry, and services, 1999–2009



Source: LFS, NSO.

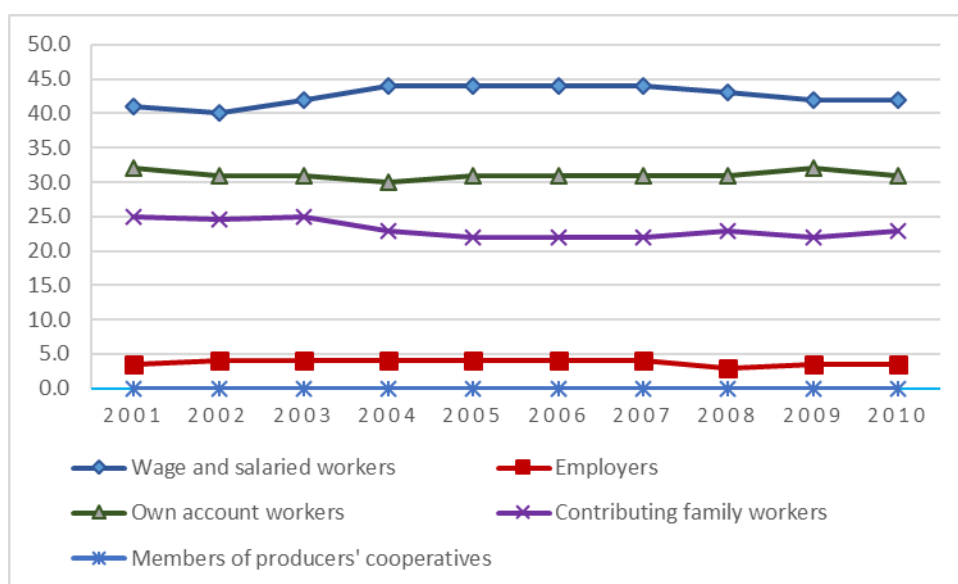
2.2.5 Employment by work status

Total employment figures indicate that waged and salaried workers have always been recorded as having the largest share in total employment. In 2010 the share of waged and salaried workers was 42.6 per cent. However, the number of contributing family workers, who mostly work in the informal sector, has demonstrated a decreasing trend, standing at 32 per cent in 2010, as shown in figure 11.

The gender segregation suggests that in 2010 a large share of men, 37.3 per cent, were own-account workers. Similar to the share distribution of employers by gender, the share of female unpaid family workers (31.3 per cent) was double that of men (15.3 per cent), while the share of female employers was two times less than that of men (1.5 per cent to 3.7 per cent). It is noteworthy that interestingly, regardless of gender, the share of own-account workers has significantly increased over the past 10 years, from 22.7 per cent to 25.7 per cent, as shown in figure 12 and figure 13.

For vulnerable employment, the indicator was measured as the sum of own-account work and unpaid family work. For Thailand, this share was 56.7 per cent in 2001, but was suddenly reduced to 53 per cent in 2004, before increasing again to 54.6 per cent in 2010. An upward trend could be seen in this indicator during the recent economic crisis, which implies a larger incidence of informal employment during the economic crisis, probably due to the fact that few can afford to become unemployed in the absence of social protection, as shown in figure 14.

Figure 11. Share of employment by work status, 2001–10



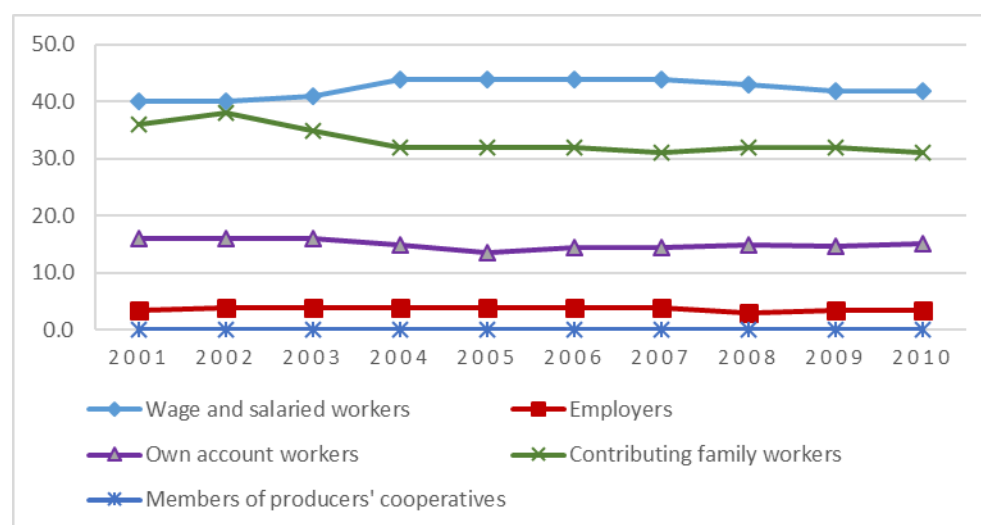
Source: LFS, Whole Kingdom, 2009, cited from Guidebook Thailand 2012, unpublished.

Figure 12. Share of male employment by work status, 2001–10



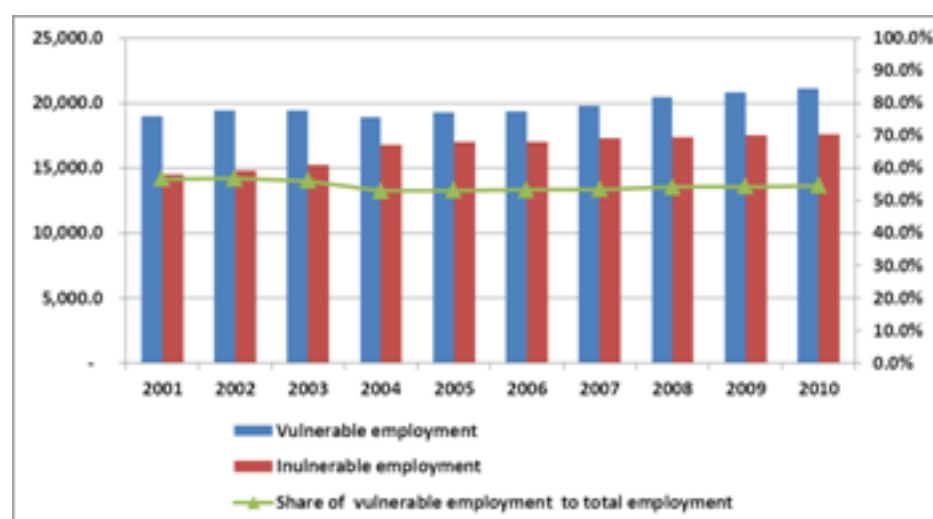
Source: *Ibid.*

Figure 13. Share of female employment by work status, 2001–10



Source: Ibid.

Figure 14. Vulnerable employment, 2001–10



2.3 Labour productivity and skills shortages

2.3.1 Labour productivity

As mentioned, economic growth in Thailand has, to a large extent, been driven by exports, in which the trend has seen a shift from traditional export products to high-tech products. Agricultural and agro-industrial products, for example, have been declining as a share of total exports, representing only 10 and 6 per cent, respectively, in 2007, while principal manufacturing products represented 78 per cent. High-tech products such as computers and parts, automobiles and parts, and integrated circuits now account for over 50 per cent of the total value of the top ten exports from Thailand (World Bank, 2008). However, labour productivity, measured by the real GDP per hour worked, hasn't synchronized with this shift, and it has been argued that to the extent that Thailand has experienced productivity improvements, they have been associated with international spill-over and have been the result of a broad learning process rather than innovation and high-tech production (ibid.), advanced technology or high skill intensity have had a very limited role on productivity. This

is evident in the fact that low-productivity industries absorbed more than 65 per cent of the Thai labour force.

In the three broad economic sectors, estimated labour productivity has shown an increase only in industry; it has in fact declined in the other two sectors over the past decade. Figure 15 shows the estimated labour productivity of the three sectors in 2001, 2006, and 2010. Given 100 as labour productivity in 1998 (the base year), the estimation showed that only the industry sector experienced a significant increase, from 246.8 in 2001 to 303.1 in 2010, while the other two sectors experienced a decline – labour productivity in the agricultural sector saw a mild decline from 24.6 in 2001 to 21.7 in 2010, but the service sector saw a much sharper decrease, from 121.9 in 2001 to 102.4 in 2010.

The labour productivity decrease was also evident in Thailand's Knowledge Economy Index (KEI), an aggregate index by the World Bank Institute representing the overall preparedness of a country or region toward the knowledge economy. Thailand ranked 63rd of 132 countries in 2008 (a drop from 53rd in 1995), indicating that conditions that support the move toward a knowledge economy have worsened in Thailand. Unless the country significantly improves the quality of its labour force, information infrastructure, and related incentive mechanisms in the coming years, it may soon be overtaken by emerging economies such as China, Vietnam, or India (*ibid.*)

Figure 15. Labour productivity by economic activity⁴⁶



Source: Guidebook Thailand 2012, unpublished.

The unit cost of goods and services can be kept low and competitive while raising wages and earnings by raising productivity. The pursuit of higher productivity through innovation and investment in workforce skills can enhance competitiveness and provide for employment and more inclusive growth. Only by adopting this approach can Thailand expect to raise the incomes of its workers, and join the ranks of other high-income countries (World Bank, 2010). The Thai government has recognized the issue to be a constraint for increasing competitiveness, and therefore is restructuring – according to the Eleventh NESDP (2012–16) – the production system from a dependence on natural

⁴⁶ According to the OECD, labour productivity = volume measure of output/measure of input use. The volume measure of output reflects the goods and services produced by the workforce. As the numerator of the ratio of labour productivity, the volume measure of output is measured either by gross domestic product (GDP) or gross value added. The measure of input use reflects the time, effort and skills of the workforce. As the denominator of the ratio of labour productivity, the input measure is the most important factor that influences the measure of labour productivity. The estimation is based on the author's own calculation: 1) divided sectoral real GDP by sectoral employment; 2) Estimate the overall economy's labour productivity and use it as a weight. (The overall labour productivity then became 100.)

resources and capital and labour with low productivity, to a focus on knowledge, science, and technology with high productivity (NESDP, 2012). In order to move up from low-wage industries to achieve sustainable development with high productivity, key reforms are needed to address the relative shortage of engineers and skilled technical personnel, which may limit future technological creativity and productivity, even as the government is pushing for an increase in the proportion that creative industries contribute to GDP from 12 per cent to 20 per cent by 2015 (Jorge Mongay, 2011).

2.3.2 Shortage of skilled labour

It is evident that the shortage of skilled labour is perceived as one of the biggest obstacles to doing business in Thailand. Although more labourers have shifted from the agriculture sector, it is often difficult for them to fit into the high-tech labour market because they don't have the appropriate skills needed by the industries. At the same time, industries demand for labourers has dramatically increased, particularly in textiles, electronics, and machinery.

Employers' associations have continuously reported shortages of skilled workers who are capable of performing multiple tasks in order to enable the companies to complete their orders. This context largely explains the fairly uneven distribution of labourers between the formal and informal sectors, in which the vast majority of unskilled labourers, lacking skills, opt for the informal sector. This can be further proved by a World Bank periodical study on the Thailand investment climate, which contains an important component of skills assessment.

According to report (World Bank, 2008), the shortage of skilled labour was perceived as the biggest obstacle to doing business by the largest percentage of firms in both the Productivity and Investment Climate Survey (PICS) 2004 (48 per cent) and PICS 2007 (39 per cent). This implies an urgent need to upgrade skills training to close the skills gaps and increase labour productivity.

Table 3. Job vacancies

	Professional worker		Skilled production worker		Unskilled production worker	
	PICS 2007	Change from PICS 2004	PICS 2007	Change from PICS 2004	PICS 2007	Change from PICS 2004
Share of firms with vacancies (per cent)	20.4	- 8.0	30.1	+ 0.8	48.0	+ 11.0
Time to fill the most recent vacancy (weeks)	7.4	+ 1.0	5.2	- 0.7	2.2	0.0

Source: Thailand PICS 2004 and 2007 (cited from World Bank, 2008, p. 53).

Table 3 shows the shares of firms with vacancies in each worker group, and the time it took to fill the most recent vacancy. On average, firms took 7.4 weeks to find a suitable professional worker in 2007, a week longer than they did in 2004. For skilled technicians, the average time (5.2 weeks) was slightly less than the 2004 level. Despite this improvement, a shortage of skilled technicians is much more prevalent in Thailand than in other countries. Out of 64 countries for which similar data are available, Thailand ranks 53rd, and the causes were either because the available workers have poor skills (skills shortage) or workers have sufficient skills but these are not the skills required by the firms (skills mismatch), or both (World Bank, 2008).

2.3.3 Trends in future labour demand

As discussed, shortages and mismatches of skilled labour, and inadequacies in the technological innovation system, have limited the ability of Thai firms to increase productivity. Many job vacancies arise because applicants lack both basic and technical skills required by firms, and there is high staff turnover due to intense competition among firms for qualified labour (World Bank, 2008). In the PICS survey, two-fifths of firms responded that a shortage of skilled labour was one of their three biggest constraints. The insufficient supply of qualified staff in Thai enterprises has caused consequences beyond lowering their productivity; it also largely limits their capacity and willingness to invest in training in the long run, which tends to perpetuate the vicious circle (*ibid.*). The growth model of Thailand is still largely based on “learning by exporting” and advanced technology. In other words, Thai firms, more often than not, adopt new technologies by acquiring them from a parent company, rather than making their own technological innovations, hence high skill intensity plays a limited role in productivity growth.

Having realizing this, the Thai government has given priority to improving competitiveness and productivity – the key topics of the Ninth and Tenth NESDPs, which focused on education and on the development of a knowledge economy. This priority was continued in the Eleventh NESDP, which emphasizes strengthening the human resource base and improving productivity as a key to the nation’s competitiveness. The pursuit of higher productivity through innovation and investment in workforce skills can enhance competitiveness and provide for employment and more inclusive growth.

3. The TVET system in Thailand

3.1 Structural framework

3.1.1 TVET system

The TVET system consists of formal and non-formal education. Formal technical and vocational education carries out as a full-time school scheme. Graduates are awarded a certificate, which is on par with that of graduates in general upper-secondary education. Non-formal technical and vocational training, on the other hand, is more flexible in the modalities, management procedures, and duration, and offers many social groups open access to the training programs; graduates are awarded recognized certificates in skills development at different levels. Both sectors have a dense network of institutes that stretch across the whole country.

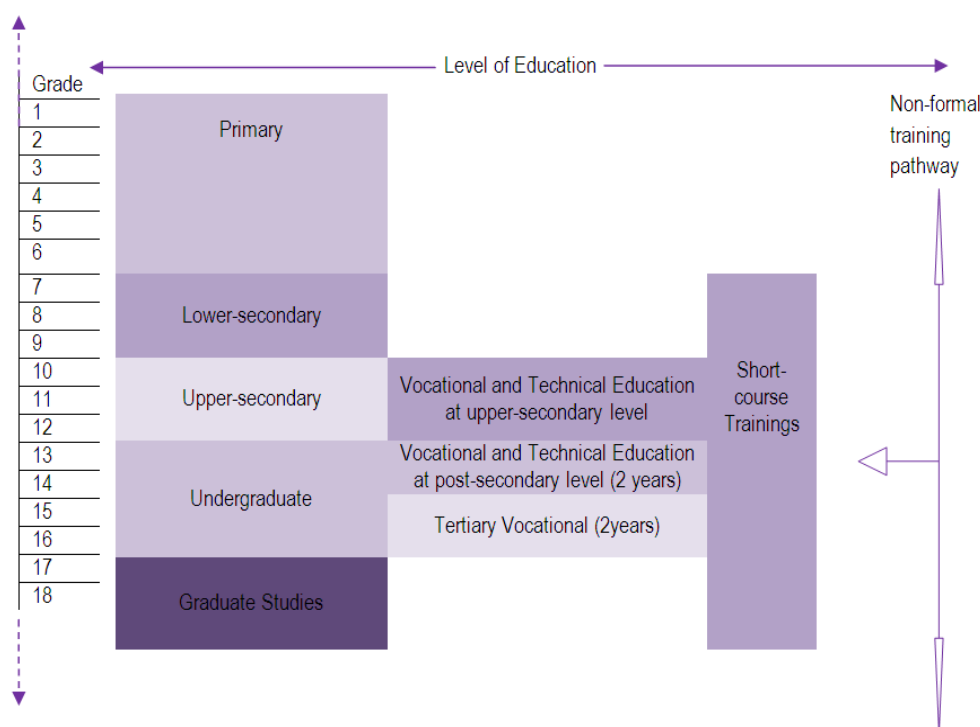
The formal Thai education system consists of 12 years of free basic education: six years of primary schooling, followed by three years of lower-secondary, and then three years of upper-secondary. Enrolment in the basic education system begins at the age of six, and all students are required to complete the compulsory nine years up to lower-secondary level.

Formal vocational and technical education is conducted at three levels: upper-secondary (leading to a vocational certificate), post-secondary (leading to a diploma or vocational associate degree), and university level (leading to a degree). TVET starts at upper-secondary level; students who complete lower-secondary education can voluntarily choose to enter the vocational stream, or stay on and complete the general education stream. A vocational certificate is provided upon completion of the three-year programme.

Students who obtain the vocational education certificate can pursue a technical diploma upon the completion of another two-year programme at post-upper-secondary level, which is also open to those

upper-secondary graduates in the general stream. A higher diploma in technical education, or a bachelor of technology two-year programme is also provided after completing the post-upper-secondary level, as shown in figure 16. It is worth noting that regardless of choice, graduates from both the general and vocational streams are considered equally qualified to sit for national university entrance examinations after completing upper-secondary education.

Figure 16. Thai education system



Source: The Thai education system, towards a learning society, MOE, 2007.

Box 1
Definition of vocational education and training in the Thai context

“Vocational Education” means the education and manpower development in the field, at professional and technical skill level, and technology level.

“Vocational training” means knowledge and vocational skills training, short- or long-run, in and out of school or vocational education institutions where the programmes are held. It also contains specific programs under the Vocational Education Committee.

In addition, there is another important element in vocational and technical training called the dual vocational training system (DVT), which is implemented under the Office of the Vocational Education Commission (OVEC). In this system, vocational institutes have closer cooperation with the private sector in providing education and training. Students learn theoretical knowledge in schools, and gain practical experience in industry. The system was established in the 1990s by the Vocational Department with technical support from the German government. The system covers upper-secondary level to university level.

In the DVT system, the Bureau of Cooperation under the OVEC takes the lead in cooperating with enterprises and vocational institutions to clarify their responsibilities, before officially entering into a

public-private partnership by signing a memorandum of understanding (MOU). Normally, the MOU is signed between the OVEC and the private-sector entity, within which the selected implementing vocational institutes are listed. The selection of the implementing institutes is based upon the following criteria:

- a) the characters of the institutes – whether they serve the sector that the enterprises fall under;
and
- b) the location of the institutes – whether they are in the same jurisdiction as the enterprise branches.

Currently there are more than 3,000 enterprises involved in the DVT system. Students study for two days at school, and practice at the workplaces at least three or four days a week, with a stipend or salary. After finishing the DVT programme, students earn a certificate, diploma, or degree in accordance with the educational level they have attained.

Apart from formal vocational education, non-formal short-course vocational training is also available, mostly under the MOL. For those who are out of the education system, non-formal training ranges from six hours to 225 hours, and is provided by both public and private institutes in the form of pre-employment training or skills upgrading, and is designed to serve the needs for self-employment and to articulate with normal programmes that encourage lifelong learning, as shown in table 4. Some of the main types of training are as follows:

Short training course programme (225 hours). The only pre-requisite for admission is the completion of primary education. There is no entrance examination. The student must complete 225 hours, and upon completion, a certificate will be awarded.

Short training course (6–225 hours). In addition to the 225-hour programme, a variety of short courses are available covering different areas. The duration of the courses ranges from six up to 225 hours. Course duration and content depends upon the interest and needs of local people and communities.

Cooperative study training (CST). Training for students from general secondary schools who select vocational subjects as their major, minor, or elective.

Table 4. Breakdown of TVET certificate types in Thailand

TVET level	Certificate	Course description	Offered to
Upper-secondary level (Grades 10–12)	Certificate in Vocational Education (Cert. Voc.)	Three years with theoretical and practical subjects in a school setting, with a semester spent in the workplace	Lower-secondary completers.
	Certificate in Dual Vocational Education (Cert. Voc. DVT)	Three years with allowance provided by private sector entity. Conducted at a college and a company; students conclude a contract for training.	Lower-secondary completers (Grade 9).
	Certificate in Vocational Education: Credit Accumulating System (Cert. Voc. CAS); Certificate in Vocational Education: Evening Class (Cert. Voc. EC)	Three to five years. Assessment system provided to evaluate students' knowledge and skills for validation of their experience. Accumulated credit can be transferred in the same or between institution(s).	Adults who are not able to participate in full-time study.
	Non-formal programme for the Certificate in Vocational Education	At least three years study by distance learning, except when there is a transfer of academic performance or experience.	Lower-secondary completers; both employed and unemployed adults can participate.
Completed upper-secondary education/ completed Cert. Voc.	Diploma in Vocational Education (Dip. Voc)	Admissions are accepted through competitive entrance examinations.	Cert. Voc holders or upper-secondary completers.
At university/ college level	Higher Diploma in Technical Education	Three-year programme for those who plan to teach in vocational education institutes.	Those who are completing a Diploma in Vocational Education.
At university/ college level	Bachelor's degree in technology/ performance	Two-year programme with a focus on dual system. Started in 2011.	Those who are completing a Diploma in Vocational Education.
Non-formal training courses	Short-course vocational training	Short-training course programme (225 hours); the prerequisite for admission is the completion of primary education. Must complete 225 hours.	To serve self-employment and to articulate with normal programmes that encourage lifelong learning.
		Short training course (6–225 hours); courses are designed around the interest and needs of local people and communities.	
		Cooperative Study Training (CST); training for students from general secondary schools who select vocational subjects as their major, minor, or selective.	
		Agricultural short course training; short training (7–8 days) for local farmers, provided by colleges of agriculture and technology. A special vocational education program for young farmers aged 15–25.	

3.1.2 Institutional arrangement

There is a wide range of training providers, among which the government is the main provider, with several ministries and agencies involved, including the MOE, MOL, Ministry of University Affairs (MOUA), Ministry of Interior (MOI), Ministry of Public Health (MPH), and Ministry of Defence (MOD), all of which provide a range of training courses targeting different expertise, as shown in table 5. Indeed, occupational training is regarded as a task of the government.

Table 5. Main ministerial training providers in Thailand

Provider	Courses
MOE	Primary, secondary, vocational/technical education and teacher training.
MOL	Training for upgrading and updating skills in the labour force through a large number of short training courses. The national skills testing, standardizing, and certification for those who are not in formal schooling was developed and implemented by this ministry.
MOUA	In public and private universities and institutes of higher education.
MOI	Primary education through municipal authorities; a number of short training courses in rural areas by local authorities.
MPH	Specialized education for specific groups in the form of nursing colleges.
MOD	Training in military academies.

Primarily, the task of formal vocational education is under the jurisdiction of the OVEC (formerly the Department of Vocational Education) in the MOE, to produce qualified staff for public establishments, administration, and state enterprises, where personnel are classified for grade and pay scales according to educational qualifications.

On the other hand, non-formal vocational training for skills upgrading in private companies is the responsibility of the Department of Skill Development (DSD) in the MOL. There are also a great number of private vocational schools, in which around 35 per cent of all students in formal vocational education at the upper-secondary level are enrolled. These private schools are not in conflict with the system, as they are under the jurisdiction of the Office of the Permanent Secretary of the MOE, and must follow the guidelines given by the MOE pertaining to duration and content of courses, and certificates.

3.1.3 Administration of TVET

The OVEC

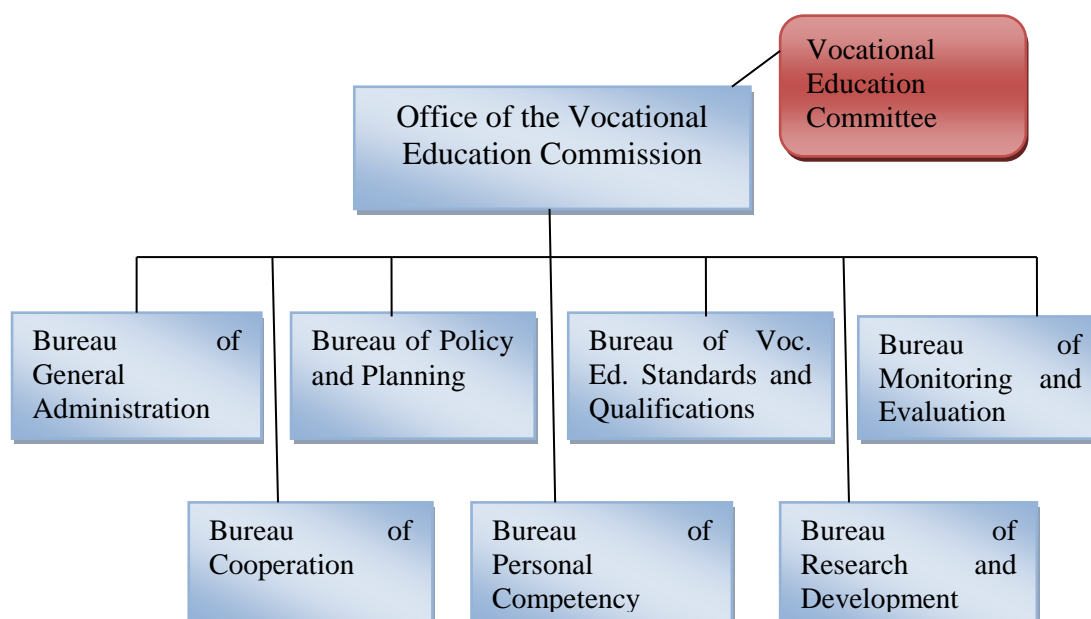
The OVEC is responsible for developing formal TVET policy and standards, allocating resources, and coordinating projects to promote TVET. The OVEC also produces required TVET manpower for the labour market and self-employment, provides social services, and facilitates poverty alleviation. Important projects and activities of the OVEC policy are based on four main targets as follows:

- a) developing skills for employability;
- b) fostering new entrepreneurship or self-employment;
- c) serving society and local communities; and
- d) conducting research for new knowledge and innovation (Sirirak Ratchusanti, 2009)

Under the secretary-general of the OVEC, the TVET administration team consists of seven bureaus: general administration, planning and policy, vocational education standards and qualifications, monitoring and evaluation, cooperation, personal competency development, and research and development, as shown in figure 17.

The OVEC embraces administration and management of vocational education at two levels. At the national level, the commission – jointly with representatives from the private sector as well as concerned agencies – is responsible for formulating long-term planning and other major policies relating to TVET. At the institutional level, the vocational and technical colleges aim at developing strong partnerships with the private sector, re-mobilizing resources, developing demand-driven programmes in line with local needs, identifying and strengthening areas of excellence in each institute, and developing multi-disciplinary programmes (UNESCO, 2011).

Figure 17. Organizational structure of the OVEC



Source: OVEC in Brief, OVEC.

Department of Skills Development

Operating under the MOL, the DSD is the core organization that carries out schemes related to skills development coordination and promotion. The DSD is responsible for skills training, re-training, and upgrading skills in the workforce to meet labour-market needs. Three main areas for both technical and non-technical skills are in manufacturing, services, and the commercial sectors.

The main responsibilities of the DSD can be summarized as:

- a) promoting competency in the Thai workforce;
- b) skills standard development, promotion, and testing;
- c) promoting cooperation between the public and private sectors in terms of networking and drafting of national plans on skills demand;
- d) overseeing the Skills Development Promotional Act (2002) and relevant labour law; and
- e) promoting and enhancing the skills development network, both at the national and international level.

3.1.4 Number of TVET institutes and types of courses

In line with the two main TVET administrative bodies, the types of courses can also be labelled as formal and non-formal.

Under the OVEC, there were 415 public TVET colleges as of 2011; the same courses were also offered at 427 private vocational schools as of 2010 (UNESCO 2011). There were ten types of colleges under the OVEC, as shown in table 6.

Table 6. Types of colleges under the OVEC

Type of college	Number
Technical college	106
Vocational college	40
Industrial and community college	144
Polytechnic college	54
Business administration and tourism college	4
Industrial and shipbuilding college	3
Arts and crafts college	2
Fisheries college	3
Agricultural and technological college	47
Technology and management college	11
Royal Goldsmith College	1

In 2012, in accordance with the Ministerial Act, B.E. 2555 (2012) concerning the merging of some vocational colleges in Thailand to form vocational education institutes, 161 Thai vocational colleges merged and re-formed into 19 vocational education institutes. These 19 institutes are responsible for managing vocational education and offering specific professional skills training from certificate level up to degree level, while the 255 vocational colleges remain responsible for providing vocational education up to diploma level.

In the long-term, according to the OVEC, these institutions are all encouraged to, and will, provide bachelor's degree courses, after the improvement of their educational quality. At the moment, 28 bachelor's degree courses in technological subjects or operational works relevant to the Thai Vocational Quality Framework (TVQF) are being approved, along with the 1.5 million Thai baht (THB) budget for each vocational education institute to establish its administration office and laboratories.

Among the 19 institutions, one vocational education institute will be located in Bangkok, five in central Thailand, four in Northern Thailand, five in the north-east, one in the east and three in the south (MOE news, 5 July 2012). In addition, four specialized agricultural institutions are also being set up.

In terms of courses, the OVEC provides nine types, namely: Industry, Agriculture, Home Economics, Arts and Crafts, Commerce and Business Administration, Fisheries, Textiles, Tourism and Hospitality, and Information Technology. Under these nine, there are many sub-types more specific to occupations such as Automobiles, Gems and Jewellery, and Accounting, which are relevant to labour-market needs.

As for the other arm of TVET provision under the DSD, there were 12 training centres at the regional level, and 65 centres at the provincial level as of 2012.

The DSD provides vocational training opportunities for all groups of people aged over 15, in various courses, as required. Some courses are conducted in accordance with the requirements of private-sector establishments. Core types of courses are listed in table 7.

In terms of the content of training courses, this covers both technical and non-technical fields. Technical training includes such subjects as automobile technology, refrigeration and air-conditioning, construction, information technology, motorcycle repair, and computer and mobile phone repair, among others. The non-technical training includes Thai massage (body and foot), cooking, floristry, painting and fashion technology, and foreign languages, among others.

Table 7. Types of training courses under the DSD

Training course	Requirements for trainees	Course
Pre-employment training	<ul style="list-style-type: none"> Finished secondary education. Aged 15 or over. Unemployed or never worked. 	Introductory or basic courses that provide new labour-market entrants with employable skills. <ul style="list-style-type: none"> 4–6 months at the institute or centre. 2 months at the private establishment.
Upgrading training	<ul style="list-style-type: none"> No educational background required. Work in a private establishment or has own business. 	Higher-level training courses for employed workers to increase their skills and productivity. <ul style="list-style-type: none"> 12–150 hours.

3.2 Financing TVET

The bulk of the financing for training comes from government budget allocations to the training authorities. In addition, the MOL has also established a national Skills Development Fund, by collecting training levies from enterprises. The training levy is complemented by a tax deduction system to reimburse firms for part of the levy paid when training expenses are incurred to train their staff.

Labour skills development work has made notable progress with the Act on the Promotion of Labour Skills Development, B.E.2545 (2002), which encourages establishments to organize training for their employees by offering tax incentives, i.e. their training expenses can be deducted through tax exemption, calculated at twice as much as the actual training expenses. The incentive has been provided to private-sector establishments by deducting the cost of training at 200 per cent from the annual tax payment.

This compulsory measure has been applied for establishments with at least 100 employees, which have to provide training for 50 per cent of the total number of employees; otherwise, the employer has to contribute approximately THB480 to the Skills Development Fund per head per year for the number of untrained employees. It is estimated that since 2005, training has been given to over 3 million workers annually⁴⁷ (Office of the High Commissioner for Human Rights [OHCHR], 2011), and it is expected that this scheme will be further expanded to cover business enterprises of all sizes nationwide.

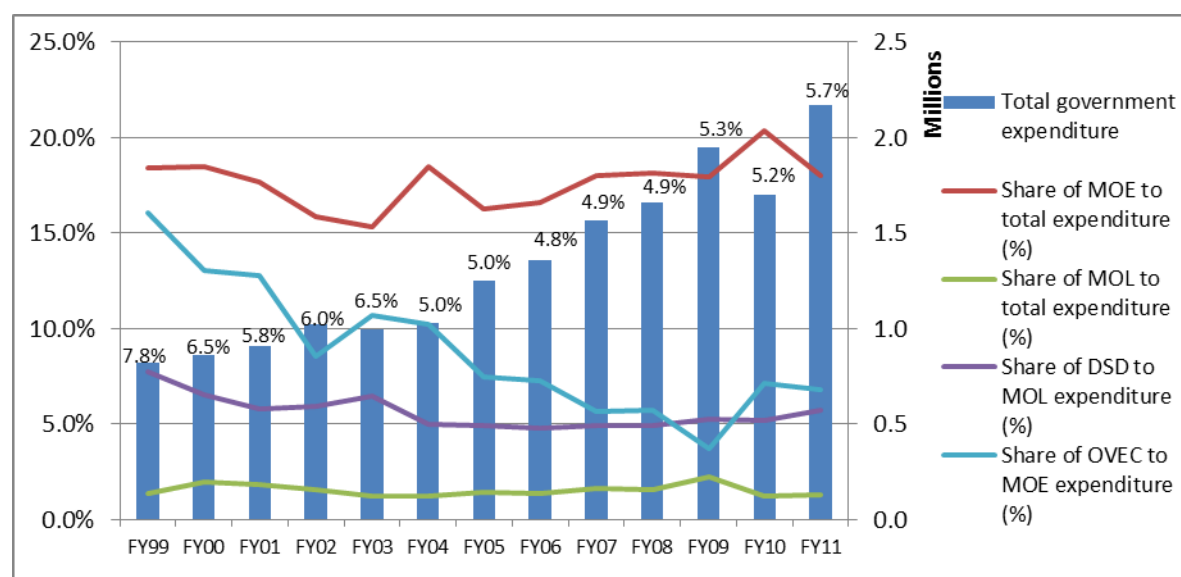
The government's annual training budget is allocated to a number of ministries that undertake TVET. The OVEC is the main receiver of government funds, receiving THB21,548.6 million in 2012; the DSD is another major receiver, but with much smaller share, of THB2,009.6 million in the same year.

The government's budget allocation to the OVEC has shown a significant decrease over the past decade, from 16.1 per cent of total MOE expenditure in 1999 to 6.8 per cent in 2011; while the overall budget allocation to the MOE, despite mild fluctuation between 15.3 per cent and 20.4 per cent, has been maintained at around 17.5 per cent of total government expenditure.

The budget allocation to the DSD, on the other hand, has maintained a comparatively stable rate over the past decade. The share of DSD to MOL expenditure was 7.8 per cent in 1999 before falling to 6.2 per cent on average from 2000 to 2004. It fell further to 5 per cent on 2005, but has maintained an average of 5.1 per cent since, as shown in figure 18.

⁴⁷ The figure was referred to in the OHCHR report published in 2011.

Figure 18. Budget allocation for the MOL and MOE, 1999–2011



Currently, only public training institutes receive budget allocations through the government, while the private ones offset expenditure through cost-recovery mechanisms – which usually means the students’ education costs. Student fees cover tuition fees and general programme fees such as school activities, union costs, and study tours. Total student tuition fees were from THB4,900 to THB11,900 per head per year, depending on the subject; and the general programme cost is around THB4,310 per year.

Apart from the government budget allocations and student fees, the government has also stipulated a series of incentive policies to encourage the private sector to be involved in, and to contribute to, TVET. For instance, a tax policy similar to the Skills Development Fund under the MOL is to encourage private-sector establishments to donate cash or in-kind to vocational institutions, with the reward of 200 per cent deduction of taxes. Other incentives include:

- assistance from the DSD in providing training for trainers, skills standard testing providers, supervisors, and others, as well as on curriculum and equipment development;
- consultation service from the DSD on skills development activities;
- other privileges indicated in the ministerial regulation;
- exemption on import duty and VAT for tools and machinery brought into the country for training purposes; and
- deduction on utility charges for electricity and water, up to twice the amount of the training expenses.

Box 2 Funding resources

Public units:

- OVEC budget.
- Other government agencies.

Private units:

- Fees from the trainees.
- Non-governmental organizations.
- Enterprises.
- Self-financing.

3.3 TVET trends

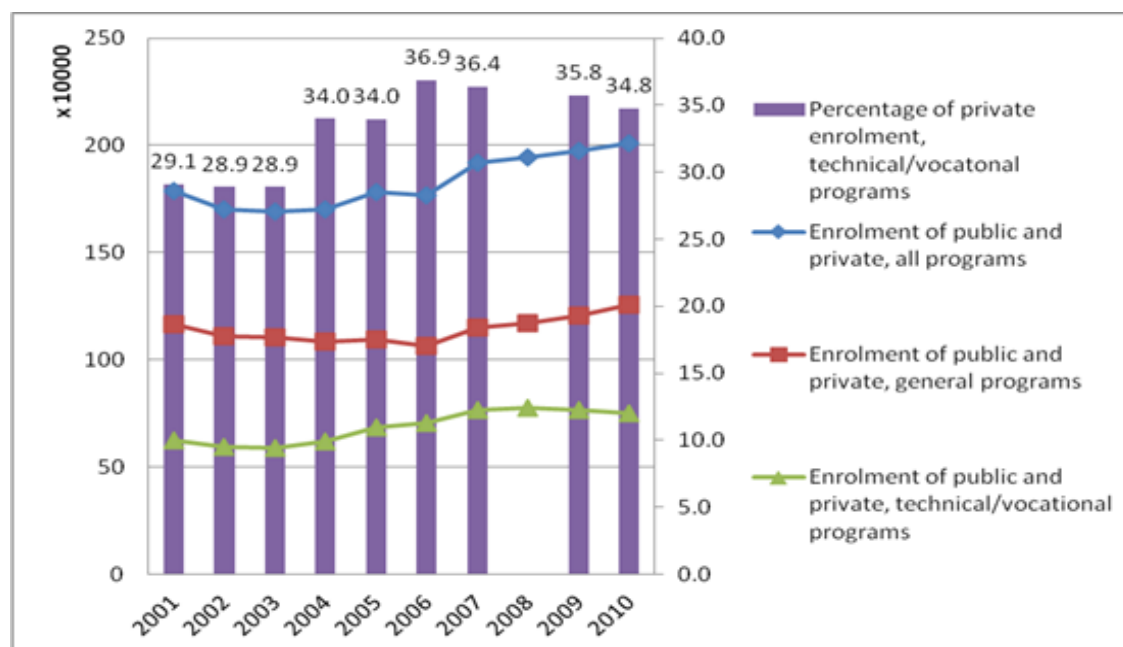
The number of public TVET institutes under the OVEC has not shown any obvious change since a sharp increase in 1997 – remaining in the range of 400 to 420 – while private TVET institutes have increased in number since 2005. In 1995, there were 280 public vocational institutes nationwide; that number sharply increased to 413 in 1997. The number remained almost the same until 2005, when it fell to 408; but in 2009, it increased again to 415.

For the number of private vocational schools, there were no data found on the number before 2005; in 2005 there were 401 private vocational schools, while in 2009 the number was 418, a 4.2 per cent increase over four years.

The number of upper-secondary students enrolled in TVET programmes in public technical or vocational schools kept increasing until 2007, before it started to fall. A similar trend is shown in the number of students enrolled in private schools. In 2001, as shown in figure 19, enrolment in the upper-secondary technical and vocational track (both public and private) went from 623,031 to 752,813, indicating an overall 20.8 per cent increase between 2001 and 2010, exceeding the growth of the total upper-secondary enrolment by 8.4 per cent. Meanwhile, the ratio of vocational and technical enrolment to total enrolment went from 34.9 per cent in 2001 to a peak ratio of 39.9 per cent in 2008; it then dropped slightly to 37.5 per cent in 2010.

Similarly, the percentage of private enrolment to the total technical and vocational programmes climbed from 29.1 per cent in 2001 to 36.9 per cent in 2006, indicating an upward trend in more students accepting private technical and vocational programmes; that number fell slightly to 34.8 per cent in 2010.

Figure 19. Enrolment at upper-secondary level, by type of programme, 2001–10



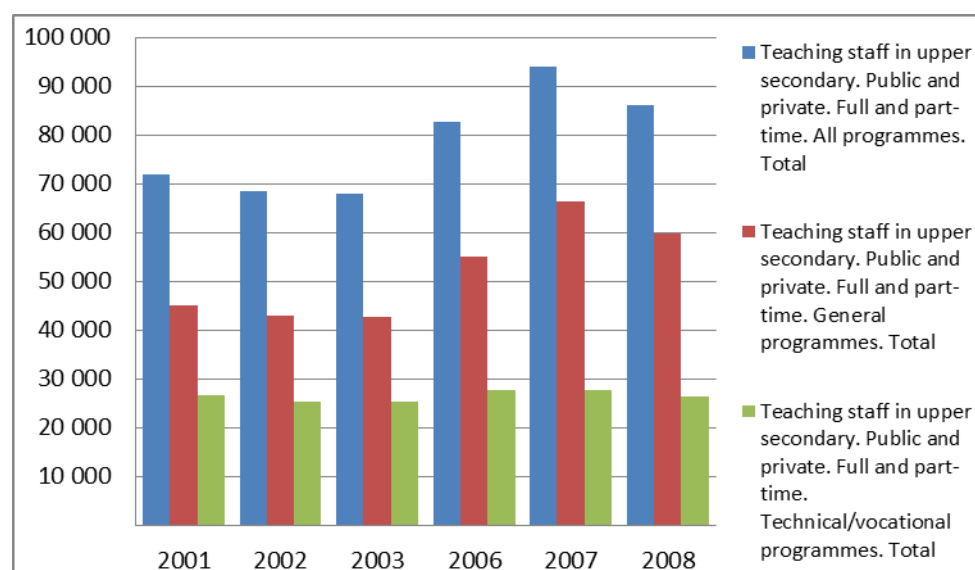
Source: World Bank data.

Note: the percentage of private enrolment in 2008 is absent from the World Bank data.

The number of students in post-secondary TVET (public schools under the OVEC) has shown an overall upward trend according to the data available from 2006 to 2011. The total number in 2006 was 207,845, while in 2010 it was 224,563, showing an 8.0 per cent increase, although it dropped slightly to 216,446 in 2011.

Contrary to the increasing trend in TVET student enrolment at upper-secondary level, the number of teaching staff was almost stagnant. There were 26,752 teachers in the technical and vocational track in 2001. This figure reached 27,796 in 2007, a 3.9 per cent increase only, while the overall student enrolment rate was 20.8 per cent (as shown previously) over the same period. In the post-secondary level, on the other hand, the number of certified teachers experienced fluctuation. The number had decreased moderately by 19.2 per cent from 684 in 2006 to 553 in 2008, before it soared to 820 in 2009, a 48.3 per cent increase. However, it decreased to 805 in 2010, and fell further to 705 in 2011, almost the same level as 2006, as shown in figure 20 and table 8. The output of skills training under the DSD is shown in table 9.

Figure 20. Teaching staff distribution, upper-secondary level, by programme, 2001–03, 2006–08



Source: World Bank.

Table 8. Number of students and teachers in higher vocational education, 2006–11

Level of education	2006	2007	2008	2009	2010	2011
Higher vocational certificate	207 845	210 866	209 324	224 277	224 563	216 446
Higher vocational 1st year	367	328	126	286	99	109
Higher vocational 2nd year	317	274	427	534	701	596
Higher vocational 3rd year	0	17	0	0	5	0
Higher technical certificate teachers	684	619	553	820	805	705

Source: OVEC.

Table 9. Output of skills training under the DSD

Activity	2006	2007	2008	2010	2011	2012
Training for increasing job opportunities	65 755	71 456	73 960	78 070	80 459	41 346
2. Training/ promotion of entrepreneurship	9 036	7 441	8 949	7 389	7 425	6 517
3. Pre- employment training	14 817	15 658	16 062	13 768	12 762	12 360
4. Upgrading training	122 009	160 103	162 760	131 828	130 790	117 517
5. Skills standard testing	40 625	48 692	51 945	43,252	43 545	43 214
6. Skills development promotion	890 376	2 979 578	3 883 275	3 880 737	3 864 489	4 015 072

3.4 TVET outcomes

3.4.1 Employment by status

In Thailand, graduates from the TVET system were more likely working as private employees and own-account workers. It is not worthy that there has been an upward trend in TVET graduates taking up unpaid family work. The shares in three main categories – namely, government enterprise employees, government employees, and employers – had been 21.1 per cent, 14.3 per cent, and 11.8 per cent respectively in 2007, yet all three experienced a slight drop in 2011 to 20.4 per cent, 12.4 per cent, and 10.7 per cent respectively. The employment proportion of private employees, own-account workers, and unpaid family workers increased slightly, as shown in table 10.

However, the overall distribution of employment by status suggests that nearly half of the graduates with TVET certificates have been working as government employees or employers, while a much smaller proportion of those with TVET certificates have been working as private employees (9.9 per cent in 2011), as own-account workers (5.1 per cent), and unpaid family workers (5.3 per cent), which are all considered as vulnerable employment.

Table 10. Employment status of TVET graduates, 2007 and 2011

	2007 (%)	2011 (%)
Employers	5.0	3.2
Own-account workers	17.7	21.2
Unpaid family workers	13.8	16.5
Government employees	15.8	14.0
Government enterprise employees	2.8	2.4
Private employees	44.7	42.6
Members of producers' cooperatives	0.1	0.1
Total	7.0	7.6

Source: LFS, micro database, NSO.

3.4.2 Employment by occupation and by sector

In general, the services sector has been the largest sector for employing TVET graduates. Two major subsectors absorb more TVET graduates than others: wholesale and retail trades, and repair of vehicles and personal and household goods; and hotels and restaurants.

According to the LFS in 2007 and 2011 – as shown in table 11 and table 12 – TVET graduates occupied 11.7 per cent and 12.8 per cent respectively of the total number employed in the wholesale and retail trade, and repair of vehicles and personal and household goods sector. The ratios were 9.2 per cent and 8.2 per cent for 2007 and 2011 respectively in the hotels and restaurants subsector. In other services subsectors, TVET graduates counted for 10.5 per cent and 10.3 per cent respectively of the total number of employed.

TVET employment in industry sector was comparatively smaller, in 2007, 10.3 per cent out of total employed persons in this sector was TVET graduates, the proportion increased slightly to 11.5 per cent in 2011. On the other hand, only 2.7 per cent out of total employed persons in agriculture sector (within which hunting, forestry and fishing were also counted) were TVET certificate holders in 2007, a minor increase from 2.0 per cent in 2007.

Table 11. Ratio of TVET employment to total employment by occupation and by sector, 2007

TVET/total employment	Agriculture, hunting, and forestry and fishing	Industry	Wholesale and retail trade, repair of vehicles and personal and household goods	Hotels and restaurants	Other services	Total
Legislator, senior officials, and managers	3.6%	9.2%	11.6%	12.8%	9.2%	9.7%
Professionals	4.4%	4.5%	8.8%	0.0%	2.3%	2.6%
Technicians and associate professionals	28.8%	28.1%	22.7%	16.4%	27.8%	26.9%
Clerks	33.6%	25.6%	32.8%	29.7%	25.0%	26.6%
Service workers, shop and market sales workers	5.5%	15.3%	10.8%	8.6%	14.1%	10.7%
Skilled agricultural and fishery workers	1.9%	0.2%	0.0%	0.9%	1.5%	1.9%
Craftsmen and related trades workers	33.8%	8.3%	18.4%	47.1%	6.6%	9.6%
Plant and machine operators and assemblers	1.5%	8.8%	5.5%	8.2%	7.5%	8.0%
Elementary occupations	0.7%	2.9%	3.3%	4.3%	3.0%	2.6%
Workers not included elsewhere		23.2%	16.9%	0.0%	11.5%	15.8%
Total	2.0%	10.3%	11.7%	9.2%	10.5%	7.0%

Source: LFS, micro database, NSO.

Table 12. Ratio of TVET employment to total employment by occupation and by sector, 2011

TVET/total employment	Agriculture, hunting and forestry and fishing	Industry	Wholesale and retail trade, repair of vehicles and personal and household goods	Hotels and restaurants	Other services	Total
Legislator, senior officials, and managers	7.8%	10.7%	11.9%	23.7%	9.2%	11.3%
Professionals	22.7%	7.1%	4.5%	16.2%	3.6%	4.0%
Technicians and associate professionals	17.5%	29.6%	24.4%	35.6%	20.4%	23.1%
Clerks	27.0%	35.6%	25.5%	24.2%	24.4%	26.4%
Service workers, shop and market sales workers	10.7%	8.7%	11.9%	7.6%	14.2%	10.8%
Skilled agricultural and fishery workers	2.7%	0.0%	0.7%	0.4%	3.6%	2.7%
Craftsmen and related trades workers	24.4%	10.1%	22.0%	43.9%	7.8%	11.4%
Plant and machine operators and assemblers	4.2%	10.4%	8.0%	3.7%	10.3%	10.0%
Elementary occupations	1.0%	2.5%	5.3%	4.1%	4.1%	3.5%
Workers not included elsewhere		10.9%	0.0%		12.6%	11.0%
Total	2.7%	11.5%	12.8%	8.2%	10.3%	7.6%

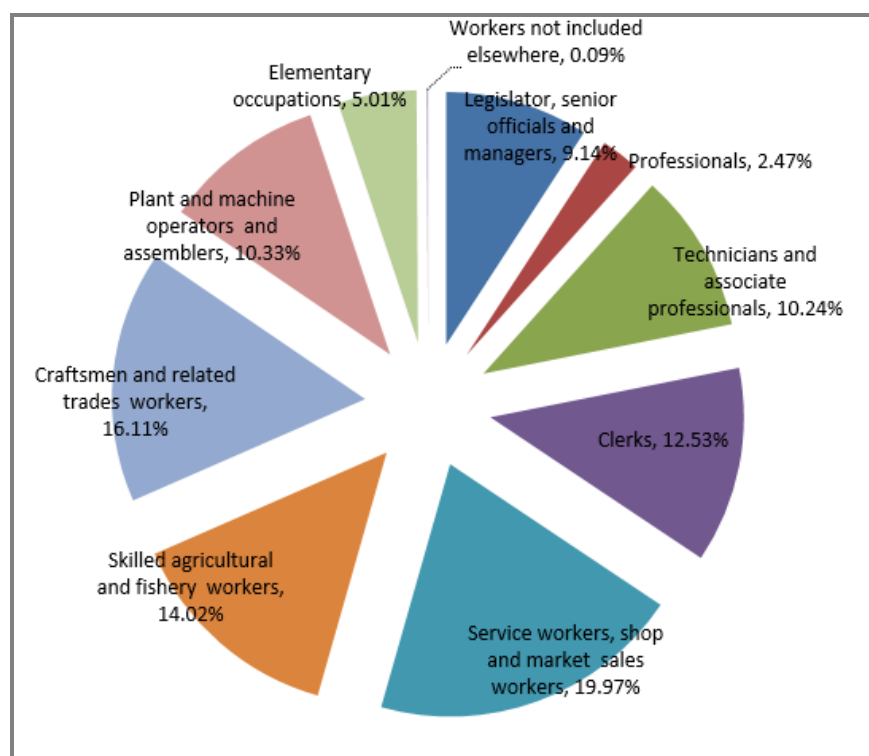
Source: LFS, micro database, NSO.

Looking at the ratio of employees from TVET education to the total number of employees in each occupation, certain occupations – namely technicians and associate professionals, clerks, and service workers, shop and market sales workers – were found to absorb more employees who graduated from TVET than other occupations. In 2007, of the total number of technicians and associate professionals, 26.9 per cent were TVET graduates, and 26.6 per cent of the clerks were TVET graduates. The ratios in these occupations dropped slightly in 2011 to 23.1 per cent and 26.4 per cent respectively, as shown in table 12, yet they still represented the top two occupations in which TVET graduates were found than in others.

Following these occupations, service workers, shop and market sales workers, as well as craftsmen and related trade workers also included considerably more TVET graduates, with ratios of 10.7 per cent and 9.6 per cent respectively in 2007, rising slightly to 10.8 per cent and 11.4 per cent in 2011.

In terms of the employment distribution of TVET graduates by occupation, 19.97 per cent of employees from TVET became service workers, shop and market sales workers, 16.11 per cent became craftsmen and related trade workers, and 14.02 per cent became skilled agricultural and fishery workers, according to the available data in 2011. A considerable number of employees from TVET were found among clerks (12.53 per cent), plant and machine operators and assemblers (10.33 per cent), as well as technicians and associated professionals (10.24 per cent). The distribution showed positive outcomes and a fairly tight correlation between TVET provisions and employment. Yet it is worth noting that TVET does not necessarily lead to employment in sectors such as skilled professionals, as shown in figure 21.

Figure 21. Employment distribution among TVET graduates, by occupation, 2011



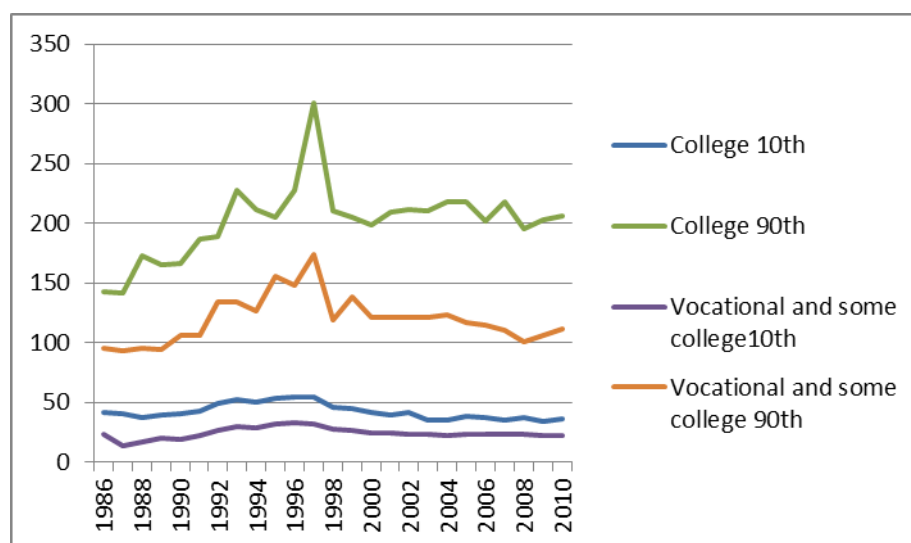
3.4.3 Wage levels of TVET graduates

It is evident that the wage level of bachelor's degree holders is overall higher than that of TVET certificate holders and diploma holders. Looking at the inflation-adjusted (real) hourly wages of the two groups in the period between 1986 and 2010 – college graduates and TVET graduates and workers with some college education – it is apparent that college graduates earned higher wages regardless of the percentiles. Yet the disparity between the two groups is larger at the bottom of the distribution (the 90th percentile) than at the top (the tenth percentile).

At the top of the distribution (the 90th percentile), the disparity has shown a fluctuating, upward trend – the smallest disparity occurred in 1995 when the wages of college graduates was 31.6 per cent higher than that of TVET graduates and workers with some colleges education, while the largest disparity occurred in 2007, with a ratio of 97.8 per cent.

It is worth noting that the disparity ratio had been especially high at an average of 88.2 per cent in the five years between 2006 and 2010. At the bottom level (the tenth percentile), on the other hand, despite the higher disparity – on average, 77.5 per cent – the trend fluctuated less compared to the top of the distribution, and decreased to 56.5 per cent during the same period between 2006 and 2010; in other words, the wages gap between the two groups was narrower at the bottom of the distribution, as shown in figure 22.

Figure 22. Comparison of wages between college graduates and TVET graduates/workers, 1986–2010 ⁴⁸



Broken down into occupations, wages were especially disparate among craftsmen and related trade workers, and skilled agricultural and fishery workers. In 2007, the ratio of the wage of skilled agricultural and fishery workers holding a bachelor's degree to the total average wage in the sector was 2.3, while the ratio was only 1.2 comparing the wage of TVET certificate holders to the total average wage in the same occupation. The disparity was compressed slightly in 2011, the ratio became 2.2 for bachelor's degree holders and 1.3 for TVET certificate holders, yet the gap is still vast (figures 23 and 24.)

Comparatively, the wage level of TVET certificate holders has exceeded that of diploma holders in a range of occupations in recent years. In comparison with diploma holders, TVET certificate holders received better wages in 2007 in occupations such as plant and machine operators and assemblers, craftsmen, skilled agricultural and fishery workers, and service workers and market sales workers, which require more technical skills. Craftsmen and related trade workers with a TVET certificate, for instance, earned more than double (1.4 to 0.6) than diploma holders.

On the other hand, for elementary occupations, clerks, technicians and associate professionals, professionals, and legislators, senior officials, and managers, TVET certificate holders were in the opposite situation. There were significant disparities especially among legislators, senior officials, and managers, in which the wage level of TVET certificate holders was at average level, while that of diploma holders was 50 per cent above the average, as shown in figure 23 and figure 24. However, since 2007, the wage level of TVET certificate holders has surpassed that of diploma holders in many occupations.

For clerks, technicians, and associated professionals, professionals and legislators, senior officials, and managers, the wage level of TVET certificate holders surpassed that of diploma holders by 10–20 per cent. The only occupation in which the wage level of TVET certificate holders was exceeded by diploma holders, in comparison with that of 2007, was for service workers, shop and market sales workers (figure 23 and figure 24).

⁴⁸ The wages are presented in log scale and they have been inflation-adjusted. The constant-composition (for workers having the mean level of experience and living in the "mean" region of residence) wages was calculated at the 10th 50th and 90th percentiles for post-secondary vocational and some college schooling group. The base year is 1986.

Overall, the wage ratio of TVET certificate holders to total average wages has remained relatively stable, with minor fluctuations in the period between 2007 and 2011. It fell slightly for legislators, senior officials, and managers (30 per cent), and elementary occupations (24 per cent), while the real wages in these occupations fell below the average for TVET certificate holders. On the contrary, there was a slight increase in the wage levels of skilled agricultural and fishery workers (11 per cent), and plant and machine operators and assemblers (4 per cent), as shown in figure 25.

Figure 23. Wage level by education level, 2007

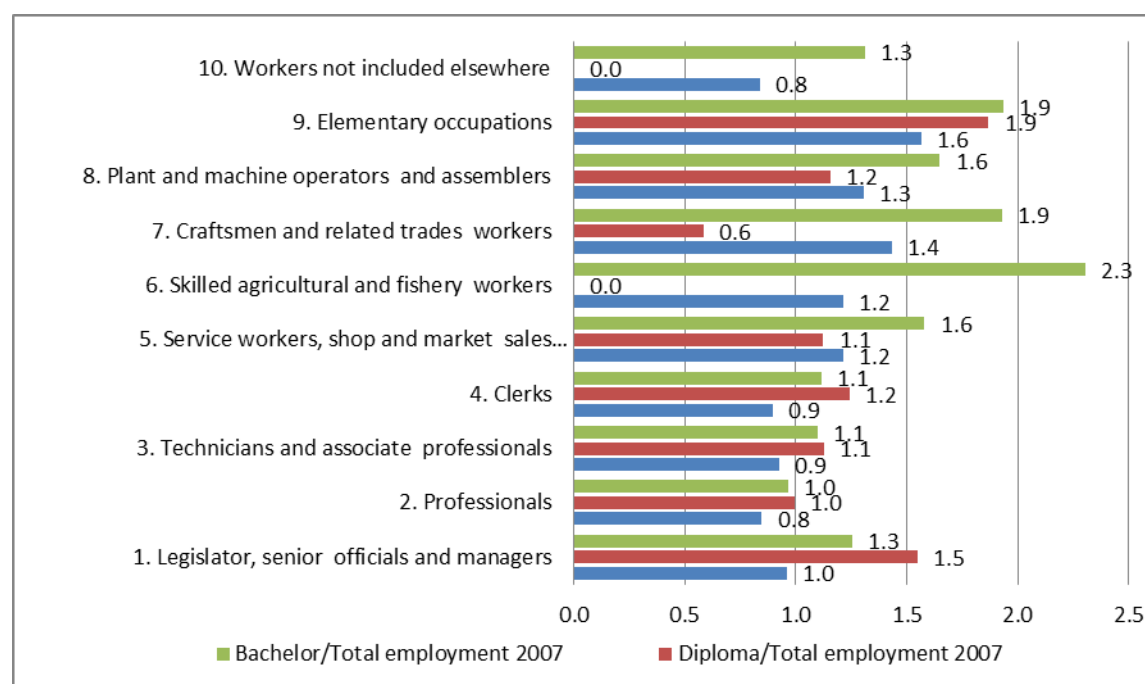


Figure 24. Wage level by education level, 2011

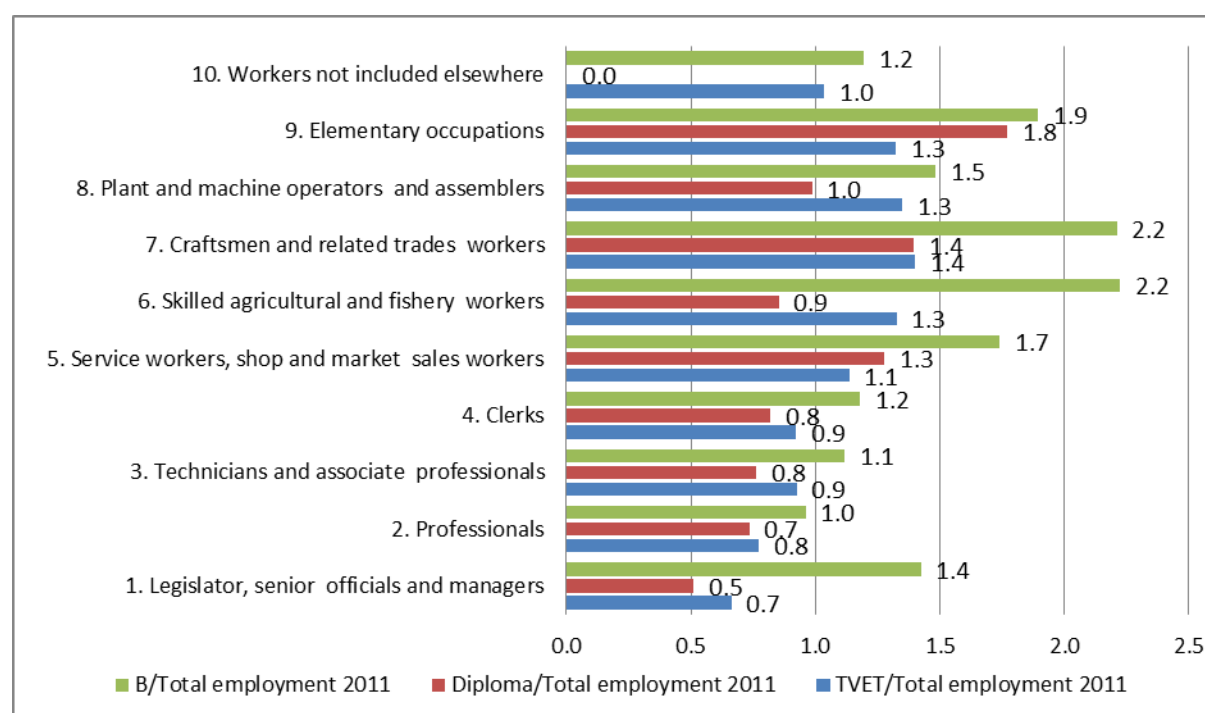
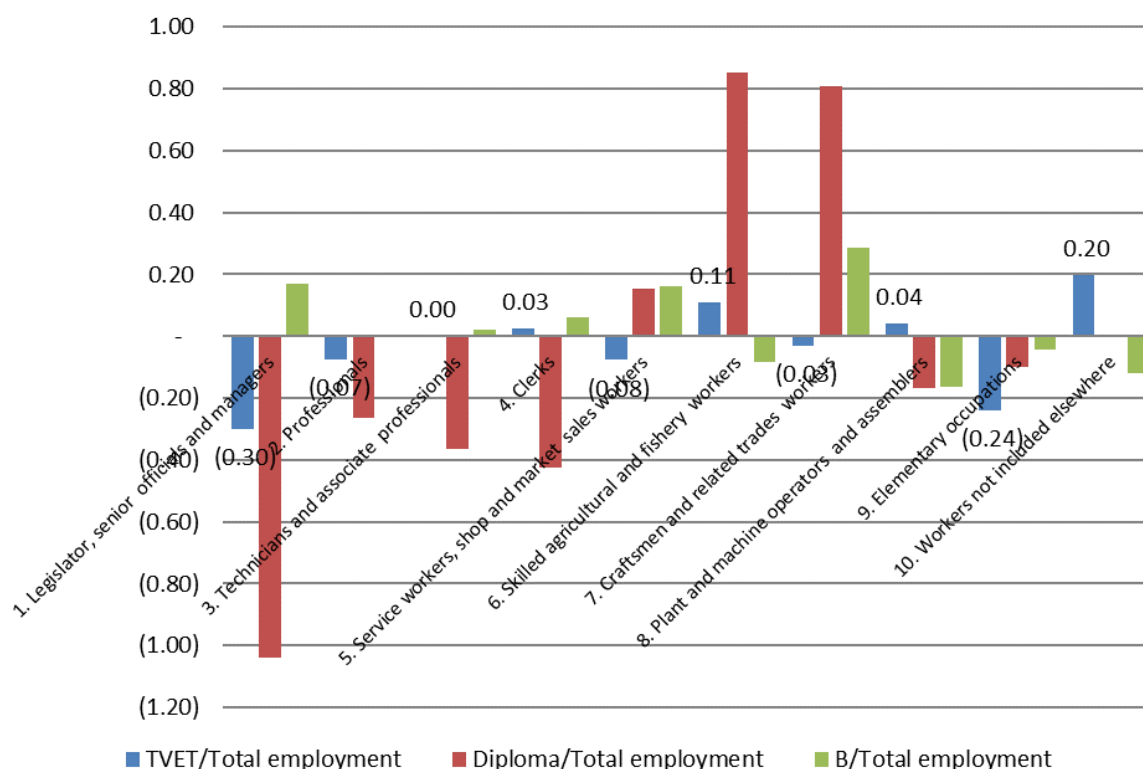


Figure 25. Wage level change (per cent) by education and occupation, 2007 and 2011



3.5 National policy framework for TVET

Both the MOE and MOL have laws to stipulate and support their responsibilities towards the growth and competitiveness of public and private vocational education. Thailand's technical and vocational training is primarily handled by these two ministries; the MOE mostly deals with formal vocational education and training, or school-based education via the OVEC, while the MOL deals with skills training, re-training, and upgrading in accordance with the skills qualification standards via the DSD. The Constitution and National Education Act, and the Vocational Education Act, stipulate the responsibilities of the MOE on vocational educational education.

The 1997 Constitution and 1999 National Education Act (and its amendments, 2002)

At present, the framework of formal education in Thailand is based on the 1997 Constitution and the 1999 National Education Act. The 1997 Constitution, in Section 81, mandates the government's role in "improving education to be in harmony with economic and social change." The National Education Act, B.E. 2542 (1999), and its amendment, B.E. 2545 (2002), are the fundamental and more specific laws for the administration and provision of education and training, in which Section 34 stipulates the responsibility of the OVEC as "proposing policies, development plans, standards, and core curricula for all levels of vocational education, which meet the needs specified in the NESDP and the National Education Plan; promoting coordination of provision of vocational education by the state and the private sector; mobilization of resources; monitoring; inspection; and evaluation of the provision of vocational education, taking into consideration the quality and professional excellence." The law also stipulates that vocational education and occupational training shall be provided in accordance with the Vocational Education Act and relevant laws; however, it also states immediate action on amending the Vocational Education Act.

The 2008 Vocational Education Act

The 2008 Vocational Education Act aims at managing vocational education in accordance with the NESDP and the National Education Plan, to develop manpower skills, techniques, and technology levels, and upgrade national vocational education in line with market demand. The law provides for structures and accountability, and management and financial procedures, in order that each vocational education committee can meet, in as effective and efficient a manner as possible, the needs of vocational education in the area that it serves.

The 2002–16 National Education Plan

As mandated by Section 33 of the 1999 National Education Act, a 15-year National Education Plan from 2002 to 2016 was prepared in place of the former National Scheme of Education. It serves as a framework for formulating the development plans pertaining to basic education, vocational education, higher education, religion, art, and culture. It also provides guidelines for formulating operational plans for educational service areas and educational institutes. The National Education Plan represents a major reform plan, bringing together the relevant provisions of the Constitution (Puntrik Smiti).

Skills Development Promotion Act

This law is an amendment of the Occupational Training Promotion Act, B.E. 2537 (1994). It mandated the DSD to become directly responsible for promoting skills standards development by establishing the National Skills Standard Testing programme, with the aim of extending employment opportunities for job-seekers, promoting career paths for workers throughout the country, and enhancing the skills of the Thai labour force to achieve international standards. It further stipulates that all manufacturing firms that employ more than 100 workers must provide training to at least 50 per cent of the workforce, or else pay a subsidy to the Skills Development Fund. Training courses are eligible for tax deduction incentives, while manufacturers have the right to import foreign trainers and experts, including from their parent company in cases where the necessary expertise is hard to find in Thailand. Other incentives include tax allowances for water, electricity, and training equipment, as well as exemption from certain other legal requirements (DSD, 2007). Three skills levels have been established – basic, intermediate, and advanced – and testing involves both theoretical and practical aspects. An estimated 1.5 million to 2 million workers are trained in this way annually.

In addition, Thailand put the Finance Ministry's Decree on Tax Reduction for Training Cost into effect in 2005. This decree provides tax incentives for enterprises that outlay expenditures on training their own workers. This measure has not only benefitted enterprises by increasing their training activities, but has been a key mechanism in helping workers to acquire skills and competencies they need in the workplace.

Other responsibilities of the DSD include the development of training personnel, national and provincial skills development coordination, public- and private-sector coordination, skills development promotion for entrepreneurs, and international cooperation schemes. These are quite wide-ranging and resource-intensive activities. For example, international cooperation schemes include technical cooperation at the global level, with countries such as Japan, the Republic of Korea, Germany, and Australia, and the provision of various fellowships, training scholarships, expert exchanges, and the transfer of knowledge. At the regional level, the DSD has also been involved since 2000 with establishing and supporting the Cambodian-Thai Skills Development Centre. Thai staff members from the DSD have been involved in providing administrative and technical support to this centre, and have been involved in transferring knowledge and competencies from Thailand to Cambodia. These activities require considerable expenditure of resources

3.6 Quality of TVET

3.6.1 Courses and curriculum

There are three main standards that the OVEC applies to measure TVET quality: Occupational Standard or Competency Standard, approaching the Vocational Qualification (VQ); the General Vocational Education Standard; and the Institute Standard, approaching the quality of colleges under the procedure of quality assurance.

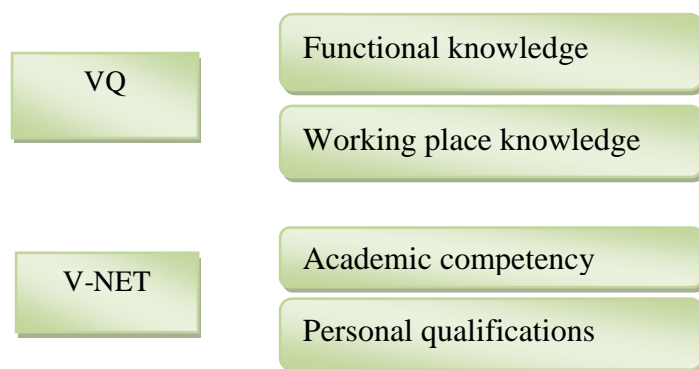
The competency-based curriculum was developed from the Competency Standard, adding life skills and general academic background to become the General Vocational Education Standard (Sirirak Ratchusanti, 2009). It is revised on a regular basis, every three to five years, in line with the NESDP, to meet vocational education standards. In order to adjust the curriculum to be more competency-based and market-oriented, the OVEC has been trying to closely collaborate with the TVET institutions and the private sector. Therefore, the curriculum aim and requirement is that at least one semester provides on-the-job training. The problem, however, is that not all students can be sent for on-the-job training because it is still not a mandate for all of the institutes.

When students complete all the courses at upper-secondary level, they need to take exit tests to either continue their study or go to work. There are two types of tests for graduating TVET students: the Vocational Qualification Test (VQ) and the Vocational National Education Test (V-NET), as shown in figure 26. The V-NET, mostly exam the personal qualification and academic competency such as reading and writing, is an optional test in written form for every student; while the VQ test, organized by each specific industry sector, is set to exam the students' knowledge in the sector and their readiness for taking up technical and vocational work in that sector.

When the students finish the course, they have to be tested. This procedure represents internal quality assurance. Every student has to pass the VQ test in order to obtain the certificate, but if the VQ test is absent in a certain sector, the students can choose the skills competency standards test for that sector, from the DSD. It has been reported that students are more serious about, and accordingly perform much better in, VQ than V-NET, as the latter is rather an indicator of the quality of teachers and schools than a necessity for students' graduation.

Currently, the OVEC is planning to modify the curricula in lower and higher vocational education to be compatible with bachelor's degree courses. The modified curricula have to comply with the OVEC's standards within the Association of South-East Asian Nations (ASEAN). Modification of the curricula will cover all systems of teaching and learning at vocational level, to accommodate courses at the vocational colleges.

Figure 26. Tests in formal TVET at upper-secondary level



The courses provided by the other arm of the TVET system – the DSD – are divided into three categories: pre-employment training, re-training, and skills upgrading.

Pre-employment training aims at developing foundation knowledge, skills, and good attitude, as required by the labour market, as shown in figure 26. Training programmes include construction, painting, mechanics, welding, automobile maintenance, electronics, computer use, and industrial services (Chantachoknimit, 2004a). These programmes last between two months and ten months, with 20 per cent of the test based on theory and the remaining 80 per cent on practice.

Upgrading training aims at enhancing the knowledge and skills of existing workers to meet the rapid changes and demands in the labour market, and for further career development. Training courses last a minimum of 12 hours and cover similar areas to basic skills training.

Re-training, on the other hand, aims at enabling workers to learn new skills and work practices, to switch to new professions and career paths. Programmes are similar to upgrading training, but more extensive in length (Chantachoknimit, 2004b). If a trainee completes up to 225 hours of training courses, his or her credit can be transferred into the formal vocational training system. The DSD also plays an important role in giving advice and providing trainers for the private sector to conduct workplace training, while the private sector gives feedback on the curriculum and market needs.

3.6.2 Thai vocational qualifications and skills standards

In 2011, the OVEC was tasked with developing the Thailand Vocational Qualifications (TVQ), based upon industrial practices and needs. This was announced with the Royal Decree on the Establishment of the Thailand Vocational Qualifications Institute (TVQI). This organization is responsible for the development of vocational qualifications based on occupational competency standards; assessment and validation of workers' experience; and organization of training to bridge the skills gaps (both at institutes and in the workplace) in cooperation with educational institutions. Vocational qualifications will be interrelated with vocational education qualifications, so as to promote continuous or lifelong vocational education. The system covers desirable characteristics including integrity, professional ethics, personality, and cognitive skills. Core competencies include communications, information and communications technology (ICT) literacy, teamwork skills, learning skills, and practical skills. Professional competencies entail the ability to perform specific functions and tasks in the workplace. For instance, as per the TVQ, those who achieve Level 2 or 3 of the TVQ (equivalent to upper-secondary education or a TVET certificate) must be able to demonstrate knowledge in theoretical concepts related to work, English-language ability, fundamental ICT literacy, ability to work independently, and problem solving skills. Agencies involved in the establishment of vocational qualifications include the MOE, the Ministry of Industry, the MOL, the NESDB, the Federation of Thai Industries, the Thai Chamber of Commerce, and the German-Thai Institute.

The structure of the draft TVQ has seven levels. Levels 1 and 2 relate to lower-secondary education with vocational training, and upper-secondary with vocational training. Level 3 is a vocational certificate. The components of each level consist of knowledge, skills, application of skills and knowledge, and required attributes. The upper levels include technical diplomas and degrees, as shown in figure 27.

Linkages between the levels of competency and educational qualifications include the required mechanisms for assessment, validation, testing, comparison, and fulfilment by additional training, education, or workplace learning.

Figure 27. Draft vocational qualifications

Levels	Training/comparison/ validation of experiences	Learning outcomes/ qualifications
7	← - - - - - →	Doctoral
6	← - - - - - →	Master's
5	← - - - - - →	Bachelor's
4	← - - - - - →	Diploma (technical diploma)
3	← - - - - - →	Certificate 3 (vocational certificate)
2	← - - - - - →	Certificate 2 (upper-secondary & vocational training)
1	← - - - - - →	Certificate 1 (Lower-secondary & vocational training)

When students graduate from TVET institutions, they are required to take a VQ test or the equivalent, in order to take up employment. The tests are regarded as an equal and inclusive way of measuring the skills of graduates; the equivalent tests are usually skills standards tests under the MOL. Students are encouraged to take the MOL tests because it has developed standards in association with the private sector, specifically to focus on the needs of businesses, using a demand-driven approach. The skills standards are technical regulations classified into three levels:

- Level 1 refers to those who have the skills and knowledge to perform tasks that require a supervisor to give advice or help making important decisions when necessary.
- Level 2 refers to those who have the knowledge and skills to use equipment well. With work experience, those in Level 2 can provide guidance to subordinates.
- Level 3 refers to those with high skill levels, who can analyse or diagnose in the decision-making process and the learning process, and can help to develop competent subordinates. Also, it refers to those who can make particular decisions and choose the right approach in decision-making.⁴⁹

3.6.3 National Qualifications Framework

In order to prepare and enhance Thailand's labour force, there is an urgent need to increase skills and qualifications, and the Second Round Educational Reform Plan (2009-18) reflects this need by approving the establishment of the National Qualifications Framework (NQF) in 2010 as a tool and mechanism for strengthening knowledge, skills, and competency, as required by the labour market (Siripan Choomnoom, 2011). The aim is to ensure consistency in both standards and titles in higher

⁴⁹ The categories of the skills standards refer to the division of skills standards setting, DSD; at <http://home.dsd.go.th/standard/dsss/index.html>.

education, and to provide employees with a clear career path in preparation for the free flow of labour within the ASEAN community.

Under this backdrop, Thailand has been developing its NQF, which will be used as a framework for the transfer of credit institutes in the country. The NQF is expected to have nine levels covering all levels of learning in secondary education, further education, TVET, and higher education to improve the quality and standards of education at all levels, and ensure the learning outcomes of graduates.

When complete, the framework will establish not only skills standards but also the procedures for testing and certifying trainees. The framework will be supported by an organization with a mandate to develop procedures for accrediting training providers. This will build up a register of training providers and their specialties. The system will also monitor and evaluate the outcomes of accredited training providers in terms of quality, relevance, and efficiency.

3.6.4 Quality assurance and accreditation

The National Education Act, B.E. 2542 (1999) and its amendments (the Second National Education Act, B.E. 2545 [2002], and Chapter 6 of the Educational Standards and Quality Assurance Section), stipulate the system of educational quality assurance and accreditation, covering both internal and external quality assurance.

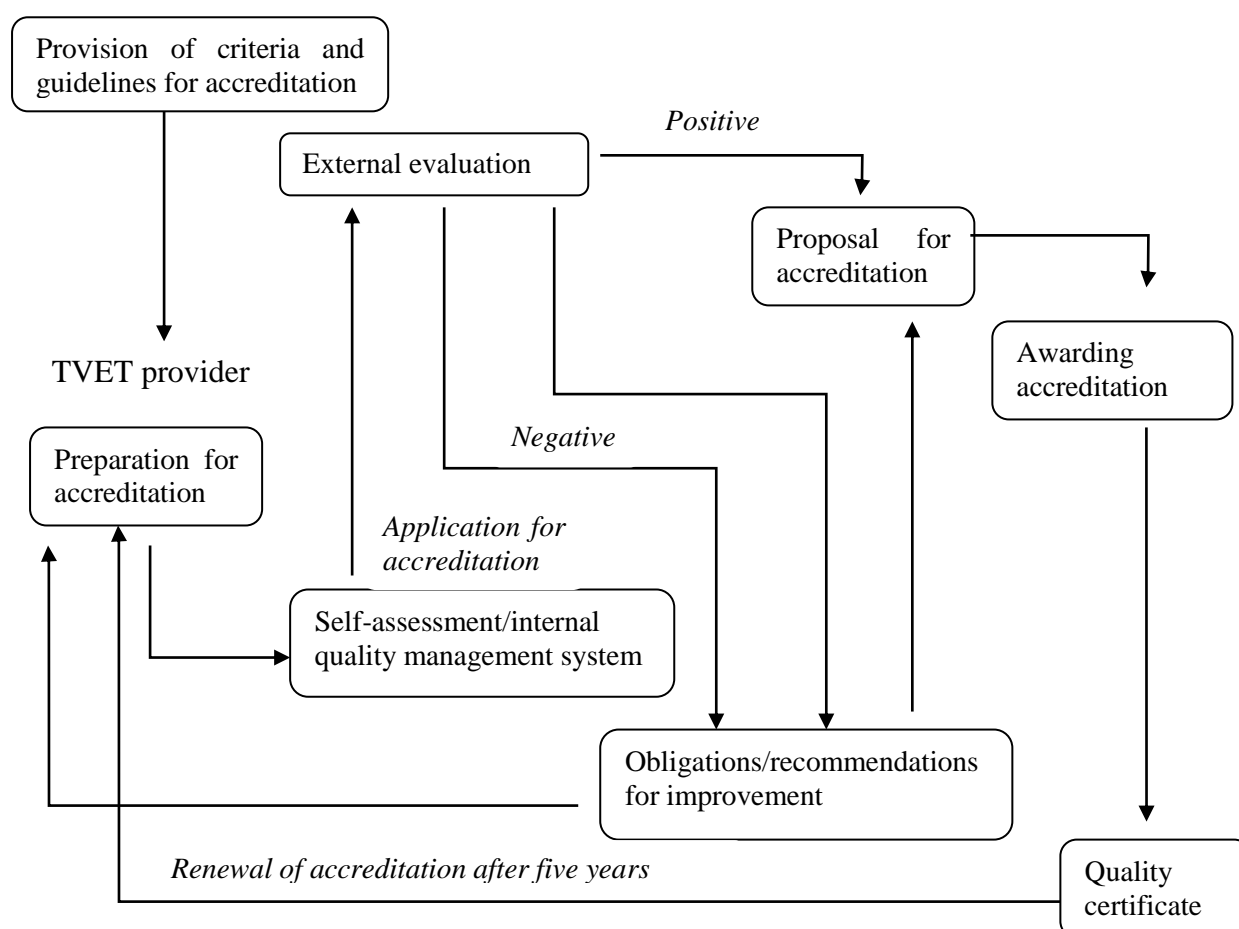
Internal quality assurance is the responsibility of the education institute in question, while the Office of National Education Standards and Quality Assessment (ONESQA) is responsible for external quality assurance. This independent public organization, set up in 2000, is not part of the MOE. The ONESQA is also responsible for developing the criteria and methods of external quality assessment of educational institutes under the supervision of local administration organizations, as well as submitting reports to local administration organizations (UNESCO, 2011).

In general, after a TVET provider (public or private) has submitted an application for accreditation to the relevant body, an external evaluation follows, as shown in figure 28. Self-assessment reports are written by the proposed provider, which will be used as a starting point for the external evaluation. The evaluation, in many cases, will be delegated to a group of experts in the field of training. If the result of the evaluation is negative, accreditation will be denied, and the provider will have to prepare and apply again, after having improved its organizational structures and the quality of its training. The decision of the evaluating body will normally include advice and recommendations on necessary changes; in some serious cases, an external body, linked to the accreditation body, may offer professional support to the provider in overcoming identified deficits. In other cases, when the result of the external evaluation is critical but not too negative, some additional improvements will be required, which could be of a binding character or, when less serious, consist of recommendations for improvement only. In both cases, the provider will have to demonstrate, in an improvement report, that relevant changes will be made, so that a positive proposal for accreditation can be made by the body charged with carrying out the external evaluation (*ibid.*).

If the evaluation is positive, the proposed provider will be awarded its accreditation, and its organization and TVET programme will receive a quality certificate. This certificate can be used for marketing activities to attract potential customers. It is worth noting that a renewal of the accreditation is necessary after a specified period, normally five years, with a comparatively lighter procedure than the initial accreditation. It is mainly the adequacy of the internal self-assessment or quality management system of the provider that is assessed (*ibid.*).

Figure 28. Accreditation process

Accreditation body
OVEC



The General Vocational Standard Test, carried out by the provincial college committee, measures the student internal quality assurance. The system for quality in vocational education and competitiveness of workers will improve with the national qualification standards and the TVQI. The OVEC provides internal quality assurance covering six standards and 34 indicators for institutes' vocational education standards.

The six standards are: students and graduates, curriculum and teaching resources, student activity development, innovation and research, social services, and leadership. These are the frameworks for colleges to perform and manage themselves, to qualify and be accepted under the internal and external auditing in educational quality assurance system.

3.6.5 TVET trainers and teachers

In Thailand, a bachelor's degree and a teacher's certificate authorized by the Teachers' Council of Thailand are required in order to become a TVET teacher. Under Thailand's New Teacher Scheme, an additional year of on-site training is mandated for teachers before they start teaching in a certain subject like ICT or hospitality. More than 50 per cent of the training is provided by the private sector. However, it has been reported that there is a shortage of qualified teachers in some sectors, including agriculture and fisheries, owing to the poor financial situation in those sectors.

3.7 The role of workers' and employers' organizations in TVET

There has not been much collaboration with workers' or employers' organizations at the policy level, although the OVEC has built relationships with concerned agencies such as the Committee of Thai Industries and the Ministry of Commerce (MOC), for TVET interventions or guidance.

At the institutional level, both the DSD and the OVEC have been actively engaging industrial sectors in a wide range of TVET activities, including curriculum designing, skills training and upgrading, and the establishment of skills standards. Enterprises in a particular industrial sector, and concentrated in certain areas, could form industry clusters and therefore benefit from being served by tailored courses.

Joint committees between the OVEC and industrial clusters are organized under cooperative projects to identify competencies required by each industrial cluster, and to develop career paths. This is an attempt to develop a sense of ownership in TVET, and to encourage industrial clusters to work closely with the OVEC in producing and developing qualified graduates.

Also, the OVEC has tried to expand dual vocational training (DVT), to foster high-skilled graduates who can fit into the labour market directly after school. A good example is from Mercedes-Benz (Thailand) Ltd., which has cooperated with Samut Prakan Technical College to enrol highly qualified students in a degree course for electricians and auto mechanics for Mercedes-Benz cars. The course usually takes about two and a half years to complete. Students are well trained by specialists from Mercedes-Benz (Thailand), and are also entitled to take courses over a period of time at Samut Prakan Technical College. All the students receive wages per day during the training period.

4. Issues and challenges

Despite the many changes that have taken place, and more developments in progress, with the aim of improving TVET in Thailand, this study identifies a number of remaining gaps. This section discusses some primary issues in the scope of policy framework, and the relevance, efficiency, effectiveness, and linkages between the TVET system and the labour market.

4.1 National policy framework and institutional arrangements

There is an apparent and clear lack of coordination among national institutions responsible for TVET. An effective and well-managed national training system is essential for the effective delivery of TVET, but TVET provision in Thailand is undertaken by different ministries, agencies, and organizations, both public and private, with a multiplicity of certification, curricula, and even standards. The various TVET providers do not take into account programme offerings in the broader context, resulting in overlapping courses and institutes, as well as creating confusion for students and employers.

Because the whole TVET system in Thailand is fragmented by separate administrative arrangements, operates at many levels and areas, and has established many different examinations and qualifications, there are many negative consequences – for instance, there are many thousands of university graduates entering the labour market each year who take on entry-level managerial and technical tasks without being qualified to add value to organizations, while graduates with vocational training are sometimes frozen out. This situation has implications for the standardization of training and qualifications, cost-effectiveness, quality assurance, recognition of prior learning, and the further education of TVET graduates.

The current governance structure in the Thai TVET system still lacks effective coordination, sharing of resources, and articulation within the overall system; and it has been argued that establishing a single oversight body could be an option for providing an overview and improving the TVET landscape. Referable international practices can be drawn from the Philippines, where the Technical Education and Skills Development Authority (TESDA) provides relevant, accessible, high-quality, and efficient technical education and skills development in support of the development of high-quality, middle-level manpower that is responsive to, and in accordance with, the Philippine development goals and priorities. Likewise, Australia has undertaken major reforms to establish an authority for the purpose of more efficient delivery of national vocational training, to avoid overlapping and duplication in the TVET management structures and the sharing of supervisory responsibilities by various government bodies and ministries.

Box 3
International experience in TVET policy frameworks

The Philippines

In the Philippines, TVET is fully overseen by the Technical Education and Skills Development Authority (TESDA), which was established through the enactment of the Republic Act No. 7796. The TESDA Act merged the Bureau of Technical and Vocational Education, of the then Department of Education, Culture, and Sports, the National Manpower and Youth Council, and the Apprenticeship Programme of the Department of Labour and Employment. The new body became the national authority for TVET. It is composed of the Board and the Secretariat.

The TESDA Board is the highest TVET policy-making body, composed of at least 13 public and private stakeholders that work together for the benefit of constituents. It is chaired by the secretary of labour and employment, with the secretaries of education and trade and industry as co-chairs. Private-sector representatives come from the employer and industry organizations, national associations of private TVET institutes, and from labour organizations.

The TESDA has had a positive impact on minimizing duplication between ministries, providing national leadership in developing a skilled workforce, and ensuring sufficient provision of skilled workers and technicians at an international standard to meet the needs of enterprises.

Australia

Australia's national TVET system was initiated in 1994, with the establishment of the Australian National Training Authority (NTA). Before this, Australia had eight separate training systems operating independently of each other, and there was no recognition of qualifications between each state and territory.

In 2005, the responsibilities and functions of the Australian NTA were transferred to the Department of Education, Science, and Training, which is responsible for overseeing Australia's TVET system. The Ministerial Council for Vocational and Technical Education leads the national training system. It includes ministers with responsibility for vocational education and training from the Australian state and territory governments, to ensure extensive coordination among the relevant agencies for more coherent policy-making and allocation of public funds.

4.2 Financing TVET

There is lack of resources, mainly funds for upgrading of equipment, curricula, and skills training. Formal TVET education in the country is funded mainly with public resources, which raises the issue of how to procure additional resources to enhance the quality of TVET services. Even with the growing awareness of the role played by skills in the socio-economic development of Thailand, public funding of TVET has remained inadequate over the years.

As discussed earlier, the share of TVET in the total national education budget of the MOE has dropped from 16 per cent to around 7 per cent. As a result, academic infrastructure expansion and upgrading has been slow. The provision of inputs for quality teaching and learning has also not kept pace with training demands. Diversification in the sources of funding is necessary to mobilize additional resources. Direct budget allocations to training authorities and training institutes should be complemented with new funding mechanisms designed to increase accountability, efficiency, and relevance. Additional new mechanisms include performance-based budget allocations, cost-recovery mechanisms with provisions to guarantee access to those who cannot pay, and funding of end-users of training services through competitive training funds.

Currently, in response to the problems, Thailand has introduced skills development funds administrated under the DSD, as a strategy for mobilizing additional resources for financing TVET. These employer contributions are intended for use in financing the “up-skilling” or re-training of employees, the organization of student internships, and the general TVET delivery system; as for the formal TVET system, however, very limited additional resources have been mobilized to mitigate the shrinking allocation for TVET.

4.3 Quality, efficiency, and accountability

In general, TVET provision in Thailand is still largely concentrated on lower-level skills qualifications. Although, TVET institutes are running at high operating levels, many are not yet operating at full capacity.

Weak linkage with the labour market

As addressed earlier, more attention has been given to improving the quality of TVET delivery, especially in terms of relating labour-market needs to formal TVET provision, particularly since after the first economic crisis in the late 1990s. For instance, the DSD offers various short-term courses either at its training centres or at workplaces, for skills upgrading or re-training; in addition, it provides “mobile training centres” to reach out to training beneficiaries scattered among villages, who are either self-employed or work in the informal sector.

Despite the positive progress, gaps between TVET provision and labour-market needs are still a concern for employers, and remain a challenge, partially owing to out-dated curricula and facilities that are not flexible enough to meet technological changes and the diverse needs of different clients.

Yet, to a broader extent, it also reflects the slow response of TVET provision to the labour market, largely due to the absence of a well-functioning labour-market information system (LMIS) that anticipates labour-market trends and, accordingly, signals the demands for TVET provision. Employers, particularly from the private sector, complain that they have to spend extra time re-training TVET graduates in basic skills to meet their requirements, as training provided in TVET institutes tends to be supply-driven rather than demand-driven, and often spurs obsolescence and improper orientation.

TVET graduates have experienced “technology shock” when they finally enter the job market. Neither have they evolved with changing labour-market demands for competencies relevant to participation in a technology-driven global economy.

Lack of capacity of trainers

In addition, trainers in TVET institutes lack necessary, industry-based technological skills updated through industrial attachment. It has been observed that teachers in the technical institutes rarely go for refresher courses, which puts them at the mercy of their students who are more exposed. They

need to be guided and be given training on training materials development. This may require more short-term and long-term training.

Lack of monitoring system

Training institutes seldom track the employment destination of their graduates. Consequently, the institutes have not taken advantage of feedback from past trainees on the quality of the training they have received, in order to improve their curricula and training packages. In short, the implementation of outcome evaluation and tracer studies that can improve the market responsiveness of training programmes is still lacking.

Not many referable tracer studies have been used to gather information about the employment history of TVET graduates, and the relevancy of programmes undertaken. This kind of this data needs to be fed back into the course development process. The question of effective linkages is something that simply has to be worked on over time.

4.4 Poor recognition and perception on TVET

TVET in Thailand has been considered by the public at large, and parents, as a career choice for the less academically-qualified. Although the government has been promoting the profile of TVET and trying to transition the system from being a second-chance option for school drop-outs, to a more complex role that includes addressing the skills required in economies more integrated to world markets, the negative perception hasn't changed much. This is mainly due to the lower academic requirements stipulated for admission into TVET programmes, and the limited prospects for further educational and professional development among TVET graduates.

The stigma of TVET has also been created by the impression that the primary objective of vocational education and training is to cater for school drop-outs, rather than as an important strategy to train skilled workers for the employment market and for sustainable livelihoods. In addition, TVET-based qualifications and careers are still poorly perceived and recognized in the workplace. Many employers do not recognize certification, due to the highly fragmented landscape, with many ministries and agencies issuing qualifications.

Besides, despite reform being in progress towards a more inclusive and open-ended education for TVET students, they still face great challenges in proceeding to higher education. There is a need to make TVET less of a “dead-end” option by creating articulation pathways between vocational and general education. Meanwhile, a credit transfer system also needs to be established to facilitate mobility between institutes; in the recognition of different types of qualifications from various institutes offering vocational training; and the evaluation of prior learning and work experience from within the formal, non-formal, and informal sectors.

5. Recommendations

Without doubt, Thailand is moving towards a more effective and efficient TVET system for its labour force development, but urgent improvements are still needed in several important areas. For instance, there is clearly a need to redefine the involvement of ministries and agencies, and rationalize the diverse curricula and funding approaches. A new governance structure should be considered, to provide oversight and coordination across all related ministries and agencies, over matters that include curriculum development, performance, planning of provisioning, and funding allocation. It is also important to make the TVET pathway more attractive for further learning and professional opportunities, as well as to provide flexibility for students to articulate across different providers.

5.1 National policy framework and institutional arrangements

The involvement of many ministries and agencies in TVET – with multiple certification levels, standards, and student-funding models – has created complexity. The limited cooperation between different ministries and agencies leaves little flexibility for students to move to higher levels across institutes. To avoid omissions or overlaps in training programmes, and to achieve continuum, the overall coordination and management of a national training system will involve functional linkages among various ministries, organizations, and other systems that affect TVET. Common international experience in achieving the coordination and management of this system is through the establishment of a national training agency.

The various linkages will allow for the flow of information to the national training agency, in order to facilitate decision-making and coordinating and monitoring activities. The national training agency should consist of representatives from the MOE, training institutes, industry, the public and private sectors, trade unions, and community groups. The establishment of this agency would help to clarify how various TVET stakeholders are able and willing to participate in TVET governance in a systemic way and within the broader socio-economic policy framework in Thailand.

5.2 Raising the profile and acceptance of TVET

The low regard for manual labour, and TVET, is a universal challenge for TVET practitioners. Thailand, therefore, needs to target varied audiences – primarily, youth, parents, the unemployed, career shifters, schools, and industries, to improve the general profile and acceptance of TVET. Other audiences, including policy-makers and legislators, should be also targeted for the purpose of TVET profile upgrading.

A common and effective way to raise the profile is through mass communications campaigns and social marketing, as communication plays a vital role in keeping organizations, the general public, and stakeholders constantly informed about programmes and services. Social marketing needs to focus on selling government products, programmes, and services to the public.

Malaysia and the Philippines, as two South-East Asian countries sharing a similar socio-economic context as Thailand, can be referable good examples of successfully raising the TVET profile. This should be done in partnership with industries that indicate their willingness to support such campaigns. Also, some of the allocated funds could be awarded to a commercial marketing company to develop a professional careers marketing campaign, using industry-identified role models. Industry representatives and government together can oversee the development and direction of the campaign.

Box 4
International experience in raising the profile of TVET

Rebranding exercise for TVET in Malaysia

In 2011, a rebranding exercise was announced as an entry-point project under the Economic Transformation Programme, to make TVET a popular choice for, and more appealing to, school-leavers and workers alike. A national media and promotion campaign was launched by the deputy prime minister to emphasize the career prospects and advantages of a TVET qualification, in order to lift the stigma associated with TVET and to roll out a series of road shows throughout the country to provide information and create awareness on opportunities in TVET.

To support the country's Economic Transformation Programme, seven key initiatives under the National Key Economic Areas for Education have been put in place: promoting closer links with industry; harmonizing skills training by regulatory reform; increasing the availability of demand-side funding; conducting awareness campaigns; articulating the professional pathway; increasing the number of qualified instructors; and assisting providers in attracting foreign students.

Source: Key Reforms in Revitalizing Technical and Vocational Education and Training (TVET) in Malaysia, Dr. Pang Chau Leong, Department of Skills Development, Ministry of Human Resources, Malaysia.

Social marketing and advocacy of TVET in the Philippines

In order to improve the traditional low profile of TVET, to present TVET as a means to a desirable lifestyle, the TESDA established a comprehensive communications plan that included a wide range of promotion methods and activities, as an intervention to promote the public profile of TVET. For instance, the TESDA printed thousands of brochures, flyers, and leaflets containing information on its programmes and services, to circulate during exhibitions, trade fairs, and TESDA-sponsored public events. The same content was also published regularly in advertisements in major newspapers and magazines with nationwide circulation.

The TESDA has also made use of broadcast media in its social marketing and advocacy programme. The central office has arranged appearances on national radio and TV programmes, where TESDA officials talk about TESDA programmes and services. TESDA officials in the field offices have taken part in their interviews and shows on local radio programmes. In some areas, the TESDA offices maintain their own radio programmes, through which they regularly disseminate information to the public.

Source: Increasing Public Awareness of TVET in the Philippines: A Case Study, UNESCO-UNEVOC, 2010.

5.3 Quality improvement

While attention should be drawn to raise the TVET profile, the quality of TVET should be improved as well. To begin with, the use of competency standards should be explicit in any curriculum or courses that are submitted for accreditation. This would require the course or curriculum developer to document where in the curriculum the competency standards are being delivered in close consultation with the private sector, which should be involved in the development of the curriculum. This would assist in determining industry relevance during the curriculum accreditation process.

For courses where competency standards do not exist, the curriculum, resources, and learning objectives should be written as outcome-based objectives, reflecting an approach similar to a competency-based method. These courses should emphasize skills development rather than theory-based methods, where appropriate.

At the same time, the professionalization of TVET teachers and trainers is widely regarded as one of the most important issues that could influence the effectiveness and quality of the TVET system. There are increasing requirements for TVET teachers to be more adaptive and technologically literate, and to play a more interactive, experimental, and exploratory role, as opposed to the traditional role as “transmitters of knowledge.”

However, the TVET teaching profession faces the challenges of its low status and the emphasis on factors that serve to maintain it at this low level. The key to enhancing the status of the profession is through a process of professionalization that needs to be enacted by individuals themselves, and supported by TVET institutes, as well as by partners in the community whose interests are served well by TVET. These institutes need to support the TVET profession and grant an appropriate level of status and freedom for teachers and trainers (Kingombe, 2012). At the same time, linkages between TVET institutes and employers also need to be strengthened, to empower TVET teacher education through the acquisition of practical skills, positive professional attitudes, and the gradual development of teachers' understanding of working within industry. An effective relationship between TVET teachers and industries will therefore ensure that TVET curricula and teaching methodologies are relevant and modern.

Last but not the least, as Thailand has been developing the TVQ and NQF, the initial focus for the development of qualifications should be on formal TVET qualifications below the degree level, as this appears to be where most of the industry demand is. The qualifications framework should identify articulation and credit progression guidelines, to facilitate the process of “up-skilling” sections of the workforce as necessary, and for the progression of individuals. Guidelines on the packaging and levels should be applicable to all framework qualifications, so that no confusion is caused.

On the other hand, since the NQF targets international or regional standards, the qualifications should be clear but at the same time flexible, to meet current and future skills needs. Qualifications are issued only by training organizations that satisfy certification and course accreditation requirements. Courses that lead to qualifications should be based on national competency standards, and where competency standards do not exist, meet the quality criteria for course accreditation.

It has been reported that the MOL and MOE were working together to set up a system for transferring credits between skills and basic knowledge, in order to encourage the upgrading of skills and knowledge, along the lifelong-learning approach. The short courses that are currently delivered for up to six months in basic entry-level technical skills should be reviewed and developed into formal TVET qualifications, and registered in the qualifications framework. Many of these short courses will have qualification pathways that reflect industry skills needs at different levels, and similar to those offered in other countries. In this way, those completing a skills training programme under the DSD will have a chance to obtain a higher certificate up to degree level.

Box 5
Referable NQF model: the Australian Qualifications Framework

The Australian Qualifications Framework (AQF) describes a system of nationally recognized qualifications that spans school, vocational education and training, and higher education, and includes qualifications from senior secondary levels through to doctoral degrees. Similar frameworks either exist, or are under development, in and between many countries (see, for example, European Commission, 2008).

Such frameworks have two broad purposes. One is to enable qualifications to be compared (perhaps between countries) on a common basis, to facilitate labour mobility, and this is a major thrust of the European Qualifications Framework.

They also facilitate the movement of learners between qualifications. In particular, these frameworks provide a basis for crediting learning at one level towards a qualification at another level, and facilitate occupational mobility within industries. For example, an initial laboratory technician qualification can be upgraded through further study to a professional, say industrial chemist, level.

Therefore, qualifications frameworks that include recognition of learning achievements, and that therefore depend on compatible assessment models, can facilitate mobility between TVET and higher education. This is a relatively under-utilized feature of these structures, although there are some examples of good practice in Australia (Curtis, 2009).

5.4 Financing

The Skills Development Fund should have been an additional sustainable source of TVET financing, to award grants and provide assistance to training institutes and local government units for improving the quality, relevance, efficiency, and effectiveness of TVET provision. At present TVET financing, particularly scholarships, comes mainly from the MOE. There might be a need for legislation to identify other sources of funds for the MOL and MOE, to make it fully operational.

Traditional funding mechanisms based on past enrolments can be complemented by new funding mechanisms like performance-based allocations for training institutes, training funds directed to end-users of training services, and increased cost-recovery with targeted assistance to the poor. Without reform of the current financing mechanisms, TVET systems will not become more relevant to the needs of individuals and businesses.

Training funds could channel public and private funds to directly finance businesses and individuals, in the form of grants and vouchers, which would in turn use this spending power to hire private or public training providers. Therefore, public and private providers would have access to training funding through a competitive process that would enhance the quality and relevance of training provision. Direct funding to individuals, in particular, would enhance the ability of the government to reach target groups (the disadvantaged and low-income earners).

In addition, part of the direct funding to public training institutions could be made on the basis of performance, for which benchmarks and indicators would have to be established. Of course, this type of mechanism would require decentralization and autonomy for training centres, the active participation of the private sector in the management of the training funds, the establishment of new management models for training centres (unit costs, accounting, etc.), the development of a voucher system, new indicators and benchmarks for measuring performance, and a level field for public and private competition for funds.

References

- Bank of Thailand. Discussion paper, p. 3–4. Available at: http://www.bot.or.th/English/EconomicConditions/Publication/Documents/dp042009_eng.pdf [23 Oct. 2014].
- Central Intelligence Agency (CIA). 2012. *World factbook Thailand: Economy 2012*. Available at: http://www.theodora.com/wfbcurrent/thailand/thailand_economy.html [23 Oct. 2014].
- Chantachoknimit. 2004. “The perceptions of Thai manufacturers toward training courses provided by the Department of Skill Development”, in Walsh, J.; Anantarangsi, S.: *NIDA Development Journal*, Vol. 48, No. 2/2008, p. 53. Available at: <https://www.tci-thaijo.org/index.php/NDJ/article/download/2827/2213> [23 Oct. 2014].
- Curtis, D. 2009. *Student transfer: At a glance* (Adelaide, National Centre for Vocational Education Research), p. 1. Available at: <files.eric.ed.gov/fulltext/ED507110.pdf> [31 Oct. 2014].
- Eleventh National Economic and Social Development Plan (NESDP). 2012–16. Available at: <eng.nesdb.go.th/Portals/0/news/plan/eng/THE%20ELEVENTH%20NATIONAL%20ECONOMIC%20AND%20SOCIAL%20DEVELOPMENT%20PLAN%282012-2016%29.pdf> [31 Oct. 2014].
- International Labour Organization (ILO). 2002. *Decent work and the informal economy: Six items on the agenda of the International Labour Conference 90th Session, 2002*. Available at: <http://www.ilo.org/public/english/standards/relm/ilc/ilc90/pdf/rep-vi.pdf> [22 Oct. 2014].
- Kingombe, C. 2012. *Lessons for developing countries from experience with technical and vocational education and training*, Working paper (London, International Growth Centre), p. 48.
- Mongay, J. 2011. *Business and investments in Asia: New challenges, new opportunities* (Madrid, ESIC), p. 214.
- National Statistics Office (NSO). 2011. Labour force survey (LFS) 2011. Available at: web.nso.go.th/en/survey/lfs/lfs2011_tab.htm [23 Oct. 2014].
- Office of the United Nations High Commissioner for Human Rights (OHCHR). *Thailand’s country report on implementation of the International Covenant on Economic, Social, and Cultural Rights..* Available at: https://www.google.co.th/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&cad=rja&uact=8&ved=0CCIQFjAB&url=http%3A%2F%2Fwww2.ohchr.org%2Fenglish%2Fbodies%2Fcscr%2Fdocs%2FAdvanceVersions%2FE-C-12-THA-1_en.doc&ei=ddu8VJKVO9Pm8AXLqID4Cw&usg=AFQjCNGs6zGAMN23Ato6sQxeSRX7MuSSuw [31 Oct. 2014].
- Organization for Economic Cooperation and Development (OECD). 2012. *Southeast Asian economic outlook 2011–12* (Paris), p. 124.
- Siripan, C. 2011. *Establishment of the National Qualifications Framework (NQF) and planning for manpower production and development according to the NQF* (Bangkok, Thailand, Ministry of Education).
- Sirirak, R. 2009. *Innovative practice in TVET towards education for sustainable development in Thailand, Country paper* (Bangkok, Thailand, Ministry of Education), p. 8.

Smiti, P. *Thailand's perspective on skills training in the workplace*. Available at: http://www.ilo.org/wcmsp5/groups/public/@asia/@ro-bangkok/documents/meetingdocument/wcms_120566.pdf [23 Oct. 2014].

United Nations Educational, Scientific, and Cultural Organization (UNESCO). 2011. *World data on education, seventh edition, Thailand*, updated.

United Nations University. 2000. *Growth, structural change, and inequality: The experience of Thailand*, Working Paper No. 207 (Tokyo).

Whattananarong, K. 2004. An in-depth study on the cooperation of vocational colleges and companies in the DVT programme, to identify major strongpoints in the institution-industry linkages, with a recommendation for enactment of the new Vocational Education and Training Act.

World Bank. 2012. *Thailand Overview*. Available at: <http://www.worldbank.org/en/country/thailand/overview> [28 Dec. 2012].

—. 2008. *Thailand, Investment Climate Assessment Update* (Washington, DC.) p. 49.

Yongyuth, C. 2008. *Case study by economy, Southeast Asia: Thailand*. Available at: http://www.pecc.org/resources/doc_view/693-demographic-change-and-international-labor-mobility-in-thailand [31 Oct. 2014].

Viet Nam:

TVET in Viet Nam - Situational assessment and inputs for the legal reform process

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1. TVET in Viet Nam: situational analysis

Viet Nam's economy is developing rapidly but the education system in general, and the TVET system in particular, has failed to keep up with the pace of change. Addressing the challenges in terms of the quality and relevance of training requires institutional changes that are difficult to implement, largely due to the incentive structure of the actors concerned (government officials at different levels, TVET institutions, employers, and trainees), and to a lack of capacity at the institutional level. These issues are further explained in the following sections.

1.1 Demand for skills in the economy and major change drivers

The last few decades have seen rapid economic growth and structural change in Viet Nam, which have led to job creation and improvements in living standards. However, a number of challenges remain. The major drivers of change have been a shift from a centrally-planned to a market-based economy, an increase in foreign direct investment (FDI flows) – which has led to economic diversification – and integration into the world economy.

There has been a shift in employment from agriculture to industry and services, although agriculture still has the largest share of employment. In 2010, agriculture accounted for nearly half (48 per cent) of Viet Nam's employment (and 62 per cent of rural employment), while industry accounted for 22 per cent, and services for 30 per cent.⁵⁰ The service sector accounted for the largest share of urban employment, with approximately 58 per cent.

In the early years of FDI inflows to Viet Nam, investment focused on labour-intensive industries (footwear, textiles, garments, furniture, among others) but in recent years there has been a shift towards more value-added industries. This shift is partly attributable to, and has also contributed to, the fact that labour costs in Viet Nam are no longer cheap relative to other countries (such as Bangladesh and Myanmar), or to the Vietnamese government's intention to move up the global supply chain.⁵¹

Rapid structural change has caused a number of labour market challenges. In particular, it has been accompanied by a dramatic and rapid change in terms of skills demand, specifically a need for innovation, flexibility, adaptability, and highly up-to-date technical skills. However, the education sector in general, including TVET, has failed to keep up with the pace of change.

1.2 Skills demands and skills mismatching

In the past, when FDI focused on labour-intensive industries, factories mainly needed unskilled workers, of whom there is an abundant supply in highly populated Viet Nam. However, with the shift toward higher value-added industries, the availability of skilled workers became a binding constraint. Human resources, therefore, have become a most critical issue, due to a lack of qualified labour at all levels, particularly skilled workers and technicians, but also in mid-level management. The shortage of skilled workers exists despite the fact that approximately 1.4 million people enter the labour market every year in Viet Nam.⁵² Indeed, trained skilled workers represent less than one third of the

⁵⁰ Bureau of Employment (BOE): *Viet Nam employment trends, 2011*.

⁵¹ For this reason, provincial governments have been more welcoming to higher value-added FDI. For instance, in Ho Chi Minh City, very little new FDI in labour-intensive industries has been approved recently, although the government is still supporting already established companies.

⁵² Vietnamese-German Development Cooperation (VGDC): *Programme reform of TVET*, www.tvet-vietnam.org/index.php/en/about-us/tvet-in-vietnam.

workforce, although the government target is to increase that share to 55 per cent of the labour force by 2020.

The shortage of skilled workers has affected labour productivity, and, consequently, Viet Nam's productivity ranking in the Association of Southeast Asia Nations (ASEAN). Since 2008, Viet Nam has experienced declining productivity growth. Low labour productivity discourages companies from expanding their businesses, and affects the country's competitiveness in attracting FDI. The lack of skilled workers has also caused recruitment challenges, with fierce competition for the qualified workers available. This has resulted in a "free-rider" situation with respect to skills development, whereby all employers want skilled workers, but none have the incentives to invest in training. Trained workers have higher expectations for salaries and working conditions, and can easily be poached by competitors who offer higher benefits but do not train their workers themselves.

In addition to the shortage of skilled workers, recent years have seen an excess supply of university-level graduates in some sectors, such as business administration and economics. This skills mismatch situation is largely due to the limited take-up of TVET, and to the fact that TVET curricula remain inadequate to meet labour-market demand. The limited take-up of TVET is due to social preferences (of youth, parents, and society as a whole) for white-collar jobs, and misperceptions associated with TVET. In addition, even after having studied for several years in a vocational college, workers find themselves being treated as non-skilled by their employers, who consider their skills inadequate and irrelevant (because the practical component of TVET curricula is insufficient, or schools do not have new technologies) but are forced to re-train them anyway. For this reason, many employers (e.g. in the garments and leather industries, and even in electronics) prefer to hire non-skilled workers and train them. Furthermore, despite attempts at improving perceptions of the TVET sector, social pressures still play a major role, and people can see that returns are lower for blue-collar workers. Therefore, young people have very limited incentive to invest in training and attend TVET institutions.

The policy debate around skills in Viet Nam has recently expanded from focusing solely on technical skills to encompass a broader set of skills that are demanded by employers and are lacking among recent graduates and labour-market entrants. These skills, often referred to as "soft skills," include both cognitive skills (knowledge, literacy, critical thinking, problem-solving, communication, and the ability to continuously learn, among others) and behavioural skills (attitude, professionalism, team work, punctuality, reliability, time management, and sense of responsibility, among others).⁵³ The broader skills set has also been referred to in Viet Nam as "occupational culture," a term that emphasizes professionalism, ethics, knowledge of occupational health and safety issues, and environmental protection, among other things.⁵⁴ In particular, many of the students entering TVET come from rural areas and disadvantaged socio-economic groups, and lack basic skills. Coming from these backgrounds and having gone through the general education system without having received any career guidance or counselling, they have no previous exposure to the work environment when they first enter TVET, and then the labour market. This causes a new set of challenges for employers.

Indeed, the lack of soft skills is a widespread concern for employers in Viet Nam. This issue is exacerbated by the fact that the law is considered to "overprotect" workers. Language skills are also weak, and academic institutions do not seem to have the incentive to address this issue.

⁵³ The importance of distinguishing between technical, cognitive, and behavioural skills has been the focus of a recent World Bank study, and will be emphasized in a forthcoming report.

⁵⁴ The Vocational Training Association (VTA) is currently piloting, with support from the Spanish government, a project on promoting "occupational culture" (which includes four areas or environments – family, school [general education], vocational college, and workplace). The concept involves links between TVET, "occupational behaviour," gender equity, and sustainability. Basically, it involves "soft skills," as well as additional issues such as awareness of occupational safety and health, as well as environmental impact and sustainability. The project involves going to TVET institutions to raise awareness about occupational culture among students, teachers, and staff.

While technical skills are acquired in TVET, the other types of skills are more difficult to impart in TVET, and are generally acquired earlier in life, usually in general education.⁵⁵ While employers themselves can often address the lack of technical skills among their workers, they can do little to address the lack of cognitive and behavioural skills. In particular, while behavioural skills can, to a certain extent, be acquired along with technical skills, as implied by the concept of “occupational culture,” cognitive skills, on the other hand, require changes in pedagogical approaches at earlier stages, in the general education stream.⁵⁶ It is therefore important to keep in mind what the TVET system should be held accountable for, and addressing skills shortages should involve reforms at all levels of education, including general, non-formal, and higher education.

2. The TVET system in Viet Nam

TVET in Viet Nam consists of skills development courses and programmes offered by institutions under the Ministry of Labour, Invalids, and Social Affairs (MOLISA), the General Department of Vocational Training (GDVT), the Ministry of Education and Training (MOET), other ministries, provincial- and district-level governments, and by companies, private institutions, and trade unions⁵⁷ and other mass organizations. The number of private institutions has increased in recent years, but at a slower pace than expected despite the government’s “socialization” policy, which aims at promoting their establishment. This is partly due to limited implementation of support policies, and low competitiveness relative to public institutions that benefit from a better reputation.⁵⁸

Formal TVET consists mainly of short-term programmes (less than one year, leading to a vocational certificate) in institutions under the GDVT, and long-term programmes (one to three years, leading to a vocational or technical diploma) under either the GDVT or MOET. The TVET Law of 2006 introduced a three-tier qualification structure for the TVET system under the GDVT:

Vocational elementary level. Short-term courses (less than one year) leading to a certificate. No previous education is required for entry.

Vocational secondary level. This leads to a vocational secondary diploma. Entry qualifications are having completed Grade 12, and the TVET programme duration would be 1–2 years; having completed Grade 9, and the TVET programme duration would be 2.5–3 years; or having completed Grade 9 with vocational certificate and two years of work experience, and the TVET programme duration would be 1.5–2 years.

⁵⁵ However, the TVET Law (2006) makes references to the three types of skills – cognitive or “knowledge,” technical or “skills,” and behavioural or “professional attitudes” – as falling within the scope of vocational training (Article 5). The law describes the objectives of vocational training as the provision of training to develop workers who have both technical skills (“practical capabilities compatible to their qualifications”) and soft skills (“work ethics and conscience,” professionalism, and discipline) (Article 4). The provision of soft skills is included in the training objectives of each of the three qualification levels (articles 10, 17, and 24).

⁵⁶ Viet Nam outperforms many countries, including richer and more developed countries, in terms of basic cognitive skills (basic literacy, etc.) but performs weaker in the higher-level cognitive skills (creative, inquisitive thinking, among others) that are learnt early in life, and are difficult to acquire afterwards.

⁵⁷ The TVET system under the trade unions (VGCL) consists of 40 establishments or institutions (one in each province, so in 40 of the 63 provinces) that provide training, some of which provide employment services also. These institutions offer mainly short-term courses (3–6 months) including under contracts for companies. They train some 50,000 workers annually.

⁵⁸ Vietnamese-German Technical Cooperation (2008).

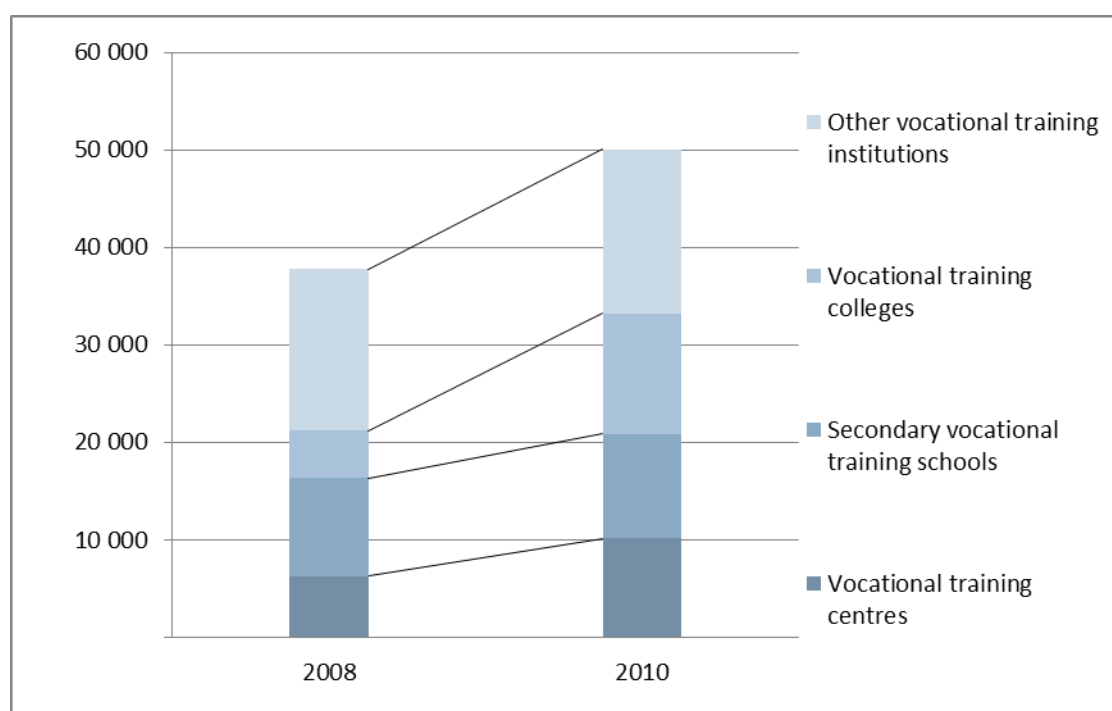
Vocational college diploma level. Entry qualifications are having completed Grade 12, and the diploma programme duration would be three years; having completed technical or vocational secondary school, and the TVET diploma programme duration would be 1.5–2 years; or having completed technical secondary school plus two years of work experience, and the TVET diploma programme duration would be 1–1.5 years.

TVET institutions include vocational training centres that can provide elementary-level training, vocational secondary schools that can provide elementary- or secondary-level training, and vocational colleges that can provide all three levels of training. Enterprises and other organizations can provide elementary-level training and continuing education courses as long as they register their programmes with the MOLISA. In addition, and in parallel to the system under the GDVT, secondary-level training is offered at the technical schools as well as at some colleges and universities under the MOET.

The three-level qualification structure was expected to improve transitions within the TVET system, and from the TVET system to higher education, but it has not fully achieved this goal, partly because of delays in agreements between the MOLISA and the MOET.

In 2010, there were over 50,000 TVET institutions in Viet Nam: 10,111 vocational training centres, 10,731 secondary vocational training schools, 12,369 vocational training colleges, and 16,869 other vocational training institutions, as shown in figure 1.

Figure 1. TVET institutions, 2008 and 2010



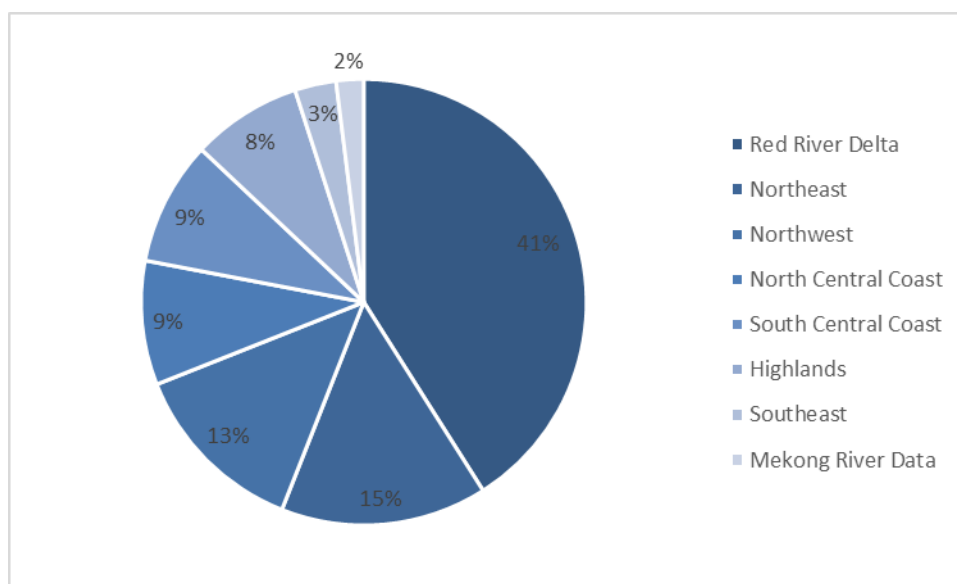
Source: BOE (2012) Viet Nam Employment Trends, 2011.

The number of TVET institutions has increased significantly in recent years, from 37,760 in 2008. The highest growth has been in the number of vocational colleges, with a net increase of 7,457 colleges between 2008 and 2010, and vocational training centres, with a net increase of 3,880 centres during the same period. The growth in the number of colleges has been largely driven by government intervention, while non-state actors have contributed more to the growth in vocational training centres.

Overall, nearly 65 per cent of TVET institutions were public entities in 2009. The public share of institutions was 60 per cent for the elementary-level programmes, 70 per cent for secondary programmes; and 75 per cent for college-level programmes.⁵⁹

In 2009, there were nearly 45,000 permanent TVET trainers in Viet Nam, but 56 per cent of them were concentrated in two regions: the Red River Delta and the northeast regions, as shown in figure 2. The southern regions appear to be at a disadvantage in this respect.

Figure 2. Permanent TVET trainers by region, 2009



Source: BOE (2012) Viet Nam Employment Trends, 2011.

3. TVET governance and accountability

In terms of governance, a major issue in Viet Nam is the ongoing debate about where the “state management” of TVET should be, and the division of responsibilities between the MOLISA and the MOET. The TVET system reform of 1998 transferred the state management responsibility for TVET from the MOET to the MOLISA and the GDVT. The MOET kept the responsibility for technical secondary school education and for higher technical education. However, the secondary-level programmes under the MOET are very similar in content to the vocational secondary programmes under the MOLISA, which has led to confusion, duplication, and inefficiencies.

Having the TVET system under the MOLISA presents both advantages and challenges. The main advantage is that TVET can be more easily linked with employment, but on the other hand it means that the most recent developments in pedagogical approaches are slower to reach the TVET sector. There are also funding implications, as TVET is no longer part of the large education budget.

Another governance issue is that provincial-level Departments of Labour, Invalids, and Social Affairs (DOLISA), and of Education and Training (DOETs) have major responsibilities for planning and

⁵⁹ BOE, MOLISA (2012): *Viet Nam employment trends, 2011*, table 1.13.

policy implementation. However, the lack of transparency in terms of funding and budget allocations at all administrative levels often complicates policy implementation, and affects accountability.

The Education Law of 2005 and the TVET Law of 2006 gave TVET institutions a somewhat higher degree of autonomy, for instance with respect to enrolment, programme planning, and financial management. However, limited management capacity at the institutional level has prevented them from achieving the potential benefits of this newly gained autonomy. For instance, in general, managers of TVET institutions have not been able to innovate or to improve the relevance of their programmes through forming private-sector partnerships. There have been some initiatives to improve the management of institutions through the creation of advisory boards, but only at selected institutions and generally within the framework of donor-financed programmes.

In terms of accountability, statistics on employability rates of students and other performance measures are reported on regularly (on an annual basis) by the TVET providers under the GDVT and the MOET. These performance measures do not seem to be linked to any incentive structure, however, as funding is based on the number of training places, regardless of the quality of training provided.

4. Labour market information and training planning

The lack of information on both the demand side (e.g. what skills employers value most, and what occupations are most needed) and the supply side (e.g. what is the difference in quality among different TVET providers, among others) poses a challenge to the development of quality TVET programs in Viet Nam.

There is no functioning, integrated labour market information system (LMIS) in Viet Nam, although labour-market information is collected by various stakeholders including the General Statistics Office (GSO), employment centres, and other institutions. These institutions rarely coordinate their efforts or share information.

The GSO conducts a quarterly labour force survey (LFS), but the data collected are under-utilized; little, if any, analysis is conducted and disseminated. Data are not made publicly available, and researchers need to pay and seek permission to obtain them. The LFS was transferred from the MOLISA to the GSO in 2007, and since then the MOLISA has relied less on it as a source of LMI. Even within the MOLISA, there is very little cooperation and information sharing between departments; the GDVT is responsible for the network of TVET institutions, while the Bureau of Employment (BOE) under the MOLISA is responsible for the network of employment service centres, but the two departments rarely cooperate or share their data, which would be complementary (covering both the demand and supply sides of the labour market) for the purpose of training planning. The BOE is developing a national LMI database that includes three sub-databases:

- a) supply-side information, mainly from the population census (annual), which covers all of the population aged 10 years and older;
- b) demand-side data from the establishment census, which covers all registered enterprises in the country; and
- c) profiles of all employees, also from the establishment census.

The GDVT is also developing a TVET information system, which should be linked with the BOE database to make the best use of the information available. According to BOE officials, the lack of information sharing and coordination has resulted in inefficient training planning. For instance,

policies and targets, such as the training of one million farmers a year, have led to the establishment of TVET institutions in every district, although there might not be any need for some of these. Consistently, with the government's human resources strategy, training planning is conducted at the provincial level using results from a survey of government departments in charge of the different economic sectors (e.g. industry, agriculture, and tourism) and the consolidated list of focal occupations (see Section 7.1).

The BOE has an inter-industry macroeconomic forecasting model, the LOTUS model – that was developed by the Inforum (or Inter-industry Forecasting Project at the University of Maryland) with support from the ILO under the Labour Market Project (LMP) – which was completed in 2011. The Labour Market Information Centre (LMIC) unit that was responsible for the LOTUS model was merged in April 2013 with the unit responsible for unemployment insurance, under the new name the National Centre for Employment Services. The LOTUS model's results are published annually, but whether or not they are used or taken into account by policy-makers in training planning, or by other potential users, is unclear. However, it should be noted that the update of the model is done only partially, and some of the input data have not been updated since 2010.

Employment service centres also gather LMI from various sources: they collect information themselves directly, through regular enterprise surveys conducted to inform their data exchange platform, but also coordinate with the DOLISAs, the MOLISA, and the GSO, and undertake additional surveys for these agencies from time to time. They also do short-term forecasting using basic methods. There are seven employment centres in Hanoi, but the other six are managed by the Viet Nam General Confederation of Labour (VGCL), by other ministries and social associations, and do not have all the functions that the centres directly under the DOLISAs have.⁶⁰ One centre in each province offers all functions, and falls under the DOLISA, while the rest are run by social associations. In terms of governance, the employment service centres report to the DOLISA on administrative issues, but they receive technical guidance and direction from the BOE. There is talk of restructuring the system to make it more centralized, with the employment services centres reporting directly to the MOLISA.

In addition to the GSO, the MOLISA, and the employment service centres under the DOLISA, there is the Human Resources Forecast Centre (HRFC), an organization that was established by the Ho Chi Minh City government to forecast labour demand by companies, as well as labour supply from universities, and identify mismatches. This organization, a state-owned enterprise (SOE), has a staff of some 50 young employees who are “willing and able to conduct surveys,” and compile and analyse the data. They use two types of data sources for two purposes: for long-term forecasting (five- or ten-year periods), they use data from annual enterprise surveys conducted by the government (the MOLISA) and a survey of universities, as well as government plans and strategies, and plans of multinational companies, among others; while for the short-term forecasting (forecast periods of one month, three months, six months, and one year), they collect data on a continuous basis through online surveys, job fairs, and seminars. They have a list of some 6,000–7,000 enterprises from which they collect information on a continuous basis. In terms of supply side, they obtain data from the government (the MOET), which has general education statistics in terms of the number of graduates or enrolment figures by level, but not by major or field of specialization. Unlike the MOLISA, they do not use econometric models, but consider their projections as more reliable than the MOLISA's because they use more up-to-date information and take into account the supply side as well, not just demand.

⁶⁰ The employment service centres under DOLISA have several functions: a) Providing LMI; b) providing counselling (in-person and through a telephone operator system) to job-seekers regarding employment opportunities and workers' rights; c) linking job-seekers with employers through an information exchange platform, and by providing a weekly forum for them to meet and conduct interviews, etc.; and more recently, d) administering Unemployment Insurance (UI), whereby people come to the centres to register for UI and receive their payments. The roles and responsibilities of employment service centres are detailed in a draft decree, and may be revised to further expand the functions of these centres.

Many data collection methods are difficult to implement in Viet Nam, where it is estimated that only 9 per cent of firms are large, while the rest are small to medium-sized enterprises (SMEs).⁶¹ Data are often not sufficiently reliable, and several methods must be used to fill data gaps and improve data quality. The large and growing informal employment sector also poses difficulties, and the organizations would like to use methods to account for it (household-based surveys, among others), but they lack the resources to do this.

The HRFC updates its short-term projections weekly. It writes reports and disseminates findings by publishing them on its website, sending reports to universities and TVET colleges, and publishing them in the newspapers. In 2013, it was expected to make recommendations to the government regarding the numbers of students that should be admitted to each major or field of study, to limit the extent of mismatch. In 2014, it planned to participate in the drafting of the Ho Chi Minh City development strategy; it will be assessing the draft strategy and ensuring that government targets are feasible and realistic, specifically on the availability of the skilled workforce to implement specific projects. This organization works mainly in Ho Chi Minh City, and there is no organization like it in Hanoi or in the provinces. The government wants to establish one at the national level, but there are disputes and debates underway as to who would be in charge of the new institution.

4.1 Vocational guidance

To a certain extent, career guidance and counselling exists in Viet Nam, but is not provided at the right time, when young people start considering career choices (e.g. during, or at the end of, middle school). Instead, it is provided later (Grade 12), when the choice of whether or not to go into TVET has already been made, and it is done in a superficial and inadequate way; it often involves helping students decide which university to go to, rather than if they should be going to university or going into TVET instead.

Aside from academic institutions, employment service centres also provide some career guidance and counselling, but mainly for graduates and job-seekers who are already set along a certain career path. The counselling provided by the centres focuses on workers' rights, and the process of applying for positions (drafting CVs, preparing for interviews, among other things). Other stakeholders are also engaged in providing career guidance, for instance youth unions and mass organizations in rural areas, and NGOs such as Vietseed.⁶²

The career guidance process needs to be institutionalized and to involve the private sector, in order to provide accurate information, address misperceptions of the TVET sector, and raise the awareness of students and parents alike about career opportunities available to TVET graduates. The attitudes and social preferences of parents in Viet Nam have a significant influence on their children's choices; in general, parents insist on sending their children to university, and view TVET only as a second choice when the university track is not feasible.

Career guidance and making LMI available are particularly important in rural areas, where they are most needed. At the local level, employment centres lack the capacity to collect, use, and disseminate information. Youth and people in general from rural areas often lack basic skills ("soft skills" or "employability skills") and know very little about unions, social security, occupational health and safety, working conditions, labour rights, and standards. Providing them with accurate information about opportunities in rural areas would mitigate the rural-to-urban migration issue, which seems to be driven more by push factors than by pull factors in Viet Nam.

⁶¹ Ho Chi Minh City Human Resources Forecast Centre.

⁶² Vietseed is an NGO involved in career guidance and counselling for young people. They help young people process the large amount of information available, and identify the opportunities that are suitable to them, then establish a training and career pathway to take advantage of those opportunities.

5. Training funding and efficiency

A lack of transparency regarding TVET financing makes it difficult to obtain actual figures on budget allocations or unit costs.⁶³ However, funding does not seem to be a major problem for public TVET institutions, which receive substantial government funding to cover both their capital and recurrent costs, with the exception of vocational training centres. The latter do not seem to receive much financial support from their sponsoring organizations. Allocations for long-term programmes are based on a per-trainee quota basis. As per capita allocations generally declined over time, tuition fees have become the most important source of funding for TVET institutions. Furthermore, due to a cap on tuition fees,⁶⁴ institutions try to maximize enrolment in order to raise their revenues, but this often happens at the expense of training quality.

Private institutions do not receive any regular state funding, but raise their revenues mainly through tuition fees. TVET institutions are allowed to generate additional revenue in the market, but income from these activities constitutes a marginal share of their funding. There are also a number of selected institutions that receive direct funding from international donors.

There is an uneven playing field between private and public providers of TVET in terms of government funding and general support policies. In particular, incentives to provide training for companies are insufficient, given that these companies pay taxes, have higher costs (including the opportunity costs of their staff spending time supervising and teaching trainees), offer a higher quality of training than public TVET providers, and run the risk of having trained staff poached by other employers.

According to the VGCL, the government intends to reduce the existing investment gap between public TVET institutions and those under private and social associations, but there do not seem to be any concrete measures in place to achieve this objective.

6. Equity and access to TVET

There is an urban-rural gap with respect to TVET quality, the capacity of institutions, and training planning, which is due to the limited availability of LMI and weaker linkages with private-sector entities in the provinces. A recent World Bank study found that although the employability rates of university graduates in urban areas had somewhat improved, the employability rates of TVET college graduates in rural areas had not; many of them were unable to find work in their field of training, and were therefore absorbed into employment in agriculture.

A number of government policies and provisions in the TVET Law are aimed at encouraging people from disadvantaged or minority groups to participate in training (including fees exemptions and other special programmes and incentives, for which TVET institutions are compensated by the government). For instance, there is PM's Decision 1959 on VET for Rural Workers (the "million farmers a year initiative") and also Decision 295 on supporting women in employment and TVET. Although policies are in place, access remains limited for certain groups. More generally, programmes tend to be quite rigid, with few flexible arrangements, and are therefore not suitable for all students.

⁶³ Vietnam- German Technical Cooperation, 2008.

⁶⁴ The tuition fee cap for public TVET institutions was 120,000 Vietnamese dong (VND) per month in 2008 (Vietnam-German Technical Cooperation, 2008).

One minority group that has had limited access despite existing legislation, is people with disabilities, who are estimated to represent between 7.8 per cent and 15.3 per cent of Viet Nam's population.⁶⁵ The incidence of disabilities in Viet Nam is high for several reasons, including the legacy of war, landmines, polio, lack of vaccination (many people suffer from "post-polio syndrome"), and accidents. A new law on people with disabilities was adopted in 2010 and became effective as of January 2011. There is also a national action plan (2012–2020) with specific and quite ambitious targets for training 250,000 disabled persons by 2015, and another 300,000 by 2020.⁶⁶ The MOLISA's Social Protection Department is under considerable pressure to answer for and meet these targets, but the GDVT does not seem to be doing much to address the issue.

Currently in Viet Nam, it is not mandatory for organizations to provide access to training for disabled persons, but when the country ratifies the UN Convention on the Rights of Disabled Persons (2006), which it has already signed, it will become mandatory to do so.⁶⁷ All institutions would then have to provide access by ensuring that the correct physical infrastructure is in place, with reasonable accommodation. Within two years of ratification, Viet Nam would have to revise all legislation to make sure it is compatible with the convention. Therefore, the current TVET Law revision process is the perfect opportunity to make these revisions that need to be made anyway in the near future.⁶⁸

At the moment in Viet Nam, TVET for disabled persons is delivered mainly through international and local NGOs, specifically disabled persons organizations (DPOs),⁶⁹ and through livelihood schemes and projects.⁷⁰ In particular, there is the Viet Nam Federation of Disabled Persons, as well as provincial-level organizations. Disabled persons benefit from free tuition, food allowance, and free transportation. Each disabled person is allowed to participate in this scheme only once. The funding is channelled through the GDVT to the local-level DPOs for the provision of this training. The problem with this approach, however, is that it is only able to reach a few thousand people.

Furthermore, most of the TVET programmes for disabled persons are short-term (six to nine months) and at the lowest skill level, leading to very low pay (mainly subsistence work in such things as handicrafts). The MOET has an inclusive education strategy and resource centres for people with disabilities across the country for general education, but not for TVET – but this will be needed later

⁶⁵ Based on existing estimates, people with disabilities represent between 7.8 per cent (low estimate by the GSO using only four questions, likely excluding some people with mental or learning disabilities) and 15.3 per cent (estimated from the Vietnam Household Living Standards Survey [VHLSS], which used six questions in line with international practices, e.g. a Washington-based group on disabilities). These questions and measurements are based on the International Classification of Functioning (ICF) system.

⁶⁶ MOLISA (2013a).

⁶⁷ On September 24, 2014, a conference was held in Hanoi, to discuss the pros and cons of ratifying the convention. The conference was co-hosted by the National Assembly Committee for External Relations, the MOSAL, and the United Nations Children's Fund (UNICEF). Source: <http://en.vietnamplus.vn/Home/Vietnam-discusses-ratification-of-UN-Convention-on-the-Rights-of-Persons-with-Disabilities/20149/55755.vnplus> (updated 24 Sep. 2014, accessed 13 Oct. 2014).

⁶⁸ The MOLISA also promised in 2009 to sign ILO on Vocational Rehabilitation and Employment (Disabled Persons) Convention, 1983 (No. 159) but still has not done so. This convention should somehow be reflected in the TVET Law revision.

⁶⁹ Also referred to as ODPs or organizations for disabled persons (by the United Nations Children's Fund [UNICEF], also working on disability issues in Viet Nam).

⁷⁰ For instance, a project supported by Irish Aid and Union Aid Abroad (Apheda) is underway in some northern and central provinces, to offer TVET classes to 500 disabled persons, of which at least half are women, by 2015. After completing the courses, trainees are introduced to employers and assisted in finding employment at manufacturing businesses overseen by the DOLISAs. The programme, which has completed its first year in the northern Hai Duong province, is reported to have helped raise the average monthly income of participants from VND 190,000 (US\$9) to VND 600,000 (US\$29). Source: <http://english.MOLISA.gov.vn/news/viewdetail/tabid/339/newsid/57661/se/Vocational-programme-for-the-disabled-reports-progress/language/en-US/Default.aspx> (updated 15 Aug. 2013, accessed 20 Aug. 2013).

on, to train trainers to teach persons with disabilities, and make training accessible in terms of the facilities.

The education system in Viet Nam is inclusive up to Grade 6 (primary level), but once in secondary school, which is where TVET comes in, there are no programmes for disabled people. This means that between the ages of ten and 16, ages at which they can access the short-term TVET courses, children cannot study – and of course should not work, because that would be child labour – so they suffer from “lost years”. The education pathway for disabled persons is therefore broken, and the situation is worse for those in rural areas – in fact where most disabled persons live. Furthermore, pressures to meet action-plan targets have also led to an “anything goes” attitude with respect to training for disabled persons. The government aim of training a million farmers a year has a large budget, and the DOLISAs intend to tap in to that budget in order to implement the national action plan on disabled persons. The ILO is providing training of trainers (TOT) in the Start and Improve Your Business (SYIB) programme in Viet Nam, but this does not include disabled persons, because they would need the GDVT’s approval to do so, but the GDVT does not seem very cooperative in this regard.

The ILO has tried to discuss with the GDVT the need to mainstream TVET for disabled persons, to improve access to the entire system and to provide disabled persons with equal opportunities to pursue training at higher vocational levels, but the GDVT seems to prefer the current structure (disbursing money to DPOs to provide the training) and does not seem to want to change it. The system, therefore, remains far from inclusive of disabled persons.

Government statistics on TVET staff with respect to equity were the following for 2012 (provisional figures): out of the 40,000 TVET teachers across the country, some 14,000, or 17 per cent, were teaching in private institutions; more than 9,000, or 24 per cent, were women; and 720, or 1.8 per cent, were from minority groups.

7. Quality of education and training

Despite improvements following the TVET Law, training quality remains generally weak in Viet Nam, mainly due to old, outdated machinery and equipment at TVET schools, poorly qualified trainers, inadequate curricula, and ineffective testing and certification, all of which are linked to a certain extent to the issue of limited private-sector involvement.

7.1 National Vocational Qualification Framework and occupational standards

After the adoption of the TVET Law, new standards, the DACUM approach, and CBT were introduced in Viet Nam, and the development of National Vocational Qualification Framework (NVQF) has also been underway, supported by many donors including the United Nations Educational, Scientific, and Cultural Organization (UNESCO), the ILO, the Asian Development Bank (ADB), and German International Cooperation (GIZ). The NVQF has not yet been implemented, as many components are missing, and related issues need to be addressed, like the development of a quality assurance and accreditation system, and the recognition of prior learning, among others. Building the NVQF is one of the key features of the national vocational training strategy (2011–20).

Occupational standards are set by national skills committees consisting of stakeholders from the different ministries concerned (e.g. Industry, Agriculture), and the GDVT plays a coordination role. There are currently occupational standards for 200 “focal occupations” that have been, or are being, developed or adapted from regional or international standards. Specifically, international standards are available for 26 occupations; regional (ASEAN) standards for 34 occupations; and national standards

for 140 occupations.⁷¹ There is some overlap of the occupations in these three groups, but not to a large extent, and when more than one level of standards (e.g. regional and international) are available for the same occupation, the highest level is used as the reference.⁷²

To select the focal occupations, surveys were conducted by the ministries in charge of each sector (e.g. industry, tourism, agriculture) and at the provincial level, as requested in the government's Master Plan on Projecting Human Resources. Based on this survey, a matrix of human resource needs, in terms of occupations by sector and province, was prepared. The GDVT was involved in consolidating the resulting list of focal occupations, which are the focus of the national target programme. Based on the results of this survey and the master plan, provincial governments were asked to develop their own training plans.⁷³

7.2 Curricula development

The GDVT Department of Regular Education is responsible for developing curricula for all occupations in Viet Nam. Since the adoption of the TVET Law, all curricula have been developed using the DACUM method or another standard-based approach. The curriculum development process is similar to the standard development process: a national committee is in charge of developing the curriculum for each occupation, and another committee is created for appraisal. The establishment of the committees must be approved by the minister of the MOLISA. There are "clear criteria" for the selection of committee members in terms of years of experience and qualifications, and the selected members are often recommended by the relevant ministries for each sector.

The GDVT is in charge of organizing the development of "framework curricula" for non-focal occupations, adapting regional and international curricula to the Vietnamese context (about 10 per cent is changed) and developing training material for focal occupations. Institutions offering training for the focal occupations must have the required equipment and facilities. These institutions have received funds and equipment from the government and donors, including from the ILO under the Labour Market Project.

There is a drafting committee for the framework curriculum of each occupation, consisting of representatives from enterprises, vocational schools and colleges, scientists and experts, as well as an appraisal committee for each occupation composed also of these stakeholders (but different individuals than the drafting committee). Based on the framework curricula developed for the non-focal occupations, training institutions determine their syllabus. Of the curriculum content that institutions can select for their syllabus, 70 per cent is fixed by the GDVT (compulsory for all TVET providers in the country) and 30 per cent is flexible (the institutions can make modifications and have their own content, but it must be approved by the MOLISA). In general, 70–80 per cent of the curriculum is practical, while the rest is theoretical. For the focal occupations, institutions must deliver 100 per cent of the curriculum developed by the GDVT. The development of these curricula is done according to government regulation – specifically, MOLISA Decision 58/2008/QD. This legislation also stipulates that the private sector must be involved in curricula development. Every three years, curricula are assessed to make changes if needed.

The 70/30 rule in developing the framework curricula was established after the TVET Law in order to ensure a minimum standard of training quality (the 70 per cent represents the minimum requirements). According to GDVT officials, only when they feel that most training institutions can meet this

⁷¹ In Viet Nam, the development of national standards has been supported by the ADB; the development (adaptation) of regional standards has been supported by the government of Malaysia; and the development (adaptation) of international standards, supported by the government of Germany. National and regional standards have been more or less completed already, but not the international ones.

⁷² The transfer of international and regional curricula and adaptation to the Vietnamese context, along with TOT and piloting, are done according to Government Decision 371/2013/TTg, dated February 2013.

⁷³ This process is outlined in the National Strategy No. 630/2012/QD-TTg, dated May 2012.

minimum standard, will they consider decreasing the fixed component share of the curricula. The rules on 100 per cent of the fixed curriculum for focal occupations, and 70/30 for the framework curricula occupations, are not mentioned in the TVET Law, but in the national strategy. However, there is an intention to include these rules in the revised law.

The large fixed portion of curricula makes it difficult for TVET providers to innovate and develop curricula that are tailored to market demand. This limited autonomy, and a lack of capacity, limit these schools' ability to form partnerships with industry. Additionally, it seems to be the case that while public institutions have limited autonomy, they are also "afraid of being given autonomy because they are afraid of the competition that would ensue". Currently, the funding they receive is enough to keep them afloat; they are operating without external pressures, and they do not necessarily want to have to compete in order to survive in the market; they have no incentive to change the status quo.

Therefore, despite several changes following the TVET Law, results have not been as expected in terms of training quality improvements, and the content of training programmes remains "what they [the TVET institutions and the GDVT] have, and not what the market demands". Training quality remains weak because a large share of content that is irrelevant and not useful is included, while other content that is relevant is excluded.

7.3 Skills testing and certification

Skills testing and certification is generally undertaken at the TVET institutions, without industry participation, although some national skills testing initiatives have taken place in recent years. The lack of industry participation in the skills assessment process is a major concern because "schools are developing curricula that do not reflect private-sector realities, and then assessing graduates based on how well they have learned these curricula, which are not very relevant". TVET institutions' incentives are to have their students pass and graduate, but little attention is given to the relevance of the skills they have acquired, and there is limited feedback from the private sector into the process. According to the GDVT, industry representatives were involved in developing the "questions bank" from which questions are randomly selected each year for the testing of trainees.

National skills testing started in Viet Nam in 2011 with a mining company, and there have been skills testing in a number of areas since then. In particular, the Japan International Cooperation Agency (JICA) has organized skills assessment tests that can be considered as best practice because of the involvement of private-sector enterprises in the process (see Box 1).

Box 1
JICA and national skills testing

JICA organized a test for turning-machine operators,* which are operated by skilled workers (at the secondary technical school level), to cut metal pieces into metal accessories and machine components. Japanese companies and Vietnamese training institutions were invited to participate. The test involved two components: theoretical and practical. For the practical component, participants were given the blueprint beforehand, to enable them to be trained at their institutions and practice the required task. They were tested on the quality of the finish of their product, the measurements and precision, occupational safety, and attitude, among other things. They had two hours to complete the task, and were allowed an extra 30 minutes (but points were deducted for the additional time). Assessors were selected from the participating institutions, additional TVET institutions and from one Japanese company, and were trained specifically for this purpose.

Unlike expectations that workers from companies would be weaker in theory and stronger in practice than the Vietnamese TVET students, the results were mixed. Six out of nine participants from the Vietnamese TVET system were able to pass the practical test, while one worker from a Japanese company did not. The participants who passed both practical and theoretical tests were certified.

The testing was considered by the participating companies as a very good opportunity to identify challenges and to improve their workers' performance and productivity. Companies in general have shown significant interest in being part of this process, which they view as a useful evaluation tool. The second round of turning-machine testing was planned for the end of July 2013, and included four participating Japanese companies, and another three companies attending as observers.

**This test was organized by Mr Hayaki, a national skills testing expert from JICA based at the GDVT and working with the department responsible for national skills testing in Viet Nam.*

The GDVT has not been very successful in involving the private sector in the skills testing and certification process, and the TVET Law is too general in this regard. Part of the problem is that those in charge are government officials with limited understanding of, and limited experience in communicating with, the private sector. Often, they do not want to approach private-sector entities and industries themselves, but want those entities to approach them instead. For instance, instead of taking the initiative of visiting foreign companies to engage with them, they wait for an official invitation letter from these companies.

7.4 Accreditation of TVET programmes or institutions

After the adoption of the TVET Law, the GDVT visited all TVET schools, in order to evaluate and accredit them. They found that in most schools, facilities, equipment, and teacher qualifications did not match all of the requirements. If the TVET institution was able to meet the minimum requirement (i.e. adequately deliver the 70 per cent required curriculum content), which was the case for most institutions, they were accredited anyway. Sometimes, institutions were accredited to provide training in some occupations, but not in others. If an institution did not meet the minimum criteria, it was given partial or conditional accreditation and allowed some time to improve (e.g. trainers at the institution would be given six months to get a certificate in pedagogical methods).

7.5 Trainer quality and training of trainers

Trainers constitute the backbone of the TVET system, and need to have adequate vocational and technical skills in addition to the pedagogical skills. The importance of trainer quality and TOT has been a major gap area for TVET in Viet Nam. This issue has long been emphasized by GIZ and covered extensively in its studies. It is now high on the government agenda, and has been mentioned in the TVET strategy, but the extent to which the related policies are implemented remains to be seen. GIZ has been involved in TOT, providing workshops on basic or fundamental training areas, which require trainers to know how to adequately use the relevant machinery and equipment. Before starting the training programme, to identify the training needs of trainers, GIZ tested trainers using a skills assessment tool used to test workers and trainees in Germany – therefore, the bar for trainers should be higher than this level – but they found that almost none could pass the test.

TVET teachers in Viet Nam come from four sources:

- a) general education (university graduates in electronics and engineering, among others);
- b) universities for technical education (specifically for students to become TVET teachers);
- c) industry (e.g. engineers who are or were practicing in the field); and
- d) good students from TVET colleges.

Trainers coming from a) and b) above often lack the practical know-how and technical and vocational skills, but are strong in terms of pedagogical skills (particularly those in group b). On the other hand, trainers coming from c) and d) are weaker in terms of pedagogical skills, but stronger in terms of vocational skills. In particular, trainers coming from industry are the strongest in terms of technical and vocational skills, but they represent a very small share of all TVET teachers, partly because they can get higher salaries through employment in industry than through teaching, and are therefore difficult to recruit by TVET institutions.

Currently, the GDVT has some US\$10 million from the government budget to train teachers in 34 occupations selected as being key for ASEAN countries, including funding to send teachers abroad for training in countries such as the Republic of Korea or Taiwan. The GDVT's Department for Vocational Teachers and Management Staff is running a programme to improve the vocational skills of teachers coming from a) and b) above. It has developed programmes for 44 occupations, of which ten programmes have been piloted already in 18 sessions across the country (in selected provinces, with teachers from neighbouring provinces invited to attend). These programmes were developed on the basis of two considerations: using the relevant national occupation standards; and taking into account the college curricula for the occupations in question. After completing the training, teachers are tested and certified to teach at the college level. Teachers who are not certified can still teach, but at lower levels. Sometimes, feedback questionnaires are filled in by the students of teachers who have received this training, providing some feedback.

The department is also running a programme to improve teachers' pedagogical skills, and provide them with second-level certification according to international standards.⁷⁴ As of July 2013, the programme had been provided to 160 teachers who were divided into groups of 20 (i.e. eight courses or sessions were delivered in a number of provinces across the country). This programme started in 2009, and also received support from the ILO LMP. Currently, 40 out of the 160 trainees in the programme have been funded by the ILO. After completing the two-month courses, teachers may have to wait for the international exams, which take place twice a year. After passing the exams, teachers are certified. There are already 160 teachers in Viet Nam, in addition to the ones currently enrolled, who have level 2 certification in a number of vocations (other than the ones currently being

⁷⁴ Level 1 is basic, so the international recommendation was to skip it and go directly for second-level certification, particularly because those who are being trained are already teachers, so they have the basic requirements.

provided), but none who have Level 3. The department would like to send at least ten teachers abroad, to obtain Level 3 certification, so that they can come back and train other trainers at Level 2 – the idea being that they would no longer depend on foreign trainers to provide this training. They would like ILO support for this.

In addition to training organized by the GDVT, TVET institutions have their own training programmes for their teachers and staff.

Despite the provision of TOT by the government, and donor support for these activities, addressing the challenge of weak trainer quality, and the related issue of poor training environment (e.g. in terms of workshop management, among other things) requires improving the linkages between the TVET sector and enterprises. According to the GDVT, industry is involved in the TOT process at various stages; it is initially involved in developing the standards and curricula that constitute the basis for these programmes, and it is then consulted again in developing the programmes themselves.

8. Industry training

Although industry involvement in TVET has improved since the TVET Law became effective, it remains limited, partly because there are no specific mechanisms in place for implementing the policy objective of increasing private-sector participation in TVET, and incentives are either not implemented or insufficient. Enterprises do not invest sufficiently in training because they are mainly SMEs; they cannot afford to pay, and lack the capacity to participate sufficiently in the process. Furthermore, there is a lack of capacity at the management level of the TVT institutions to establish solid linkages with industry.

There is currently a consensus about the need to increase private-sector participation in TVET in Viet Nam; however, to what extent and through which mechanisms remains the subject of much debate. At lower levels of authority, at schools and government agencies, there seems to be a greater understanding of the importance of this issue, and of approaches and required changes, than at higher levels of authority.

8.1 Private-sector involvement in TVET planning and management

Despite legislation that requires inviting enterprises to participate, and the presence of some industry representatives on the committees for standards and curricula development, private-sector involvement in TVET management and provision remains limited. Viet Nam still relies to a significant extent on central planning; there are few mechanisms in place for engaging the private sector, and little clarity or transparency in these mechanisms (e.g. who is involved, what the outcomes of the processes should be, or who is accountable for these outcomes). As a result, there is a significant mismatch between employer demands and expectations, and the skills and qualifications that the TVET system and schools are supplying.

There are some government policies to promote linkages – for instance, an agreement being discussed between the German and Vietnamese governments on tax incentives for industry-TVET partnerships – but these policies are generally not implemented. Furthermore, some stakeholders argue that schools do not necessarily need government guidelines and incentives; they mainly need more autonomy and capacity to form partnerships with industry. Indeed, higher education institutions (universities) that have more autonomy have been more successful at forming these partnerships. Even universities, however, are not proactive in approaching enterprises in Viet Nam. For instance, IBM has had to approach universities to set up their internship programmes, rather than the other way around.

8.2 Apprenticeship practices

There are internships and apprenticeship practices in place, but these initiatives depend on the schools and the enterprises involved, and are on a case-by-case basis; they need to be scaled up to the national level, and regulated through government-industry agreements.

Often, schools lack new equipment, which is often expensive, and teachers do not know how to operate certain equipment. As a result, when trainees go to the enterprises for internships, and have never been exposed to these new machines, they do not have sufficient time to learn how to operate them; they end up “just walking around and observing”. Some schools have become aware of this problem, and have taken initiatives to address it by working with employers.

8.3 Industry training organizations

In terms of direct training provision, this is done by some individual enterprises – mainly SOEs and larger private enterprises, but not SMEs – but there are few, if any, industry training organizations run by industry associations. In Viet Nam, sector councils or industry associations exist in all major economic areas, but they have limited resources and capacity; they need strengthening and capacity building (by the VCCI, and perhaps with ILO assistance in terms of improving tripartite mechanisms). Even if they don't have the capacity to implement projects themselves, at the very minimum, these associations should have a mechanism to select representatives who can act on their behalf, and who are best placed to represent them and their interests in different areas, like skills development.

There is a disparity between employers' awareness of skills development issues and challenges, and their willingness or commitment to address this challenge. For this reason, even if initiatives are started with a limited number of companies, ultimately, sector councils and associations must become involved to ensure that all companies benefit. A model of cooperation between the local government, TVET schools, and enterprises in the hospitality and mechanics trades is being piloted by the VCCI Ho Chi Minh City with support from the Norwegian Confederation of Enterprises.

Box 2
Case study: Intel's Higher Engineering Education Alliance Programme

An important model for industry involvement in Viet Nam is the Higher Engineering Education Alliance Programme (HEEAP). This initiative was conceived by Intel in 2006 when the company first arrived in Viet Nam, but was only implemented in 2010. The programme was developed because Intel found that engineering education was not sufficiently applied in Viet Nam, and the company would have to provide their own training. The programme involved sending engineering teachers from Vietnamese universities to be trained at the University of Portland in the US.

Intel implemented this programme four times and then could no longer afford to do it on its own, because it was concerned that its trained employees would be poached by other companies. It formed a coalition to continue the programme, launching HEEAP 1.0 with contributions from the US government and also from other companies. This project involved sending 25 teachers from five universities to the US, and provided the selected universities with new equipment, and stipends for teachers so that they would not need to accept bribes. Intel's workforce consists of engineers (35 per cent) and manufacturing technicians (65 per cent) who are the skilled workers and represent the largest share of its workforce.

In 2012, Intel signed a memorandum of understanding (MOU) with the MOET and the MOLISA for a US\$40 million project for 2013–17 (part of the funding for this may have come from a large ADB project) to scale up the programme (HEEAP 2.0). They now have six universities in Ho Chi Minh City, Hanoi, and Danang, and two technical colleges in Ho Chi Minh City participating, and have also helped in developing curricula. All of the training provided under the HEEAP programme is in English, and the institutions and graduates from these programmes receive (international) Accreditation Board for Engineering and Technology (ABET) accreditation. Intel has also made a strong push for women to be included in engineering, and many women were part of the fourth cohort of students who were sent to the US for training. A scholarship programme for women engineers was also supported by the American chamber of Commerce (AMCHAM).

9. TVET and tripartism

The same issues or “root causes” of many of the major labour-market challenges that Viet Nam is currently facing also complicate effective tripartite processes. These include a lack of “industrial history,” or the relative novelty of employer-worker relationships (previously, everyone in the country was an employee), the novelty of labour-market supply and demand interactions (previously, all students entering university were guaranteed employment upon graduation, and were absorbed into employment), as well as the somewhat blurry distinction between the private and public sectors (because of the prevalence of SOEs, but also because many private enterprises are family-owned, and these families are connected with the Communist Party structure).

Nevertheless, tripartite mechanisms in areas like industrial relations have been operating for some years now in Viet Nam, but in terms of TVET and skills development, they are very new. In 2008 and 2009, there were numerous strikes across the country, and tripartite mechanisms mainly focused on discussing industrial relations issues, and solving disputes (over wages and salaries, and working and living conditions, among other things). Employers were then primarily concerned with macroeconomic stability, labour productivity, and rising labour costs. Since 2010, the debate has shifted towards skills shortages, which became increasingly viewed as a cause of many problems (including low productivity).

The VCCI then started thinking about skills issues, and in 2011 it organized a conference to discuss these issues, and found that a lot of the complaints and concerns from both TVET schools and employers were the same as the concerns that had been raised in 2004 and 2005; although the TVET reform process was underway, little progress had been made. The limited experience that the tripartite partners have with skills issues makes it more difficult for them to work together effectively.

One issue with tripartism in Viet Nam in general is a negative perception of trade unions, which are criticised as being weak, and lacking both capacity and accountability. Unions are said to be either very much part of the government structure (and not speaking for workers), or otherwise as not standing up for workers' rights, but for employers instead. In 2008, when there were industrial relations problems in Viet Nam, strikes were not organized by unions, but rather by individual leaders among workers. Furthermore, there was an industrial relations conference in 2010, and a national conference to revise the Labour Code in 2011; but unions' participation in these events and meetings was limited.

The VGCL's Legal and Policies Department is currently reviewing the draft revisions of the TVET Law to find discrepancies; it would like to have capacity building by the ILO to learn about international best practices and experiences, in order to be able to better contribute inputs into the law's revision process. The Law on Trade Unions in Viet Nam was revised in 2012, at the same time as the Labour Law (which has been effective since 1 July 2013). The previous version of the Law on Trade Unions was dated 1990. There is a general sentiment in Viet Nam that the unions need to be rethinking their roles and responsibilities.

However, unions are not the only weak link in tripartite mechanisms in Viet Nam. The VCCI was assigned responsibility for solving industrial disputes, representing all businesses (foreign and Vietnamese) in terms of legal affairs in dealing with the government, and promoting FDI and investment in general. However, the VCCI lacks the capacity to fulfil all these tasks, despite the presence of some highly qualified people among its staff. Furthermore, government officials lack experience in working with, and approaching, employers. They have a limited understanding of private-sector realities and concepts. For instance, while employers emphasize TVET as a means of improving labour productivity, government officials have a different approach, considering TVET as a social protection tool.

9.1 Skills training for employment promotion initiatives

The most prominent policy for employment promotion in Viet Nam at the moment is the "one million farmers" initiative, which is a desirable policy in principle, although implementation is a challenge (including how to select participants, and what training to provide, among other issues). The training must be relevant for local labour-market needs and opportunities in rural areas. The initiative would be particularly positive if it is taken as an opportunity to establish a system linking training with local labour-market needs (including career guidance, monitoring of implementation, and tracer studies); in other words, if it is used as an opportunity to develop a proper system for training planning and provision, and value added chains in the rural areas. Unfortunately, at the moment, only uncoordinated initiatives are being taken, and "anything goes" to meet the ambitious target.

The ILO Know About Business (KAB) and SIYB programmes have both been successfully implemented in Viet Nam. The Women's Entrepreneurship Council (WEC) has used a lot of ILO material and has adapted it to local context. It holds an entrepreneurship festival every year, organized by a group of trainers, many of whom are SIYB trainers. The GDVT has contacted the WEC to obtain this SIYB material, and has now integrated SIYB modules into curricula. SIYB training will be delivered in 20 provinces. The GDVT has been training trainers in SIYB through the Vocational Training Association, which has also been involved in delivering 32 KAB training sessions (and four on occupational health and safety).⁷⁵ The MOLISA has secured funding for this training under the

⁷⁵ The Vocational Training Association was established in 2005–06. Its members are vocational institutions, enterprises that provide training themselves, individuals (scientists, formal officials, and other interested parties), and government officials. The association has recently changed its name to the Association of Vocational Education and Social Work. The association's objective is to enable members to share experience and lessons learned, contribute to the policy-making process, raise the voice of training providers to the government, and advocate and disseminate policies for the TVET system. It has its own magazine, published on

“one million farmers” initiative.⁷⁶ There are other stakeholders also engaged in training in rural areas: youth unions and mass organizations (providing career guidance and training), and the Ministry of Agriculture, among others.

The WEC also has several projects targeting poor women in rural areas. For instance, it is working on a feasibility study with the World Bank to develop employment “incubators” for women who have lost their land due to urbanization. It intends to create a group of women who will work together, similar to the approach used in microfinance. One possible activity being considered is mushroom growing for pharmaceuticals rather than for consumption. Specifically, it wants to transfer mushroom growing methods and technology from Europe to these women’s groups, as the productivity of mushroom growing for pharmaceuticals is 20 times higher than for consumption.

9.2 Technical cooperation projects on education and TVET

9.2.1 The Asian Development Bank

The ADB has been involved in TVET in Viet Nam for some 15 years. Education and training is one of its key operational areas in its plan up to 2020. Over the years, the ADB has had a budget of over US\$500 million for education, but less for training and TVET. However, the ADB remains the largest donor in terms of TVET funding, with US\$70 million under the Skills Enhancement Project. Of this US\$70 million, some US\$20 million is channelled through the Vietnam Development Bank to private TVET institutions – a type of public-private partnership (PPP). The other US\$50 million is for investment with the MOLISA to support public TVET colleges. The first phase of the project involved investing in infrastructure and equipment for public TVET schools. The second phase, which was ongoing at the time of writing of this report, involves support for private TVET providers, and for the establishment of national standards. The ADB was also helping the MOLISA to establish an accreditation system for TVET, and to provide TOT.

In the third phase (an estimated US\$80 million) – which was being designed at the time of writing, and should start in 2016 – the ADB wants to focus on the policy-making process and policy planning at the MOLISA, in terms of capacity building, as opposed to the traditional approach of funding equipment and facilities, which has been found to be ineffective. It would like to have a strategic partnership with the ILO in this regard. In particular, it would like to discuss areas where it could provide funding, and the ILO could provide technical expertise.

The previous ADB project, which has been completed, also involved US\$50 million over nine years (the original project design was for six years, but it took much longer).⁷⁷ This project was considered

a monthly basis, and undertakes research and conducts surveys. It has also contributed to curriculum development and developed training material based on ILO documents (e.g. KAB and occupational health and safety). The association has a network of professors and retired officials who can provide training.

⁷⁶ The government master plan includes the ambitious target of training 1,000,000 farmers every year, so the ILO KAB came at the right time for this initiative.

⁷⁷ The project implementation was difficult because the ADB has found the MOLISA quite challenging to work with on both the technical and administrative fronts. The MOET has cooperated better with the World Bank (WB) and the ADB. The ADB and WB have coordinated their education-sector interventions in Viet Nam: the WB has been involved in primary and higher education, and the ADB has been involved at the secondary level, which is where TVET falls. The MOLISA has set up a single unit to manage all projects – the Project Implementation Unit (PIU), which is in charge of dealing with, and coordinating on, all donor support. The MOET has the same PIU structure, but the staff of that unit seemed relatively more experienced in dealing with donors and managing projects than their MOLISA counterparts. At the MOLISA, the PIU staff is young, inexperienced workers, often having just graduated, but fulfilling the condition of being able to speak English. However, they often did not understand the substance of projects. Part of the issue is that the GDVT is not yet properly integrated into the MOLISA structure. The ADB has so far worked mainly with the PIU, but for the next phase of its project, which involves capacity building for policy-making, it would likely to work with the

successful because it allowed for the establishment of the three levels of TVET (elementary, intermediate, and diploma) that were introduced in the TVET Law. In the revised version of the TVET Law, an additional level has been introduced at the university level.

9.2.2 GIZ

GIZ⁷⁸ has been heavily involved with TVET reform since 2006, providing significant technical and financial support; its ongoing Programme on Reform of TVET in Viet Nam (2008–2014) addresses many gap areas identified in this study, through its different components, which include:

- a) system advisory services – providing advice on TVET governance (roles and responsibilities of the actors involved), practical focus of the training, and private-sector involvement, including in standards development, in implementing cooperative training approaches, sustainable TVET funding, and setting up an assessment system;
- b) improving training quality at five selected TVET institutions – providing advice and capacity building for the institutions' managerial staff, including on strengthening cooperation with the private sector, TOT, and provision of training equipment; and
- c) developing a model for TVET centres of excellence.

GIZ stands out among bilateral donors in Viet Nam for addressing TVET issues from a systemic perspective.

9.2.3 The Canadian International Development Agency

The Canadian International Development Agency (CIDA⁷⁹) has signed an MOU with the Ministry of Planning and Investment (MPI) for the Viet Nam Skills for Employment Project (V-SEP). The MOU was signed with the MPI to avoid disputes arising from choosing to work with either the MOLISA or the MOET. The project was not yet operational at the time of writing of this report, but the Canadian Executing Agency (CEA) had been selected, and was expected to come to Viet Nam in September or October 2013 for an inception mission, and then prepare the project implementation plan on this basis. Following this, the project would begin within six months.

This project came about because of the realization that graduates of the education system in Viet Nam, at all levels, including TVET, were not meeting labour-market demand, and as a result, when companies hire them, they are forced to re-train them. The CIDA's aim with this project is to help improve TVET linkages with the private sector, in order to achieve more relevant market-driven curricula. This project is a grant of US\$20 million over five years. The CIDA communicated with and met GIZ during the project planning process to avoid duplication of efforts, and will coordinate with GIZ in the future.

The V-SEP project has two components: build the capacity of management at TVET schools; and institutional development. Under the first component, it is establishing two new TVET centres, one within the Ho Chi Minh City National University (in the south), and one at the Educational Management Centre in Hanoi (in the north).

Under the second project component, it is choosing three provinces in the south that will be provided with support in terms of:

GDVT. Another challenge for the ADB has been the conventional mind-set of MOLISA officials and the weak communications and linkages that they have with donors and other stakeholders (e.g. other government ministries like the MPI and Finance) which makes it difficult and time-consuming to solve disputes.

⁷⁸ Vietnamese-German Technical Cooperation – TVET Reform Programme website: www.tvet-vietnam.org/.

⁷⁹ CIDA is now part of the Department of Foreign Affairs, Trade, and Development (DFATD) but is referred to in this paper as CIDA for simplicity.

- a) assistance in developing socio-economic plans – the project will help the provinces draft their development plans, and link their TVET strategies to the overall development plan; and
- b) strengthening the TVET system by building a new TVET management system (i.e. student recruitment process, curriculum development, quality assurance, mechanisms of linking with the private sector, and mobilizing the resources of companies for TVET, among others).

Still under the second project component, it will be developing 29 community colleges across the country (in other provinces, not the three selected for the capacity-building activities mentioned above).

The key project partners (Ho Chi Minh City National University and the Educational Management Centre in Hanoi) have the mandate to improve the quality of trainers from different TVET schools and colleges, and also to participate in policy-making; to undertake their own studies and develop advocacy plans to inform and contribute to the consultations and policy-making process in general.

9.2.4 Other donors

In TVET in Viet Nam, most of the donors, with the exception of the ADB and the ILO, are bilateral (e.g. France, Japan, and the Republic of Korea), and therefore are interested in specific areas – for instance, in a limited number of occupations – partly because one of their major goals is strategic: to support their country's FDI. Therefore, with the notable exception of GIZ, which has a long history of involvement in TVET in Viet Nam and other countries, bilateral donors have not been interested in the overall TVET system, and as a result, assistance in TVET has been quite fragmented. The MOLISA holds an annual half-day coordination meeting with donors – which is often used as an opportunity to describe the department's achievements – but there is a greater need for ongoing communication and coordination.

10. Recommendations on skills and TVET system development in Viet Nam

Based on the gaps identified in previous sections, as well as ongoing or planned donor projects, this section presents recommendations for ILO engagement with the skills development process in Viet Nam. These recommendations can be grouped into the following broad categories, where the ILO can provide significant value added:

- a) labour-market information and training planning;
- b) tripartite mechanisms with a focus on skills development;
- c) linking TVET with employment creation schemes and initiatives at the local level; and
- d) promoting equity and access, and the concept of “IVET” or “integrated TVET,” which includes soft skills components at schools in rural areas in particular, with modules on occupational health and safety, workers' rights and responsibilities, among others.

10.1 Labour-market information and training planning

Recommendation 1: Capacity-building activities for local-level employment services offices in terms of LMI collection, analysis, and dissemination;

Recommendation 2: Support for training planning at the provincial level using LMI.

Recommendation 3: Follow-up capacity-building activities for the BOE on using, maintaining, and updating the LOTUS model.

10.2 Tripartite mechanisms with a focus on skills development

Recommendation 4: capacity building for unions, to enable them to make better contributions to the policy process for skills development in particular;

Recommendation 5: capacity building for the VCCI and industry associations and sector councils, and assisting industry associations and sector councils in participating in the TVET process (from standards development to testing and certification); and

Recommendation 6: support for TOT at TVET schools run by unions (e.g. support for trainers to be sent abroad and benefit from other professional development activities to which they have limited access, relative to their public school counterparts).

10.3 Linking TVET with employment creation schemes and initiatives at local level

Recommendation 7: Capacity building for employment service centres to enable them to link with TVET schools and employers (including government or donor run employment schemes) at the local level

Recommendation 8: Capacity building for TVET management staff and trainers in rural areas; helping them establish solid partnerships with industry and employment opportunities at the local level.⁸⁰

Recommendation 9: Continuing to support SIYB and KAB programmes and the inclusion of relevant modules in TVET curricula.

10.4 Promoting equity and access

Recommendation 10: Support for mainstreaming gender and disability issues at training institutions; assisting schools develop flexible programmes, and TOT regarding disability issues, among others.

Recommendation 11: Explore employment opportunities for women⁸¹ and for people with disabilities in higher value-added and higher productivity sectors in Viet Nam, and develop training pathways for them to access such opportunities.

Recommendation 12: Support for training provision of modules on occupational health and safety, and workers' rights and responsibilities, among others, through TVET schools, employment service centres, or unions at the local level in rural areas.

⁸⁰According to the ILO Country Office Hanoi, the SIYB experience demonstrated that removing the disconnect between training content and local labour-market demand provides an incentive for trainers to improve their skills. Specifically, showing teachers the relevance of the training they were providing for youth employment in local areas motivated them to improve their skills and pass these skills on to their students.

⁸¹ Specifically, women represent the largest share of employment in industries like garments, leather, and fisheries processing, where working conditions are poor (long hours, and standing up, among other issues) and labour productivity and remuneration are low. Are there any skills-related barriers for women to access higher productivity employment?

11. The TVET Law and revisions

This section focuses on the TVET legal reform process. It begins with a review of the TVET Law of 2006, which is the current legal reference⁸² for TVET in Viet Nam, identifying the law's strengths and weaknesses, then describing the proposed changes and revisions and analyses, and whether these changes are sufficient and adequate to address the gap areas and shortcoming of the law, in order to achieve the government's objective of improving the quality and relevance of TVET. The proposed changes will be assessed in light of information gathered on the current situation of the TVET system as described in the previous chapters.

11.1 Strengths of the 2006 TVET Law

The adoption of the Law on Vocational Training in 2006, following the adoption of the Education Law in 2005, was a significant milestone, widely considered as an important step in the right direction for TVET reform in Viet Nam. The two laws were expected to set the stage for the introduction of far-reaching autonomy at the TVET institutional level, provide incentives for and facilitate the expansion of private providers, and introduce and define three levels of qualifications, among other objectives.⁸³ TVET has ranked high on the government's agenda since the adoption of the law.

The TVET Law brought about many positive changes, specifically by:

- a) introducing three levels of training (elementary, intermediate and diploma);
- b) reorganizing the system to better meet labour-market demand, by introducing the DACUM approach for curriculum development, and introducing module-based courses, among other things;
- c) providing TVET institutions with more autonomy in recruiting students and developing their programmes;
- d) improving quality assurance by introducing two types of accreditation and certification for TVET institutions; and
- e) raising awareness of TVET and helping change negative social perceptions of the sector – by defining the three qualification levels and associated certificates and diplomas, the law raised the profile of TVET; parents still view it as the second-best choice, but value it more than they previously did.

The law introduced various committees and councils to improve TVET management, governance, and quality: the “institutions’ committees” at public secondary vocational schools and colleges, and management boards at private secondary vocational schools and colleges; consultant committees to advise on management issues; and curriculum and syllabus appraisal committees, which may include employers who are knowledgeable of the vocation.

The law also introduced the idea of vocational training funds to support TVET, which consist of the (voluntary) contributions of businesses, organizations, individuals, the state budget, and other legal sources. These are exempt from tax, and regulated by the government. The law also authorizes TVET institutions to set up production units and raise additional revenues.

⁸² Other relevant legislation includes the Education Law (2005), the Labour Law (2011), and the new Employment Law, which was also being revised at the time of writing this report (July 2013), and was expected to be submitted to the National Assembly in November 2013.

⁸³ Technical and Vocational Education (TVET) in Viet Nam – A Brief Overview (2008).

Furthermore, since the passing of the law, the Vocational Training Association was established, investment in the sector has increased, teacher qualifications have improved, and linkages between training institutions and the private sector have been somewhat enhanced.

11.2 Shortcomings of the 2006 TVET Law

In general, although the law includes many key components, there are areas where more information, guidelines, and implementation mechanisms are needed. For instance, the law does not clearly describe the organization of training within the three levels of qualification, nor the division of responsibilities, roles, and authority of the different stakeholders. In particular, the unclear division of authority between the MOLISA and the MOET in terms of “state management” of TVET has led to confusion and inefficiencies, with both departments working on developing vocational standards.

Stakeholders involved in TVET are the MOLISA and the MOET and their provincial-level representatives, as well as unions, employers’ associations, and private companies, among others. The lack of clarity regarding the roles, responsibilities, and authority of stakeholders results in a confusing reporting structure, which limits accountability. Even when the law mentions that more on a subject will be specified in a government decree, the decrees take a long time to be approved, and even when they are, they are often themselves confusing or not sufficiently detailed, and lack proper mechanisms for implementation.

Although the law provided TVET institutions with more autonomy than they previously had (e.g. to recruit staff, enrol trainees, and manage resources), the extent to which they have the autonomy to develop their own programmes and cooperate with the private sector are still limited. For instance, although institutions can develop their own curricula, these must be based to a significant extent on the framework curricula provided by the GDVT, which limits their autonomy and capacity to innovate and compete.

Another major issue with the law is that although it calls for private-sector participation in training, it does not provide any mechanisms for implementation. Currently, the GDVT consults with businesses, but it is unclear how these businesses are selected. There is no institutionalized mechanism for these consultations, which are done on an ad-hoc basis – for instance, employers are invited to participate on curriculum appraisal committees. The roles and responsibilities of TVET institutions on forming industry linkages are vaguely defined as “carrying out study tours and probation at businesses for trainees” and “cooperating with domestic and overseas businesses.”

The law presented the government’s “socialization” policy, which involves promoting the participation of non-state actors in TVET, but did not specify support measures for this. Similarly, although the law identified target groups (ethnic minorities, veterans, disabled persons, the poor, homeless orphans, agricultural households whose land was confiscated, among others), only a few specific measures were provided in that regard (incentives for institutions and trainers to provide TVET to target groups, and for target-group members to partake in training).

There is a chapter on disabled persons in the law, which includes incentives for training provision to disabled persons by organizations set up for this purpose (DPOs). While the recognition of the importance of access to TVET for disabled persons is a positive feature of the law, a drawback is that this mode of delivery does not allow reaching the majority of disabled people with high-quality training, for all the reasons described earlier in this document.

An important gap area in the law is that there is no mention of gender, and no flexible training arrangements or special provisions for women (e.g. with respect to dormitories, programme contents and duration, location, or special measures for pregnancy, among others).

Table 1. Strengths and weaknesses of the 2006 TVET Law

Strengths	Weaknesses
<ul style="list-style-type: none"> ▪ Introduced three levels of qualification and associated certificates and diplomas. ▪ Introduced the DACUM approach for curriculum development, and introduced module-based courses, etc. ▪ Provided TVET institutions with more autonomy in recruiting students and developing programmes, etc. ▪ Introduced the government's "socialization" of TVET policy. ▪ Emphasized the importance of linkages between training institutions and the private sector. ▪ Introduced accreditation (two types) and certification for TVET institutions ▪ Introduced target groups. ▪ Emphasized training for disabled persons. 	<ul style="list-style-type: none"> ▪ Did not clearly describe the organization of training within the three levels. ▪ Autonomy of institutions remains limited. ▪ Large share of curricula fixed (based on framework curricula developed by the GDVT). ▪ Did not provide specific mechanisms for implementing and improving TVET-private sector linkages, or for promoting "socialization" of TVET. ▪ No clear involvement of the private sector in quality assurance, accreditation, or certification. ▪ Provided few specific measures. ▪ Did not include gender and specific measures for women. ▪ TVET for disabled persons through specialized organizations rather than mainstreamed.

Source: TVET Law 2006.

11.3 TVET Law revision process

The TVET Law revision process was underway at the time of writing this report, and the revised law was in its third draft. Proposed changes to the law include modifying and supplementing a number of articles, removing a chapter, and changing some of the terminology. These proposed changes are examined in the next chapter. The revision process itself, however, has been criticised by several stakeholders as lacking clarity and transparency, for instance regarding the consultations that took place.

The process has been tripartite, including representatives from government, the VCCI, and the VGCL on both the drafting and editing committees. However, a number of stakeholders feel that they were not included in the process, including important donors like the ADB, and even relevant departments within the MOLISA, like the BOE, and other organizations like the WEC. The BOE considers that "more attention has been paid to the training side rather than the labour-market side in the TVET Law development and revisions process, and as a result, there are missing inputs and information that were not adequately taken into account". The WEC, which has been an active advocate of the rights of working women, and was invited to contribute inputs to two chapters of the law, was not (directly) included in the revision process.⁸⁴ The WEC represents the interests of women entrepreneurs who may not be represented by the unions.

⁸⁴ The WEC was, indirectly, through the VCCI.

Furthermore, the process is described as being very ad hoc, with different versions of the revision drafts appearing without any continuity, i.e. new versions of the draft revisions not seeming to be built upon previous ones. Gap areas were not identified in any systematic way (there appear to have been no studies that examined the implementation of the previous law, to identify challenges and areas to be addressed in the revision). The impact that the law has had is not clear so far, and there have not been any serious efforts at understanding the reasons for this (e.g. whether challenges were due to the design or implementation, among other things) before moving forward with the revision process.

The lack of transparency and ad hoc nature of the revision process is largely due to the fact that no clear guidelines exist for the process. There is a document that mentions the selection of the committee members, but not their tasks and responsibilities, and not the mechanism for setting up meetings, or for selecting those responsible for chairing meetings, among others.

Stakeholders are concerned that, unless the revision process itself is improved, the revisions are likely to be inadequate or insufficient. One welcome development was that, as of July 2013, the planned submission of the revised VET law had been postponed to April 2014, which gave stakeholders more time to provide feedback and ask for additional changes.

11.4 Proposed revisions

11.4.1 Better defining roles and responsibilities of stakeholders

The proposed revisions attempt to clarify the confusion regarding the authority responsible for state management of TVET by changing the terminology specifically to the MOLISA in various articles. This change does not seem sufficient, however; the law should be specific about the roles and responsibilities of the MOLISA and the MOET, and their provincial-level representatives, other ministries and agencies, employers' associations, enterprises, unions, and all relevant stakeholders.

11.4.2 Adding a fourth qualification level

The proposed revisions include adding a fourth level of qualification for vocational training: the advanced college level. Training at this level can be provided only at vocational training colleges, for a duration of six months to one year, depending on the vocation in question, for trainees who have obtained a vocational college diploma. The additional qualification level is consistent with the government's objective of promoting higher skill-level occupations and shifting towards higher value-added activities, which has led to the government establishing a number of vocational training centres in recent years.

11.4.3 Concrete measures for improving industry participation and the "socialization" of TVET

The proposed revisions include incentive measures to support the government's policy of "socialization" of TVET, specifically: policy incentives for enterprises and individuals to provide vocational training classes, and policy incentives for private TVET institutions, in an attempt to create a more "even playground" between private and public training institutions.

Although the requirement criteria for managers of TVET institutions still do not include specific private-sector knowledge or experience, managers are required to "cooperate with enterprises" to organize their training programmes. Responsibilities of TVET institutions are further specified in the proposed revisions to include "organizing for the trainees to study, practice, and do internships in enterprises," "cooperating with enterprises" and "guaranteeing" that graduate trainees will meet the skills requirements of these enterprises, and implementing "linkages" with domestic and foreign organizations.

The proposed revisions specify the membership of school councils (previously called “institution committees”), as including representatives of government and unions at different levels, and representatives of the ownership body of the school, and representatives of the school’s production unit, if any, but these do not seem to include other private-sector representatives. Similarly, for private institutions, the management board would consist of representatives of shareholders of the institution, of the school staff, and of mass organizations, but does not seem to include other enterprises.

11.4.4 Raising additional funds for TVET development

The proposed revisions further develop the idea of a vocational training fund (“vocational training development fund”), which consists of contributions from enterprises that do not themselves provide training or otherwise invest in training, as well as voluntary contributions of organizations and individuals. The fund would be managed by the “organization representing the enterprises” (the VCCI). The revisions also include a provision requiring private TVET institutions to re-invest at least 25 per cent of their profits for their development (infrastructure and TOT, among others), and this amount would be exempt from taxes.

11.4.5 Improving quality assurance and accreditation

The proposed revisions include changes to the accreditation system. The first type of accreditation (self-accreditation) is unchanged; however, for the second type, instead of accreditation by the “state vocation management office,” there would be organizations dedicated to the assessment of vocational training. TVET institutions would be allowed to select the organization from a list of MOLISA-approved organizations.

11.4.6 Improving access and equity

There is an additional provision in the revisions that refers to the government support for enterprises to provide training and employment to disabled persons. Among the proposed revisions is the inclusion of women, and in particular women from ethnic minorities among the target groups. However, unlike for ethnic minorities and disabled persons, no specific policy incentives are listed, with the exception of giving females priority for participation in school councils.

11.5 Recommendations for inputs into the TVET Law revision process

This section provides recommendations for inputs into the TVET revision process based on gap areas identified in earlier in the document, and building upon the previous sections on the shortcomings of the TVET Law and the proposed revisions.

From a systemic perspective, the major challenges facing TVET in Viet Nam are institutional, and therefore require deep changes and reforms of the system and institutions. Although some components of the required reforms are stated in policy documents, implementation is very difficult because of lack of capacity, but more importantly because of lack of incentives. If the incentives were in place, people would mobilize the necessary resources and develop the capacity.

Major institutional reforms are particularly difficult to implement in the TVET sector, where there are many vested interests resisting change. For instance, TVET reform, unlike the reform in general education, directly affects politically strong SOEs (e.g. in the textiles industry), which provide their own training and may not want to change the status quo. Indeed, in general education, there is a consensus regarding significant changes that are needed, and the direction of these changes (e.g. new curricula that emphasize critical thinking); the only question is regarding the approach.

However, on the TVET side, not enough thought is given to determine required reforms and actions to pursue in order to implement these reforms. In the words of a resource person consulted for this study,

“There needs to be a change in mind-set, which is not happening, and this is why attempted reforms are failing; the government is trying to do something new within an old system. It is not working; they fail, and so they go back to the old system. This results in inefficient, ineffective skills provision.”

Given the situation, narrow and specific donor interventions will only have a limited impact. Donors should consider the broader context and identify key bottlenecks where they can effectively intervene. Of course, no external donor can come with an agenda for institutional change; donors must therefore select local partners (researchers and other stakeholders) who want to make significant changes to the system, and work closely with them. There needs to be pressure on the government to implement reforms, but there also needs to be a thorough process of developing mechanisms that can be implemented (politically and logistically). The policy revision process must be opened up to allow for new inputs and ideas.

11.5.1 More autonomy for TVET institutions

In terms of TVET law reform, therefore, institutional changes are needed by the government to facilitate the flow of information, give more freedom and autonomy to the TVET institutions, and let them compete. The legal revisions should address the three areas that are the cause of market failure in TVET – lack of information, incentives, and capacity – but not to over-regulate. The law should be revised to give the government the authority and responsibility for the required outputs of TVET (i.e. the competencies that people need to have) rather than for the inputs to TVET (detailed curricula). Specifically, the state should be involved in developing standards and occupational definitions, in testing, assessment, and certification, but not in detailing and dictating curricula. It should not matter how people acquire their skills, as long as they acquire relevant and high-quality skills.

Recommendation 1: TVET institutions should be given full autonomy to develop their curricula. The state should only be involved in developing standards and occupational definitions, in testing, assessment, and certification.

The law should allow for more flexibility, more space for TVET schools and industry to interact and cooperate in developing curricula, and in the entire process (e.g. in determining how long the practical training should be, among others.)

There have to be mechanisms in place to make TVET providers more pro-active, to establish partnerships with industry, form linkages with unions and other organizations at the local level, and to advertise their programmes. The lack of incentives for these functions is partly due to the lack of competition among TVET providers. The situation is starting to change slowly, but this change is being driven by the leadership (forward-looking) of a limited number of institutions, rather than by the law. Incentives to improve training quality through higher competition could include funding mechanisms linked to performance indicators such as employability rates (i.e. mechanisms that reward the quality and not just the quantity of training).

Recommendation 2: There should be mechanisms in place, including mechanisms linking funding to performance indicators, to increase competition among TVET providers.

11.5.2 Mechanisms for private-sector participation

The VCCI has held discussions with the GDVT to see if they can introduce more concrete measures for industry participation (through tripartite mechanisms) in TVET planning and management. In particular, the VCCI would like to have greater involvement of private-sector councils and industry associations in curriculum development and in assessment. The involvement of sector councils and industry associations is crucial in the long run – the VCCI is an umbrella for these organizations, but cannot undertake all the needed tasks and activities on their behalf. If it is not the sector council or industry association that is involved, then there needs to be clear selection criteria to ensure that the

employers participating in the process are representative of the relevant industry or sector, and are sufficiently equipped to articulate industry demands. For instance, selected employers must have a certain background, including in terms of experience cooperating with educational institutions, etc.

Recommendation 3: There should be specific mechanisms for ensuring industry participation in TVET planning and management, and in the entire process from curricula development through assessment and certification. Such mechanisms should involve industry associations or sector councils as representatives of employers.

In addition, there should be specific mechanisms (piloted and then implemented on a broader scale) to assist enterprises in making linkages with the TVET sector. Currently, the process requires enterprises to be very active in this regard, and requires a lot from them by asking them to take on students who are not qualified. Enterprises feel a strain on their resources because they have to assign their experts to work with, teach, and supervise students who are under-qualified. The current process is very demanding from employers' perspectives, and is not sustainable; in the long term, enterprises should not have to invest their own budgets and resources in training workers; they should be able to rely more on the national training system.

11.5.3 Equity and access: mainstreaming gender and disability issues

Achieving equity in terms of access to training requires mainstreaming disabled persons issues in the TVET Law and system, so that all organizations can provide training to this important but disadvantaged group in Vietnamese society. Mainstreaming disability issues should go hand in hand with training policies targeting rural areas, where most disabled persons reside. One opportunity to do so would be to use the “million farmers” initiative to develop a solid network of TVET institutions linking with employment service offices and local enterprises and employment schemes.

Just like disability issues, gender issues should also be mainstreamed in the TVET Law and system, so that all TVET institutions provide special measures and flexible training arrangements that are suitable for women.

Recommendation 4: Disability and gender issues should be mainstreamed in the TVET Law and system, such that equity of access to training can be achieved

11.5.4 Improvements in quality assurance

The assessment and accreditation of TVET institutions is crucial to ensure that training quality is sufficiently high. The process proposed in the revisions, for the second type of assessment (the first being self-accreditation), which is to have TVET institutions select their own assessors from a list of organizations acknowledged by the MOLISA (these can be established by the state, or by organizations or individuals) could potentially cause incentive problems. Even if the MOLISA is regulating the process and developing standards and assessment criteria, assessment organizations would have the incentive to be less thorough in order to be selected by TVET institutions. There should be one organization, or only a few, with the authority to provide accreditation for the same vocation or programme across the country, in order to ensure consistency and standards, and the private sector should be involved in the process (e.g. these organizations should be linked with sector councils).

Recommendation 5: There should be one organization, or only a few, with the authority to provide accreditation for the same vocation or programme across the country, in order to ensure consistency and standards, and the private sector should be involved in the process.

References

Asian Development Bank (ADB). 2013. *Viet Nam: Vocational and technical education project*, Performance evaluation report, April 2013 (Manila).

—. 2010. *Viet Nam: Skills enhancement project*, Technical assistance consultant's report, June 2010, (Manila).

International Labour Organization (ILO). 2008. *Mapping report of vocational training and employment for persons with disabilities in Viet Nam*, August 2008 (Geneva).

—. 2013. *Summary report of skills conference held in Hanoi on April 25, 2013*, Internal document.

Ministry of Labour, Invalids, and Social Affairs (MOLISA). 2013a. *Development of vocational training and employment creation models for people with disabilities*, Updated 26 June 2013. Available at: <http://english.molisa.gov.vn/> [20 Aug. 2013].

—. 2013b. *Nearly 6,000 people with disabilities to vocational training every year*, Updated 24 July 2013. Available at: <http://english.molisa.gov.vn/> [20 Aug. 2013].

—. 2013c. *Vocational programme for the disabled reports progress*, Updated 15 Aug 2013. Available at: <http://english.molisa.gov.vn/> [20 Aug. 2013].

—. 2013d. *Improving the rights and obligations of enterprises in vocational training*, Updated 2 Aug 2013. Available at: <http://english.molisa.gov.vn/> [20 Aug. 2013].

National Centre for Labour Market Forecast and Information, Bureau of Employment (BOE), Ministry of Labour, Invalids, and Social Affairs (MOLISA). 2012. *Viet Nam employment trends 2011* (Hanoi).

Nguyen, T.K.Q. 2010. *National vocational qualification framework in Viet Nam: Enrichment or error?* Institute of Education, University of London. Available at: http://www.academia.edu/725993/National_Vocational_Qualification_Framework_in_Viet_Nam_Enrichment_or_Error [29 Aug. 2013].

Nhan Dan Online. 2012. Available at: <http://en.nhandan.org.vn/en/society/item/900402-top-ten-labour-and-social-affairs-highlights-in-2012.html> [20 Aug. 2013].

Prime Minister's Decision No. 43/2013/QĐ-TTg on the Role, Responsibility, Duty, Authority, and Organization of the Directorate of Vocational Training of the Ministry of Labour, Invalids, and Social Affairs, 16 July 2013 (Hanoi).

The Socialist Republic of Viet Nam National Assembly. 2005. *Education Law No.38/2005/QH11*.

—. 2006. *Law on Vocational Training No.76/2006/QH11*.

—. 2013. *Law on Supplementation and Amendment of a Number of Articles of the Law on Vocational Training*. Draft 3.

United Nations Educational, Scientific, and Cultural Organization (UNESCO), Institute for Lifelong Learning. 2013. *UIL's contribution to the global inventory on NQFs*. Available at: http://uil.unesco.org/fileadmin/keydocuments/LifelongLearning/en/GlobalInventoryonNQFs_Viet_Nam_130509_final-final.pdf [29 Aug. 2013].

- Viet Nameese-German Development Cooperation. 2012. *TVET quality breakthrough*, Documentation from the regional TVET conference held in Hanoi in October 2012.
- . 2009. *Business sector involvement in TVET delivery and governance in Viet Nam: Current situation and policy implications* (Hanoi).
- . 2008. *TVET in Viet Nam: A brief overview*. Available at: [http://www.tvet-VietNam.org/tvet%20in%20Viet Nam_brief%20overview_080908.pdf](http://www.tvet-VietNam.org/tvet%20in%20Viet%20Nam_brief%20overview_080908.pdf) [15 July 2013].
- . 2007. *Financing of vocational education and training (TVET), Viet Nam: Fact finding mission report* (Hanoi).
- World Bank. 2013. *Viet Nam workforce development: SABER country report 2012* (Washington, DC).

Annex 1 List of consulted stakeholders

Asian Development Bank Human and Social Development Division – Ms Eiko Izawa, senior education specialist.

American Chamber of Commerce (AMCHAM) Ho Chi Minh City – Mr Herb Cochran, executive director.

BOE – Mr Tao Bang Huy, vice director, and manager of the BOE's National Centre or Labour Market Forecast and Information.

Central Institute of Economics Management (CIEM) – Dr Nguyen Dinh Cung, vice president.

Canadian International Development Agency (CIDA) Skills for Employment Project – Ms Chau.

Department for Vocational Teachers and Management Staff.

General Department of Vocational Training (GDVT) Policy and Legislation Department – Ms Nguyen Thi Mai Phuong.

GDVT Regular Education Department – Mr Thang, specialist.

GIZ Programme Reform of TVET in Viet Nam – Mr Philipp Lassig.

Hanoi Employment Service Centre – Mr Chinh, director.

Human Resource Forecast Centre – Mr Tran Anh Tuan.

IBM Viet Nam – Ms Pham Thi Thanh Long, governmental programme manager.

ILO – Ms Minh, national project coordinator of ILO Disability Project.

Japan International Cooperation Agency (JICA) – Mr Takeo Hayaki, advisor on the national skills testing system.

Saigontourist Hospitality College – Mr Tran Van Hung, rector.

Viet Nam Chamber of Commerce and Industry (VCCI) Ho Chi Minh City – Mrs. Nguyen Hong Ha, deputy general director.

Viet Nam General Confederation of Labour (VGCL)

- Mr Dang Quang Dieu, director of the Trade Union and Workers' Institute.
- Mr Vinh, Legal and Polices Department, Trade Union Vocational Training College.
- International Cooperation Department.

Viet Nam Vocational and Training Association – Mrs. Nguyen Thi Hang, chairperson (former MOLISA Minister).

Women's Entrepreneurship Council – Ms Nguyen Thi Tuyet Minh, director.

World Bank – Mr Christian Bodewig.

Compilation of assessment studies on technical vocational education and training (TVET)

Lao People's Democratic Republic, Mongolia, the Philippines, Thailand and Viet Nam

This publication is a compilation of assessment studies on technical vocational education and training (TVET) development in Lao People's Democratic Republic, Mongolia, the Philippines, Thailand and Viet Nam. It provides a critical analysis and assessment of the current state of skills development and TVET as well as reviews past and current policies, strategies, programmes and trends, and implications to the country's socio-economic development and employment in these countries. Recommendations are made in identifying future skills and occupations needed given current and future employment levels.

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