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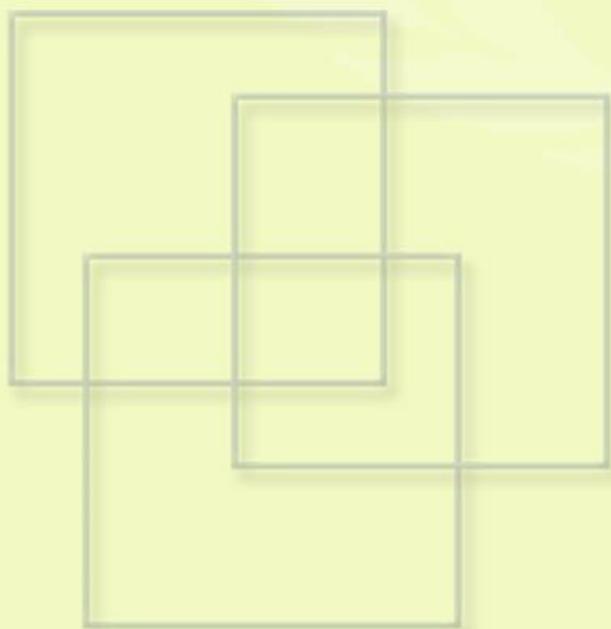


ILO Asia-Pacific Working Paper Series

Assessment study of technical and vocational education and training (TVET) in Myanmar

Simona Milio, Elitsa Garnizova and Alma Shkreli

December 2014



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Preface

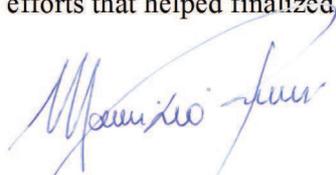
The ILO Human Resources Development Recommendation, 2004 (No. 195) provides guidance on the content of effective skills policies and systems. It encourages ILO member States to promote the expansion of workplace learning and training. It calls on governments and social partners to actively promote and support skills development in the workplace. It also reaffirms that quality assurance of training and skills certification has to be an essential component of national skill development policies and strategies.

Myanmar is embarking on an ambition plan of socio-economic reforms and has placed skills development as a core element of its national strategy in order to increase the employability of workers, the competitiveness of enterprises and the inclusiveness of growth. This is reaffirmed in the Framework for Economic and Social Reform (FESR) which outlines Myanmar's policy priorities up to 2015. The National Comprehensive Development Plan (NCDP) also outlines important long-term goals such as: i) achieving average GDP growth of 7.7 per cent; ii) increasing the industrial share of GDP from 26 per cent to 32 per cent, and reducing its share of the agriculture sector; and iii) achieving GDP per capita growth of 30–40 per cent from 2010.

As a result of the NCPD and the emphasis placed on its effective implementation, policy-makers have identified growth potential in many sectors, such as labour-intensive and export-oriented manufacturing, including the garment sector; construction; infrastructure development for the production of hydroelectric energy; and tourism. Education and vocational skills development in these sectors are necessary conditions for sustainable development and inclusive growth. To successfully and smoothly *transit* towards those challenges a better understanding of technical knowledge on the current status of Myanmar's skill development landscape, in particular of technical and vocational education and training, is crucial.

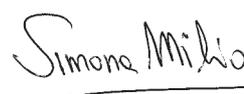
This paper, *Assessment study of technical and vocational education and training (TVET)*, sheds light on the current state of TVET in Myanmar with a particular focus on the role of the private sector; identifies constraints on skills development and provides recommendations to determine future policy measures that would improve and strengthen strategic areas for TVET development. It also explores the demand for skills in Myanmar's economy, identifies the major development factors and the possible role of TVET, and investigates the current status of the national education system, training policies and TVET. In its final chapter this study provides recommendations on the transition from supply-driven to demand-driven labour market and improvement of the TVET delivery and quality. We hope that this work will be a useful tool for practitioners and provide the basis for better-informed policy-making.

We would like to thank the LSE Enterprise research team members for their contributions, especially Ms Elitsa Garnizova, Expert in Development Policy and Research Officer, and Ms Alma Shkreli, Expert on Vocational and Education and Training. Most significantly, we are thankful to Ms Carmela Ilustre-Torres, ILO Senior Skills and Employability Specialist for South-East Asia for initiating this study and for ensuring technical guidance throughout the various stages of this work. And lastly, we would like to express our gratitude to the ILO Liaison Office in Myanmar for their close engagement and collaborative efforts that helped finalized this study.



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Abstract

The goal of the labour market TVET system is to prepare workers to easily enter the labour market. In order to assure quality in TVET and a demand-driven TVET system, it is necessary to involve the private sector in each of the components of TVET. TVET institutions must realize their role as a service provider for the economy in general, and for flourishing businesses in the country.

The analysis presented in this study has confirmed that, presently, Myanmar's TVET system is dominated by supply-driven TVET for both public and private providers. The consultation system with entrepreneurs, business associations, and chambers of commerce that would enable the system to be more demand-driven is not yet in place. At this stage, there is no evidence of public or private-enterprise involvement in the development of curricula. The consequence has been that TVET is highly supply-driven and the training subjects are defined with little or no consultation on the needs of the labour market.

The study has suggested that there are ways to change the policy from supply-driven to demand-driven, through: (i) understanding the needs of the private sector (businesses and entrepreneurs); and (ii) involving the private sector in designing the curricula so that there is more balance between theory and practice, and the curricula content and learning outcomes are closer to the needs of the labour market, i.e. competency-based.

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Executive summary

The goal of the labour market TVET system is to prepare workers (students, trainees, and apprentices) to easily enter the labour market. In order to assure quality in TVET and a demand-driven TVET system, it is necessary to involve the private sector in each of the components of TVET. TVET institutions must realize their role as a service provider for the economy in general, and for flourishing businesses in the country. Therefore, the first objective of this study was to identify the involvement of private industries and businesses in the TVET system and the role of private TVET providers.

The analysis presented in this study has confirmed that, presently, Myanmar's TVET system is dominated by supply-driven TVET for both public and private providers. The consultation system with entrepreneurs, business associations, and chambers of commerce that would enable the system to be more demand-driven is not yet in place. At this stage, there is no evidence of public- or private-enterprise involvement in the development of curricula. The consequence has been that TVET is highly supply-driven and the training subjects are defined with little or no consultation on the needs of the labour market.

The interviews and desk analysis have suggested that there are ways to change the policy from supply-driven to demand-driven, through:

- a) understanding the needs of the private sector (businesses and entrepreneurs); and
- b) involving the private sector in designing the curricula so that there is more balance between theory and practice, and the curricula content and learning outcomes are closer to the needs of the labour market, i.e. competency-based.

The National Skills Standard Authority (NSSA) has been able to develop a number of skills standards for 175 occupations, with remarkable speed. Fifty-five of these have already been approved by the government. The format used for the standards is a common and internationally recognized format adapted from Australia. The question is, whether the content of the standards has been adapted accordingly to fit into the current training and work environment in Myanmar. This appears not to have been the case, and it has had consequences on budgets (the skills standards developed, probably require an amount of equipment that is not available).

The curriculum was developed without the involvement of, or consultation with, industry partners. In addition, the trainers have little industrial experience. TVET delivery in Myanmar can therefore be characterized as theory-oriented rather than practice-oriented (competency-based), and classroom-based rather than industry- or business-based.

From the fieldwork undertaken, it is clear that TVET stakeholders in Myanmar on both sides – supply and demand – are aware of the obstacles and problems in the system. These constraints result from the broader environment in Myanmar where, due to long years of economic sanctions and isolation from global processes, the country is only beginning to develop the key domestic sectors. Even though the government is supported by development partners, the work on building technical capacity across all state services has been a slow and challenging process. This is directly reflected in the issues outlined in this report, and this complexity has to be kept in mind throughout.

With the help of the ILO and development partners, the consultant has attempted to cluster the issues that exist in the TVET and related sectors. It should be noted that the partner organizations continuously operate in this environment and often face the same limitations. The issues have been grouped under three main headings:

Planning level

The analysis suggested that the planning of TVET is done in a relatively uncoordinated fashion, with duplication and lack of knowledge of what the labour market needs. Some of the main aspects to be targeted are as follows:

Coordination among ministries and duplication of work

Currently, 14 ministries or agencies are actively involved in TVET. The responsibility for planning TVET is shared between them, and they bring in a variety of understandings of TVET, which leads to a conspicuous number of offers, durations, target groups overlapping, regional overlapping, and doubling of efforts from different ministries within the same skills training field.

Also, there is a lack of coordination among the ministries and their TVET providers, which results in either a lower quality of formal TVET delivery, or a lack of offers in some areas, causing confusion for young people trying to choose a career, or even for adults trying to get a (re)qualification.

Cooperation with employers and employers' organizations

There is very little evidence of the involvement of businesses organizations and employers' representatives in the planning of TVET, or in the number of student or trainees needed regionally or nationally. Businesses are consulted occasionally, and not in a periodical way, and within well-established mechanisms like forums, committees, or other groups.

Resources

At the moment, the scarce resources allocated to TVET institutions do not allow them to take into account the specific needs for developing the necessary professional profile.

More resources should be allocated to provide subsidies to employers for workplace training, or to those who can take on apprentices and mentor them successfully.

Implementation level

A number of interviewees from private TVET providers reported that the education system and the private education sector operate under many constraints. The Comprehensive Education Sector Review (CESR) revealed that the sector, with its different subsectors, needs to be substantially reformed in order to be able to support the development of the country. Within this context, the issues that relate to the TVET sector refer to the importance of the link to the labour market and the rest of the economy.

Facilities and infrastructure

There are insufficient teaching materials, teaching aids, training laboratories, and computers to support students and teachers.

Outreach is difficult, and some of the facilities are not accessible to the students. Due to Myanmar's overall low level of infrastructure, in some cases there is no public transportation.

Curricula and guidance

The curricula for some of the TVET courses are not prepared and developed in line with quality standards, and curricula rarely involve discussion groups and workshops.

Teaching methods focus primarily on the theoretical approaches and sometimes their quality is compromised due to inexperienced teachers.

Combined, the problems with the curricula and the teaching methodology affect the skill level of the graduates.

Teacher's capacity

The capacity of the education sector to retain qualified capital is constrained by the overall situation in the country; in deciding where to practice their profession, qualified teachers with good education and training opt to go abroad and work in countries like Singapore because they can enjoy better employment conditions.

The motivation of the teachers and trainers is notably low due to the very low salary, which is a direct effect of the state of the economy of Myanmar and the limited resources. As it stands, most resources available to education are already allocated to teacher salaries.

Regional and labour market needs

Surveys to specifically target the demand have not been delivered yet. As a result, students are in some cases trained in subjects that do not necessarily respond to labour market needs.

The mentoring and coaching mechanisms to support the practical aspect of vocational education and training in companies have not been substantially developed.

Due to migration processes, a high proportion of low-skilled workers are potentially in need of access to TVET. However, very often, the number of seats in schools or TVET centres, especially in rural areas, is not sufficient. Therefore, it is important to map the private schools and providers because the government is unable to fulfil all the needs and requests of the growing population.

The diversity of regional needs is not addressed through a fairer distribution of TVET providers across the territory.

Recommendations

From both the deskwork analysis and the fieldwork, a number of recommendations can be drawn to improve the current situation and assist the overall transformation process in Myanmar.

Law and policy development

Implementation of the Employment and Skills Development Law

The Employment and Skills Development Law, approved in 2013, calls for the creation of a central body to implement the law. This law is important because it creates a closer link between the labour market and the TVET sector. Phase 2 of the CESR continues the initiative from Phase 1, to organize roundtable meetings that bring together representatives from the line ministries involved in TVET, and representatives of the private sector, for information exchange and dialogue about core TVET issues. These meetings are a setting where stakeholders can discuss how the law can be implemented most effectively.

The structure proposed by the law, reviewed in Chapter 3, Figure 18, shows the proposed central body, which will rely on two teams: the employment development team and the skills development team. With regard to the development of skills, the team will advise employers to either conduct on-the-job training or provide employees with other forms of training. Such practice is in line with the task to

ensure that workers' skills are updated regularly and kept relevant to the development of the country.¹ With regard to employment, the Ministry of Labour, Employment, and Social Security (MOLES) will be responsible for matching employment seekers with employers, covering the public and private sectors and various employment agencies. The law also stipulates stricter requirements for employment terms and conditions, therefore protecting employees. Last but not least, the law also addresses the possibility of foreigners open training schools or skills assessment centres.

The role of development partners and the ILO in particular is essential for the implementation of this key legislation. Areas where critical action is needed include promoting capacity building within the institutions, and ensuring an effective organizational structure with clearly defined roles and responsibilities for participants. The ILO could provide technical assistance and guidance in employment and skills-related areas, like strengthening policy implementation and systems development. It will be also essential to promote coordination between the relevant employment and labour exchange offices involved.

Greater cooperation and integration of policies

There is a need for a much greater degree of cooperation between the ministries and agencies involved in setting the institutional and policy framework for TVET. This will involve, in effect, greater coordination in policy making in relation to TVET.

More attention should be given to the integration between education and social policies for vulnerable groups, and better coordinating the policies and action plans of different ministries. The social partners and local government institutions should also be more engaged in the policy debate, and in the formulation and implementation of vocational education policy.

The role of the ILO in this process can be to support the MOLES in the development of coordinated actions, as well as advising on ways to reduce the gap between social policy and education.

Support for the strengthening of an integrated vocational guidance system

With regard to forging a stronger link between the TVET system and the labour market, a career guidance system is a key element in creating a system for lifelong learning. Well-functioning vocational guidance can help make the best use of human resources in the labour market, as well as in education, by creating better matches between skills and interests and existing opportunities for work and learning.

The employment services system has core functions that cover: job search and services, labour-market information, implementation of labour market programmes, administration of unemployment benefits, and regulatory services. The current employment services system and its vocational guidance component require an assessment of how well they are functioning, and whether they are sufficiently based on up-to-date labour market information.

The ILO's assistance can focus on further developing a career guidance system in Myanmar.

¹ N. Kyaw, C. Toh, and J. Bhandari: *New Employment and Skills Development Law (Pyidaungsu Hluttaw Law No. 29/2013)*, 18 Oct. 2013, <http://www.lexology.com/library/detail.aspx?g=11e340-132f-41bd-988c-eae340a3d56a> [accessed 17 Jan. 2014].

Training management and organization

Current structure

Approximately 459 public training institutions provide TVET in Myanmar, and this number does not reflect the number of private training providers. The structure of TVET is on one hand, centralized because of the tight control of the ministries responsible for the management and financing of the institutions – TVET institutions’ budgets come almost exclusively from their respective ministries, and no delegation of authority to the state or region level is practiced. On the other hand, it is decentralized due to the fact that multiple institutions hold responsibility for TVET delivery. Each of the Ministries involved in the provision of TVET has a specific organizational structure to plan and manage skills and human resource development.

Moreover, in terms of location of the training institutions, the system has wide coverage. Such is the case especially with the TVET institutions under the Department of Technical and Vocational Education (DTVE), which has many branches throughout Myanmar following the policy to provide TVET in both rural and urban areas.

At the same time, due to the limited human and financial resources available, the policy to establish technical universities and government technical high schools (GTHSs) in all regions and states, in order to provide TVET opportunities nationwide, has proven cost-ineffective. According to the CESR, there is little reliable data on the geographical locations from other ministries, except for the major TVET institution under the DTVE, the University of Technology, the Ministry of Science, the skills training centres (STCs), as well as institutes under the Ministry of Industry (MOI).

Research underlines that the number and location of TVET institutions does not match the needs, as illustrated by tracing student enrolment levels. Even though the enrolment levels differ between the central areas and the periphery, staffing levels point to a similar allocation between states and regions. Data from the CESR team points to approximately 4,755 teachers in TVET institutions under the DTVE for the year 2011–12, with technical universities having the highest number of teachers.

The inefficiencies have been addressed by a number of government and non-government initiatives aimed at decreasing the number of institutions, by merging less-attended institutions, creating institutions in the border areas, planning financial and human resources based on the size and needs of the institution, and overall by giving more authority to state and regional bodies to manage the TVET system.

Even though these aspects have been subject to the CESR, and efforts to improve the organization and management of the TVET system are under way, the ILO can support the initiatives by raising awareness of the advantages of delegation of powers from the centre to the states and regions. The ILO’s support can also be essential in promoting clarification of the organizational structures of the ministries responsible for TVET, and strengthening the capacity of the specific departments. Overall, development partners promote an extensive cost effectiveness analysis, and the conclusion of this task will be essential for the reform of the system.

School assistance to student and teacher training

More effort should be spent on improving the skills and professionalism of teachers, through improved teacher training, upgrading of their technical competencies, and providing up-to-date methodologies for delivering TVET. Teachers should also promote a learner-centred approach for the improved capacities and competencies of students, as well as student-teacher relationships.

TVET institutions should be able to guide students in their careers, and be able to link the transition from school to the work environment. Further, such institutions should offer individual guidance to students to enhance their motivation to continue their studies, especially if they are at risk of dropping

out. Teachers play a vital role in identifying a proper match between students' vocation and subject chosen. They should be trained in counselling. Schools should provide an aptitude test for students at an early stage, to ensure they are on the right track or subject specialization in relation to their talents and abilities.

The ILO can assist policy-makers in developing a comprehensive teacher training programme, and draw up teacher profiles and teacher training requirements.

Promoting access to TVET

Development of more inclusive practices in TVET

This recommendation refers directly to the need to ensure that the TVET system is socially inclusive, allowing disadvantaged individuals and groups better access to education and training. The inclusion of out-of-school children into vocational training is especially important for a country with such a high drop-out rate in post-primary education. This also includes:

- a) people with disabilities and their families;
- b) marginalized and unemployed youths;
- c) disadvantaged women;
- d) ex-child soldiers;
- e) forced labour victims; and
- f) individuals living in rural communities and in distant areas from education and training facilities.

The development of a national policy for promoting social inclusion in TVET is very important for Myanmar. It should be based on forums that bring together all stakeholders, including parents, teachers, socially-excluded youths, government authorities, and the private sector. The debates will directly feed into the future policy and will ensure that the policy receives wide support.

The ILO's role in the process is essential in feeding-in the development of the national policy, and in its implementation. The ILO can assist policy-makers by ensuring better TVET outreach through innovative approaches and facilities that include mobile training programmes and developing community learning centres for youths.

Support for policies for the protection of migrant workers

Migrant workers are important human resources in Myanmar. They are valuable in an expanding economy where labour may be limited. Policies that promote the protection of migrant workers through adequate and quality education and skills training should be promoted along with, where applicable, the transfer of qualifications from abroad.

The ILO can assist policy-makers in the development of policies for the protection, re-integration of, and recognition of skills of, returning migrant workers, as well as in improving their skills and employability for better employment opportunities.

Planning and information

Capacity building to create a labour market information system (LMIS) for competitive, industry-led, and demand-driven TVET

One critical area with regard to the development of a demand-driven TVET system is the availability of, and access to, quality data. The national census, labour force, and national household surveys are

crucial, but they will have to be supplemented by mechanisms to deliver updated information to the ministries involved in TVET, especially the MOLES, the Ministry of Science and Technology (MOST), and the Ministry of Education (MOE).

The information that needs to be collected depends on the target entity, but it all links to planning for demand-driven TVET. A labour-market information system (LMIS) should also include data needed by public employment services, which includes: the profiles and numbers of unemployed graduates who are either from universities or TVET institutions; and profiles of vacancies in sectors that could be filled by TVET graduates with the required TVET certificates, or university graduates with the required license or certificate. Information to be requested at the Ministry of National Planning and Economic Development (MNPED) and its agencies includes: the registration of new businesses by sector, and especially SMEs; private investment in different sectors; and spending on research and development. Employers have to feed into this “database” by providing information and statistics on internal training through the chambers of commerce, and, more importantly, their skills needs. This data collection process will take a long time to organize, but it will build a stable foundation for longer-term development of demand-driven TVET.

Support for this process will also include creating the mechanisms for tracking data related to social inclusion indicators. Currently, the lack of gender and ethnicity disaggregated education data is largely missing, and prevents policy-makers from delivering equitable programmes and plans.

An LMIS is the systematic collection, analysis, and dissemination of information regarding the demand for and the supply of labour. It is crucial for the TVET sector to have access to updated LMIS that includes information on population, the labour force, employment and unemployment, education and training, wage rates, and related data. This is the information that should be made available to stakeholders.

In order to align the education system with the requirements of businesses, it is necessary to build on the concept of an LMIS, as it is an essential mechanism for better planning of TVET.

The ILO can support the MOLES in the development of tools for data collection, in order to ensure continuous access to updated information and, more importantly, high-quality information. Assistance in this area could be in the form of technical assistance in the creation of a national LMIS and comprehensive capacity building and training.

Mapping of both public and private TVET providers

Private providers cover a big part of the gap in quality, practice, or relevance of the formal, state-owned TVET providers; quality measures, therefore, should also cover the private TVET providers.

Two tasks are proposed for overcoming this gap:

- a) **identifying and mapping the private providers** – this first task requires collaboration with several ministries and local government units, which also register or licence private providers operating informally.
- b) **accreditation** – it is anticipated that this second task of accreditation will be the duty of the National Skills Standards Authority (NSSA), to ensure that skills and training standards are within industry requirements.

The ILO’s support to the NSSA can include improving the capacity of the NSSA in developing its accreditation procedures.

Industry collaboration in TVET

Support for raising awareness among employers regarding skills levels and needed competencies

Businesses in Myanmar² often have a limited capability to define the skills levels they need, thereby preventing them from organizing clearly-defined internal training programmes, remuneration, and development programmes.

The development of the National Qualifications Framework (NQF) is ongoing, and the NSSA is the key institution responsible for this task and creating a stable and comprehensive foundation for skills development. The NQF secures the standards of qualifications, ensures accuracy and consistency in the use of nomenclature, and ensures that the quality is assured and assembled into a coherent and consistent structure. It supports a flexible education and training outlook that recognizes workplace training and prior learning. The NQF is a framework that articulates the links with qualifications in other countries, and promotes worker mobility with due recognition of skills and knowledge.³

However, under the CESR it should be noted that the involvement of the private sector has been limited to the Union of Myanmar Federation of Chambers of Commerce and Industry (UMFCCI), and should be supplemented by the participation of a wider range of business representatives, so as to result in a real demand-driven TVET system.

On one hand, this point links with the need to extract accurate information from industry (discussed under the previous recommendation), and on the other hand, the need to raise awareness among industry associations, professional associations, and businesses on the issue of skills development.

The ILO's role in this process could consist of raising awareness of the importance of TVET for the workforce, to ensure quality, relevance, equality, and social inclusion in training opportunities. This can be done by supporting the MOLES and the newly-defined provisions under the Employment and Skills Development Law in reaching out to various professional bodies, employers' organizations, and businesses, and in providing guidance on TVET.

Establish a mechanism for industry and cross-ministerial coordination and stakeholder involvement in developing a national skills standards, assessment, and certification system

Presently, employers face the problem of different classifications and definitions of occupations and skills by different institutions. This prevents a uniform terminology across the TVET sector. The development of the NQF is ongoing and will take a number of years to establish. Meanwhile, what is required is to ensure that the national skills standards approved by the government are acceptable by industry. The MOLES can establish an institutional mechanism to allow for a regular consultation process. This should include regular meetings and facilitating demand-driven TVET initiatives.

The MOST supervises the largest number of TVET institutions and acts as the key ministry in TVET. Other ministries offering TVET programmes manage their own institutions in accordance with their own management policies, rules, and regulations. However, to link TVET with the labour market, the MOLES can be instrumental in setting up coordination practices, via official cross-ministerial working groups or committees on TVET.

² Interviews with stakeholders.

³ D. Lythe and B. Smith-Comyn: *ADB Project Report 2011*.

The ILO can provide technical guidance to the MOLES in establishing a coordination mechanism for policy development, planning, implementing, and monitoring TVET in Myanmar.

The crucial challenge in planning TVET is the advent of the ASEAN Economic Community (AEC), due to take effect at the end of 2015. Myanmar must prepare its own human resources to take advantage of the planned freer movement of skilled labour under the AEC. After 2015, it is expected that there will be a better flow of skilled workers to and from other countries in the region, and that a mutual recognition of skills mechanism will be in place. Private businesses and industries will be in a better position to hire more qualified workers. Therefore, policy-makers need to be more aware of the possible future market dynamics, in order to respond with adequate training and equip Myanmar's people with the skills necessary to be employable and competitive in a larger labour market.

Acronyms and abbreviations

ADB	Asian Development Bank
AEC	ASEAN Economic Community
AGTI	Association of Government Technical Institutes
ASEAN	Association of Southeast Asian Nations
AusAID	Australian Government Agency for International Development
BIT	bilateral investment treaty
CESP	Costed Education Sector Plan
CESR	Comprehensive Education Sector Review
CRPD	Convention on the Rights of Persons with Disabilities
CSO	Central Statistical Organization
CVT	Centre for Vocational Training
DAST	Department of Advanced Science and Technology
DTVE	Department of Technical and Vocational Education
EIU	Economist Intelligence Unit
EMIS	Educational Management Information Systems
FESR	Framework for Economic and Social Reform
GDP	gross domestic product
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH
GSP	Generalized System of Preferences
GTC	government technical college
GTHS	government technical high school
GTI	government technical institute
HDI	Human Development Index
HRD	human resources development
IHLCS	Integrated Household Living Conditions Survey
ILO	International Labour Organization
IMF	International Monetary Fund
JICA	Japan International Cooperation Agency
LFS	Labour Force Survey
LMIS	labour market information system
MBEA	Myanmar Business Executives' Association
MES	Myanmar Engineering Society
MGI	McKinsey Global Institute
MGMA	Myanmar Garment Manufacturers' Association
MICS	Multiple Indicator Cluster Survey
MMK	Myanmar kyat
MNPED	Ministry of National Planning and Economic Development
MOE	Ministry of Education
MOFA	Ministry of Foreign Affairs
MOH	Ministry of Health
MOHT	Ministry of Hotels and Tourism

MOI	Ministry of Industry
MOLES	Ministry of Labour, Employment, and Social Security
MOST	Ministry of Science and Technology
MSARR	Ministry of Social Affairs, Relief, and Reconstruction
MTF	Myanmar Tourism Federation
NCDP	National Comprehensive Development Plan
NEC	National Education Committee
NER	net enrolment ratio
NGO	non-governmental organization
NQF	National Qualifications Framework
NSSA	National Skills Standards Authority
SDC	Swiss Agency for Development and Cooperation
SEZ	special economic zone
SME	small and medium-sized enterprises
STC	skills training centre
TVEC	Technical and Vocational Education Council
TVET	technical and vocational education and training
UMFCCI	Union of Myanmar Federation of Chambers of Commerce
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific, and Cultural Organization

1. Introduction

1.1 Background to the study

Myanmar is the second-largest country in South-East Asia, and is located between South and East Asia. As a result of its location, Myanmar has access to the fast-growing economies of China and India, together with its neighbours and fellow members of the Association of Southeast Asian Nations (ASEAN).

Between 2010 and 2012, gross domestic product (GDP) performance was on average about 12 per cent, and was expected to grow modestly to a little over 6 per cent by the end of 2013. Agriculture is the dominant sector in providing employment. The country's development plan aims at reducing the overall poverty rate to 16 per cent by 2014–15.

The country has growth potential in many sectors, such as labour-intensive and export-oriented manufacturing, including the garments sector, telecommunications, hydroelectric energy, and tourism. Vocational skills development in each sector and investment in infrastructure are necessary conditions for the development of these and other industries.

Despite the significance of technical vocation and training (TVET) in the economic development of countries, many developing nations have not been able to flexibly adjust to the modern world of new and changing technologies, much less provide quality and accessible TVET.

In Myanmar, the TVET system has been undertaken by the MOST and the MOLES within the policy framework set by a central body to implement the provisions of the Employment and Skills Development Law.

Despite the fact that in Myanmar there seems to be an awareness of the necessity of TVET responsiveness to the labour market, there are significant constraints on development and employment creation in all sectors. For the region to take a step forward in the development process, it is necessary for any skills development programme to be in line with more general transformation strategies influencing each sector and the general environment, as well the legal and institutional framework.

Recently the MOLES has played a key role in skills development planning activities through the elaboration of the National Plan on Myanmar Workforce Skills Development, aimed at providing skills training that is relevant to advanced technology, and ensuring job opportunities. The Employment and Skills Development Law was approved on 30 August 2013 and calls for the creation of a central body to implement the law. This body will have at least seven members. Included are the mayors of Nay Pyi Taw, Yangon, and Mandalay cities; the chair of the UMFCCI; and the chairs of Myanmar's employers' and labour organizations. The UMFCCI is, therefore, a key national body for future human resources development (HRD) in Myanmar.⁴

In this context of awareness and development opportunities, a TVET assessment is timely and necessary to identify strategic areas for interventions.

⁴ D. Lythe: *Industry leadership of human resources development in Myanmar*, Dec. 2013.

1.2 Objective of the study

The main objective of the assignment was twofold:

- a) to review the current state of TVET, with a particular focus on the role of the private sector; and
- b) to provide recommendations to determine measures to improve and strengthen the TVET system.

Particular focus was given to the role of the private sector. This methodological choice was based on two main factors: first, to ensure that the study is in line with the priorities of the ongoing CESR and does not overlap or duplicate work already done; and second, and more importantly, recognition of the fact that the Myanmar TVET system is dominated by a supply-driven TVET from both public and private providers. There is an absolute need to work in partnership with entrepreneurs, business associations, and chambers of commerce in order to change from a supply-driven to a demand-driven TVET system. There is no evidence of public or private enterprise involvement in the development of curricula. The consequence is that TVET is highly supply-driven, and the subjects taught or tasks trained in are defined by officials who have no or little affiliation with the labour market.

The second objective of this assessment will result in recommendations and bases for identifying the ILO's strategic priorities on skills and employability for the country, which will input into the future Decent Work Country Programme (DWCP). It will also provide guidance in the development of new project ideas for technical cooperation.

1.3 Methodology

In order to fulfil both objectives, the assignment was divided into two main phases as described below.

1.3.1 Phase I: Mapping exercise of TVET requirements for Myanmar

This phase was the core of the assignment, in which both deskwork and fieldwork activities were performed in order to take stock of the existing material on TVET in Myanmar, and fill any gaps through interviews.

In this phase, an international consultant was stationed in Myanmar for four weeks. This allowed us to collect the necessary information, as well as to attend meetings and engage in consultations with the government, workers, employers' organizations, relevant partners, stakeholders, and other agencies. The international consultant worked closely with the ILO Liaison Office in Myanmar, and liaised with constituents, development partners, and relevant institutions during the time in Myanmar.

Fieldwork

During the field research, the consultant attended meetings with the main stakeholders in the TVET policy-making process, and carried out a number of face-to-face interviews.

Meetings attended

Annex III shows an overview of the meetings attended, and the details of each meeting can be found in Annex II. The contacts proved extremely useful for understanding the complexity of the local environment. Some of the major issues identified were: i) the political, social, and economic context of the country; ii) the work already accomplished by development partners; iii) planning in the field of education and, especially, TVET; and iv) the coordination and assistance needed by local business

organizations. The meetings with development partners were particularly helpful due to the exchange of information necessary for the study.

Face-to-face interviews

The main tasks of the consultant were to map the TVET stakeholders on the ground, to arrange interviews with the representatives, and to collect as much information as possible from the stakeholders. The information on TVET stakeholders was collected through contacts with the interviewees, with each new meeting proving to be instrumental in the collection of further contacts.

In line with the terms of references (TOR), the main questions explored during the interviews were:

- a) How demand-driven is TVET in Myanmar?
- b) Are there demand-driven initiatives by private providers?
- c) Does industry invest in training, and if so, how much (as a percentage of company payroll)?
- d) Do companies cooperate with public and private TVET providers in delivering courses and workplace training?
- e) Are industry training organizations set up and implementing adequate policies and practices?
- f) Do apprenticeship practices exist, and if so, are they regulated by government or industry agreements?

The interviewees were selected from three main groups (but predominantly the private sector):

- a) the demand side (private sector):
 - i) chambers of commerce and industry;
 - ii) business associations;
 - iii) individual businesses (priority sectors are construction, tourism, IT, and manufacturing);
- b) the supply side (providers):
 - i) STCs (MOLES);
 - ii) industrial training centres (MOI);
 - iii) MOST;
 - iv) tourism training schools (Ministry of Tourism [MOT]);
 - v) private providers; and
- c) development partners (with experience in labour-market-oriented TVET delivery):
 - i) Swiss Agency for Development and Cooperation (SDC);
 - ii) Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH (GIZ).

The list above represents the initial planning for the interview phase of the field research. However, in the process of conducting the interviews, the distinction between a private company and a training provider (e.g. Kabar Services or Recruitment Company Ltd [TRC]) and between the representatives of a governmental institution that is a provider, or a national institution that is laying the standards for all the other TVET providers, became less clear.

Desk analysis

A full list of documents collected and reviewed is in Annex V. The desk analysis presented in the different sections relies on data from secondary sources collected during the field work and available in the online collections of the LSE Library. The consultant had access to a wide catalogue of social sciences material, with the collections rich in economics, statistics, political science, and public administration. The data sources used ranged from the Asian Development Bank (ADB), International Monetary Fund (IMF), World Bank, and the United Nations and its agencies, to information from other consultants and researchers (e.g. Clifford Chance, McKinsey Global, and Accenture) working locally, which were referenced throughout the study.

The consultant benefited from information provided from the ILO office, which included previous research work on the TVET system, documents on the ILO's work in the country, and key statistical

documents from the ADB, which were essential in informing the approach. The desk analysis was informed by the work accomplished by the ILO and the development partners in the context of the CESR, and the assessment rests closely on the conclusions reached on the different components of the CESR.

In order to facilitate the deskwork and fieldwork, the ILO provided:

- a) a list of data, reports, and documentation available to the ILO and to other agencies;
- b) a list of stakeholders, agencies, and ministries to consult, together with full details of contact persons, contact details, phone numbers, emails, and postal addresses available in the present database; and
- c) a fully equipped office space for the international consultant.

As the report will explore, analysis of Myanmar is still restricted by the availability of information. In some cases there were discrepancies between domestic information sources and international institutions, in which case the report has relied on globally-accepted data also used by other development partners. With regard to information from the government, statistics on the TVET budgets in each of the ministries were unavailable, since TVET function is dispersed among many ministries and agencies in Myanmar, and since the ministries are currently building additional capacity. Also, the lack of a national institution responsible for private TVET providers made it quite challenging to find statistics for private TVET. Currently, private TVET providers are difficult to map, since they are all registered in different ministries and they are defined as “service providers”, including those operating also as overseas employment agencies or under business associations or private businesses. A mapping of the private providers has already been initiated by the development partners.

Milestones

The main activities and outcome scheduled in the first phase between 27 May and 31 July 2013 are enclosed in Annex VI.

1.3.2 Phase 2: Field methodology revisions, analysis, and study finalization

The final report has taken stock of preliminary findings from both the deskwork and fieldwork activities, and it provides recommendations on how to improve TVET requirements. The final report documents and reviews the nature and extent of tripartite involvement at both the policy-making and implementation stages of TVET, as well as analyzing the mechanisms that exist and their success in linking with employers. This is to ensure a correlation between the needs of employers and TVET programmes, including, of course, the key industries and occupations, and also the more detailed skills requirements.

The final product complements the study report on the assessment of skills needs of private business, and the better matching and anticipation of skills in the country through appropriate skills policy development. The main activities and outcomes that occurred in this second phase between 1 August and 30 September 2013 are enclosed in Annex VI.

1.4 Achievements and challenges

The study has made an attempt to explore the availability, reliability, and access to information on Myanmar overall, and on the TVET sector in particular. The constraints faced by the consultant are explained by the broader context of the environment in the country. It has to be kept in mind that Myanmar has been subject to external sanctions by, among others, the European Union (EU), the United States of America, Australia, and Canada for more than 20 years, which were only partially relaxed in 2012. The country is gradually opening up to the world economy, but is struggling with multiple technical needs and concerns, and support from development partners is gathering pace.

The TVET system operates in this environment of low capacity and resources, and this is directly reflected in the information available to consultants, where the data is often limited, the definitions of TVET programmes are not fully clarified, the standards are constrained, and the equipment is obsolete. The ILO office in Myanmar faces the same challenges on resources' constraints.

Given the present conditions in Myanmar as to data availability, and sources of data for the study, the contact list for the interviewees still had to be improved, and possible data sources identified and added. In addition, some interviewees were unavailable, some of whom were also development partners, who also were busy with their respective technical work in TVET. Annex IV provides the list of interviewees and a list of stakeholders who were approached but could not be interviewed.

1.5 Structure of the report

The report is divided into seven sections, of which Section 1 is the introduction.

Section 2 looks at the demand for skills in the Myanmar economy, in terms of current and future demand, as well as identifying the major development factors and the possible role of TVET within the national system.

Section 3 describes national education, training policies, and legislation, as well as the policy implementation mechanisms and what has been achieved by the CESR.

Section 4 focuses on the TVET system in terms of management and organization, training capacity, and the role of private providers.

Section 5 presents an assessment of three aspects: i) labour-market information, with a particular focus on the availability and accessibility of labour-market information by stakeholders; ii) training demand analysis and training planning; and iii) the availability of national statistics and standards, and set of TVET data.

Section 6 is centred on industry training, and consists of two main analyses, one looking at whether industry cooperates with public and private TVET providers in delivering courses and workplace training, and the other looking at what kind of training the various industries require for employing people.

Section 7 concludes the study with some recommendations on possible ways to engage with the ongoing development of the education, skills development, and TVET system in Myanmar. Particular focus is given to four main issues: i) transition from supply-driven to demand-driven TVET; ii) improving TVET delivery; iii) improving TVET quality; and iv) what the ILO can do to help.

2. Demand for skills in the economy

Box 1

Note on the access to and quality of data

A major obstacle to understanding the development challenges in Myanmar is the lack of accurate and consistent data at the national level. The statistics give a limited picture with regard to the differences between regions and between urban and rural development indicators. Further, availability and reliability issues exist with regard to the education sector and TVET in particular. It should be noted that there are few gender disaggregated indicators that can be used in the analysis.

With regard to population-related statistics, the last national census took place in 1983, and population figures used today range from 48 to 61 million, with an estimated 10 per cent of the population living and working abroad. This uncertainty will potentially be resolved in 2014 because the Thein Sein government has announced its intention to conduct a census, and is receiving assistance from the United Nations and other organizations to ensure that it meets global standards.

Similarly the last Labour Force Survey (LFS) was conducted in 1990, and the next one is expected after the population census, and therefore around 2015–16.

This report has relied on existing research or study reports available from international development organizations (the ADB, IMF, World Bank, UNDP, and other agencies) and official government data sources (the Central Statistical Organization [CSO] and the MNPED), summarizing data from relevant ministries.

In the cases where the data available from other sources is different from data provided by government sources, the report has been based on data from international organizations following the previous practices of development partners working in Myanmar.

2.1 Introduction

Since 2012, the Government of Myanmar has embarked on a path of political reform which, combined with a series of liberalising reforms and the lifting of international sanctions and other restrictions on trade and investment by Western governments, paints a bright picture for the development of the country.

The European Council's announcement in April 2013 that all economic sanctions on Myanmar would be lifted,⁵ suggests that steps will be taken to give Myanmar preferential access to the EU market via the Generalized System of Preferences (GSP), and also indicates that the EU will explore the feasibility of concluding a bilateral investment treaty (BIT) with Myanmar.⁶ Furthermore, as a member of the World Trade Organization (WTO) and ASEAN, the opportunities based on developing trade ties in the region and beyond could give a substantial economic push to the country. Myanmar's participation in regional integration under the AEC initiative, and its chairmanship of ASEAN in 2014 have been stimuli for many reforms, and presuppose substantial capacity on the side of the government and the economy to accommodate this busy agenda.

⁵ Council conclusions on Burma/Myanmar, 3,159th Foreign Affairs Council meeting, Luxembourg, 23 Apr. 2012, http://eeas.europa.eu/myanmar/docs/council_conclusions_april_2012_en.pdf [accessed 20 Oct. 2014].

⁶ Clifford Chance. *Myanmar sanctions update: EU permanently lifts economic sanctions*, briefing note, 23 Apr. 2013, http://www.cliffordchance.com/publicationviews/publications/2013/04/myanmar_sanctionsupdateeu permanentlylift.html [accessed 20 Oct. 2014].

With a population of approximately 61.12 million⁷ and covering an area of 676,578 square kilometres,⁸ observers agree that Myanmar has vast, untapped development potential.⁹ Its natural endowments include petroleum, timber, tin, antimony, zinc, copper, tungsten, lead, coal, marble, limestone, precious stones, natural gas, and hydropower. Its strategic location combines an almost 2,000-kilometre-long coastline, proximity to major Indian Ocean shipping lanes, and borders with five Asian countries including China, India, and Thailand. Thus, Myanmar could serve as a bridge between South and South-East Asia. At the same time, Myanmar faces a number of challenges as a result of its ongoing triple transition: first, from an authoritarian military system to democratic governance; second, from a centrally-directed economy to market-oriented reforms; and last, from 60 years of conflict to peace in the border areas.¹⁰

As described in the note on the use of data above, economic statistics coming from Myanmar today are not completely reliable, due to lack of information on methodology or incomplete data. It is therefore difficult to paint a clear picture of Myanmar's economic development in the next few years.

This chapter looks at the role of the major development factors on the demand for skills in the economy overall, and the TVET system in particular. More precisely, it identifies three key forces behind the demand for skills:

- a) a systemic approach to the reforms in the country, as outlined by the multi-annual development plans;
- b) specific potential for development in priority sectors, and a shift from primary to secondary and tertiary economic sectors; and
- c) activities linked to increasing labour productivity in the country.

These three forces, and the efforts behind each of them, will be crucial for setting the scene for skills demand in the country. It should be noted that the participation of the private sector is important for each of the above, and therefore reforms are not solely dependent on the government but conditional on the participation of business organizations, communities, private companies, and non-governmental organizations (NGOs). Below, each of the three forces is reviewed, with a strong focus on the development of specific sectors.

2.2 Major development factors

The government recognises that a number of challenges and opportunities exist for the development of the country. Positive prospects relate to the benefits of closer regional economic integration, to the national consensus on the importance of the economy, to the support from development partners, and to the advantage of being a latecomer and, therefore, learning from experience. On the other hand, the government is aware of potential issues due to path-dependency, time lags of policy not in line with the high expectations of the population, and gaps in coordination and implementation due to capacity building. Performance gaps due to insufficient capacity to implement the national development plans in the country are top of the agenda.

The economy has been guided by a series of five-year plans, with annual plans for selected sectors. Development plans target short-term gains and deeper structural reforms, and when it comes to the labour market, previous analysis points to a mismatch between the performance sought by industry, outcomes in the education and training sector, and the expectations of employees. There is a further

⁷ The ADB based on the CSO: official communication, 17 May 2012, past communication. According to the Ministry of Foreign Affairs (MOFA) of Myanmar, the population of the country was estimated at 52.4 million (July 2013) and the population growth rate was 1.84 per cent. The ADB estimate in 2012 put the population at 61.12 million.

⁸ CIA, *Burma factbook*: last updated 7 May 2013.

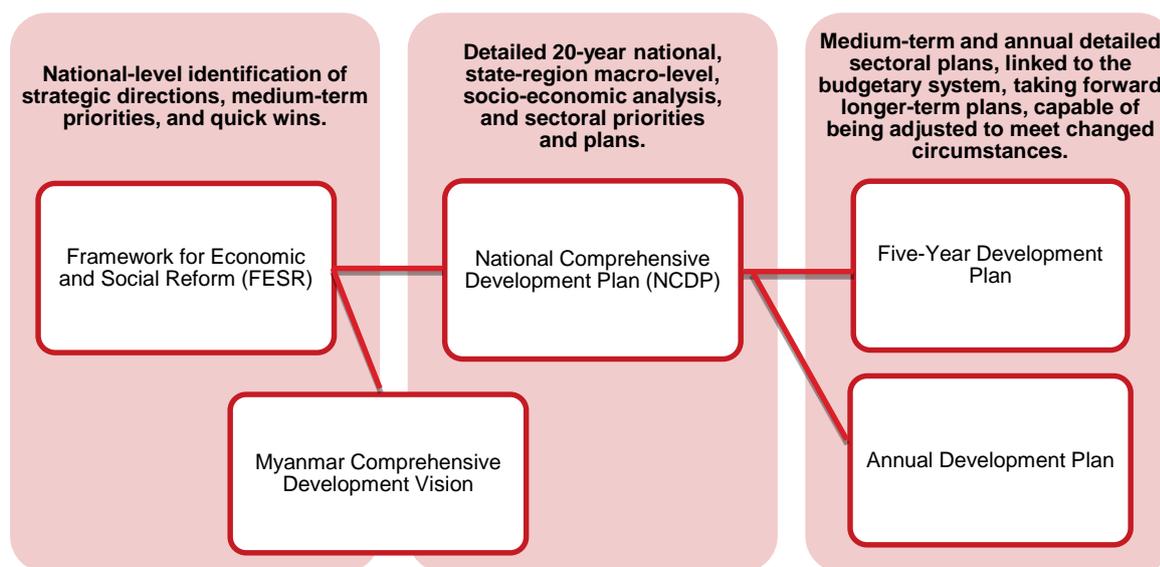
⁹ Recent reports include: McKinsey (2013), EIU (2013), KPMG (2013), and PwC (2012).

¹⁰ World Bank, 2012: International Development Association and International Finance Corporation, interim strategy note for the Republic of the Union of Myanmar for the period FY13–14, Report No. 72458-MM, 30 Oct. 2012.

mismatch between skills required for the performance of work, and the knowledge that those joining the labour market have actually gained.

The plans are based on the guiding principles of the government in addressing political, economic, and social challenges¹¹ and differ from earlier planning in the attempt to look at the cross-cutting issues as well as governance mechanisms. At the beginning of 2013, the government presented the scheme illustrated in Figure 1 during the First Myanmar Development Cooperation Conference, in an attempt to summarize and clarify the different plans and the interaction between them.¹²

Figure 1. Relationship between national strategies and plans¹³



Source: Framework for Economic and Social Reform (FESR).

At the same conference, President Thein Sein announced that a National Comprehensive Development Plan (NCDP) for Myanmar, continuing until 2030, was being drawn up in line with international standards, economic policy objectives, and people-centred development. The NCDP focuses on the new priorities and on long-term major reforms, taking a bottom-up, in addition to a top-down approach. In brief, the NCDP targets economic growth and job creation through the adoption of:

- a) policy and institutional arrangements on private-sector participation in national economic activities;
- b) strategies for the development of small and medium-sized enterprises (SMEs);
- c) labour-market development; and
- d) priority policy reforms and programmes.

Additionally, the Framework for Economic and Social Reform (FESR), launched at the same forum, outlines Myanmar’s policy priorities up until 2015, aimed at achieving the long-term goals of the NCDP.¹⁴ In essence, the FESR was designed to focus on promoting inclusive growth and poverty reduction. The key elements of the FESR are proper prioritization and sequencing of actions, a result-oriented approach, and the delivery of quick wins in a number of different sectors.

¹¹ KPMG: *Infrastructure in Myanmar*, KPMG Advisory (Myanmar) Limited, May 2013.

¹² Y. L. Aung: *The Unemployment Insurance System of Myanmar*, presented at Round Table on the design of unemployment insurance systems: Learning from ASEAN experiences, on 20 Nov. 2012.

¹³ S. Aung: *Myanmar’s National Development Priorities and Plans: Perspective and Short-Term Plans: Systems, linkages, priorities*, presented at “Partnerships for action, implementation and success”, Nay Pyi Taw, 19–20 Jan. 2013.

¹⁴ FESR: presented at “Partnerships for action, implementation and success”, Nay Pyi Taw, 19–20 Jan. 2013.

With regard to the first element, the FESR prioritizes ten critical reform areas, which include: fiscal and tax reforms, monetary and financial reforms, liberalization of trade and investment, private-sector investment, health and education, food security and agriculture, governance and transparency, mobile phones and Internet, infrastructure, and effective and efficient government. Reform in these ten areas is to be achieved through four interlinked objectives, which help in understanding the potential demand for expertise and capacity building. The FESR objectives are:

- a) industrial development;
- b) balanced growth among regions and states;
- c) inclusive growth; and
- d) quality statistics.

In addition to the other plans mentioned, the MOLES is developing a National Plan on Myanmar Workforce Skills Development, to provide skills training for the workforce, strengthening employment services, and ensuring job opportunities. This plan will now be strengthened on a legal basis, namely the Employment and Skills Development Law, which has been recently passed. The MOLES is now tasked with preparing the guidelines to implement the law. This specific law is important because it creates a closer link between the labour market and the TVET sector.

2.2.1 Development support

These development plans set a clear path of reform for Myanmar, but their implementation is strongly conditioned upon support for capacity-building in different sectors. With regard to the education sector, development partners have supported the efforts through the CESR, in three phases.

The MOE leads the CESR and coordinates the involvement of relevant government agencies and the support of multiple development-partner organizations (DPOs). The main role of the CESR is to help the government to more precisely pinpoint sector challenges, and to provide a strengthened evidence base for needed reforms and investments. According to the current planning, by August 2014 the CESR will result in an Education Sector Plan as a unified framework for prioritized and sequenced investments by both the government and DPOs.¹⁵ The CESR process is planned for two years and includes the following stages, as indicated in Table 1.

Table 1. CESR phases

Phase	Description	Progress	Timing
Phase 1	Rapid Assessment.	Completed	Launched 23 October 2012, completed early 2013.
Phase 2	In-depth analysis.	Ongoing	To be completed by December 2013.
Phase 3	CESP formulation.	Planned	Due by mid-2014.

Source: CESR team.

The main elements of the Costed Education Sector Plan (CESP) include:

- a) a two-year plan covering 2014–15 for the short-term actions to be taken in the education sector;
- b) interim planning for education-sector investments 2016–2020; and
- c) input into the formulation of the national, multi-sector Sixth Five-Year Plan.

Observation from the completed rapid assessment will be used where appropriate to support our review of the TVET sector and its link to the labour market. Labour market information collected during this phase of the CESR has been instrumental in identifying the sectors with high growth potential and skills demand.

¹⁵ ADB: Support for Education-Sector Planning, Project Data Sheets, 29 Apr. 2013.

2.2.2 State of the economy

In addition to development strategies, actual and predicted growth in the overall economy, and in specific sectors, provides a second factor for skills demand. Skills demand should translate directly into national skills and training (curriculum) standards, supported by an assessment and certification system. For example, stronger investment by the government in infrastructure should trigger consultations with private companies not only on the increase of the number of courses for skills in the construction industry, but also on the quality aspect of the courses. Growth forecasts will be reviewed in Chapter 3, while current figures for the size of the economy are provided below.

As discussed in the box at the beginning of this chapter, GDP figures differ depending on the source of information used. According to official Myanmar government statistics, the GDP growth was, on average, 10.2 per cent between the period 1992 and 2010, and 12.2 per cent from 2000 to 2010. In comparison, the IMF estimates GDP growth on average at 4.6 per cent from 2002 to 2010, and 5 per cent from 2009 to 2010.¹⁶ For 2012, IMF GDP figures point to growth of 6.2 per cent, bolstered by foreign investment in energy and the export of commodities. According to official statistics, Myanmar attracted over US\$40 billion in foreign investments in financial year 2012–13.¹⁷

The ADB's latest figures¹⁸ estimate Myanmar's GDP per capita at \$1,250 in purchasing power parity (current US dollar, 2010), comparing the country unfavourably with Bangladesh (\$1,570), Cambodia (\$2,110), and the Lao People's Democratic Republic (\$2,440).¹⁹

Over the past 20 years, Myanmar's economic relations have mainly been with its neighbours. Its two largest investors, who continue to pledge a significant amount, are China and Thailand. Together they account for \$25 billion worth of investments. China is both Myanmar's largest foreign investor and its second-largest foreign creditor.²⁰ Recent relations with Japanese companies have also been positive. The majority of this investment has been in the power and oil and gas sectors, although a substantial investment has also been committed to the special economic zones (SEZs) in Dawei, Kyaukphyu, and Thilawa.

¹⁶ IMF: *Myanmar: Staff-Monitored Programme*, IMF Country Report No. 13/13, Jan. 2013.

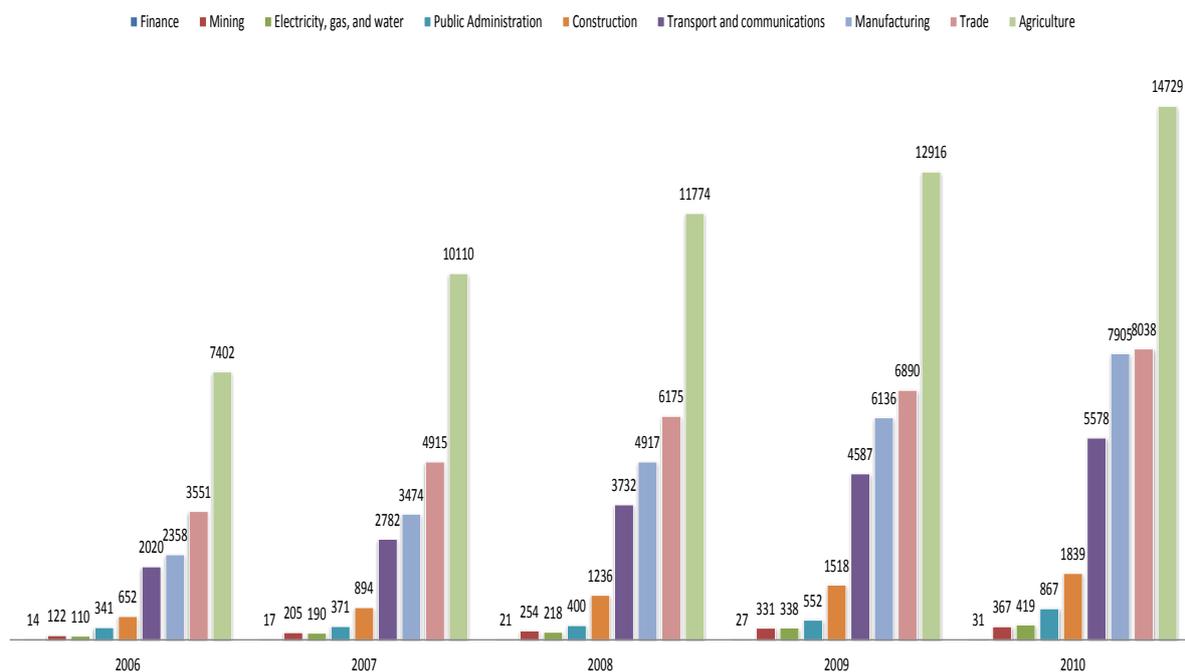
¹⁷ Myanmar Investment Commission: *Foreign investment of existing enterprises as of 31 May 2013 by sector*, <http://www.dica.gov.mm/dicagraph2.htm> [accessed Jan. 2014].

¹⁸ ADB: *Asian Development Outlook 2012*, latest amendment; ADB: *Myanmar in transition: opportunities and challenges*, 2012.

¹⁹ ILO: *Myanmar: Country fact sheet*, Oct. 2012, draft.

²⁰ T. S. Kim, E. Neo, J. S. Oeni: "Myanmar: Opportunities in Asia's Last Frontier Economy", in *IE Insights*, Vol. 2, July 2012.

Figure 2. GDP by industrial sector

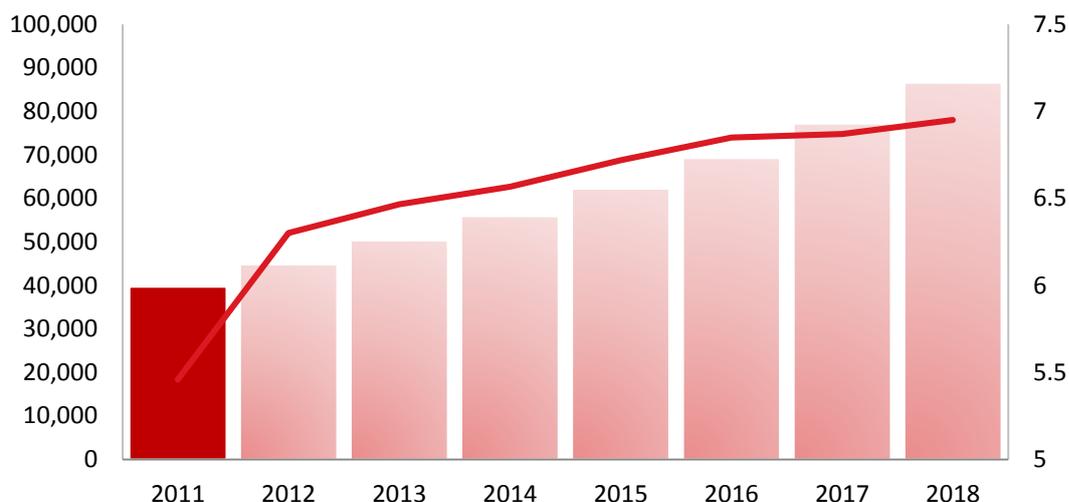


Source: GDP by industrial origin at current market prices, billion kyats; ADB Key Indicators for Asia and the Pacific 2012, Myanmar.

Figure 2 provides a sectoral picture with regard to GDP growth. The former presents the general trends in percentage terms, and the GDP growth at current market prices, and clearly shows that regardless of the natural potential, the Myanmar government has not been able to tap into the potential of the agricultural sector. The latter presents a breakdown of sectoral GDP looking at the volumes rather than the percentages. The strongest growth has been in manufacturing, transport and communications, and construction. The trends in each of these sectors are detailed later in the report.

As the discussion of the different sectors reveals, the financial services and telecoms sectors have the highest growth potential due to the low level of penetration of both non-cash banking services and mobile and Internet technology. Similar to the scenario building of the Economist Intelligence Unit (EIU), these developments are strongly related to the political situation in the country, and to preserving the current course of reforms.

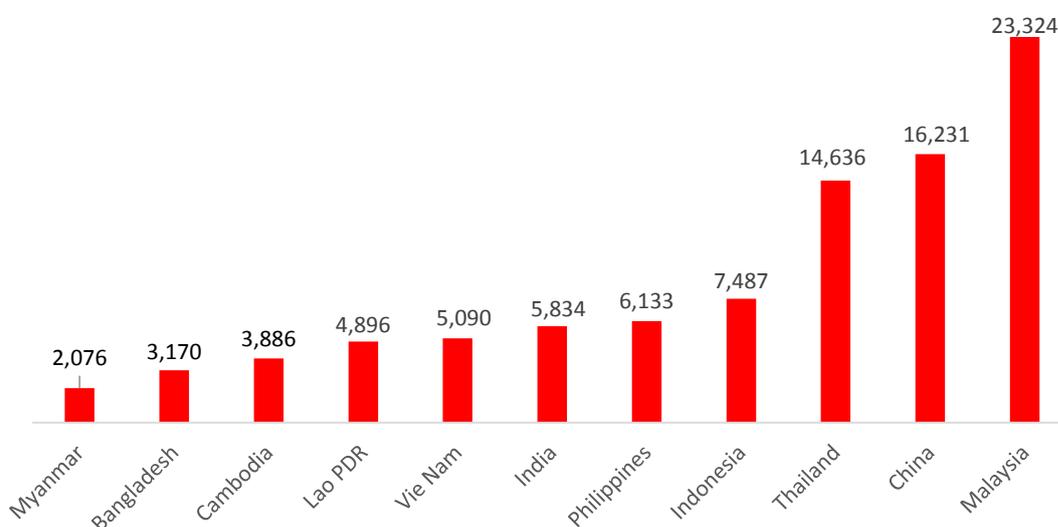
Figure 3. GDP and GDP growth projections



Source: IMF, World Economic Outlook database, April 2013, based on data from the MNPED, current prices, national currency.

According to the same projections by the IMF, without deep structural reform, Myanmar will continue to lag behind the other countries in the region, with a GDP per capita, in public-private partnerships (PPPs) terms, 20 times less than Malaysia, as shown in Figure 3 above and Figure 4 below.

Figure 4. GDP in purchasing power parity per capita, 2018 projections



Source: IMF, World Economic Outlook database, April 2013, in current international dollars (national currency per person).

2.2.3 Macroeconomic stability

The floating on 1 April 2012 of the kyat, Myanmar’s currency, was an important first step in abolishing a multiple exchange rate regime that had been identified by successive IMF staff-monitored programmes as a key constraint on the economy. The value of the kyat is now based on a managed float

and allowed to fluctuate slightly on a daily basis.²¹ This has been accompanied by a larger degree of independence of the Central Bank of Myanmar. Other reforms supporting macroeconomic stability relate to a reform of the tax system, with the abolition of the profit tax and reduction of sales tax to 5 per cent for most items.²² These changes with regard to the exchange rate and monetary policies have given reason for optimism, and together with the changes in the SEZ law, are aimed at ensuring a stable and predictable environment for foreign investment.²³

2.2.4 External trade

At the time of writing the report, Myanmar was in the process of finalizing the country's first national export strategy, marking an important step towards the mainstreaming of trade in the country's national development plans.²⁴ The Cabinet has pre-approved sectors and cross-sectors to be included in the strategy's design initiative. The strategy:

- a) targets increased exports of rice, pulses, beans, oilseed crops, fish, crustaceans, textiles and garments, and rubber, as well as tourism promotion;
- b) provides recommendations for market development for each sector;
- c) explores the growth potential of new and existing products; and
- d) outlines continued support for traditional export sectors such as agriculture, while promoting export diversification.²⁵

Myanmar currently relies on a few key export products. According to the Central Statistical Organization (CSO), the country exported \$3.5 billion worth of gas, mainly to Thailand, in fiscal year 2011–12 (April–March), compared with \$2.52 billion a year before and \$2.38 billion in 2008–09.²⁶

²¹ IMF: *Myanmar: Staff-Monitored Programme*, IMF Country Report No. 13/13, Jan. 2013.

²² McKinsey MGI: Myanmar's moment: Unique opportunities, major challenges, June 2013.

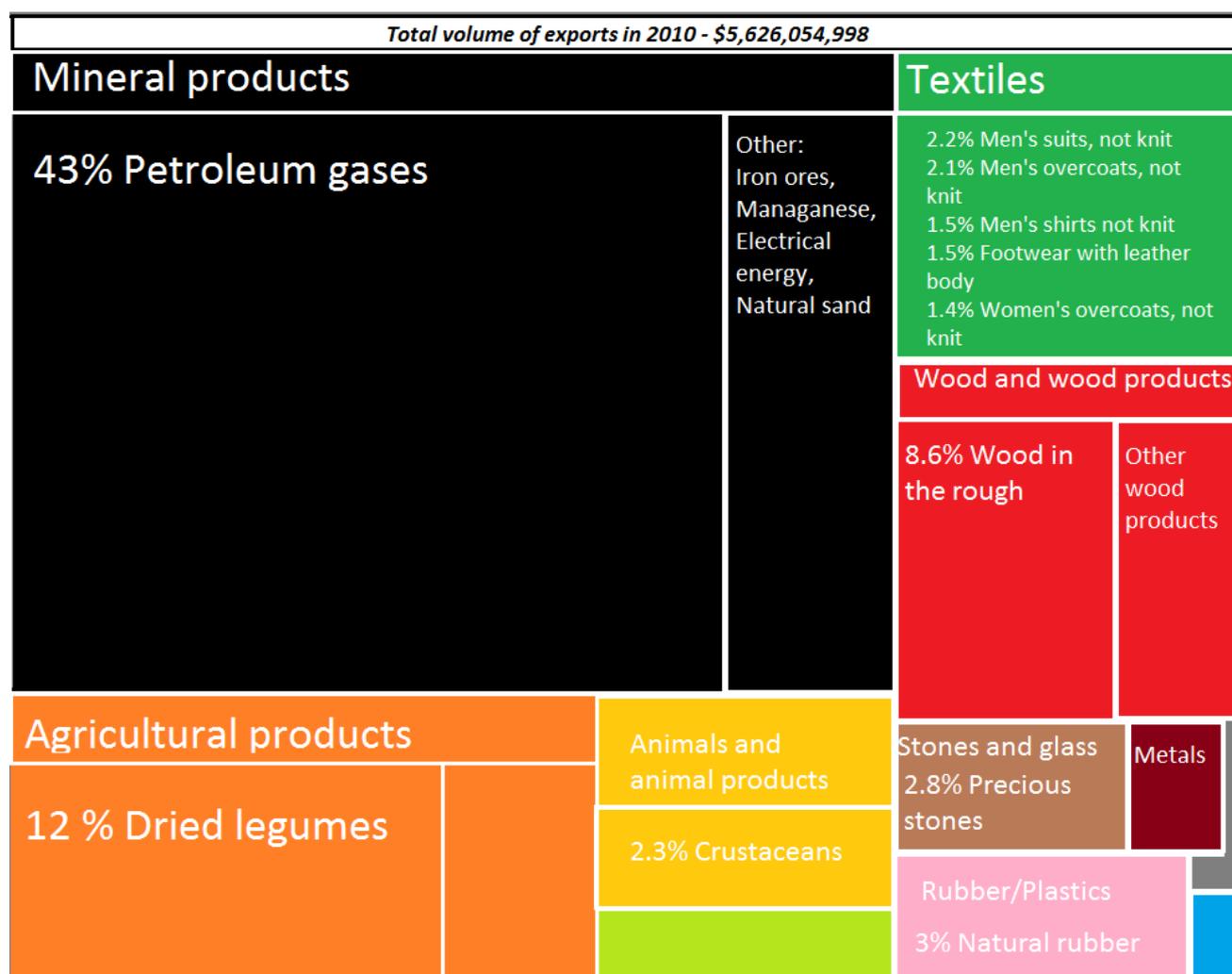
²³ Cite.

²⁴ Myanmar export strategy to focus on sector growth and market diversification. See more at <http://www.intracen.org/news/Myanmar-export-strategy-to-focus-on-sector-growth-and-market-diversification/#sthash.W3eSIJFo.dpuf> [accessed 20 Oct. 2014].

²⁵ Myanmar export strategy to focus on sector growth and market diversification. See more at <http://www.intracen.org/news/Myanmar-export-strategy-to-focus-on-sector-growth-and-market-diversification/#sthash.W3eSIJFo.dpuf> [accessed 20 Oct. 2014].

²⁶ Reuters: Corrected: H. T. Aung: "Myanmar seeks to cut gas exports to Thailand to meet own needs", <http://www.reuters.com/article/2012/10/04/myanmar-thailand-gas-idUSL3E8L24ZM20121004> [accessed 20 Oct. 2014].

Figure 5. Myanmar exports 2010



Source: A. Simoes, The Observatory of Economic Complexity, http://atlas.media.mit.edu/explore/tree_map/export/mmr/all/show/2010/ [accessed 1 Oct. 2013].

The scheme in Figure 5 above represents the composition of exported products in 2010. It can be seen that the most important sectors are mining and extraction, agriculture, and the garments industry. The figure shows the predominance of gas in the structure of Myanmar’s exports.

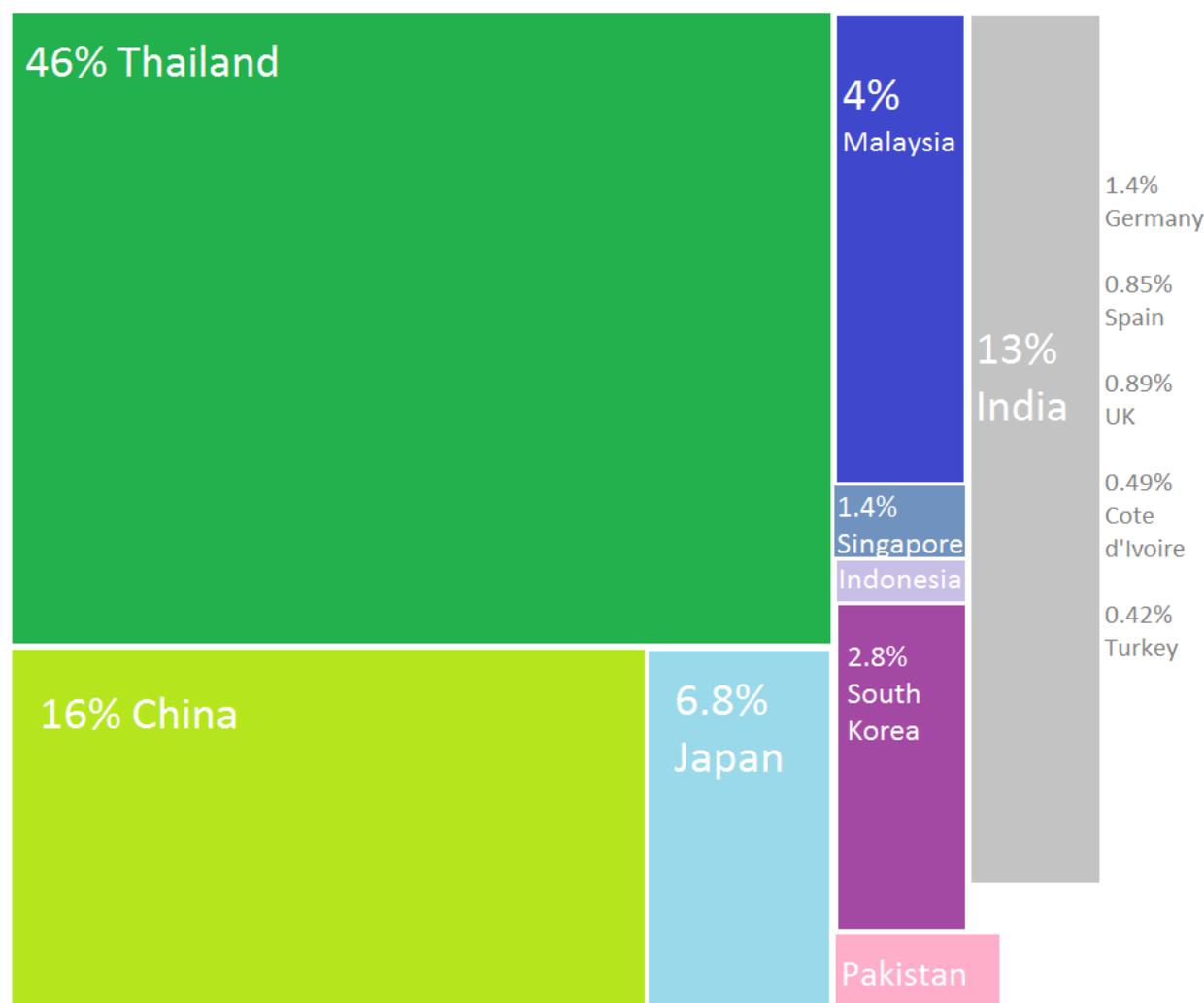
A detailed breakdown of the exports that have a share larger than 1 percent is listed in Table 2 below.

Table 2. Breakdown of exports

Name	Share (%)
Petroleum gases	43.0
Dried legumes	12.0
Wood in the rough	8.5
Natural rubber	3.0
Precious stones	3.0
Crustaceans	2.3
Men's suits, not knit	2.2
Men's overcoats, not knit	2.1
Wood sawn or chipped of a thickness exceeding 6 mm	1.6
Men's shirts, not knit	1.5
Footwear, with leather body	1.5
Women's overcoats, not knit	1.4
Rice	1.3
Iron ores and concentrates	1.2
Frozen fish, excluding fillets	1.2
Manganese of 47% or more by weight	1.1
Other oil seeds	1.1
Fish, excluding fillets	1.0

Source: A. Simoes: The Observatory of Economic Complexity,
http://atlas.media.mit.edu/explore/tree_map/export/mmr/all/show/2010/ [accessed 1 October 2013].

Figure 6. Export destinations 2010



Source: A. Simoes: The Observatory of Economic Complexity, http://atlas.media.mit.edu/explore/tree_map/export/mmr/all/show/2010/ [accessed 1 Oct. 2013].

Research shows that the export of gas has not succeeded in contributing significantly to state finance as a result of macroeconomic and monetary policy issues. Additionally, economic sanctions, underdeveloped technical capacity, opaque regulatory policy, and insufficient investment by foreign firms have impeded the country's efforts to realize its oil and gas production potential.²⁷ Similarly, the sector has not been able to contribute to an increase in employment.²⁸

In light of Myanmar's growing environmental concerns, and emphasis on ensuring contracts are more equitable, the government is reassessing existing contracts for minerals, energy, and other resources.²⁹

²⁷ EIA: Burma (Myanmar) Statistics, 2013, <http://www.eia.gov/countries/country-data.cfm?fips=BM&scr=email> [accessed 20 Oct. 2014].

²⁸ H. Rihova: *Skills development for sectors in Myanmar: Needs and opportunities*, draft, 8 Feb. 2013.

²⁹ G. Robinson and L. Barber: "Myanmar to reconsider energy contracts", in *Financial Times*, 11 Apr. 2013, <http://www.ft.com/cms/s/0/97b175c6-a2b7-11e2-9b70-00144feabdc0.html#ixzz2jfUQT7Wh> [accessed 20 Oct. 2014].

2.2.5 Private and non-governmental sector development

In line with macroeconomic reforms aimed at putting Myanmar on the path to a market economy, private-sector development is slowly awakening after a stagnant period. The private sector previously had to face high transaction costs due to a number of administrative barriers and an opaque market structure. The Ministry of Commerce and the UMFCCL have both declared the promotion of SMEs a high priority for the future development of the country³⁰ and have observed that the number of companies interested in registering in Myanmar and also wanting to become members of associations has expanded.

One of the limitations to private-sector development is the underdeveloped financial system, although this sector is slowly being liberalized to make space for private institutions in addition to the state-owned ones. Most recently, the country has seen the introduction of ATMs for domestic transactions, as well as foreign exchange facilities, thanks to the removal of restrictions on trade in foreign currency. As the CESR notes, the financial industry illustrates the huge capacity gap in the workforce moving to a knowledge economy.³¹

Further liberalization, coupled with stronger competition and privatization of some of the state-owned enterprises, could provide further opportunities for businesses to operate in the Myanmar market. Currently, the chambers of commerce have approximately 24,505 members, among which 20,000 or so companies cover the bulk of the private sector's output of goods and services. The scope of this study does not go into detail on the development of the private companies, but looks at some of the associations and members of the UMFCCL, in order to map existing TVET opportunities. Associations are reviewed in Chapter 6, but some examples of organizations that bring together professional expertise in growing sectors include:

- a) the Myanmar Industries Association;³²
- b) the Myanmar Garment Manufacturers' Association (MGMA);³³
- c) the Myanmar Rubber Producers' Association;
- d) the Myanmar Plastic Industries Association;
- e) the Myanmar Construction Entrepreneurs' Association;
- f) the Union of Myanmar Travel Association, also a member of the Myanmar Tourism Federation (MTF);³⁴
- g) the Myanmar Hoteliers' Association, also a member of the Myanmar Tourism Federation;³⁵
- h) the Myanmar Food Processors' and Exporters' Association;
- i) the Myanmar Pulses, Beans, and Sesame Seeds Merchants' Association;
- j) the Myanmar Rice & Paddy Traders' Association; and
- k) the Myanmar Computer Industry Association.³⁶

The Myanmar Business Executives' Association (MBEA), formed by graduates of the Executive MBA Programme at the Yangon Institute of Economics, is another institution aimed at supporting the private sector. At the beginning of 2012, the MBEA was permitted to formally register as an NGO after operating for several years as an informal group. In 2007, the MBEA established a Business Capacity Building Centre that aspires to bring global best practice to business training in Myanmar.³⁷

³⁰ L. Reiffel: *The Myanmar economy: Tough choices, Global Economy and Development Programme*, Working Paper 51, (Washington, DC, The Brookings Institution, 2012), p. 17.

³¹ CESR team, 2013: *Labour market analysis, the Demand for Higher Education and TVET Graduates*, CESR: Phase 1: Rapid Assessment. p. 4.

³² More information available at <http://myanmarindustries.org/> [accessed 20 Oct. 2014].

³³ More information available at <http://www.myanmargarments.org/> [accessed 20 Oct. 2014].

³⁴ More information available at <http://www.umtanet.org/> [accessed 20 Oct. 2014].

³⁵ More information available at <http://www.myanmarhotelier.org/> [accessed 20 Oct. 2014].

³⁶ More information available at <http://www.mciamyanmar.org/> [accessed 20 Oct. 2014].

³⁷ *Ibid.* p.17.

The MBEA is one example, but there are multiple signs of change in the non-government sector overall, and especially an increase in the number of professional associations, trade unions, and NGOs. This is partially due to the new legislature, which allows for freedom of association and organization. The ILO was closely involved in the drafting of the new Labour Organization Law, signed and enacted by the President on 11 October 2011.³⁸ This law repeals the 1926 Trade Union Act and “contains provisions on the establishment of labour organizations, their functions and duties, rights and responsibilities, including the right to strike.”³⁹

According to ILO data, by October 2012 some 277 labour organizations and one federation of seafarers had been registered, and this number is expected “to increase steadily over the coming months as more employers and workers become aware of, and exercise, their rights.”⁴⁰ The further strengthening of trade unions, and their coordination, has been a priority for the ILO. Some of the trade unions that are actively building capacity include the Federation of Trade Unions of Burma, the Myanmar Industrial Trade Union, the Textile and Garment and Leather Workers’ Union, the Journalist Press and Publications Workers’ Union, the Agriculture and Farmers’ Federation of Myanmar, and the Transport and General Workers’ Union.⁴¹ Even though the trade unions have become more visible, information about their activities is still limited, and further field work will be necessary to complete this data.

In order to make full mapping of the private sector and NGOs, further field work and data collection will also be necessary in the future. According to a 2012 Directory of NGO Networks in Myanmar funded by the European Union,⁴² there are 12 networks:

- a) the Child Focused Network – promotes children’s rights, with 52 members and 18 partner organizations;
- b) Gaihahita Networks (Youth Environment Networks) – environmental protection, with six member organizations;
- c) the Gender Equality Network – women’s rights and gender equality, with an inter-agency network of approximately 60 NGOs, UN agencies, and civil society networks;
- d) the Mangrove and Environmental Rehabilitation Network – rehabilitation and conservation of mangrove resources, with 15 member organizations;
- e) the Myanmar NGO Contingency Plan – responding to, and preparing for, emergencies, with seven clusters (health; education; emergency shelter; food and nutrition; agriculture; protection; and water, sanitation and hygiene (WASH));
- f) the Myanmar NGO Network – development of civil society, with 110 member organizations;
- g) the Myanmar Positive Group (National People Living with HIV/AIDS Network) – connecting positive self-help groups for people living with HIV/AIDS, but with no information on the number of members;
- h) the Myanmar Positive Women’s Network Initiative – support for women living with HIV/AIDS, but with no information on the number of members;
- i) National NGOs Network (HIV/AIDS) – prevention and treatment of the disease, with 64 organizations participating in the second annual meeting in 2007;⁴³
- j) the Sex Worker in Myanmar Network – promoting better lives for HIV-affected sex workers;
- k) Thadar Consortium – strengthening civil society, with; 18 member organizations; and
- l) Women’s Organizations Network of Myanmar – promotion of equality for women and men, with 29 member organizations.

³⁸ ILO: *Decent Work in Myanmar: ILO Programme Framework, November 2012 to April 2014*. Nov. 2012, draft.

³⁹ Ibid. p.4.

⁴⁰ Ibid. p.4.

⁴¹ More information: ITUC, ITUC-AP, Global Unions Programme Proposal for Burma: “Burma: the moment to build a movement”, http://www.global-unions.org/IMG/pdf/08a-myanmarworkinggroup_annex2_itucproposal.pdf [accessed 20 Oct. 2014].

⁴² 2012 Directory of NGO Networks in Myanmar funded by the European Union: <http://lrcmyanmar.org/en/resources/ngo-network-directory> [accessed 20 Oct. 2014].

⁴³ Ibid. p.48.

These NGO networks are essential in supporting the country and its vulnerable groups as they go through social, political, and economic transitions. They have also been essential in responding to natural disasters, and that is why they continue to receive support from international organizations. Overall, however, the role of NGOs in Myanmar society was beyond the scope of the field work for this project.

2.2.6 Condition of the labour market

As discussed at the beginning of Chapter 2, measuring population and employment rates has been a difficult task without a recent census or Labour Force Survey (LFS). With the last LFS conducted in 1990, a population census to be conducted in 2014, and the LFS⁴⁴ to be conducted in 2014 and 2015, observers will have to wait for precise data. Most of the information used below comes from the analysis made by the CESR team during Phase 1: Rapid Assessment.

The most recent primary data on the labour force comes from the Integrated Household Living Conditions Survey (IHLCS) in Myanmar, the aim of which is to complement administrative data available in the Educational Management Information Systems (EMIS) and other data sources.⁴⁵

Table 3. Key employment data

Key employment and population data ⁴⁶	2011
Population total ⁴⁷	61 million
Urban population, percentage	33
Population growth, percentage	1.1–1.3
Labour force total	32.5 million
Labour force, female percentage of total labour force	46
Labour force participation rate, percentage	67
Labour force participation rate, youth percentage	57.7 ⁴⁸ (2010)
Employed in millions ⁴⁹	30.1 million
Unemployment rate, percentage	4.01 ⁵⁰

Source: World Bank, ADB, ILO

2.2.7 Demography

The population of Myanmar is approximately 61 million and is increasing at a rate of between 1.1 and 1.3 per cent⁵¹ per year, as shown in Figure 7 below. As Table 3 above shows, a large proportion of the population in Myanmar still lives in rural areas, but this is likely to change rapidly. According to McKinsey's report, the share of the population in large cities could double by 2030. Myanmar would benefit from preparing for this change through investment, planning, and a shift to local governance.

⁴⁴ MOLES and CSO in partnership with the ILO will undertake an LFS and a school-to-work transition survey.

⁴⁵ IHLCA Project Technical Unit: *IHLCS in Myanmar (2009-2010) Poverty Profile* (Yangon, 2011), http://www.mm.undp.org/ihlca/03_MDG-Data/index.html [accessed 17 Jan. 2014]; C. Spohr: Informal Note on IHLCS Analysis as an Input to the CESR, Nov. 2012, <http://www.cesrmm.org/index.php/en/documents/category/26-other> [accessed 17 Jan. 2014].

⁴⁶ EIU: *Myanmar: White elephant or new tiger economy? A special report from the EIU, Executive summary*, Apr. 2012, http://www.eiu.com/Handlers/WhitepaperHandler.ashx?fi=Myanmar_Executive_summary.pdf&mode=wp&campaignid=Myanmar12 [accessed 20 Oct. 2014].

⁴⁷ World Bank population indicators.

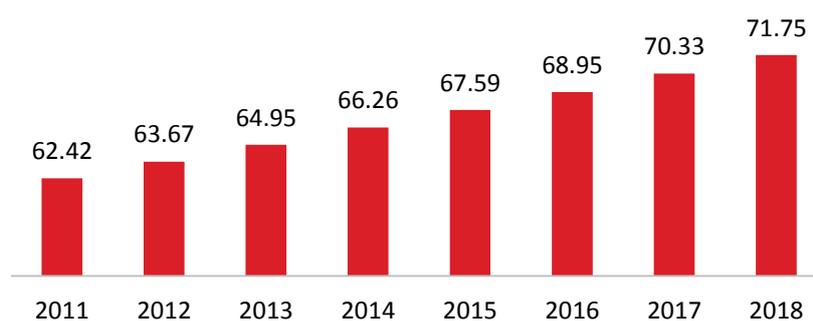
⁴⁸ ILO: *Myanmar country fact sheet 2012*, KILMnet database (for 2010).

⁴⁹ ADB: *Myanmar in transition: Opportunities and challenges* (Manila, 2012).

⁵⁰ Reliable data on youth unemployment is not available. Figures from the IHLCS point to 3.6 per cent youth unemployment in 2010 (with 1 per cent total unemployment).

⁵¹ Former figure estimate of the IMF (2012); latter, ADB 2013.

Figure 7. Population projections (millions)



Source: IMF, based on the Department of Labour latest actual data, 2006.

Myanmar is made up of 135 ethnic groups, of which the main national groups are the Kachin, Kayah, Kayin, Chin, Bamar, Mon, Rakhine, and Shan. With such enormous indigenous ethnic diversity, one of the increasing concerns in Myanmar's education sector is how such a large and diverse population can be motivated to take increased responsibility for effective lifelong learning, with particular reference to developing sustainable economic livelihoods.⁵²

2.2.8 Human development

In 2010, 25.6 per cent of Myanmar's population was living below the national poverty line.⁵³ Myanmar's Human Development Index (HDI) value for 2012 was 0.498 – in the low human development category – ranking 149th out of 187 countries and territories.⁵⁴

Myanmar's 2012 result was above the average of 0.466 for countries in the low human development group, and below the average of 0.683 for countries in East Asia and the Pacific. In East Asia and the Pacific, countries that were close to Myanmar in the 2012 HDI ranking, and in terms of population size, were Cambodia and the Lao People's Democratic Republic, which both ranked 138th, as shown in Table 4.⁵⁵

Table 4. HDI rank

Country	HDI value	HDI rank	Life expectancy at birth	Expected years of schooling	Mean years of schooling	GNI per capita (PPP US\$)
Myanmar	0.498	149	65.7	9.4	3.9	1 817
Cambodia	0.543	138	63.6	10.5	5.8	2 095
Lao PDR	0.543	138	67.8	10.1	4.6	2 435
East Asia and the Pacific	0.683	-	72.7	11.8	7.2	6 874
Low HDI	0.466	-	59.1	8.5	4.2	1 633

Source: HDI, UNDP.

Another measure tracked by the United Nations Development Programme (UNDP) is the Gender Inequality Index (GII), which reflects gender-based inequalities in three areas of concern – reproductive health, empowerment, and economic activity. In this regard, Myanmar ranked 80th out of 148 countries

⁵² Prospects, vol. XXXV, No. 3, Sep. 2005.

⁵³ ADB: *Myanmar in transition: Opportunities and challenges* (Manila, 2012).

⁵⁴ UNDP: *Human Development Report 2013*, explanatory note on 2013 HDR composite indices, <http://hdr.undp.org/sites/default/files/Country-Profiles/MMR.pdf> [accessed 20 Oct.2014].

⁵⁵ Ibid. p.3.

in the 2012 index. It ranked well with regard to female versus male labour-force participation (75 per cent compared to 82.1 per cent for men). At the same time, the female (and male) percentage of the population with at least a secondary education degree was 18 per cent, which was equal to the median for low human development countries. Below this average was the percentage of seats in parliament held by women, which was less than 5 per cent.

As mentioned earlier, difficulty in producing gender-disaggregated data has been an issue in Myanmar, so further comparison on labour participation and TVET achievements is absent from this stage of the analysis.

2.2.9 Employment

Reports suggest that a substantial portion of economic activity in Myanmar is informal, with SMEs accounting for over 90 per cent of the country's enterprises.⁵⁶ One calculation done by the CESR team using the IHLCS, estimated that informal-sector workers made up about 54 per cent of all workers in urban areas, and 79 per cent in rural areas.

Table 5 shows the trend in employment by sector between 2005 and 2010, where it can be seen that the largest increase in contribution to employment was in two sectors: "households and undifferentiated" and "real estate, renting, and business activities". Figure 8 shows the most recent results, and clearly demonstrates the state of affairs in 2010, where agriculture dominated employment, accounting for over 50 per cent of jobs.⁵⁷ Table 5 surprisingly shows that the share of the workforce in agriculture did not change, while the share of people employed in manufacturing actually decreased. Linking this to the previous discussion on the structure of the GDP, it seems that the structure of employment was not influenced. One possible explanation is that the growing GDP in manufacturing was produced by sectors with lower labour intensity, and therefore did not influence the structure of employment.⁵⁸

According to the interviews conducted by the CESR team, the approximate data for employment in specific industry sectors includes the following:

- a) garments industry – 156,000 employees (including Koreans and Japanese at technician level);
- b) wood processing industry – 9,000;
- c) construction⁵⁹ – 1.4 million;
- d) manufacturing⁶⁰ – 1.9 million;
- e) hotels and restaurants⁶¹ – 422,000;
- f) retail and wholesale trade⁶² – 3 million; and
- g) licensed hotels⁶³ – 18,780.

⁵⁶ World Bank, 2012.

⁵⁷ IHLCS in Myanmar (2009–2010), UNDP, et al., June 2011.

⁵⁸ H. Rihova: *Skills development for sectors in Myanmar – Needs and opportunities*, draft, 2013.

⁵⁹ Estimation based on 2010 ratios.

⁶⁰ Idem.

⁶¹ Idem.

⁶² Idem.

⁶³ Yangon, Mandalay, Bagan, Thanintharyi.

Table 5. Employment by sector 2005–2010 (%)

Sector	2005	2010
Agriculture, hunting, and forestry	50.2	50.2
Trade	11.6	10.5
Households and undifferentiated	1.5	7.9
Real estate, renting, and business activities	5.8	7.1
Manufacturing	7.4	5.9
Construction	2.7	4.0
Transport, storage, and communication	3.3	3.8
Education	2.0	2.7
Fishing	2.8	2.2
Mining and quarrying	1.2	1.6
Hotels and restaurants	0.9	1.3
Public administration and defence, compulsory social security	2.0	1.3
Health and social work	5.6	0.7
Electricity, gas, and water supply	0.3	0.5
Financial intermediation	0.2	0.2
Extra-territorial	0.0	0.1

Source: IHLCA Project technical unit, et al, 2011, cited in Rihova, Hana, 2013. Skills development for sectors in Myanmar: Needs and opportunities. Draft.

Currently, calculations point to a working-age population of 76 per cent of the total population, or 46 million,⁶⁴ and estimates show that this percentage will continue growing until 2030.⁶⁵ Therefore, the working-age population is likely to continue contributing positively to growth until 2030, but not at the pace it has contributed up to this point.⁶⁶ Approximately 40 per cent of the working population is between 15 and 28 years old, which provides a substantial pool of young people to sustain economic development.⁶⁷

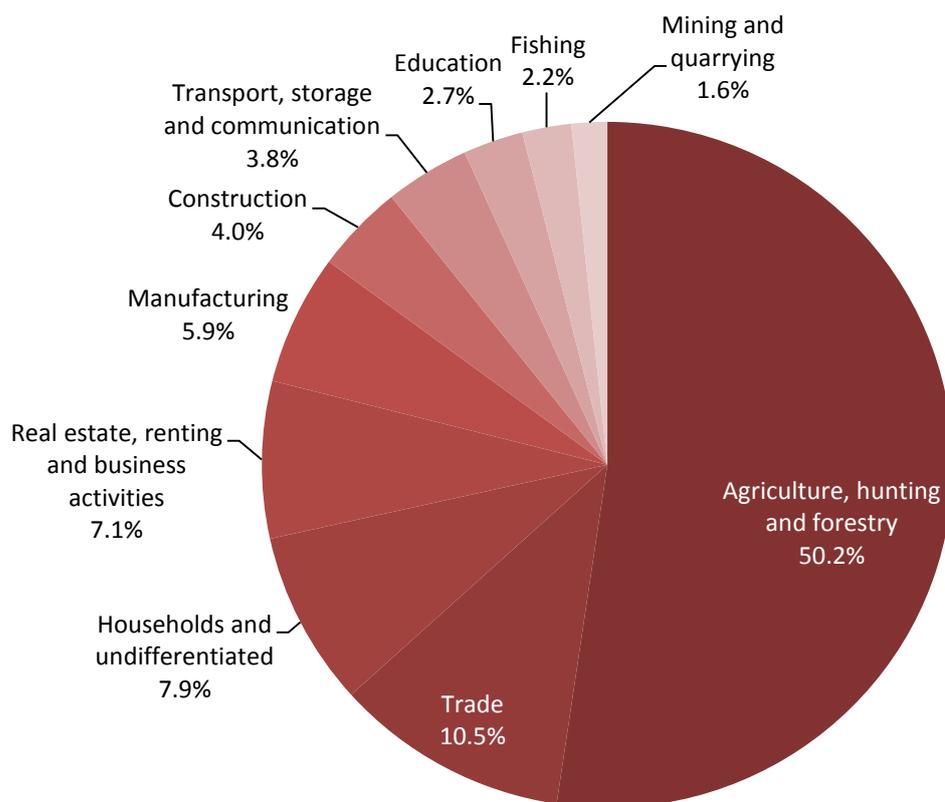
⁶⁴ Aged 15 and above.

⁶⁵ McKinsey MGI: *Myanmar's moment: Unique opportunities, major challenges*, June 2013.

⁶⁶ CESR team: Labour market analysis – the Demand for Higher Education and TVET Graduates, CESR Phase 1 Rapid Assessment, 2013; MNPED et al.: *IHLCS (2009–2010) Poverty Profile*, (Yangon, 2011), p. 36.

⁶⁷ Interview 13: MTF, Yangon, Myanmar, 19 June 2013; MNPED et al.: *IHLCS (2009–2010) Poverty Profile*, (Yangon, 2011), p. 36.

Figure 8. Employment by economic sector



Source: MNPED, et al., 2011. IHLCs (2009–10).

Growth in employment over the past 20 years has been mainly due to growth in the working-age population rather than to improvement in productivity.⁶⁸

The reasons for low productivity include the inability to shift away from low-productivity agriculture into services and manufacturing, and the inability to boost growth in specific sectors. Therefore, improving productivity within sectors will involve improvements in the use of capital, an increase in competition, gains in operational efficiency, and an increase in the use of technologies with important implications for skills.

Low labour productivity rather than a low employment rate explains Myanmar's relatively weak performance in per capita GDP.⁶⁹ According to IMF research, on average a worker in Myanmar adds only \$1,500 of economic value in a year of work, which is around 70 per cent less than the average of seven other Asian countries – Thailand, China, Indonesia, Sri Lanka, the Philippines, India, and Viet Nam.

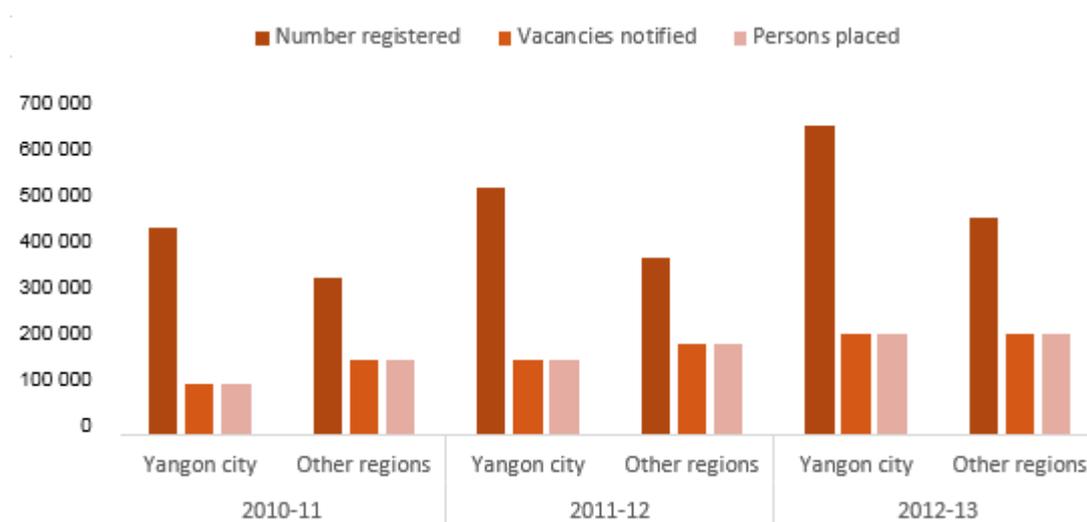
Workers returning from abroad can be a future source of skills in developing sectors. As conditions for workers in Myanmar improve, and policies are implemented to stimulate the return of nationals working abroad, migrant skills will be a valuable resource for the economy.

⁶⁸ McKinsey MGI: *Myanmar's moment: Unique opportunities, major challenges*, June 2013.

⁶⁹ McKinsey MGI: *Myanmar's moment: Unique opportunities, major challenges*, June 2013.

Figure 8 gives a preliminary look into the employment figures produced by the government, which will be reviewed in Chapter 5 of this report. The monthly selected statistics publication⁷⁰ looks into the level of employment achieved through labour offices, divided between the country's biggest city, Yangon, and other regions. Figure 9 shows a substantial increase in the number of people using labour offices for employment, but less than a proportional increase in the number of people placed in jobs. Since the success rate of job placement also depends on the overall number of vacancies, the efficiency of the labour offices cannot be directly inferred.

Figure 9. Employment through labour offices (Yangon and other regions)



Source: CSO, Department of Labour, MNPED.

2.3 Current and future skills demand

2.3.1 Growth outlook

Foreign and domestic investment

Due to the loosening of sanctions, Myanmar has seen foreign direct investment ramp up. This trend is likely to continue, and will be supported by an increase in regional trade flows. In the first seven months of 2013, Myanmar received a significantly higher number of investment pledges than in the same period in 2012. China had the biggest investment commitments for 2013.⁷¹ Enactment of the Foreign Investment Law, more transparency, and visibility for foreign investors will be essential for sustained growth. For example, due to the enactment of the Foreign Investment Law, projects on a deep-sea port and SEZ are being implemented, and local job opportunities are expected to increase accordingly.⁷²

According to recent data, the total accumulated pledged amount of foreign direct investment (FDI) up to 30 June 2013 was \$42,929.047 million. Foreign investment by existing enterprises shows the clear dominance of the power, oil and gas, and mining sectors, as shown in Table 6, even though there are new commitments in manufacturing, specifically the garments sector.

⁷⁰ CSO: *Selected Monthly Economic Indicators*.

⁷¹ Investvine: *Latest FDI in Myanmar close to \$800 million*. 2013, <http://investvine.com/?s=Latest+FDI+in+Myanmar+close+to++800m> [accessed 20 Oct. 2014].

⁷² Y. L. Aung: *The Unemployment Insurance System of Myanmar*, presented at Round Table on the design of unemployment insurance systems: Learning from ASEAN experiences (Manila), 19-20 Nov. 2012.

Table 6. Foreign direct investment by sector⁷³

Sector	Number of existing enterprises	Approved amount (US\$ millions)	Percentage
Power	6	19 237.921	44.82
Oil and gas	115	14 372.272	33.48
Mining	67	2 829.694	6.59
Manufacturing	255	2 730.883	6.36
Hotels and tourism	47	1 585.811	3.69
Real estate	19	1 056.453	2.46
Livestock and fisheries	26	347.124	0.81
Transport and communications	16	313.906	0.73
Industrial estates	3	193.113	0.45
Agriculture	10	185.351	0.43
Construction	2	37.767	0.09
Other services	11	38.752	0.09
Total	577	42 929.047	100.00

Source: Myanmar Investment Commission.

At the same point, the accumulated amount of Myanmar citizens' investment was 2,959,090.51 million kyats (MMK) (about \$3,025 million). Investment data by sector is presented in Table 7 below. It has to be noted that in comparison to FDI data, domestic investment is given in kyats. The largest difference is the pledges in construction, transport, and real estate, which are currently a priority for the government, unable to attract foreign investment yet.

Table 7. Pledged domestic investment by sector

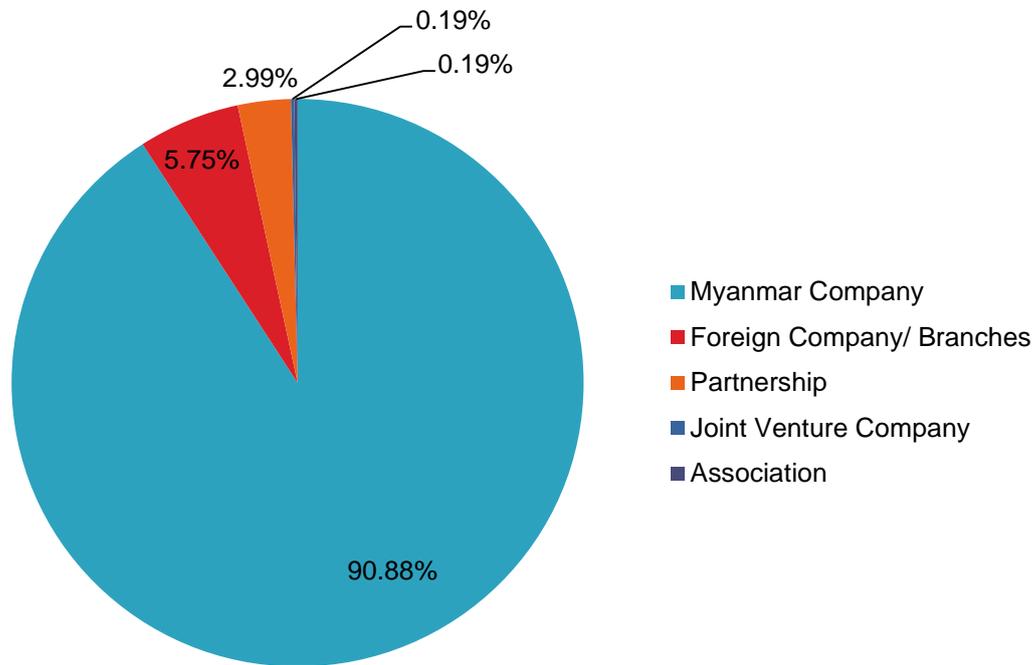
Sector	Number of permitted enterprises	Approved amount (kyat in millions)	Percentage
Construction	57	713 489.44	24.11
Power	7	246 232.50	8.32
Manufacturing	626	700 200.15	23.66
Others	27	343 700.42	11.62
Real estate development	34	195 081.96	6.59
Transport	22	292 127.46	9.87
Livestock and fisheries	59	22 141.00	0.75
Mining	52	13 007.92	0.44
Hotels and tourism	26	183 348.40	6.20
Industrial estates	2	249 212.79	8.42
Agriculture	5	547.90	0.02
Total	917	2 959 090.51	100.00

Source: Myanmar Investment Commission

⁷³ Myanmar Investment Commission: *Foreign investment of existing enterprises as of 31 May 2013 by sector*, <http://www.dica.gov.mm/dicagraph1.1.htm> [accessed 17 Jan. 2014].

Up to July 1, 2013 registered companies and business organizations in Myanmar were divided as shown in Figure 10. The total number of registered companies at the time of writing this report was 35,829.⁷⁴

Figure 10. Registered companies and business organizations



Source: Myanmar Investment Commission.

On investment, last but not least, the study observes investment by source, as reported by the Myanmar Investment Authority. The top investors are regional players such as China, Thailand, Hong Kong, the Republic of Korea, and Singapore, as shown in Table 8. It has to be noted that, although in small amounts, new countries have started pledging investments, showing diversification in the sources of finance available to the government.

⁷⁴ Myanmar Investment Commission: *Foreign investment of existing enterprises as of 31 May 2013 by sector*. 2013, <http://www.dica.gov.mm/dicagraph2.htm> [accessed 20 Jan. 2014].

Table 8. Pledged investment by country

Country	Existing enterprises	Approved amount (US\$ in millions)	Percentage
China	47	14 185.529	33.04
Thailand	66	9 979.443	23.25
Hong Kong (China)	49	6 393.334	14.89
Rep. of Korea	78	3 013.705	7.02
UK ⁷⁵	60	3 045.434	7.09
Singapore	90	2 358.946	5.49
Malaysia	44	1 034.785	2.41
France	2	469.000	1.09
Viet Nam	6	511.186	1.19
India	9	283.100	0.66
Japan	35	270.283	0.63
Netherlands	7	249.136	0.58
USA	15	243.565	0.57
Indonesia	12	241.497	0.56
Philippines	2	146.667	0.34
Russian Federation	2	94.000	0.22
Australia	14	99.246	0.23
Austria	2	72.500	0.17
Panama	2	55.101	0.13
United Arab Emirates	1	41.000	0.10
Canada	16	41.883	0.10
Mauritius	2	30.575	0.07
Germany	2	17.500	0.04
Rep. of Liberia	2	14.600	0.03
Denmark	1	13.370	0.03
Cyprus	1	5.250	0.01
Macau (China)	2	4.400	0.01
Switzerland	1	3.382	0.01
Bangladesh	2	2.957	0.01
Israel	1	2.400	0.01
Brunei Darussalam	3	4.273	0.01
Sri Lanka	1	1.000	0
Total	577	42 929.047	100.00

Source: Myanmar Investment Commission.
Including the British Overseas Territories

As illustrated in the following subsections, growth strongly depends on the ability of the Myanmar government to attract investment in the sectors with the strongest development potential, and to diversify into a range of non-primary activities such as tourism, telecommunications, manufacturing, construction, and banking. Some reforms are aimed at liberalizing state-run enterprises, and thereby increasing private competition. Two already mentioned examples of reforms that are being carried out are monetary independence of the central bank, and fiscal transparency.

Regarding monetary independence, this is the first time the central bank has gained any independence from the Finance Ministry and been able to lead on monetary policy. On fiscal transparency, 2012 was the first time the budget was openly debated in parliament, as opposed to being decided upon behind closed doors.

In addition to these two early actions, the government has invited foreign companies to submit expressions of interest in exploration rights for up to three out of 30 offshore oil and natural gas blocks. These auctions are attracting intense investor interest, but the extent to which the government will follow, and require adherence to, international regulatory and environmental standards remains unclear.

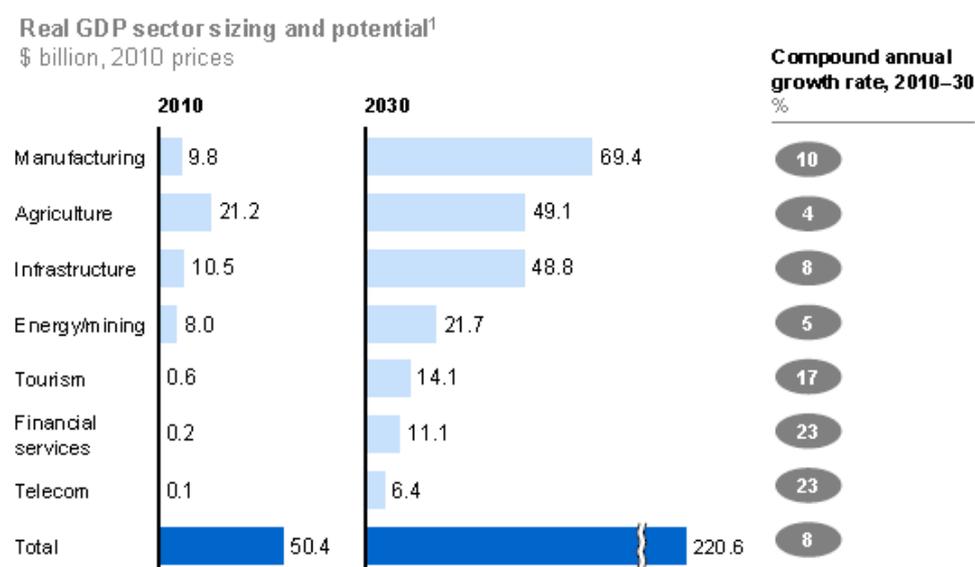
GDP growth

Different forecasts exist for Myanmar’s development in the short and medium term. The divergence in growth forecasts results from the possible paths that reform in Myanmar can take. According to the EIU, if Myanmar stays on the same track, the economy will expand by 5.4 per cent in fiscal year 2013–14 (April–March). Growth will accelerate to 6.7 per cent a year on average from 2014 to 2015 and 2017 to 2018, as the ending of sanctions prompts a surge in foreign investment. The EIU forecasts that annual consumer price inflation will accelerate to 6.7 per cent on average between 2013 and 2017. Inflation will remain manageable, but the economy will remain vulnerable to typhoons and other weather-related events, because 70 per cent of the economy is still tied to agriculture.⁷⁶

However, there is a more optimistic scenario, rated with a 25 per cent probability, which would yield a real GDP growth of 8.5 per cent between 2016 and 2020.⁷⁷ The path to this “golden era” scenario can be secured through continuous political and administrative reform, a jump in foreign investment as investors seek to secure early-mover advantages, and technical assistance by international partners that aids fast completion of comprehensive economic development plans.

A similar and, to an extent, equally optimistic result is given in the latest report by consultancy company McKinsey. A substantial real GDP sector potential is revealed when using a bottom-up approach to size the market, which is different from the official CSO estimates. This is represented in Figure 11 below.

Figure 11. McKinsey sector estimates



⁷⁶ EIU forecasts.

⁷⁷ EIU forecasts.

Source: McKinsey analysis based on company estimates of the discussed sectors, US\$ billion, 2010 prices.

In general, their analysis suggests that the seven sectors can add \$200 billion to GDP by 2030, and create over 10 million non-agricultural jobs. McKinsey analysis suggests that 85 per cent of the growth potential by 2030 in the seven sectors analysed comes from a further highlighting of four top-priority sectors: agriculture, energy and mining, manufacturing, and infrastructure.⁷⁸ With regard to employment potential, manufacturing, infrastructure, and tourism can account for 92 per cent of employment growth.

These results once again reiterate the opportunities for the government of Myanmar. As a latecomer in many respects, it has substantial unfulfilled potential, including “low-hanging fruits” that can give a quick first boost to the economy. Overall, there is agreement between different analyses that if the government keeps on the same track, external investment and support will come very quickly.

The next section briefly outlines the demand for skills in the economy overall.

2.3.2 Skills demand

During the CESR Phase 1: Rapid Assessment, the team used 1990 labour-market data as a guide to estimate the number of professionals and trade-level workers in some key industries. Their results are replicated in Table 9 below.

Table 9. Skilled occupational levels

Key industries and sectors			
Occupational level	Construction	Manufacturing	Hotels and restaurants
Professional	39 000	53 000	12 000
Technician	28 000	38 000	8 000
Trade	163 800	222 000	49 000

Source: CESR labour-market review.

A CESR study suggests that businesses may have limited means to differentiating the levels of skills held by staff. This is especially valid for the manufacturing industry, where workers are generally recruited unskilled and receive training on the job. This was largely confirmed by the interviews conducted by our team.⁷⁹

This inability to differentiate employees by specific technical skills makes it difficult for formulating longer-term development programs for the workforce, and even more difficult for employees to get access to further training.

Information on the demand for skills was extracted during the interviews conducted with industry representatives, professional associations, businesses, and training institutions. An essential element of a demand-driven system, which is currently not in place, is extracting accurate information from industries. Therefore, industry representatives should be the leading stakeholders in building and updating the national qualification framework, which is currently under way.

Analysis shows that even though low-cost, low-skilled labour can give Myanmar a short-term boost, especially in manufacturing, future growth will depend on the availability of skilled workers as the

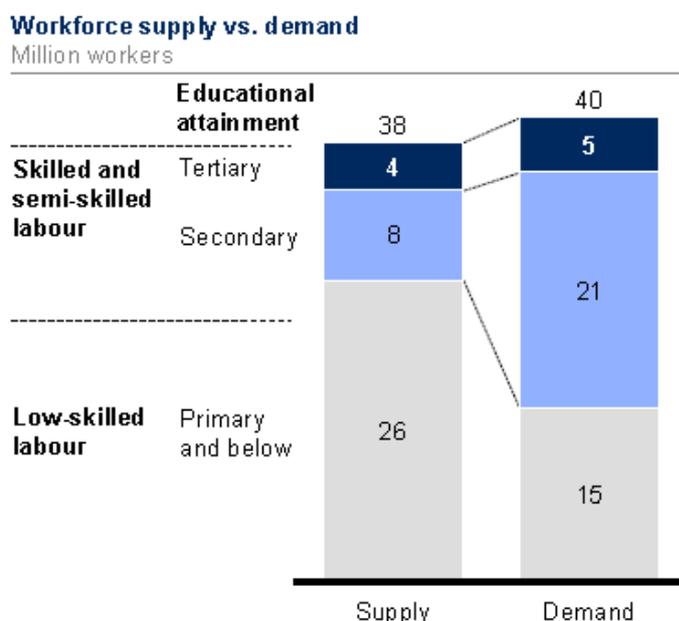
⁷⁸ McKinsey MGI: *Myanmar’s moment: Unique opportunities, major challenges*, June 2013.

⁷⁹ Interview 8: Newest Garment Manufacturing, Yangon, Myanmar, 13 June 2013.

economy rises on the value-added curve.⁸⁰ This is largely due to the overall low level of workers with tertiary and higher education degrees, a very small TVET sector, and lack of incentives for employees to increase their skills level. The government could play an important role in raising the long-term supply of skilled workers and increasing demand by:

- a) increasing output in the education and training system;
- b) eliminating barriers to job creation; and
- c) creating a vocational training system to flexibly allow for new entrants, school drop-outs, and those changing job or profession.

Figure 12. Workforce supply versus demand



Source: McKinsey (2013) analysis.

Based on the methodology developed for a McKinsey Global Institute (MGI) study on global labour markets, McKinsey estimates that the number of skilled and semi-skilled workers in Myanmar could potentially double from about 6 million in 2010 to 12 million in 2030.⁸¹ On the other hand, they also estimate the demand for high-skilled workers to be around 26 million in 2030.⁸² Even though their analysis points to the expected fall in demand for low-skilled workers, the pace and extent of such a transformation to higher value-added industries is unknown. Equally uncertain is the scope of the reforms in the education and labour-market sector. The MGI study expects that, despite the transformations, the absolute number of low-skilled workers could rise to 26 million in 2030 and would not be matched by equally high demand.

Even though this analysis is based on the sizing of the sector provided earlier, and therefore does not correspond to the CSO estimates, it is clear that investment should focus on raising skills levels and the quality of education overall.

In terms of skills demand per sector, all sectors are reviewed below, but a major contribution to the demand will come from the sectors shown in Figure 13 below. This has been confirmed by the work

⁸⁰ McKinsey MGI: *Myanmar's moment: Unique opportunities, major challenges*, June 2013, p.75.

⁸¹ McKinsey MGI: *Myanmar's moment: Unique opportunities, major challenges*, June 2013, p.76.

⁸² For further information on MGI methodology, see McKinsey MGI, 2013. *Myanmar's moment: Unique opportunities, major challenges*, June 2013.

from other development partners and international financial and development organizations. The interviews give further details that are included later in the report.

Figure 13. Seven key sectors



2.3.3 Sectors

Box 2 Infrastructure

According to a recent KPMG report citing the Logistics Performance Index (LPI), published by the World Bank, significant gaps exist in Myanmar's infrastructure development. Myanmar was ranked 133rd out of 155 countries in 2012, which presents significant opportunities for private-sector investment across a number of sectors.

Myanmar's transport sector is considerably underdeveloped for a country of its size, population, and potential. In 2011, the number of vehicles per 1,000 people in Myanmar was about 38. The number of vehicles in Myanmar more than doubled from 960,000 in 2004 to 2,354,000 in 2011, and the strong growth trajectory is expected to be maintained as the economy continues to expand.

Under the FESR, the Myanmar government has indicated that immediate priority will be given to infrastructure projects to improve land connectivity and transportation links with regional economies, to boost economic integration and fulfil the country's commitments to its ASEAN partners.

Road density in Myanmar is 2 kilometres per 1,000 people. The Greater Mekong Subregion Programme (GMS) constitutes an agreement between a number of countries, including Myanmar, for cooperation in a range of areas, especially international road connections.

Interviews with key stakeholders confirm the current picture in the country where, in the short term, development is skewed towards labour-intensive industries (including the garments sector), and in the longer term demand will shift to higher skilled workers in the manufacturing of motors, refrigerators, electrical and domestic products, and car production.⁸³

⁸³ Interview 2: MES, Yangon, Myanmar, 11 June 2013.

Figure 14. Economic sectors in Myanmar

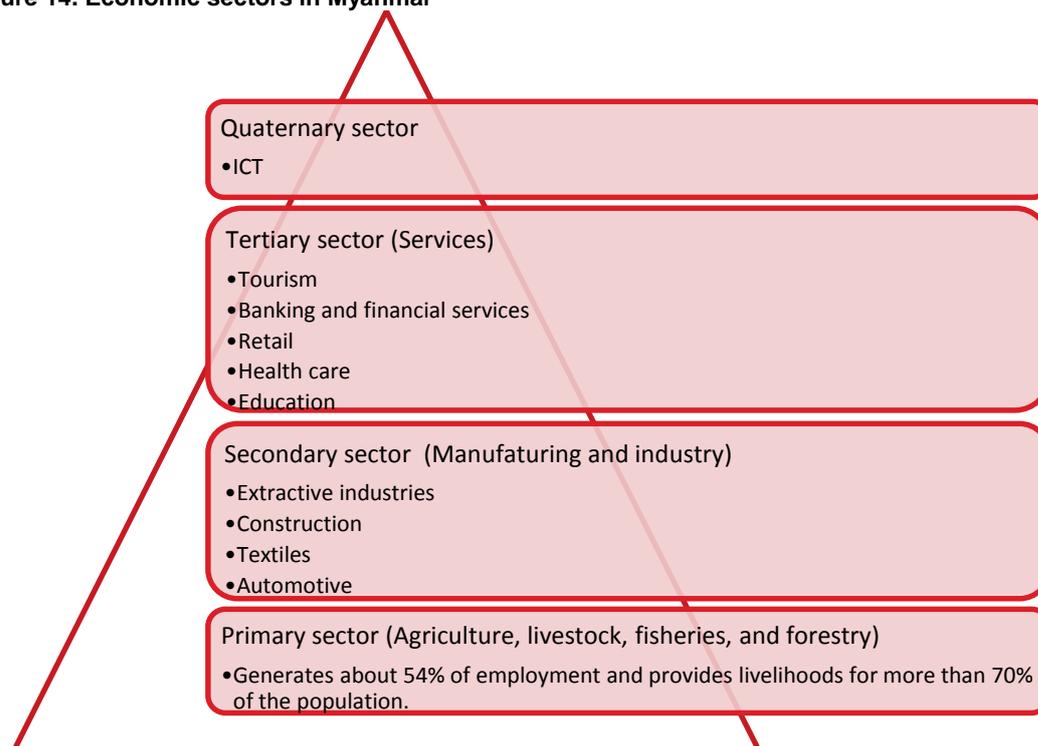


Figure 14 above represents the priorities by economic sector. If Myanmar follows a similar path to its neighbours in the region, the primary sector is expected to start shrinking at a fast pace at the expense of the secondary and tertiary sectors. The report continues with a brief review of each sector and its contribution to growth and to skills demand.

Agriculture

Agriculture, livestock, fisheries, and forestry

In Myanmar, agriculture remains an important sector, and, in the development strategies and plans, one to be further explored. Agricultural products are essential to sustain the food security of the growing population of Myanmar and, as noted earlier, there is substantial export potential. The main way to increase the benefits of the sector is through an increase in labour productivity. This is essential for stimulating work skills development.

The agricultural sector now accounts for 36 per cent of GDP, employs a majority of the workforce, and provides 25 per cent to 30 per cent of exports by value.⁸⁴ Much of the investment in Myanmar seems to be going into resource-extraction projects, which does nothing to boost domestic demand. With the current focus on agriculture, analysts forecast that the country will not be an export-oriented “tiger” for many years to come.⁸⁵

Boosting agricultural productivity will require improvements in almost every area: land ownership, crop credit, floor prices, extension services, research, and infrastructure, among others.⁸⁶ The ADB identifies

⁸⁴ ADB: *Myanmar in transition: Opportunities and challenges* (Manila, 2012).

⁸⁵ EIU: *Myanmar: White elephant or new tiger economy?* A special report from the EIU, Executive summary, Apr. 2012, http://www.eiu.com/Handlers/WhitepaperHandler.ashx?fi=Myanmar_Executive_summary.pdf&mode=wp&campaignid=Myanmar12 [accessed 20 Jan. 2014].

⁸⁶ L. Reiffel: *The Myanmar economy: Tough choices*, Global Economy and Development Programme, Working Paper 51, (Washington, D.C., The Brookings Institution, 2012).

opportunities in complementary areas of agriculture and agro-food processing such as marketing, storage, transport, and logistics, which in turn require the development of new skills.

Industrial sector

Observers identify manufacturing as one of the key economic sectors to be targeted in the country, due to the immense potential. In the face of competition from low-cost manufacturers in China, the production of consumer goods in Myanmar is limited, and manufacturing is largely based on processing agricultural crops, timber, and other commodities. There has been some diversification in recent years, and there is great potential for further growth, given the vast untapped resources and the rapid gains that could be made in productivity with modern technology and equipment. Fish products, for example, have become an important source of export revenue, boosted by investment in processing and refrigeration equipment.⁸⁷

As Box 2 above indicates, the expansion of Myanmar's manufacturing sector is dependent on building much-needed infrastructure. Interviews with stakeholders⁸⁸ confirmed the fact that Myanmar suffers from an electricity supply problem. According to recent reports, less than 13 per cent of the population has regular access to electricity,⁸⁹ which is a substantial obstacle to the development of the country. Further investment in infrastructure will bring about the need for skilled workers in the development of the energy sector, including hydropower, where there is a large potential.⁹⁰ Other renewable energy sources, such as solar, provide opportunities for off-the-grid electricity access, with important spillover effects on employment. The energy sector will soon require highly skilled human resources in a context where there are currently skills shortages.

Construction

The construction sector in Myanmar is largely underdeveloped and currently small, vis-à-vis opportunities. The biggest problem is a lack of technical expertise and experience in undertaking large and complex construction projects.⁹¹ The importance of the construction sector is increased by its links to other economic activity.

As a country rich in natural resources, and with strategic proximity to the world's biggest emerging markets, there is immense potential for investment to take advantage of Myanmar's largely underdeveloped physical resources. As noted in Box 2, Myanmar needs to build and upgrade the majority of its infrastructure, including housing, schools, shopping malls, hospitals, roads, bridges, railways, airports, seaports, and industrial zones.⁹² At the same time, given the volume of expected investments in infrastructure and housing, and Myanmar's exposure to the effects of climate change and natural disasters, it will be important to ensure that new construction projects respect environmental standards, also bringing important implications for skills development. These developments also closely related to the need to develop affordable housing for Myanmar's poorest people, which, as mentioned, account for quarter of the population.

⁸⁷ Ibid. p. 8.

⁸⁸ Interview 2: MES, Yangon, Myanmar, 11 June 2013.

⁸⁹ McKinsey MGI: *Myanmar's moment: Unique opportunities, major challenges*, June 2013, http://www.mckinsey.com/insights/asia-pacific/myanmars_moment [accessed 20 Oct. 2014].

⁹⁰ Interview 2: MES, Yangon, Myanmar, 11 June 2013.

⁹¹ EIU: *Myanmar: White elephant or new tiger economy?* A special report from the EIU, Executive summary, Apr. 2012, http://www.eiu.com/Handlers/WhitepaperHandler.ashx?fi=Myanmar_Executive_summary.pdf&mode=wp&campaignid=Myanmar12 [accessed 20 Oct. 2014].

⁹² Ibid.

The CESR Phase 1: Rapid Assessment estimates a current workforce of approximately 1.4 million, with an estimated 164,000 at the trade or skilled level.⁹³ The construction sector is in serious need of qualified personnel for various activities. According to interviewees, the courses necessary to support skills building in the sector are carpentry, bricklaying, metal working, electrical training, and plumbing.⁹⁴ These courses should be promoted throughout the entire country, as opposed to other requirements in other sectors, such as tailoring courses that should be organized in proximity to the location of the garments industry.⁹⁵

Mining and extraction sector

This was one of the original investment sectors in Myanmar, given the natural abundance of extractive resources in the country. The 2013 Resource Governance Index puts Myanmar in last place due to failure to meet basic standards of resource governance and disclose information about the sector.⁹⁶ Myanmar's natural resources include gems, industrial minerals, oil, and offshore natural gas reserves estimated at 10 trillion cubic feet. The extractive sector accounted for 39 per cent of exports in 2010, yet despite its mineral wealth, Myanmar is one of the least developed nations in the world.⁹⁷ This is also the sector that attracts the most FDI (see Table 6 Foreign direct investment by sector), and pledges show that this trend will most likely stay the same in the short to medium term. However, it does not help the government in stimulating stronger domestic demand.

Garments sector

A modest, export-oriented garments sector was developed in the 1990s, driven mainly by investment from the Republic of Korea, and supported initially by strong sales to the United States. However, development in this sector slowed following the 2003 United States ban on all imports from Myanmar. Before the United States ban, Myanmar had an estimated 300 garments and textile factories in operation. Following the ban, however, around 125 factories reportedly closed down. A number of international garments retailers – including Levi Strauss (US) and Reebok (Germany) – stopped purchasing garments from Myanmar in response to consumer boycotts and sanctions.

An interviewee with strong knowledge of Myanmar's garments sector estimated that it is structured in the following way: 70 per cent of business is done by Korean companies, 20 per cent by joint ventures, and 10 per cent local.⁹⁸ The interviewee stated that currently all raw materials and complementary products (accessories) for the garments sector are imported, while according to the opinion of industry representatives, they should be locally produced.

The workforce in this sector is approximately 1.9 million, with an estimated 222,000 at the skilled or trade level.⁹⁹ Even though gender data is limited, the garments industry is female dominated. This sector has the potential to generate a number of low-skilled jobs using the advantage of low labour costs.¹⁰⁰

⁹³ CESR team: *Labour market analysis: the Demand for Higher Education and TVET Graduates*, CESR Phase 1: Rapid Assessment, 2013.

⁹³ Interview 13: MTF, Yangon, Myanmar, 19 June 2013.

⁹⁴ Interview 3: Myanmar Garment Manufacturers Association (MGMA), Maple Trading Co. Ltd., 11 June 2013.

⁹⁵ Ibid.

⁹⁶ Revenue Watch Institute: *Resource Governance Index: Composite and Component Scores*, <http://www.revenuwatch.org/print/60749> [accessed 20 Oct. 2014].

⁹⁷ Revenue Watch Institute: *Myanmar*, <http://www.revenuwatch.org/countries/asia-pacific/myanmar/overview> [accessed 20 Oct. 2014].

⁹⁸ Interview 3: MGMA, Maple Trading Co. Ltd., 11 June 2013.

⁹⁹ CESR team: *Labour market analysis: the Demand for Higher Education and TVET Graduates*, CESR Phase 1: Rapid Assessment, 2013.

¹⁰⁰ H. Rihova: *Skills development for sectors in Myanmar: Needs and opportunities*. Draft, 8 Feb. 2013.

Growth in this sector will require not only the development of new skills, but also measures to ensure decent working conditions and the health of the workforce.¹⁰¹

Services sector

Hospitality and tourism

Myanmar can benefit from its location at the crossroads between South and South-East Asia, and the attractiveness of the country as a new tourist destination. Therefore, the potential for catch-up growth is enormous.¹⁰² The opportunities in this sector cover: hospitality training, low-cost aviation, eco-tourism, budget accommodation, and boutique and luxury hotels. Further opportunities arise from ongoing projects related to the construction and improvement of complexes such as the Novotel Yangon Hotel, the Pyi Garden Condominium project, and the Shangri-La Hotel.¹⁰³

According to the MTF, 790,000 tourists visited Myanmar in 2010, over 800,000 in 2011, and over 1 million in 2012. In 2012, 554,531 tourists visited Yangon, which is a 54 per cent increase over 2011. Currently, the estimates show that there are 800 hotels throughout the country, among which 22 are foreign-invested, four are joint ventures, six government-owned, and 707 privately owned. Given the increasing demand, the CESR Phase 1 analysis predicted a shortage of hotel accommodation in 2014.¹⁰⁴

Again, Myanmar's rise as a tourist destination will depend on improvements in infrastructure discussed in Box 2. It will also depend on the level of skills of the workforce. Currently, the workforce in this sector is approximately 422,000, with an estimated 10 per cent of those being skilled workers. Another obstacle for the development of the sector is knowledge of the English language.

To give an example of the stakeholders in skills training for tourism and hospitality, the MTF supplied a list of training providers in the sector.¹⁰⁵ The objective of these training centres is “to fulfil the demand for manpower need in hospitality sector and prepare the young people to acquire competent knowledge and skills essential for pursuing their career choice in the industry.”¹⁰⁶ Examples of the centres and courses that target human development in this sector are shown in Table 10 and Table 11:

Table 10. Training courses – tourism

Hospitality management	Flight attendant
Bakery & patisseries	Food & beverage (F&B) service
Culinary	Housekeeping operation
Front office	Hospitality English

Source: Star Resources Hospitality Management Academy.

¹⁰¹ H. Rihova: *Skills development for sectors in Myanmar: Needs and opportunities*. Draft, 8 Feb. 2013.

¹⁰² Idem.

¹⁰³ Interview 13: MTF, Yangon, Myanmar, 19 June 2013.

¹⁰⁴ CESR team: *Labour market analysis: the Demand for Higher Education and TVET Graduates*, CESR Phase 1: Rapid Assessment. 2013.

¹⁰⁵ Interview 13: MTF, Yangon, Myanmar, 19 June 2013.

¹⁰⁶ Star Resources Hospitality Management Academy, <http://www.staresources.com> [accessed 20 Oct. 2014].

Table 11. Training centres – tourism

Name	Location	Information on training
U Than Tun 00 Hotel and Tourism Training Centre	Yangon. Mingalar Taung Nyunt Township	No
U Aye Kyaw Myanmar Human Resources Management Institute	Lanmadaw Township, Yangon.	No
Daw Nay Yi Aung Star Resources Hospitality and Tourism Management Academy	Sanchaung Township, Yangon Region	Yes
U Kyaw Myo Aung Hotel and Tourism Training Centre	Taung Nyunt Township, Yangon.	-
Daw Yin Yin Aye Centre for Vocational Training/CVT Myanmar	Botataung Township, Yangon.	Yes
U Thein Tan	Tamwe Township, Yangon.	No
U Win Kyi Hotel and Tourism Training Centre	Taung Nyunt Township, Yangon.	-
Daw Yin Yin Aye Centre for Vocational Training/CVT Myanmar	-	-
U Sein Myint Mandalay Hotel and Tourism Training Centre	Mandalay	
U Khin Maung Lwin Asia Masters Hospitality and Tourism Academy	Kyauktada Township, Yangon.	No
U Kyaw Ni Khin Myanmar Egress	Dagon Township, Yangon	Yes
U Aung Aung Lwin Santini International Training Academy	Botataung Township, Yangon.	Yes
U Min Van Aung AKP International Hotel and Tourism Training Centre	Kin Township, Yangon	No
U Kyaw Kyaw Lwin The Way, The Truth and the Light Hospitality Training Centre	Yankin T/5, Yangon	No
U Kyaw Kyaw Sint TRC Hospitality Training Centre	Mayangone Township, Yangon	Yes
U Than Win	Ministry of Hotels and Tourism, Nay Pyi Taw	No

Source: MTF.

The skills and competences required for the development of the sector will be further reviewed in other parts of the report.

Banking and financial services

Myanmar is characterized by the absence of a functioning banking and financial sector. At the same time, the financial sector is critical in order for Myanmar to achieve long-term, broad-based economic growth.¹⁰⁷ The government has started a review of the financial sector, including regulations related to microfinance and private banks, to promote access to finance and create an environment conducive to job creation for both men and women, and the development of non-extractive industry sectors.¹⁰⁸

At present the country is characterized by a very low level of penetration of financial services, a limited number of banks operating in the market, and a largely cash-based economy. Studies by the large financial institutions report significant demand for a functioning financial sector, as Myanmar's people are currently prone to turning to informal lenders.¹⁰⁹

The political reforms, coupled with partial liberalization, will enable the sector to sever the ties between the banks and state-owned enterprises. The development potential is largest in SME banking, corporate banking, microfinance, rural banking, development finance, and infrastructure financing.

¹⁰⁷ World Bank, 2012. p.12.

¹⁰⁸ World Bank, 2012. p.12.

¹⁰⁹ EIU, 2012. p.7.

Retail

Some analysts see strong potential in the growth of the local consumer goods market.¹¹⁰ Even though the population of Myanmar is still among the poorest in the region, demand for goods beyond food, beverages, and tobacco, such as motorcycles, televisions, refrigerators, and air-conditioners will shape the consumption profile in the coming years. Sales could expand rapidly if economic growth spurs a sharp jump in personal incomes, which would provide massive scope for expansion of the market for high-technology products such as personal computers and mobile phones, as this sector is currently minimal.¹¹¹

Currently, the retail sector is largely unorganized and dominated by small, family-owned shops that sell local, low-quality goods. Analysts predict that this sector will take more time to develop in comparison to tourism and financial services.

Health care and education

Myanmar's health and education indicators are poor: life expectancy stands at 64 years, the infant mortality rate is 50 per 1,000 live births, and gross enrolment ratios in secondary and tertiary education are 54 per cent and 11 per cent respectively.

In March 2012, the government declared that it would quadruple its health budget for the year, and focus on building new hospitals, training doctors to provide better-quality services, and securing medical supplies. According to Reuters, in recent years, the four state-owned medical schools have started training about 2,000 doctors annually, increasing from just 550 in 2000. The improvements focus on the quality of medical education by changing the course structure from five years to six years.

Pe Thet Khin, appointed as head of the Health Ministry, has declared that skills development is a priority for Myanmar, as well as the development of infrastructure for health insurance and the banking system.

Telecoms

Myanmar's information and communications technology (ICT) sector is the most outdated in ASEAN. Technological penetration in the country remains lower than the rest of the region, but mobile access is set to expand with the availability of cheaper SIM cards. The government says mobile penetration is around 9 per cent – although Swedish telecom giant Ericsson last year put the figure at less than 4 per cent – and President Thein Sein has set a goal of 80 per cent penetration by 2015.¹¹²

Currently, the only two players in the telecommunications market are Myanmar Post and Telecommunications, which is state-owned, and Yatanarpon Teleport, which is a joint venture between local private firms and the government, and which holds the only other telecoms licence in the country.

In April 2013, the government took steps towards a decision to allow two international wireless players to enter the last untapped mobile phone market in South-East Asia – a tender that drew intense interest from a wide number of telecommunications companies and investors.¹¹³

Ericsson has also estimated that the total economic impact of the mobile sector in Myanmar could be as high as 7.4 per cent of GDP in the first few years after the market begins to liberalize.

¹¹⁰ EIU, 2012. p.7.

¹¹¹ Ibid. p. 8.

¹¹² J. Ferrie: "In Myanmar, cheap SIM card draw may herald telecoms revolution", Reuters, Yangon, 25 Apr. 2013, <http://www.reuters.com/article/2013/04/24/myanmar-telecoms-draw-idUSBRE9N1AX20130424> [accessed 20 Oct. 2014].

¹¹³ J. Ferrie: "In Myanmar, cheap SIM card draw may herald telecoms revolution", in Reuters, Yangon, 25 Apr. 2013, <http://www.reuters.com/article/2013/04/24/myanmar-telecoms-draw-idUSL3N0D92A720130424> [accessed 20 Oct. 2014].

ICT skills will be important drivers for the development of the sector. Analysts assess that demand for skills will be strongest with regard to mobile telephony, telecoms infrastructure, and mobile and fixed line services.¹¹⁴

Overall, from this brief overview, it can be seen that diversification of the economy in new, more competitive, and skills-intensive sectors, as well as within industries, is essential. In the case of the agricultural and garments sectors, the economy will benefit from the link between local production of raw materials and higher value added activities up the value chain.

2.4 TVET within a national system

A full review of the TVET system will be part of Chapter 4, while here the report positions TVET within the national system. Even though the government of Myanmar has recently stepped up efforts to strengthen the education sector – recognizing the vital role of an educated population and workforce as a pre-condition for sustained economic growth and poverty alleviation – the positioning of TVET has not yet been clearly defined. One of the reasons is the lack of a sector plan on the development of TVET, as well as the minimal involvement of other stakeholders apart from the MOST.

In addition, for our analysis, it has to be noted that there is still a strong need to collect data on the different aspects of TVET, especially with regard to private providers, gender and ethnic differences, quality of education, and finance. Especially crucial for the report is the lack of data on the link between the labour market and TVET institutions. For example, there are no statistics that can aid us in calculating the absorptive capacity of the market for TVET graduates. The alternative has been to collect as much information as possible from the interviews conducted, and to rely on CESR Phase 1.

Current information suggests that there are about 480 public training institutions that provide TVET in Myanmar. There are no statistics for the number of private training providers¹¹⁵ but a qualified assumption is that, in total, there are no more than 800 to 1,000 such institutions, including private providers.¹¹⁶ As noted, the TVET system in Myanmar is based on shared responsibility by different ministries through a variety of forms of delivery, with the result that the curricula are highly diverse.¹¹⁷

The distribution of the TVET institutions by ministry is outlined in Table 12 below. Not all institutions give degrees, and it is often the case that institutions will have both higher education and TVET courses. That is why stakeholders often cannot give a precise number of TVET institutions, or figures for the financing of TVET courses or number of students enrolled.

¹¹⁴ EIU, 2012. p.10.

¹¹⁵ Information will be further estimated from the interviews with industry stakeholders.

¹¹⁶ C. Hüttemeier: *TVET in Myanmar: Access and Quality of TVET*, draft report (North Jutland, Denmark), 2012; JICA, PADECO Co., Ltd., IC Net Limited: *Data Collection Survey on the Education Sector in Myanmar Final Report*, 2013.

¹¹⁷ N. Mar: “Strengthening TVET to achieve lifelong learning for all: Historical snapshots and recent initiatives in Myanmar”; in R. Maclean and D. N. Wilson (eds.): *International Handbook of Education for the Changing World of Work: Bridging Academic and Vocational Learning* (Dordrecht, Springer, 2009), pp. 703–719.

Table 12. Number of TVET institutions

Ministry	Field	Number
Education	Arts and sciences (HRDP)	32
	Teacher training	20
	Pre-vocational education	120
Science and Technology	Engineering	108
Border Affairs	Teacher education arts and sciences	3
	Vocational education	58
Health	Health science and traditional medicine	61
Cooperatives	Arts, business management, and accounting	4
	Cottage industries	16
Social Welfare, Relief, and Resettlement	Non-formal education	14
Agriculture and Irrigation	Agriculture	11
	Science	
Industry	Engineering	6
Defence	Military training, medical science, engineering, etc.	5
Environmental Conservation and Forestry	Forestry	4
Livestock and Fisheries	Veterinary science	4
Labour	Engineering, languages, IT	3
Union Civil Services Board	Civil service	2
Sport	Sport education	2
Transport	Maritime engineering	2
Hotels and Tourism	Tourism education	1
Rail Transportation	Rail transportation	1
Culture	Music, sculpture, drawing, etc.	1
Commerce	Trade	1
Religious Affairs	Religious and missionary works	1
Total		480

Source: Japan International Cooperation Agency, PADECO Co., Ltd., IC Net Limited, 2013. Data Collection Survey on the Education Sector in Myanmar, Final Report, Department of Higher Education (Lower Myanmar), MOE (2012).

Further analysis during Phase 2 of the CESR is needed not only in attaining further data but also in understanding the very low participation in TVET, particularly in rural areas and among the poor, and also in skills relevant to Myanmar's agricultural and industrial sectors. Table 13 summarizes the information available so far, and gives the breakdown of adolescents and adults by general-track educational attainment and participation in various sub-types of TVET.¹¹⁸

¹¹⁸ Ibid. See also IHLCA Project Technical Unit: *IHLCA Survey in Myanmar (2009-2019): Poverty Profile*, (Yangon, 2011).

Table 13. Training participation and education attainment (%)

		Age groups			
		15–19	20–29	20–39	40+
Completed general-track education	At least five years (primary)	85.14	81.46	73.92	60.45
	At least nine years (middle)	47.64	44.49	32.06	20.61
	At least 11 years (HS)	14.93	25.66	17.24	9.11
	At least HES diploma/degree	2.02	15.23	12.44	5.48
Ongoing training	At least one type	1.46	1.34	0.40	0.12
	Language	0.55	0.46	0.12	0.00
	Computers	0.97	0.71	0.11	0.02
	Primary (e.g. agriculture)	0.01	0.02	0.01	0.01
	Industrial	0.31	0.14	0.06	0.02
	Crafts	0.14	0.11	0.09	0.04
	Clerical/business	0.01	0.03	0.00	0.00
	Others	0.24	0.20	0.09	0.04
Completed training	At least one type	1.90	4.74	3.20	1.45
	Language	0.44	1.80	1.00	0.45
	Computers	1.20	2.88	1.82	0.42
	Primary (e.g. agriculture)	0.10	0.12	0.12	0.09
	Industrial	0.22	0.49	0.50	0.29
	Crafts	0.24	0.49	0.35	0.24
	Clerical and business	0.05	0.21	0.18	0.10
	Others	0.21	0.84	0.38	0.41

Source: IHLS.

In comparison with primary education, development partners conducting the CESR have assessed little progress in the TVET and higher education sectors, which face particular challenges in the key areas of equitable access, education quality and relevance, and subsector management. Furthermore, the line between TVET and higher education has been especially thin, with few stakeholders able to define a clear delineation.¹¹⁹

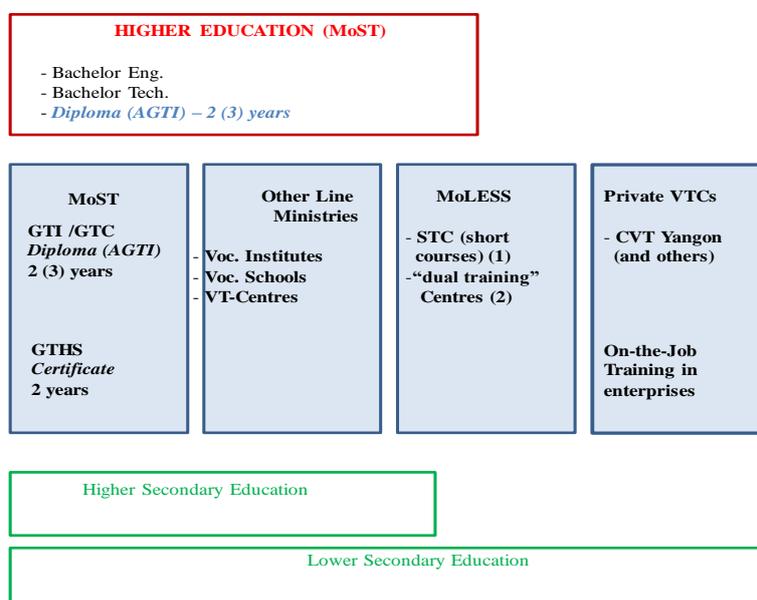
As a result of the CESR, a picture has emerged in which the TVET system is based on four interrelated modes of training (as shown in Figure 15):

- a) through the institutions that are part of the MOST;
- b) through the TVET offered by other ministries;
- c) vocational training by the MOLES; and
- d) vocational training offered by private training providers.

¹¹⁹ A note on the definition used: TVET programmes are defined here to include programmes below the tertiary level that may be either prior to entry into employment or mid-career; therefore this excludes engineering and technical programmes at the level of undergraduate diploma and up (captured as higher education). See C. Spohr: *Informal Note on IHLCS Household Survey Analysis as an Input to the CESR*, ADB, updated Jan. 2013.

Figure 15. TVET structure (CESR)

Diagram 1: TVET Structure in Myanmar 2012



Source: CESR Phase 1: Rapid Assessment.

TVET in Myanmar has been perceived as a high priority for sustainable human resource development in enhancing vocational training systems through relevant training programmes, consultancy projects, research and development assistance, and information and communication and technology services. The passage of the Employment and Skills Development Law, as well as the development of a new TVET Law, should address these concerns. The trends in human resource requirements for industry and the wider economy include:¹²⁰

- developing quality teaching and the effectiveness of teachers;
- introducing competency-based training curricula and new courses required by industries and sectors;
- providing opportunities for retention of workers;
- establishing more training institutions;
- strengthening the quality assurance system; and
- promoting high-technology training, and research and development.

More recently, as a result of the study done by the CESR team during the rapid assessment, TVET has emerged as a key area to be targeted by the government, due to its great potential to assist in the three transitions that Myanmar is going through: from an authoritarian military system to democratic governance; from a centrally-directed economy to market-oriented reforms; and from conflict to peace in the border areas. The different assessments have also pointed correctly to the fact that TVET has the potential to correct the existing mismatch between the supply and demand for skills. As illustrated by McKinsey’s analysis, if the current discrepancy is not fixed, it will be further exacerbated with the growth in secondary and tertiary sectors. All of these aspects will be reviewed further, together with CESR recommendations for stronger collaboration with a select number of partner ministries, and for a focus on the construction, manufacturing, hotels and tourism, and transport sectors.

¹²⁰ W. Aye: *Country report: Myanmar*, presented at the Experts’ Meeting on “Competence Building in APACC Accreditation”, Korea University of Technology and Education, Republic of Korea, 25–29 June 2007, p. 8.

3. National education and training policies and legislation

Box 3
Other education systems in ASEAN+6

As a contribution to the CESR Phase 1, Rapid Assessment, UNESCO undertook a comprehensive review of the education systems in the ASEAN+6 forum (Australia, China, India, Japan, New Zealand, and the Republic of Korea). This report has proven a useful tool on one hand, to position the developments in Myanmar in a regional context, and on the other hand, to inform future policy-making in the country with respect to international and regional commitments. A number of issues that other education systems have experienced are listed below, but for a full comparison of the systems, see the UNESCO Bangkok report “Education Systems in ASEAN+6 Countries: A Comparative Analysis of Selected Educational Issues”. Countries differ widely but overall:

- With regard to financial commitment, data compiled by UNESCO suggests that investment on education in Myanmar is much lower compared to other countries in ASEAN+6. On average, ASEAN+6 countries allocate 14.7 per cent of their government expenditures to education, while according to unofficial data, the figure for Myanmar is as low as 4.42 per cent.
- With regard to education structure, children in Myanmar (and New Zealand) start formal education earlier. In the majority of the countries whose data is available (12 out of the 16 countries), formal education officially starts at the age of six. Several countries have introduced structural reform in education – e.g. the Lao PDR introduced a 5+4+3 school system in 2009 and 2010 by adding one year to the lower-secondary level, which significantly increased financial and human resources needed – and this should be kept in mind for future reforms.
- With regard to balance between the centre and periphery, most ASEAN+6 countries have decentralized key functions and responsibilities to lower levels of administration, while education-sector management in Myanmar remains centralized. As the report suggests, even though decentralization is not the single solution, it has significantly helped those countries that have undertaken education decentralization reform.
- On teacher qualifications and standards, the total length of teacher education in Myanmar is less than that of other countries, which could negatively affect teacher quality. Policies for in-service training and continuous learning for teachers exist in most ASEAN+6 countries at all levels, except for the Lao People’s Democratic Republic.
- On quality, evaluated through the frequency of curricula update and reform, Myanmar is among those countries that had the fewest curricula reforms during the period (only once from 1995 to 1999), while the average number of curricula reforms in the region is 3.5 for the same period.
- On a quality assurance system, the bodies overseeing quality vary greatly depending on the country context, with some countries (Australia, India, and New Zealand) having different agencies for different levels of education, while others having a central agency overseeing all tasks (the Lao People’s Democratic Republic, Thailand, and Viet Nam).

As seen in the previous chapter, since 2011 the Government of Myanmar has undertaken swift reforms in all areas, and the education sector is no exception. In its efforts to align the education system with the needs of a changing environment, the government is being assisted by various international organizations whose number has significantly increased in the past few years. The MOE’s vision “to create an education system that will generate a learning society capable of facing the challenges of the Knowledge Age” is reflected in its motto to “build a modern, developed nation through education” and is one of the signs that the education sector is high on the reform agenda.

In early 2012, the government stepped up its effort by launching the CESR, aimed at providing a foundation to more clearly identify sector challenges, priorities, and strategic options.¹²¹ The CESR has been led by the MOE, coordinating inputs by ministries, agencies, and development partners, and will culminate in the adoption of a CESP to serve as a framework for prioritized and sequenced investments by the government and development partners.¹²²

¹²¹ ADB: *Support for Education Sector Planning*, Project Data Sheet, 29 Apr. 2013.

¹²² More information on the different stages of the CESR, see Chapter 2.

During the CESR Phase 1, Rapid Assessment, the MOE coordinated the study with the valuable inputs of other line ministries such as Science and Technology; Defence; Religious Affairs; Environmental Preservation and Forestry; Agriculture and Irrigation; Livestock and Fisheries; Cooperatives; Border Affairs; Transport; Labour, Employment, and Social Security; Sport, Hotels, and Tourism; Industry; Rail Transport; Finance and Revenue; and last but not least, the Union Board of the Civil Service.¹²³

So far, progress in Myanmar's education sector has been recorded with regard to primary education (grades 1–5) where the net enrolment ratio (NER) reached roughly 90 per cent in the academic year 2010–11.¹²⁴ During the same period, progress lagged in post-primary education (PPE) subsectors. A considerable increase has occurred in middle-school enrolment in both rural and urban areas, even as enrolment in higher grades has fallen. School ratios differ between urban and rural areas, and student mobility from rural to urban areas is a feature.

As part of Phase 2 of the CESR is currently under way, the CESR team will continue with capacity gap analysis in order to inform policies for basic education, formal and non-formal education, coordination and partnership, teacher education and promotion systems, curriculum, assessment systems, organizational structure, and decentralization to regions, states, and townships. Box 3 above briefly looks at the examples of reform in other ASEAN countries, and the future options for Myanmar.¹²⁵ This chapter reviews the different challenges faced by the national education system, among which is the management of the different subsectors, the quality of the results, and the accessibility of the system.

Data informing the reforms in the education sector has been collected through: the EMIS – the main tool for data collection, and a source for both formal and informal education; the IHLCS¹²⁶ 2009–10 – to complement administrative data available in the EMIS and other data sources, especially valuable in the absence of a nationwide census previewed for 2014; and the Multiple Indicator Cluster Survey (MICS)¹²⁷ 2009–10 – valuable in looking at pre-school education and early childhood development (ECD), and also provides good estimates on the net attendance ratio for primary and secondary education.

Box 4
Integrated Household Living Conditions Survey in Myanmar

The IHLCS is reported to be a nationally representative sample consisting of more than 95,000 individuals from more than 18,600 households in all 17 states and regions. The CESR team reviewed education-related content in the IHLCS questionnaire and identified an initial set of research questions that can be analysed using the IHLCS data, and will provide important inputs to broader CESR analysis related to post-primary education (PPE) as well as primary education. These queries can be clustered into seven areas:

1. estimates on enrolment rates by age group and level;
2. share of primary school students with pre-school experience;
3. distribution of basic education (grades 1–11) students by type of school;
4. numbers of children who have never attended school and the main reasons;
5. number of out-of-school youth and the main underlying reasons;
6. initial analysis on the role of parents' education and socio-economic status; and
7. other questions on participation, including TVET and the role of socio-economic status.

¹²³ The Republic of the Union of Myanmar, MOE: *Consolidated Report, CESR Phase I*, draft, Mar. 2013.

¹²⁴ The Government of the Republic of the Union of Myanmar, MOE: *Education for All: Access to and Quality of Education in Myanmar*, presented at conference on Development Policy Options with Special Reference to Education and Health in Myanmar, 13–16 February, 2012, Nay Pyi Taw, Myanmar, p. 26.

¹²⁵ UNESCO, 2013: *Education systems in ASEAN+6 countries: A comparative analysis of selected educational issues*, Comparative analytical report prepared for the CESR, Working Paper.

¹²⁶ IHLCA Project Technical Unit: *IHLCA (2009-2010): Poverty Profile* (Yangon, 2011).

¹²⁷ MNPED, MOH, UNICEF: *MICS 2009–2010* (Yangon, 2011).

3.1 Regulatory framework

The education system in Myanmar is characterized by a strict organizational structure that operates under a large set of rules and regulations. This framework makes it difficult to adjust to external changes – i.e. developments and growth in other sectors – and inflexible to changes in internal dynamics. In the past, the government formulated a number of priorities, as shown in Figure 16, that still guide education-sector planning.¹²⁸

Figure 16. Education-sector priorities

Education sector priorities	Thirty-Year, Long-Term Basic Education Development Plan (2001-2031): a series of five-year, medium-term plans are based on this. The 30-Year Long-Term Plan aims at achieving universal primary education by the end of the first five-year plan (2001-2002, 2005-2006); universal lower-secondary education by the end of the third five-year plan (2011-2012, 2015-2016); and universal basic education by the end of the 30-year period
	Ten-Point Education Policy by the Head of State: regarded as a primary source of reference that provides a general orientation for Myanmar's education development, as reflected in the process of formulating the new 20-Year, Long-Term Plan.
	Education for All National Action Plan (2003-2015) covers: (a) access and quality of basic education; (b) ECCE; (c) non-formal and continuing education; and (d) education management and EMIS. A detailed plan to implement EFA is to be prepared at the township level, and all levels including central, state, and regional are to support the implementation of the plan.
	Rural Areas Development and Poverty Alleviation Plan (2011-2015) describes activities planned to achieve the general objectives of rural development and poverty alleviation.

Source: LSE team analysis. CESR Phase 1: Rapid Assessment

The legislation that provides the background to current policies in the education sector was thoroughly reviewed during the CESR Phase 1 and includes the following:¹²⁹

- a) Constitution of the Republic of the Union of Myanmar (2008). The Constitution of 2008 describes the obligations of the Union regarding education and the rights of all Myanmar citizens to an education.
- b) Employment and Skills Development Law (2013) – see below.
- c) Basic Education Law (1973), amended in 1989. This sets out the structure of basic education – which comprises five years of primary level, followed by four years of secondary level – and the specified duration of higher-level education.
- d) University Education Law (1973), amended in 1998. All the Ministries that manage universities (currently 13 ministries) must follow this law.

¹²⁸ Myanmar, Ministry of Education: *Ten-Point Education Policy: the Thirty-Year, Long-Term Basic Education Development Plan (2001–02 FY to 2030–31 FY)* (Yangon, 2012).

¹²⁹ I. Birch: *Analysis and assessment of Myanmar's education legislation with regard to international commitments*, 2012, draft.

- e) Technical, Agricultural, and Vocational Education Law (1974), amended in 1989. The activities of the DTVE under the MOST are based on this existing law.
- f) Private Tuition Class Law (1984).
- g) Child Law (1993).
- h) Educational Research Law (1973).

One of the short-term expectations is that private-sector education is to expand as a result of the Private Education Registration Law adopted in 2012.¹³⁰ The issues to be monitored are the provision of equitable access and a certification and assurance system to monitor the quality of the service provided.

In order to amend the existing framework, the review by the CESR team recommends a comprehensive education reform law to be adopted in 2014, which can address the issues raised during the assessment, as well as set the path for future reforms. There is a general agreement among development partners¹³¹ that the aspects that restrict development in the sector can be summarized as follows:

- a) There is no specific law to govern the education sector from early childhood development to higher education, and to lifelong learning, to ensure the coherence of the sector overall and to present learning as a process. To some extent the approach of the CESR to look at both subsectors and overarching principles will rectify the existence of a single, full sector-covering law.
- b) As Figure 16 above summarizes, there is no sector-wide document to reflect the overall priorities. On one hand, existing strategies and plans overlap, but on the other hand they rarely address the cross-cutting issues and the opportunities for cooperation between different subsectors, and often they are outdated. In 2012 the MOE drafted the National Education Promotion 20-Year, Long-Term Plan for 2011–12 and 2030–31, which corresponds to the Comprehensive National Development Plan for 2011–12 and 2030–31, and which is a step closer to a sector-wide plan.
- c) Very important for the rest of this report is the idea that there is no mechanism that ensures private-sector involvement in all stages of the policy-making process and at all levels of the education system (with TVET seen as a priority in this respect). Interviews suggest that even in cases where the private sector is ready to get involved, the lack of an appropriate forum or platform for this involvement restricts entry and action. The active participation of the private sector in policy development has been pointed out as one of the ways to ensure quality as well as wider access.
- d) Lastly, an issue that goes beyond the education sector and is particularly relevant for the TVET subsector is the weak coordination between the MOE and other ministries that host education and training programmes. The large number of institutions responsible for TVET, as well as the fact that most fall under the purview of the MOST, requires strong cooperation among the ministries and the departments that deal with policy-making.

The implications of some of the reforms in the education system have been included in a review by UNESCO¹³² that investigates the quantitative impact of the structural reforms using a simulation model. It looks into the resource strain that will result if the government increases the number of school years and changes the systems to one of two proposals: a 6-3-3 structure or a 5-4-3 structure.

Developments in the education system are closely tied to the structure of Myanmar's population, which, according to the models presented, is expected to increase from 61 million in 2010 to 73 million in 2024. Figure 17 below does not express the concrete figures but represents the increase across different groups. The population projection provided by the CESR team does not have an urban-rural

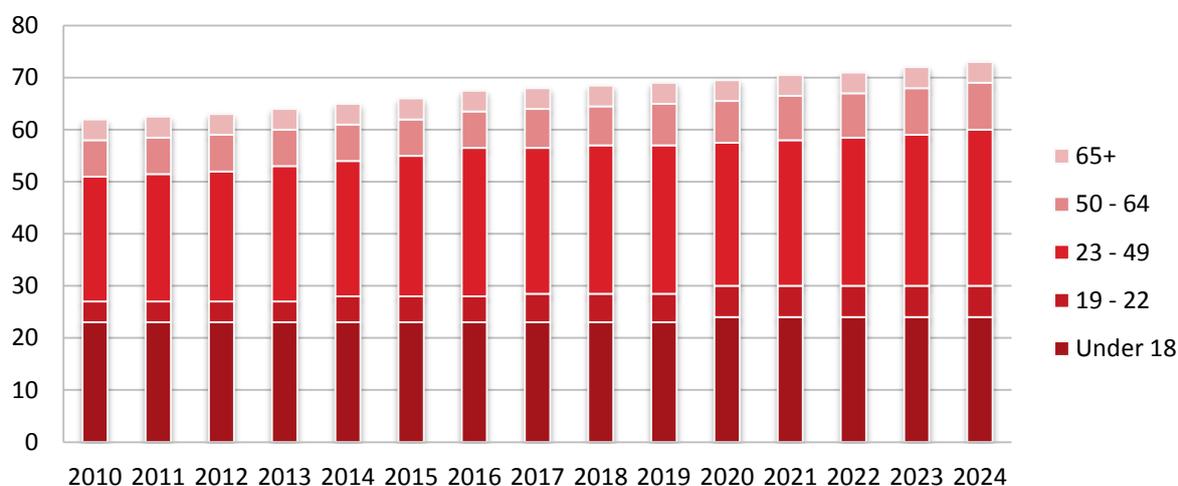
¹³⁰ CESR Phase 1 Rapid Assessment: *Secondary Education Subsector*, draft, 2013, p. 7.

¹³¹ UNESCO: *Focal Area B (i) Overarching legislation, policy and management*, CESR Rapid Assessment, UNESCO input to the Rapid Assessment Background, 2013.

¹³² UNESCO Bangkok: *Implications of education sector restructuring*, CESR Phase I, Education Policy and Reform Unit, 2013.

disaggregation, and therefore it is not possible to calculate certain indicators (e.g. enrolment ratio, completion ratio, number of students, and number of teachers) for urban and rural areas separately.

Figure 17. Population projections



Source: UNESCO Bangkok, 2013. Implications of Education-Sector Restructuring, CESR Phase I.

3.2 Policy implementation mechanism

The implementation of the education policies is strongly contingent on the available resources. Assessment of the financial resources dedicated to the education sector was part of the CESR Phase 1. However, as with other discussions, the one on the financing of the system is hampered by the lack of reliable and comparable data. Conclusions reached by the World Bank and AusAID in their review complementing the CESR work¹³³ show that even though a substantial increase in spending is needed in Myanmar, it is also very important to plan carefully on the allocation of additional resources in order to support a well-functioning education system that promotes the development of human capital.

Other key issues related to policy formulation and implementations are currently being assessed by the CESR and include curricula development, decentralization, information collection and analysis, and teacher education. These issues are horizontal and affect all levels of education.

Phase 2 of the CESR will build on the Rapid Assessment by conducting thorough assessment in:

Policy formulation and monitoring

The general conclusion of the report by the Japan International Cooperation Agency (JICA) supports the idea that the ministries, administrative bodies, and schools involved in education policy are not fully serving their intended functions, and there is no appropriate coordination and demarcation of roles. This also involves the discussion on decentralization in education planning and management.

Curricula reform

There is an overall need to strengthen the professional capacity of those involved in curricula development, which includes upgrading the curricula to international technical and vocational skills standards.¹³⁴ The review also points out the need to create a link between pre-vocational subject content

¹³³ World Bank and AusAID: *Rapid Assessment of the Financing of the Education Sector in Myanmar*, prepared by a World Bank and AusAID team with Y. Y. Cho, for the CESR, draft, 22 Jan. 2013.

¹³⁴ CESR Phase 1 Rapid Assessment: *Secondary education subsector*, draft, 2013.

and skills taught in upper-secondary school, and the curricula content and skills covered in post-secondary TVET institutions.

Education indicators, data analysis, and EMIS development

The CESR team has concluded that lack of information on learning outcomes is a significant obstacle to education reform. In line with the efforts to decentralize, information on learning outcomes is particularly important in the cases where local stakeholders have decision-making authority and financial discretion. Standardized learning assessments are, therefore, a necessary complement to support for decentralized systems.

Financial planning and management

Since 2009 the MOE has stepped up its efforts to decentralize funding for education through two national programs: it transfers funding for various operating expenditures through townships to schools, based on enrolment numbers, and it transfers funding through townships and schools to pay cash stipends to poor children and for scholarships to high-achieving students.

The evaluation of these two programmes will be essential for expanding these financial initiatives, linking them to specific education development goals and targets, and monitoring their impact on achieving broader development objectives.

Teacher policies

There is an absence of an overall teacher education policy. This is complemented by a lack of set professional standards, which makes continuing professional development very difficult. Teachers' evaluation systems are not yet well established in terms of the effectiveness of classroom teachers.

Teacher policies closely relate to the future demand for skills and, as the McKinsey report suggests, international experience can assist the government of Myanmar in reforming the education system to make teaching a more attractive career choice.¹³⁵ These include:

- a) raising the criteria for becoming a teacher;
- b) improving pre-job and on-the-job qualifications for teachers; and
- c) aligning the education system with the demand for skills by businesses.

3.3 Equitable access to education and training

Myanmar acceded to the International Convention on the Rights of Persons with Disabilities (CRPD) on 7 December 2011, but the essence of the treaty needs to be further integrated into Myanmar law. Myanmar's first report to the UN Committee was due in December 2013. The current Constitution of Myanmar recognizes the rights of the disabled, but the CRPD goes considerably further.

On the right to education, the CRPD states that persons with disabilities should be guaranteed the right to inclusive education at all levels, regardless of age, without discrimination, and on the basis of equal opportunity.¹³⁶

Myanmar's adherence to the CRPD will be significant in increasing assistance to those with disabilities. More specifically, Myanmar will have to:

- a) undertake a survey of the number of disabled people, to make a clear assessment of disability needs within the country;

¹³⁵ McKinsey MGI: *Myanmar's moment: Unique opportunities, major challenges*, 2013.

¹³⁶ I. Birch: *CESR, Rapid assessment of overarching legislation*, draft, Nov. 2012.

- b) create opportunities for economic reintegration through assistance programmes that improve the economic status of the disabled, through education, economic development of community infrastructure, and the creation of employment opportunities; and
- c) ensure and appropriate the measures required, especially related to the recognition and use of Braille as a language and the need for teachers trained in using Braille.¹³⁷

The assessment of post-primary education in Myanmar observes significant disparities in access to secondary-level education. There are sizeable geographic and socio-economic gaps, and attempts to evaluate these gaps have been made through the MICS and the IHLCS. The analysis shows wide disparities across states and regions. The data indicates an NER in Yangon of roughly 74.7 per cent versus only 30.9 per cent in Rakhine: more than four-fifths of children aged 10–15 in Yangon are in school, while more than half (52.9 per cent) in Rakhine are already out of school.¹³⁸

This analysis also shows strong correlation between income and the share of 10–15 year olds who are out-of-school youth. The relationship is “dramatic and strikingly linear”, which supports the hypothesis that the enrolment and drop-out rates are strongly affected by socio-economic status.¹³⁹ With regard to gender, poverty appears to more strongly affect female drop-outs; with the exception of the richest group, the gender gap in share of out-of-school youth is roughly inversely related to the level of income. The share of girls who are out of school is also slightly higher in rural areas and marginally lower in urban areas.

One of the recommendations of the CESR Phase 1 review of the education sector is the need to collect further information through surveys and studies, to inform future strategies for more equitable access, and guide developments in pre-vocational and TVET access and curriculum. This is especially important for out-of-school youths who are in a position of disadvantage due to disability or location.

The Government of Myanmar has showed its commitment to education by establishing the right to education for every child, via the existing legislation and policy priorities. One of the driving documents is the Education for All National Action Plan,¹⁴⁰ which outlines the necessary education developments until 2015, in line with the Global Education for All Declaration.¹⁴¹

The MOE is making special arrangements for the disabled and other excluded children to attend school, as well as to have access to specialist care. Most programmes are formulated to encompass all excluded groups: the disabled; gifted children from mobile families; orphans and homeless children; children from remote or border areas; and disadvantaged children.

The expansion of inclusive education in Myanmar emphasizes activities in four areas:

- a) data collection and awareness raising;
- b) development of inclusive education content for teachers, and teacher training;
- c) teaching aids and methodologies for better-trained teachers; and
- d) the establishment of a centre for inclusive education to promote learning and self-reliance.¹⁴²

The MOE provides inclusive education in regular classes at the middle- and high-school levels. Schools that specifically target the rehabilitation of disabled children are under the Ministry of Social Affairs,

¹³⁷ United Nations: Convention on the Rights of Persons with Disabilities and Optional Protocol, 2006, <http://www.un.org/disabilities/documents/convention/convoptprot-e.pdf> [accessed 20 Oct. 2014].

¹³⁸ C. Spohr: *Informal Note on IHLCS Household Survey Analysis as an Input to the CESR*, ADB at the request of the CESR office, minor updates, draft, Jan. 2013, p. 4.

¹³⁹ C. Spohr: *Informal Note on IHLCS household survey analysis as an input to the CESR*, ADB at the request of the CESR office, minor updates, draft, Jan. 2013, p.4.

¹⁴⁰ Myanmar, Ministry of Education: *Education for All: national action plan* (Yangon, 2003).

¹⁴¹ UNESCO: World Education Forum 2000, Dakar, Senegal, Apr. 2000.

¹⁴² MOE: *Country report: Myanmar education development strategy focusing on inclusive education*, October 2008, http://www.ibe.unesco.org/National_Reports/ICE_2008/myanmar_NR08.pdf [accessed 20 Oct. 2014].

Relief, and Reconstruction (MSARR). Students with social disadvantages usually study at monastery schools under the MSARR. According to the JICA report, 37.1 per cent of disabled students have received educational opportunities, implying that around two-thirds of disabled individuals do not have an access to education. Among those who received an education, 66 per cent graduated from primary school, 22 per cent graduated from middle school, and only 2 per cent graduated from university.¹⁴³

3.4 TVET objectives, priorities, and target groups

The assessment of policy, legislation, and management in the TVET sector has proven extremely challenging due to the architecture of the education system in Myanmar. The CESR Phase 1, Rapid Assessment¹⁴⁴ made a number of recommendations that will be discussed below, but overall there is still a need to collect information on policy, rules, and management.

This point is reflected in the concept note on TVET for the second phase of the project,¹⁴⁵ which will build on the preliminary findings of Phase 1 and the sector analysis, identifying medium- and longer-term reform issues and directions. Some of the tasks for Phase 2 include a mapping of existing TVET providers and programmes, with specific focus on private and non-governmental providers; the quality of TVET-sector programmes; the link with the labour market; and enhancing the overall management and financing of the sector.

With regard to policy, Phase 2 will also address the following challenges:

- a) **A fragmented TVET system.** The TVET system is characterized by the lack of a central body and main institution to exercise control over the sector, and by the fragmented structure where ministries have responsibility for the different fields.
- b) **Lack of coordination among the different ministries responsible for TVET, and no actual lead by the MOST in policy formulation.** As seen in previous instances, the MOST supervises the largest number of TVET institutions and acts as the most important ministry, while other ministries manage their own TVET institutions in accordance with their management policies, rules and regulations.¹⁴⁶
- c) **TVET classification is not harmonized among different institutions.** The development of a fully functional national qualification framework will take many years to be completed. While it will allow for comparability among institutions within the country, and outside, a set of national skills standards in selected priority skills areas in the country will allow Myanmar to participate in the AEC on the mutual recognition of skilled labour. Employers face the problem of different classification of skills by different institutions, and this prevents a uniform terminology across the TVET sector.

The approach used to address these recommendations has involved the organization of a series of roundtables and workshops, bringing together the different stakeholders: ministries responsible for TVET, public providers, and development partners. What has not been achieved so far is the effective contribution of private TVET providers and labour market representatives to this discussion process. This links with the issues that, currently, neither labour market partners nor training institutions have influence in the development of TVET curricula. The following chapter will discuss the issue of TVET being supply (versus demand) driven, and the subjects taught or tasks trained in, being defined by officials who have little or no affiliation with the labour market. This is the result of the severed link between education, training, and employment.

¹⁴³ JICA, PADECO Co., Ltd., IC Net Limited: *Data Collection Survey on the Education Sector in Myanmar Final Report*. 2013.

¹⁴⁴ CESR, Phase 1: Rapid Assessment, TVET Subsector Analysis: *Policy, Legislation, Management and Service Delivery*, draft, 2013.

¹⁴⁵ UNESCO, ADB, GIZ, ILO, and SDC: *CESR Phase 2: TVET Component, concept note*, draft. 2013.

¹⁴⁶ JICA, PADECO Co., Ltd., IC Net Limited: *Data Collection Survey on the Education Sector in Myanmar Final Report*, 2013. p. 6.

3.4.1 Target groups

TVET target groups are mostly the jobseekers and young people who are drop-outs from the middle-school level. An interviewee explained¹⁴⁷ that in the STCs the basic courses in welding, machining, electrical, air-conditioning repair, pipe-fitting, and computer application are mainly attended by people who are 18 to 30 years old.

Dual tech training centres focus on a wider age group, between 15 and 40 years of age, but in reality the majority of the trainees are between 20 and 30 years old. Some of the trainees have a bachelor's degree in a different field, but because they were unable to find a job, they opted out of further training.¹⁴⁸

Some NGOs give informal training, depending on the regional needs. Save the Children is such an organization, and is working with drop-out students aged between 8 and 19 to help them get a job, according to the needs of the regions.¹⁴⁹

3.5 Legislative background of TVET

During this period of political, social, and economic reform in Myanmar, it has become increasingly clear that TVET has an important role to play in the country's ongoing development, particularly in terms of sustainable human resources. However, the current policy and legislative background does not yet reflect fully this importance.¹⁵⁰

According to the CESR Phase 1, Rapid Assessment, whose findings are supported by our field research, a comprehensive TVET policy does not exist. TVET falling under the MOST is regulated by the Agricultural, Technical, and Vocational Education Law of 1974.¹⁵¹ A new TVET Law, however, is currently being developed under the MOST. According to this law, "agricultural, technical, and vocational education" includes all types of vocational education offered by agricultural, technical, and vocational training schools and institutes under the supervision of the Department of Agriculture, Technical, and Vocational Education of the MOE, with the aim of fulfilling the objectives of agricultural, technical, and vocational education. The law set out the following objectives:¹⁵²

- a) to nurture technicians and specialists required for the establishment of industries;
- b) to nurture luminaries required for the effective utilization of sophisticated technology for the development of agriculture and livestock activities;
- c) to expand or increase vocational education courses that are in line with the country's political, economic, and social systems; and
- d) to nurture technicians and intellectuals who have a positive attitude and strong nationalist sentiments.¹⁵³

This is complemented by the Science and Technology Development Law of 1994, which has been promulgated by the MOI with the aim of engendering technicians and specialists to fulfil the requirements of industrial-sector development.

The fact that the legal background is outdated creates discrepancies between reality and law. The JICA report advises that the amendment of Agricultural, Technical, and Vocational Education Law should be

¹⁴⁷ Interview 1: Skills Training Center (STC), MOLES, Yangon, Myanmar, 10 June 2013.

¹⁴⁸ Interview 6: Dual Tech Vocational Training Centre and Engineering Co., Ltd., Yangon, Myanmar, 12 June 2013.

¹⁴⁹ Interview 15: CESR team, MOE, Yangon, Myanmar, 20 June 2013.

¹⁵⁰ UNESCO, ADB, GIZ, ILO, and SDC: CESR Phase 2, TVET Component, concept note, draft, 2013.

¹⁵¹ Amendments in 1983 and 1989.

¹⁵² CESR, Phase 1 Rapid Assessment: *TVET Subsector Analysis: Policy, Legislation, Management and Service Delivery*, draft confidential, 2013.

¹⁵³ The Agricultural, Technical, and Vocational Education Law of 1974, with amendments in 1983 and 1989.

completed as soon as possible, to solve the problem of inconsistency between the law and actual conditions.¹⁵⁴ The amended law should reflect a broader discourse between the MOST and other ministries that offer courses related to vocational education.

A more recent policy development since 2007 has been undertaken by the MOLES to establish the NSSA, aimed at improving the quality, relevance of, and access to vocational training and skills development, which all links to preparations for the AEC.

The Employment and Skills Development Law¹⁵⁵ was approved by Parliament in August 2013. This law proposes a number of bodies to take over responsibility for the development, adoption, assessment, and supervision of the skills system, and thus formalizing the temporary set-up of the NSSA. It will hold the leading role in the accreditation, assessment, and certification of public and private providers and evaluators. The NSSA is also viewed as an organization based on public-private cooperation, due to the role of the UMFCCI. In practice, there is little involvement of the private sector or other ministries. The guidelines are being prepared to implement the law.

The government will establish a central body to implement the law, as shown in Figure 18. This body will have at least seven members. Included are the mayors of Nay Pyi Taw, Yangon, and Mandalay cities; the chair of the UMFCCI; and the chairs of Myanmar's employers' and labour organizations. Further, this body will form two committees: a Skills Standards Committee and a Skills Standards, Certification, and Assessment Committee.¹⁵⁶ Its role is to regulate, lead, establish competency standards, and conduct assessments for workforce development in Myanmar. It is also responsible for developing the national continuing education and training infrastructure, to deliver training to meet the manpower development in each economic sector in Myanmar. The other important development under the law is the creation of a training fund based on a levy system on employers, and by donations from workers.¹⁵⁷

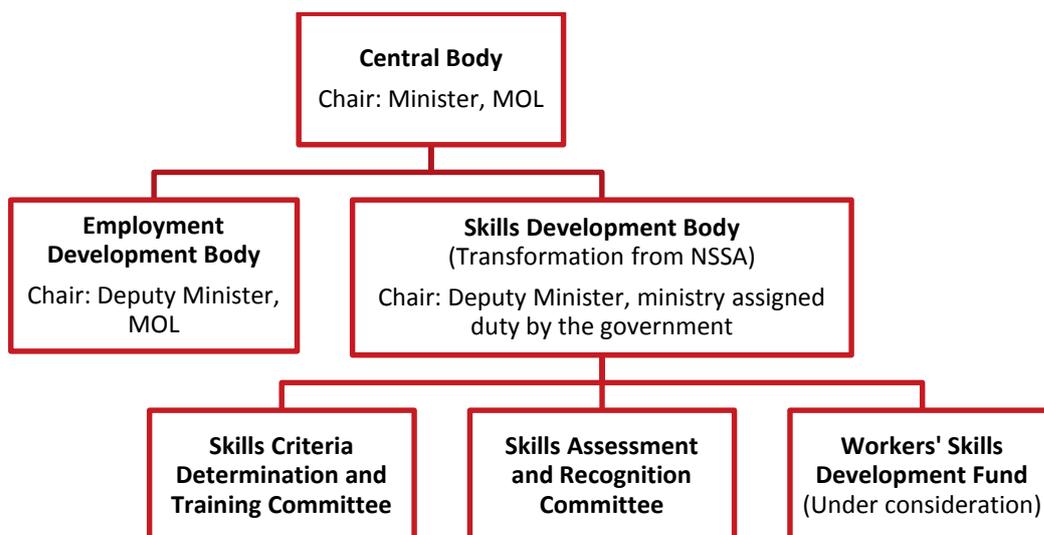
¹⁵⁴ JICA, PADECO Co., Ltd., IC Net Limited: *Data Collection Survey on the Education Sector in Myanmar Final Report*, 2013.

¹⁵⁵ The Pyidaungsu Hluttaw, 2012, draft law, 15 May 2012.

¹⁵⁶ D. Lythe: *Industry leadership in HRD in Myanmar*, Dec. 2013.

¹⁵⁷ Interview 1: Skills Training Center (STC), Ministry of Labour, Employment, and Social Security, Yangon, 10 June 2013.

Figure 18. Organizations under the Employment and Skills Development Law



Source: Employment and Skills Development Law.

3.6 Financial arrangements of TVET

TVET institutions receive resources from the ministry to which they correspond. TVET institutions currently have no say in the amount of resources allocated to them, since this is budgeted for by the respective ministry. The agencies do not have a say in the distribution and allocation of resources.

Current expenditures for TVET institutions under the DTVE are mainly used for teacher salaries. Capital expenditure for facilities, equipment, and teaching materials are unfortunately constrained. In order to improve the quality of education and the high drop-out rate, the budget for these purposes should be increased.

4. Technical and vocational education and training system

The goal of the TVET system is to prepare students, trainees, and apprentices who can then easily enter the labour market. TVET institutions have to realize their role as service providers for the country's economy in general, as well as for businesses. Therefore, in order to assure the quality and relevance of TVET offers and eventually a demand-driven TVET system, it is necessary to involve the private sector in each of the components of TVET.

This chapter will provide an overview of the TVET system in Myanmar, its main stakeholders, public and private providers, and the involvement of the private sector in the TVET system. The focus is also on exploring how demand-driven the TVET system in Myanmar is, and what kind of demand-driven initiatives exist to supply the labour market in Myanmar and other ASEAN countries.

The discussion presented in this chapter is mainly based on interviews, meetings, and consultations conducted during a field trip in May and June 2013, and desk research. Due to the difficulty in accessing and collecting quantitative data, this chapter will focus more on qualitative data collected via face-to-face interviews and meetings with a number of TVET stakeholders in Myanmar. The interviews were conducted within a semi-structured format. Different types of questionnaires were prepared for the different TVET stakeholders: private businesses, business associations or chambers of commerce, private TVET providers, state-owned providers, and development partners. However, during the interviews, it was noticed that in the private sector it is quite difficult to separate a training centre or school from an employment agency or any other service provider for local and foreign businesses. For example, the TRC Hotel and Vocational Training School was a training centre, an employment agency, and a hotel establishment services company.

4.1 Historical background

As in many other countries going through a transitional period, in Myanmar, HRD has close links with political, social, and economic developments in the country. The TVET system, including all of its formal, informal, and non-formal components, as a main source of HRD, has been undergoing several transformations over the past 50 years.

After independence in 1948 the level of education was one of the highest in Asia.¹⁵⁸ As a result of under-investment and civil strife, the education system has suffered deterioration across the country. Developments in the education system focused on the quantity of degrees and diplomas offered, rather than on the quality of the courses. This contributed to the creation of a gap between the supply of training and education and the demand in the labour market.¹⁵⁹ The education system (including the TVET system) has not yet recovered, and today Myanmar is facing an education and HRD crisis in its cities and rural areas.¹⁶⁰

Until 1996, all vocational schools were under the administration of the MOE. Afterwards, they were separated and positioned under the responsibility of each of the relevant vocational organization. As a result of this transfer of responsibility, many vocational schools were closed down, creating a big gap

¹⁵⁸ M. Lall: "Evolving education in Myanmar: The interplay of state, business and the community", in M. Skidmore and T. Wilson (eds): *Dictatorship, disorder and decline in Myanmar*, (Australian National University Press, Canberra, 2008), pp. 127–149, <http://www.eipress.anu.edu.au/?p=102401> [accessed 20 Oct. 2014].

¹⁵⁹ Interview 13: MTF, Yangon, Myanmar, 19 June 2013.

¹⁶⁰ *Evolving education in Myanmar: The interplay of state business and the community*, 2007, p. 128.

in education and training available for mid-level technicians. More recently, the MOE has been attempting to revive and improve the remaining vocational schools; however, there remains some scepticism about the financial resources available for this endeavour, as well as for subsequent maintenance.¹⁶¹

Therefore, in an attempt to fill this gap in main urban centres, a large number of unofficial schools in the private sector have been established to meet the demands of the growing labour market. These are mainly English-teaching schools, but other subjects are often taught as well. These private schools and centres are operating in parallel to the state system, which remains compulsory.¹⁶² Currently, due to the poor quality and other issues, several state TVET providers run the risk of running empty courses, whereas the private-sector providers are overloaded with students but lack the financial resources to meet the high demand from the labour market for skilled workers.

4.2 Current management and organization in TVET

The responsibility for TVET provision in Myanmar is divided among 13 to 19 ministries.¹⁶³ They provide a variety of vocational courses that differ in duration. The courses range from short-term with a duration of several weeks or months, to long-term education ranging from three to five years of pre-secondary, secondary, and higher education. They also vary in skills delivery level, mode of delivery, and expected outcome.

As anticipated in the earlier chapters, in the near future the whole education system will go through a transformation intended to improve the quality of TVET and to bring the system closer to the demands of the labour market. The analysis resulting from the CESR process and the follow-up activities are expected to contribute to the changes in the education system. In this chapter, the current management and organization of the institutions comprising the TVET system will be examined.

4.2.1 Defining TVET in Myanmar

Before discussing the management and organizational structures of TVET in Myanmar, it is very important to understand what the TVET system includes, and how the main stakeholders (governmental and private) understand it. As many studies on Myanmar recognize, the diversity of both the ministries responsible and the stakeholders, makes it challenging to adopt a common understanding and a single definition of TVET. In some cases, different stakeholders interviewed (ministries, public and private providers and even donors and development partners) have a different understanding of what TVET is or what it should be.¹⁶⁴ In line with the shared understanding of TVET between the ILO and GIZ, the study will examine a broad definition of the TVET concept, which includes all the learning initiatives, short- and long-term, that prepare individuals with a certain level of skill (from basic to advance) for the labour market. Such an approach supports GIZ in underlining the need to develop definitions and terminologies for clarity and better understanding of what TVET is.

4.2.2 Responsible ministries and agencies

The existence of a number of ministries offering and conducting TVET is also a reason why there is a variety of understanding on TVET – resulting in a variety of offers, durations, and target groups spread

¹⁶¹ Interview 15: CESR team, MOE, Yangon, Myanmar, 20 June 2013.

¹⁶² *Evolving education in Myanmar: the interplay of state business and the community*, 2007, p.129.

¹⁶³ Note: Some sources say 14 ministries and some list 19. This mismatch is a reflection of the lack of a common definition and understanding of what is considered TVET.

¹⁶⁴ Interview 14: GIZ, Yangon, Myanmar, 19 June 2013.

throughout the different regions and states of Myanmar. According to the JICA report¹⁶⁵ and the interviews conducted, the main ministries responsible for TVET are:

- a) the Ministry of Agriculture and Irrigation;
- b) the Ministry of Border Affairs;
- c) the Ministry of Commerce;
- d) the Ministry of Cooperatives;
- e) the Ministry of Culture;
- f) the Ministry of Defence;
- g) the Ministry of Education;
- h) the Ministry of Environmental Conservation and Forestry;
- i) the Ministry of Health;
- j) the Ministry of Hotels and Tourism;
- k) the Ministry of Industry;
- l) the Ministry of Labour, Employment, and Social Security;
- m) the Ministry of Livestock and Fisheries;
- n) the Ministry of Rail Transportation;
- o) the Ministry of Religious Affairs;
- p) the Ministry of Science and Technology;
- q) the Ministry of Social Welfare, Relief, and Resettlement;
- r) the Ministry of Sport; and
- s) the Ministry of Transport.

The list above leaves out the MNPED, under which many of the private TVET providers are registered.¹⁶⁶ These often also function as overseas employment agencies. It was reported that private TVET providers are registered (or licensed) under the respective ministry, according to their related vocational field of training. For example, the training centres and schools providing training in hospitality and tourism services are registered under the Ministry of Hotels and Tourism (MOHT).¹⁶⁷

Table 14 presents a more detailed overview of the main TVET-providing institutions in the formal system, and the relevant ministries responsible.

¹⁶⁵ JICA, PADECO Co., Ltd., IC Net Limited: *Data Collection Survey on the Education Sector in Myanmar Final Report*, 2013.

¹⁶⁶ Interview 9: Arbourfield Manpower and Training Services Co. Ltd., Yangon, Myanmar, 13 June 2013.

¹⁶⁷ Interview 13: MTF, Yangon, Myanmar, 19 June 2013.

Table 14. Summary of ministries and public TVET institutions¹⁶⁸

Ministry	Field	TVET institutions	Total number
Ministry of Agriculture and Irrigation	Agricultural science	Yesin Agricultural University (1) Agricultural Institute (10)	11
Ministry of Livestock and Fisheries	Veterinary science	Yesin University of Veterinary Science (1) <i>Fisheries science school (1) Breeding training centres (2)</i>	4
Ministry of Commerce	Trade	<i>Trade Training Institution in Yangon (Short course)</i>	1
Ministry of Cooperatives	Arts, business management, and accounting	Cooperative universities (2) Cooperative colleges (2)	4
	Cottage industries	The Lacquerware College (1) <i>Saunders Weaving School (2) Basic weaving schools (5) High-level weaving schools (8)</i> Technological universities (27) University of Technology ICT (1) Government technical colleges (3), Government technical institutes (11) <i>Government technical high schools (36),</i> Aerospace Engineering University (1) Universities of technology (4) Universities of computer studies (25)	16
Ministry of Science and Technology	Engineering	Arts and science universities (32) <i>Education colleges</i> <i>Pre-vocational schools (Attached to high-schools)</i> Universities of medicine (4) Universities of pharmacy (2) Universities of paramedical science (2) Universities of dental medicine (2) Universities of nursing (2) University of Public Health (1) University of Community Health (1) <i>Nursing and midwifery schools (46)</i> University of Traditional Medicine (1)	108
Ministry of Education	Arts and science (HRDP)	Arts and science universities (32)	32
	Teacher training	<i>Education colleges</i>	20
Ministry of Health	Pre-vocational education	<i>Pre-vocational schools (Attached to high-schools)</i> Universities of medicine (4) Universities of pharmacy (2) Universities of paramedical science (2) Universities of dental medicine (2) Universities of nursing (2) University of Public Health (1) University of Community Health (1) <i>Nursing and midwifery schools (46)</i> University of Traditional Medicine (1)	120
	Health science/traditional medicine	International Theravada Buddhist Missionary University	61
Ministry of Religious Affairs	Religious and missionary work	Myanmar Maritime University (1) Myanmar Mercantile Marine College (1)	1
Ministry of Transport	Maritime engineering, etc.	National University of Arts and Culture	2
Ministry of Culture	Music, sculpture, drawing, etc.	<i>Forestry Training Centre, Central Forestry Development Training Centre (2)</i> Universities of forestry (2) Defence Service Academy (1) Defence Service Medical Academy (1) Defence Service Technological Academy (1) Defence Service Institute of Nursing and Paramedical Science(1) National Defence College (1)	1
Ministry of Environmental Conservation and Forestry	Forestry	<i>Central institutes of the civil service (Short course)</i> University for the Development of the National Races of the Union (1) Nationalities youth resources development degree colleges and central training schools (2) <i>Vocational training schools of domestic science for women (39)</i> <i>Training schools for the development of nationalities youth from border areas (29)</i> <i>Industrial training centres (One-year certificate course)</i>	4
Ministry of Defence	Military training, medical science, engineering, etc.	Defence Service Institute of Nursing and Paramedical Science(1) National Defence College (1)	5
Union Civil Service Board	Civil service	<i>Central institutes of the civil service (Short course)</i> University for the Development of the National Races of the Union (1) Nationalities youth resources development degree colleges and central training schools (2) <i>Vocational training schools of domestic science for women (39)</i> <i>Training schools for the development of nationalities youth from border areas (29)</i> <i>Industrial training centres (One-year certificate course)</i>	2
Ministry of Border Affairs	Teacher education arts and science	Nationalities youth resources development degree colleges and central training schools (2)	3
	Vocational education	<i>Vocational training schools of domestic science for women (39)</i> <i>Training schools for the development of nationalities youth from border areas (29)</i> <i>Industrial training centres (One-year certificate course)</i>	68
Ministry of Industry	Engineering	<i>Industrial training centres (One-year certificate course)</i>	6
Ministry of Labour	Engineering, language, IT	<i>STCs (Short courses)</i>	3

Ministry of Social Welfare, Relief, and Resettlement	Non-formal education	<i>Youth care centres and vocational training centres for disabled adults (10)</i> <i>Schools for visual and hearing impairment and students with disabilities (4)</i>	14
Ministry of Sport	Sports education	<i>Sports and physical science schools (High-school level)</i>	2
Ministry of Hotels and Tourism	Tourism education	<i>Tourism Training School</i>	1
Ministry of Rail Transportation	Rail transportation	<i>Central Institute of Transport and Communications</i>	1

Source: JICA, PADECO Co., Ltd., IC Net Limited: Data Collection Survey on the Education Sector in Myanmar Final Report. 2013.¹⁶⁹

4.3 Organizational structures of TVET agencies

The data on functions and the staffing figures of TVET agencies is not currently available, and, in addition, it is too early to discuss decentralization in education and training provision. Therefore, this chapter provides an overview of the central institutions responsible for the considerable number of public TVET providers.

4.3.1 Main ministries

Ministry of Science and Technology (MOST)¹⁷⁰

The MOST was established in 1996 with the objective of enhancing the development of science and technology, and to reinforce state development more effectively. The MOST supports the development of science and technology for the promotion of industrial production contributions, tying into the National Economic Development plans. The MOST's objectives encompass:

- a) research and development work for national economic development;
- b) the use of national resources aimed at developing the economy and raising the living standard of the people;
- c) the spread of the technological know-how achieved by research and development to the industrial and agricultural sectors, in order to enhance production capacity;
- d) planning and carrying out HRD programmes to train specialists and professionals in science and technology;
- e) analysis and testing of raw materials and finished products, and to implement quality control and standardization of industrial products; and
- f) coordinating the research, development, and use of atomic energy.

The implementation of the MOST's programmes is divided into two areas:

- a) developing the human-resource sector – extending universities, colleges, and institutes; extending new courses and special courses; and facilitating international collaborations; and
- b) developing the research and development sector – research on rural development; research on industrial development; research for master's and doctoral programmes; and regular research being done by research departments.

This study explores the challenges faced in the arena of HRD, since it plays multiple roles in the development of the economy. The objectives of HRD are to:

- a) fulfil the increasing demand of industries;

¹⁶⁸ JICA, PADECO Co., Ltd., IC Net Limited: *Data Collection Survey on the Education Sector in Myanmar Final Report*, 2013, pp. 86–87.

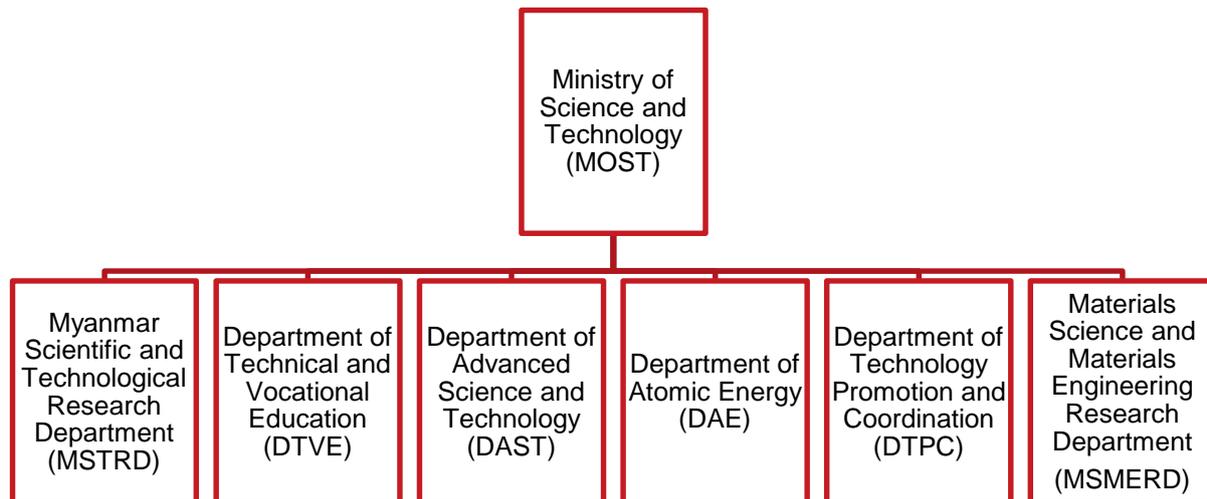
¹⁶⁹ Bold = higher-education institutions that provide undergraduate diploma or higher degrees related to technical and vocational education; italic = TVET institutions that do not provide degrees; bold italic = higher-education institutions that provide both undergraduate diploma and higher degrees and TVET without a degree.

¹⁷⁰ MOST, <http://www.most.gov.mm/most2eng/> [accessed 20 Oct. 2014].

- b) conduct courses in new academic fields, in order to meet the current need;
- c) enable qualified students to pursue advanced technologies; and
- d) disseminate technological know-how for the nation.

As Figure 19 represents, the MOST consists of six departments. The department responsible for technical and vocational training will be the subject of further review below.

Figure 19. Organizational structure of the MOST



Source: MOST, last updated 19 March 2009.

The MOST defines the important areas of development in research and innovation on science and technology, which are: food science and technology, biotechnology, meteorology and geophysics, materials science and technology, information technology, non-conventional energy research, marine science and technology, and space technology.¹⁷¹

Department of Technical and Vocational Education (DTVE)¹⁷²

The DTVE is one of the six departments under the MOST. It is responsible for the technical education and training of the country’s youth to become engineers, technicians, and other skilled workers. The DTVE functions within the policy framework laid down by the Technical and Vocational Education Council (TVEC). The TVEC is the highest supervisory body for the DTVE. This council is responsible for the management of TVET activities.

The TVEC’s members include senior officials from the other relevant departments and agencies. Under the TVEC, there are two educational committees: the Technical Education Committee, and the Vocational Educational Committee. They were formed to help implement the respective educational activities. Two different curriculum committees are present, along with two respective examination committees to design, develop, implement, and monitor progress in these two distinct types of education

¹⁷¹ Thida: *Status of Science and Technology in Myanmar*, Myanmar country report, <http://www.mis.nsf.ac.lk/S&T/Myanmar%20-%20Dr.Thida.ppt> [accessed 17 Jan. 2014].

¹⁷²MOST: *DTVE*, <http://www.modins.net/myanmarinfo/ministry/science.htm> [accessed 17 Jan. 2014].

offered under the DTVE: the Technical Education Curriculum Committee, and the Vocational Educational Curriculum Committee.¹⁷³

The key objectives of the DTVE, as presented on the department’s website, are:¹⁷⁴

- a) training technicians and skilled and semi-skilled workers;
- b) formulating programmes that link teaching and working experience;
- c) priority-setting for occupations and skills that respond to current needs; and
- d) training and nurturing skilled professionals who are dedicated and motivated towards developing the state.

In order to achieve these objectives, the DTVE performs the following functions:¹⁷⁵

- a) implements the MOST policies and guidelines in the field of developing human resources;
- b) develops plans for strengthening, expanding, and upgrading technical and vocational schools, institutes, and colleges, as well as special courses for highly-qualified human resources training;
- c) creates and implements plans for the attainment of highly-qualified and proficient teaching staff; and
- d) takes responsibility for budget allotment and the purchase of tools, equipment, and teaching aids.

Department of Advanced Science and Technology (DAST)¹⁷⁶

The DAST oversees four technological universities, 25 universities of computer science, and the Myanmar Aerospace and Aeronautical Engineering University. Figure 20 shows the educational programmes provided by higher education institutes under the MOST

Figure 20. Academic degree programmes offered by universities under the MOST

Ph.D Degrees	Master's Degrees	Bachelor's Degrees	Diplomas
<ul style="list-style-type: none"> • Ph.D (Engg/Applied Science/Biotechnology) • Ph.D (Information Technology) 	<ul style="list-style-type: none"> • M.E & M.Arch, M.S (Applied Science) • M.Env.E/M.Env.M/ M.F.T/M.E.S.P/ M.Biotech/ M.Engg:Geol/ M.Aqua-Tech/M.Phil • M.I.Sc/M.A.Sc/ M.C.Tech/M.C.Sc 	<ul style="list-style-type: none"> • B.C.Sc (Hons:), B.C.Tech (Hons:) • B.C.Sc, B.C.Tech • B.E • B.Tech • A.G.T.I • B.E (Aerospace) • BSTC 	<ul style="list-style-type: none"> • D.C.Sc, D.C.A, D.C.M • Dip.Env/Dip.Env.M/ D.F.T Dip. Aqua Tech /Dip Bio tech/ Dip.Engg: Geol/Dip ESP/Dip.LM • Dip.Tech (EA/AV/EI) • Handicraft • G.C.C.E

Source: MOST, 9 February 2009.

Additionally, the MOST’s Department of Higher Education has established an HRD programme¹⁷⁷ with short-term and part-time courses in hotels and tourism, financing, banking, and ICT, among others. It also offers an 18-month bachelor’s degree.¹⁷⁸ The HRD programme is available in all of the 66 universities across seven states and seven divisions in Myanmar. The way the structure is set up, each state or division has at least three universities, consisting of a science and arts university, a technical university, and an ICT university. Universities in Mandalay and Yangon offer the majority of courses,

¹⁷³ W. Aye: *Country report: Myanmar*. Experts’ meeting on “Competence Building in APACC Accreditation”, Korea University of Technology and Education, Republic of Korea, 25-29 June 2007.

¹⁷⁴ Seameo Voctech: *TVET System in Myanmar*, 2007, <http://www.voctech.org.bn/epublication/educsystem/VTETEDUCSYSMM.pdf> [accessed 17 Jan. 2014].

¹⁷⁵ Ibid. (172).

¹⁷⁶ Idem.

¹⁷⁷ More information can be found on the webpage of the YTU, <http://www.most.gov.mm/ytu/> [accessed 17 Jan. 2014].

¹⁷⁸ Interview 15: CESR team, MOE, Yangon, Myanmar, 20 June 2013.

while those in other regions offer fewer courses depending on the specific regional needs. The minimum requirement to enter these courses is to pass the matriculation exam – the examination conducted for basic-education high-school completion and for university entrance. A number of part-time, evening courses have been opened due to the fact that the skills with which students exit universities do not match the demand of the labour market.¹⁷⁹

Ministry of Education (MOE) ¹⁸⁰

The MOE does not have a key role with regard to the governance of TVET, but there are 120 schools identified as pre-vocational schools, and in these schools there is more than one period per week of vocational subjects. The students learn skills in vocational areas such as agriculture, industrial arts (handicrafts), and home economics,¹⁸¹ serving as the basis for vocational guidance activities.

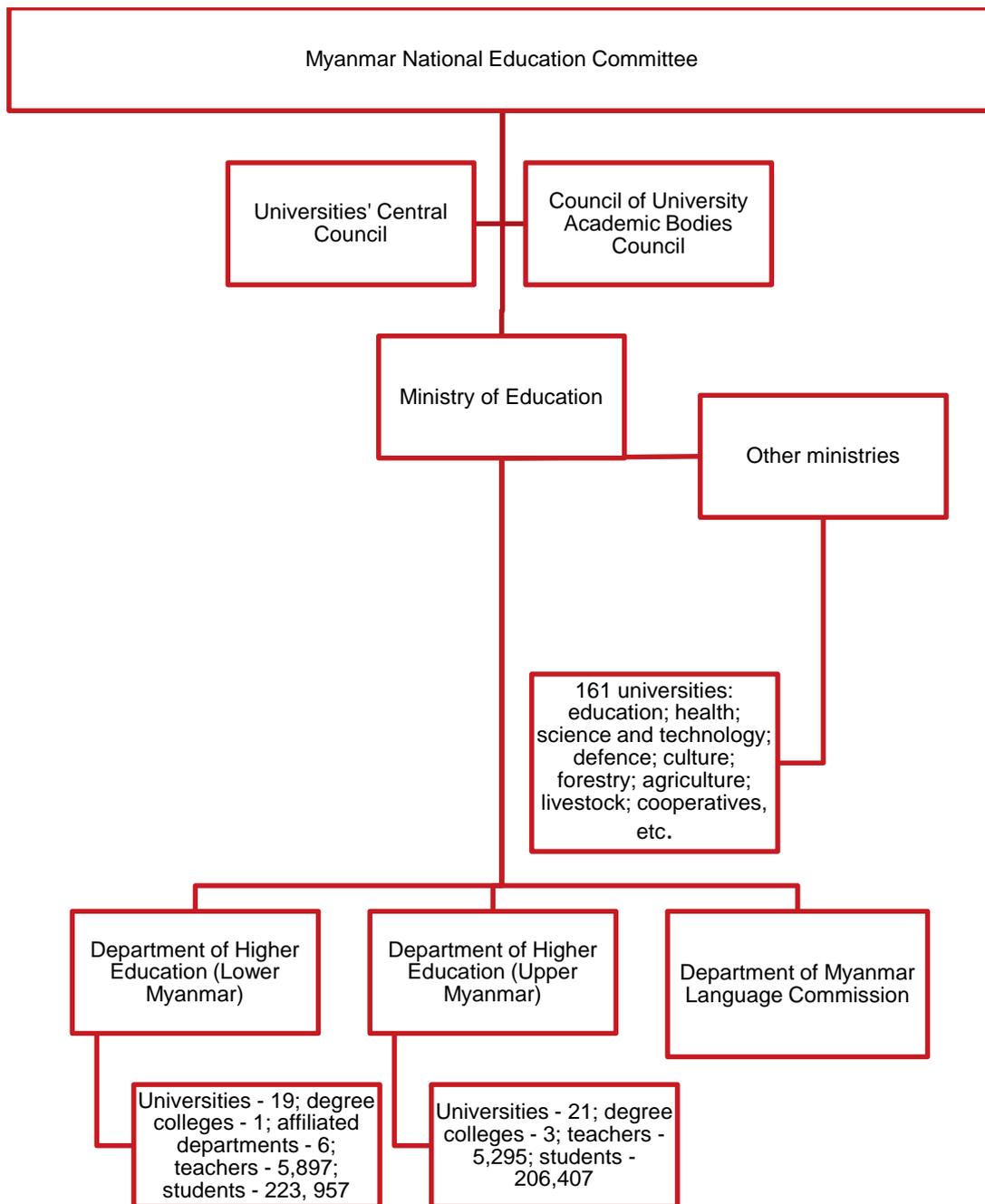
The MOE plays a significant role in higher education, which is closely related to TVET. The administrative structure for the higher-education subsector is presented in Figure 21:

¹⁷⁹ Interview 15: CESR team, MOE, Yangon, Myanmar, 20 June 2013.

¹⁸⁰ For more information, see <http://www.myanmar-education.edu.mm> [accessed 20 Oct. 2014].

¹⁸¹ Interview 15: CESR team, MOE, Yangon, Myanmar, 20 June 2013.

Figure 21. Administration of higher education



Source: Department of Higher Education, MOE (2012), CESR team on HE Background.

Ministry of Labour, Employment, and Social Security (MOLES)

The key objectives of the MOLES, as listed on the website of the ministry, are:¹⁸²

- a) maintaining of industrial peace;
- b) providing free employment services;
- c) skills training of workers;
- d) conducting research regarding labour matters and the collection of statistics;

¹⁸² MOLES, <http://www.myanmar-education.edu.mm/> [accessed 17 Jan. 2014].

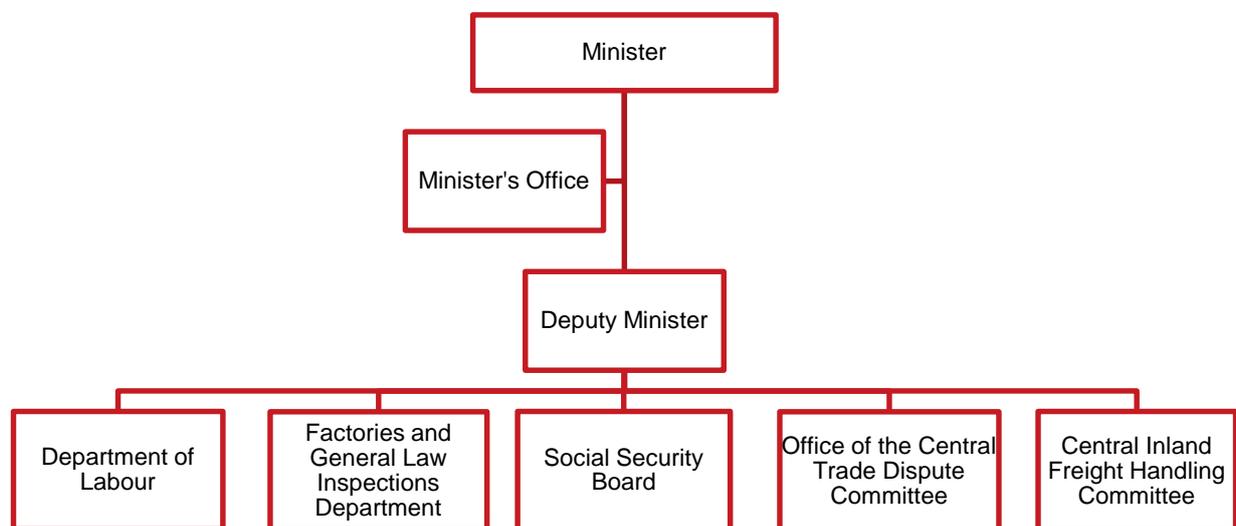
- e) ensuring that workers enjoy rights under the labour laws;
- f) occupational safety and health;
- g) social security of workers;
- h) supervising the smooth and steady flow of goods throughout the country; and
- i) participating in international labour affairs.

The main functions of the ministry include:

- a) ensuring workers enjoy rights and protection granted under the various labour laws;
- b) providing social services for workers;
- c) promoting higher productivity of labour; and
- d) participating in international labour affairs.

The structure of the MOLES is illustrated in Figure 22.

Figure 22. Organizational structure of the MOLES



Source: MOLES.

Department of Labour

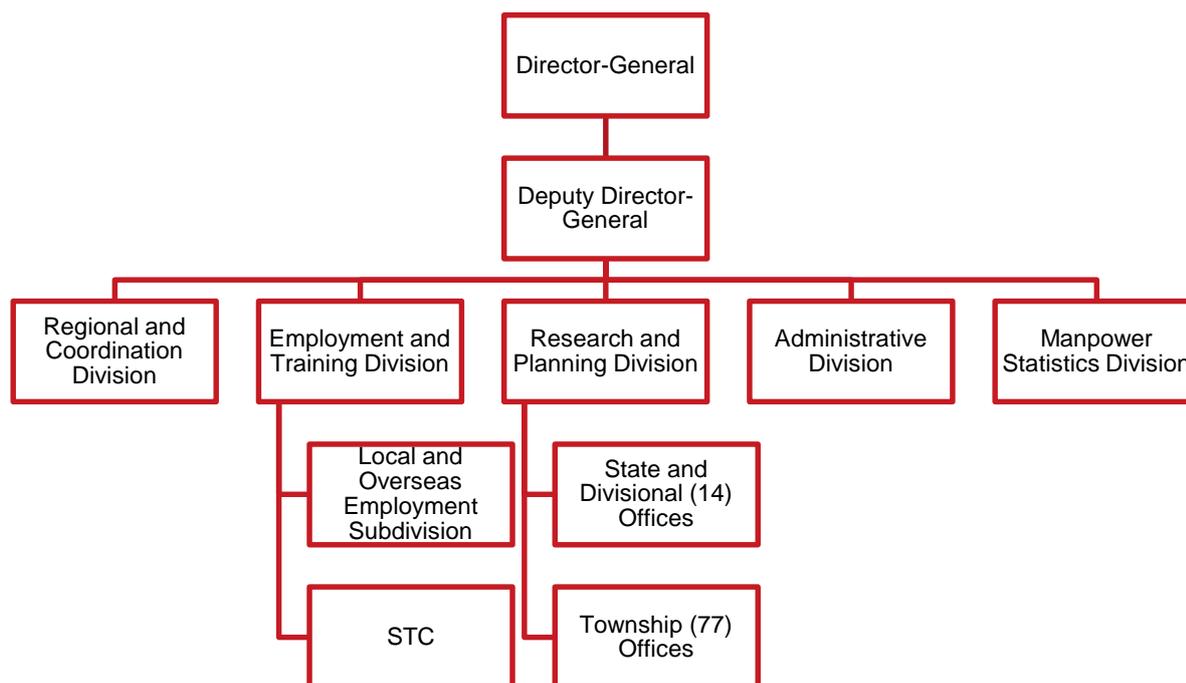
The key objectives of the Department of Labour, as listed by the website of the ministry, are:¹⁸³

- a) maintaining of industrial peace;
- b) providing free employment services;
- c) skills training of workers;
- d) conducting research regarding labour matters, and the collection of statistics;
- e) ensuring workers enjoy rights under the labour laws;
- f) occupational safety and health;
- g) social security of workers;
- h) supervising the smooth and steady flow of goods throughout the country; and
- i) participating in international labour affairs.

The structural organization of the department is shown in Figure 23.

¹⁸³ MOLES, <http://ww.mol.gov.mm/en/about/minister-office/objectives/> [accessed 17 Jan. 2014].

Figure 23. Organization of the Department of Labour



Source: MOLES. www.mol.gov.mm/en/wp-content/uploads/2011/07/DOL-charteng.jpg.

4.4 Taking stock of public TVET institutions

As stated previously, it is not an easy task to map all the public TVET institutions in terms of number of students, teachers, and TVET offers, due to the lack of reliable data collection or a unifying central administration.

The different studies conducted under the CESR, and the interviews, revealed that some of the most influential ministries are the MOE (which has the largest number of pre-vocational schools), the MOST (which has the largest number of higher-education and pre-university TVET providers), the MOI (with six industrial training centres), and the MOLES (with three STCs).

4.4.1 Main TVET providers

As seen earlier in the study, there are approximately 459 public training institutions in Myanmar, not including the private training providers. The MOST supervises about 108 TVET institutions, the largest number among the ministries, and acts as the key ministry, producing the required skilled labourers, technicians, and specialists needed for the country.¹⁸⁴

Ministry of Science and Technology

Among the TVET provisions of the MOST are:

- a) teacher training schools (TTS) – with a course duration of two years;
- b) machinery repair and maintenance schools – duration six months (modular); and
- c) handicraft schools (HS) – duration three months (modular).

Other institutes under the DTVE are shown in Figure 24 below:

¹⁸⁴ JICA, PADECO Co., Ltd., IC Net Limited: *Data Collection Survey on the Education Sector in Myanmar Final Report*, 2013, p. 86.

Figure 24. DTVE-associated institutions

Department of Technical and Vocational Education			
27 technological universities (TUs) throughout Myanmar except Chin state. Duration of study: five years.	Three government technical colleges (GTCs) in the central dry zone. Duration of study: five years.	11 government technical institutes (GTIs) mainly located at central dry zone and states in upper Myanmar. Duration of study: two years.	36 government technical high schools (GTHS) throughout the country.

Source: MOST.¹⁸⁵

The distribution of the TVET institutions is one of the defining characteristics of the system in Myanmar. There are multiple TVET institutions spread around the country, but often information about enrolment, staff, and financing is not available in order to map clearly the existing providers. The structure of the TVET sector is highly centralized in the management and financing aspects – TVET institutions’ budgets come almost exclusively from their respective ministries, and no authority has been delegated to the state or region level yet.

Even though control has been localized at the centre, TVET institutions are spread throughout the country. As Figure 25 illustrates, the TVET institutions under the DTVE have many branches all over Myanmar, which is the result of a policy to provide TVET for both rural and urban areas. Technical universities, for example, have been established in all regions and states except Chin State. On the other hand, TVET institutions in Yangon, Mandalay, and the Central Dry Zone area have few branches.¹⁸⁶

In order to cover the entire territory, the JICA report observes that, in most cases, the areas without a technical university benefit from the existence of government technical colleges (GTCs) (Figure 26) or government technical institutes (GTIs) (Figure 27). Similarly, and as Figure 24 shows, GTHSs, currently numbering 36, are also being opened in all regions and states in Myanmar. Overall, these centres are concentrated in the Central Dry Zone, where many of the industrial zones are located (Mandalay, Magway, and Sagaing region), and in the delta area (Ayeyawaddy region), as it is the biggest population centre in Myanmar.¹⁸⁷

According to the CESR, there is little reliable data on the geographical locations from other ministries, except for the major TVET institutions under the DTVE, the University of Technology, the Ministry of Science, the skills training centres, as well as institutes under the MOI.

Research underlines that the number and location of TVET institutions do not match the needs, as seen by tracing student enrolment. Reforms proposed in this area include the consolidation of institutions in terms of merging the smallest or least-attended ones, splitting the largest, moving the institutions with

¹⁸⁵ MOST, <http://www.most.gov.mm/most2eng/> [accessed 20 Oct. 2014].

¹⁸⁶ C. Hüttemeier: *TVET in Myanmar: Access and Quality of TVET* (North Jutland, Denmark), draft report, 26 Dec. 2012. p. 17.

¹⁸⁷ JICA, PADECO Co., Ltd., IC Net Limited, 2013: *Data Collection Survey on the Education Sector in Myanmar Final Report*, 2013, p. 90.

few attendees to more accessible locations, and ensuring that the areas with ethnic populations are also covered. These changes are aimed at increasing the cost effectiveness of the TVET sector and possibly freeing up capital for the institutions most in need.

The following tables and charts illustrate this distribution phenomenon and review the four types of TVET institutions – technological universities (TUs), GTCs, GTIs, and GTHSs – under the DTVE.

Technological universities under the DTVE

There are 27 TUs under the MOST, as shown in Figure 25, and these can be considered as the most important providers of higher-level TVET due to the wide variety of engineering options available.

Figure 25. List of regions and technological universities

Yangon Division
<ul style="list-style-type: none">• Yangon Technological University (YTU)• West Yangon Technological University (WYTU)• Technological University (Thanlyin)• Technological University (Hmawbi)
Kachin State
<ul style="list-style-type: none">• Technological University (Myitkyina)• Technological University (Banmaw)
Kayain State
<ul style="list-style-type: none">• Technological University (Hpa-An)
Mon State
<ul style="list-style-type: none">• Technological University (Mawlamyaing)
Shan State
<ul style="list-style-type: none">• Technological University (Taunggyi)• Technological University (Pinlon)• Technological University (Lashio)• Technological University (Kyaingtong)
Magway Division
<ul style="list-style-type: none">• Technological University (Magway)
Ayeyarwadi Division
<ul style="list-style-type: none">• Technological University (Maubin)• Technological University (Pathein)• Technological University (Hinthada)
Mandalay Division
<ul style="list-style-type: none">• Mandalay Technological University (MTU)• Technological University (Mandalay)• Technological University (Kyaukse)• Technological University (Meikhtila)
Kayar State
<ul style="list-style-type: none">• Technological University (Loikaw)
Chin State
<ul style="list-style-type: none">• Technological University (Kalay)
Rakhine State
<ul style="list-style-type: none">• Technological University (Sittwe)
Sagaing State
<ul style="list-style-type: none">• Technological University (Monywa)• Technological University (Pakokku)
Bago Divison
<ul style="list-style-type: none">• PYAY Technological University (PTU)• Technological University (Taungoo)
Tanintharyi Division
<ul style="list-style-type: none">• Technological University (Dawei)• Technological University (Myeik)

Source: www.burmalibrary.org/show.php?cat=1240&sl=1 [accessed 17 Jan. 2014].

Government technical colleges (GTCs)¹⁸⁸

The MOST has established GTCs in four regional areas of Myanmar, to promote regional development and to train engineering students in those areas. The aim is to plan and carry out HRD programmes to produce specialists and professionals in science and technology. The GTCs are made up of the following departments:

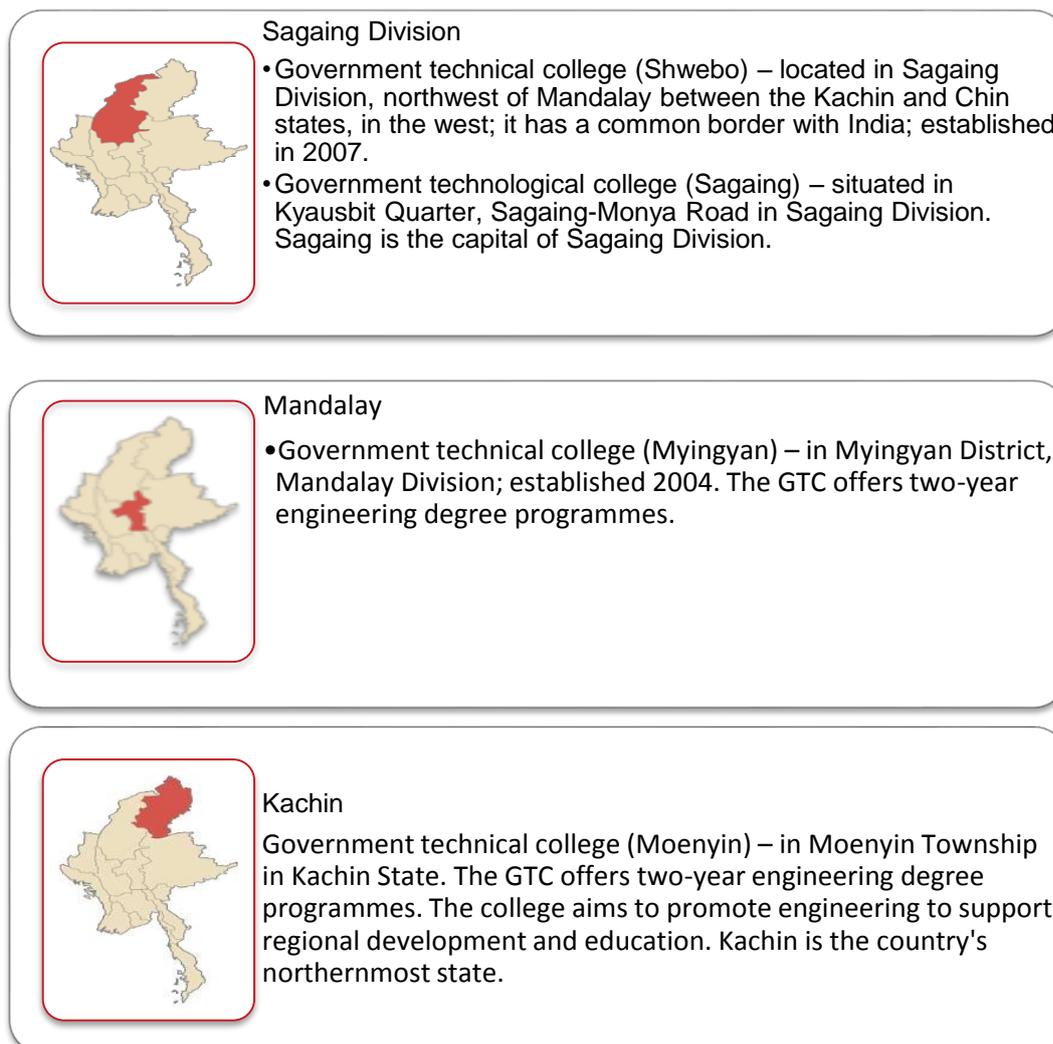
- a) the Department of Civil Engineering;
- b) the Department of Electrical Engineering;
- c) the Department of Electronic Engineering;
- d) the Department of Information Technology; and
- e) the Department of Mechanical Engineering.

GTCs offer the Certificate in Association of Government Technical Institute (AGTI), Bachelor of Technology (B.Tech), Bachelor of Engineering (BE) degree, and certificate programmes.¹⁸⁹ There are four GTCs, in Shwebo, Moenyin, Myingyan, and Sagaing districts, as shown in Figure 26.

¹⁸⁸ Engineering courses offered by TUs, GTCs, GTIs: civil engineering, electrical power engineering, electronics engineering, mechanical engineering, plastics and rubber engineering, food and chemical engineering, mining engineering, chemical engineering, architecture, mechatronics engineering, textile engineering, metallurgy engineering, petroleum engineering, information technology, aquaculture, biogas and bio fertiliser, plant tissue culture, biotechnology, computer numerical control, and mechanical power engineering.

¹⁸⁹ MOST.

Figure 26. Government technical colleges and their locations



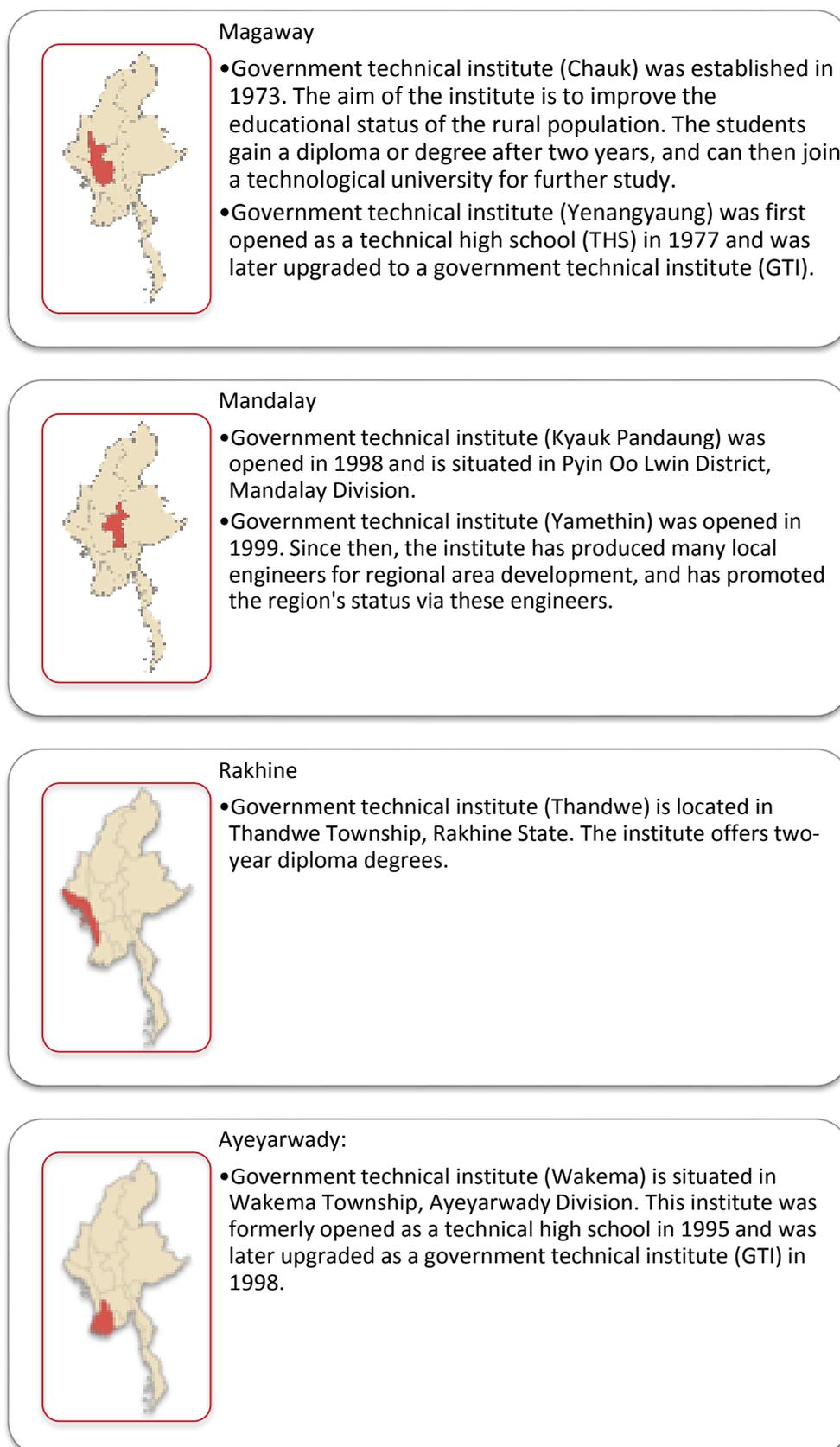
Source: MOST. www.most.gov.mm/gtc/ [accessed 17 Jan. 2014].

Government technical institutes (GTIs)

GTIs are under the MOST's administration. The aim is to promote the development of every state and region of the country equally, and to create regional areas with local engineers. The MOST has established the GTIs for students to have a chance to study engineering technology in their own localities.

All GTIs offer a two-year AGTI diploma. GTIs usually have the following major departments: civil engineering, electrical power engineering, mechanical power engineering, computer numerical control engineering, English, mathematics, science, and a workshop.

Figure 27. Government technical institutes and their locations



Source: MOST. www.most.gov.mm/techuni/index.php?option=com_content&task=view&id=16&Itemid=26 [accessed 17 Jan. 2014].

Continuing education programmes are in place that target previously unqualified GTI students who can write entrance exams specially conducted by the GTIs.

Box 5
Admission requirements for enrolment in technological universities and government technical colleges

- Score of 320 and above in the Basic Education High School Examination permits application for technological universities and government technological colleges.
- Has to be in the same area in which the student lives.
- Admission is limited to 20,000 students per year in technological universities and government technological colleges.

Source: Seameo Voctech, 2007. VTET Education System in Myanmar.
www.voctech.org.bn/epublication/educsystem/VTETEDUCSYSMM.pdf.

Government technical high schools (GTHSs)

GTHSs were established to cater to the requirements for medium-level, qualified labour in industry. The GTHSs are pre-diploma schools, and students can continue onto related diploma programmes after successfully clearing the transition exams. The objectives of the GTHSs are:¹⁹⁰

- a) to expose students at a basic high-school level to a range of practical activities in the vocational field, in order to make them familiar with, and stimulate their interest in, vocational subjects, and to give them equal opportunity to choose their future careers in either technical or general fields;
- b) to equip students who have completed basic education with those occupational skills that will facilitate their entry into gainful employment in industry and commerce;
- c) to equip students with the relevant productive and entrepreneurial skills that will prepare them for self-employment;
- d) to provide trained personnel in science, technology, and commerce, matching the supply of skilled labour with demand; and
- e) to encourage the increased participation of students in rural and remote areas in education, training, and employment in the technical field.

The MOST has also established about 20 research centres, but they are not well equipped.¹⁹¹ There is not much information on the functions of these centres.

Additionally, the MOST plans to open technical schools for those students who cannot pass the matriculation exam – the examination that is conducted for basic high-school completion, and for university entrance. These schools will offer a two-year programme and will award a diploma at the end. Outstanding students from these schools will have the opportunity to join technical universities.¹⁹²

Ministry of Education

The MOE does not have a big stake in TVET, but there are 120 schools identified as pre-vocational. In these schools, there is more than one period per week of vocational subjects, which provides basic vocational guidance. Students learn about vocational areas such as agriculture, industrial arts (handicrafts), and home economics. They usually have seven periods per day, with lessons being 35 minutes long in primary education, and 45 minutes long in secondary education.

¹⁹⁰ Theingi: *Reorienting TVET Policy Towards Education for Sustainable Development in Myanmar*, 2009, http://www.unevoc.unesco.org/up/Myanmar_Country_Paper.pdf [accessed 20 Oct. 2014].

¹⁹¹ Interview 10: Steering Committee of Yangon Technical University and advisor for the MOST, Yangon, Myanmar, 14 June 2013.

¹⁹² Interview 15: CESR team, MOE, Yangon, Myanmar, 20 June 2013.

However, the quality of vocational education at these establishments is poor. MOE officials have declared that even though there is a period per week of vocational (agriculture) subjects, due to lack of teachers and proper facilities this is not implemented very well.

A significant problem for the MOE is the lack of computers available to schools. There are over 40,000 primary schools and over 30,000 secondary schools under the MOE, all of which suffer from serious infrastructural and equipment problems.¹⁹³

Ministry of Labour, Employment, and Social Security

There are three STCs under the MOLES. The first STC started in Yangon as a project between 1972 and 1976, supported by the UNDP and ILO. The objectives of the STCs are:

- a) to provide a steady flow of skilled workers to industries at all levels;
- b) to raise the quality and quantity of production by the systematic training of workers; and
- c) to provide systematically trained manpower to satisfy local and overseas labour requirements, matching the supply of skilled labour with demand.

The functions of the STCs are:

- a) to provide training for key personnel;
- b) to organize and implement training programmes within industry, and pre- and post-employment training;
- c) to introduce training standards to set up a national system of trade skills testing and certification; and
- d) to conduct various types of skills training for workers.

Skills training centre, Yankin (Yangon, established in 1976)

This centre has the following tasks:

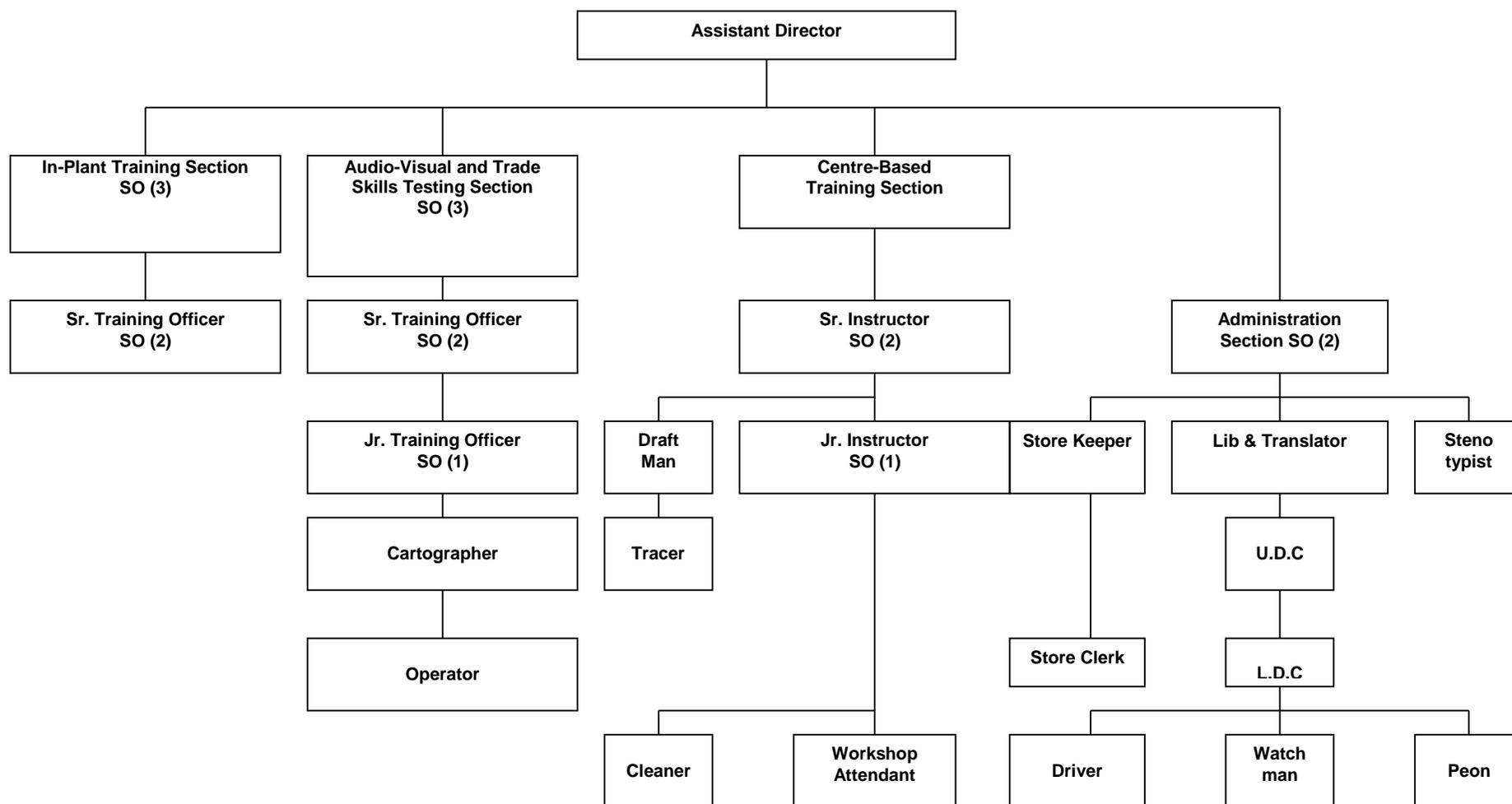
- a) in-plant training – supervisory course, instructional techniques course, trade skills testing technique course, and productivity improvement course;
- b) centre-based training – basic welding course, basic machinist course, basic electrical course, basic air-con repairing course, basic pipe fitter course, and basic computer application course; and
- c) promotion and coordination of skills development.

Currently the centre is not operating to its full potential due to a lack of financial resources. There are approximately 20 trainees at a single time, and six teachers or instructors from a 20-member staff. The target groups are:

- a) unemployed job-seekers aged 18–30;
- b) middle-school drop-outs; and
- c) employed workers who want to become supervisors within their current job.

¹⁹³ Interview 15: CESR team, MOE, Yangon, Myanmar, 20 June 2013.

Figure 28. Organization chart – STC, Yankin



Note: This chart is for 50 staff members, as was proposed when the centre was first established, but the director of STC Yankin stated that they now have only 20 staff members due to budget cuts from the MOLES and lack of financing from donors or other parties.¹⁹⁴

¹⁹⁴ Interview 1: STC, MOLES, Yangon, Myanmar, 10 June 2013.

Skills training centre, Mandalay (established in 2008)

Training courses:

- a) basic welding course;
- b) basic air-con repairing course;
- c) TIG gas welder;
- d) supervisor course;
- e) productivity improvement course; and
- f) basic computer application course.

Skills training centre, Patheingyi (established in 2011)

Training courses:

- a) basic welding course;
- b) pipe fitter course; and
- c) steel structure course.

Ministry of Industry¹⁹⁵

Industrial training centres¹⁹⁶

Industrial training centre Sinda (located at Sinda Township in Bago Region). This training centre was established in 1979 with the assistance of the Federal Republic of Germany. It provides the following eight courses for 200 trainees per year: machine tool operator course; tools and die maker course; machinery fitter course; motor vehicle mechanic course; electrical fitter course; electrical machine maker course; pattern maker course; and mechanical draughtsman course.

Industrial training centre Mandalay (located at Mandalay Township in Mandalay Region). This training centre was opened in 2008 with the assistance of the People's Republic of China. It provides the following six courses for 180 trainees per year: mechanical draughtsman course; conventional machine tool operator course; computer numerical control (CNC) machine tool operator course; electrical fitter course; computer and computer-aided design/computer-aided manufacturing (CAD/CAM) course; and welding, electro plating, and surface treatment course.

Industrial training centre Thagaya (located at Thagaya Industrial Complex in Bago Region). This training centre was opened in 2009 with the assistance of the Republic of Korea. It provides the following four courses for 120 trainees per year: machinery course; CAD/CAM course; electricity course; and electronics course.

Industrial training centre Pakokku (located at Pakokku Township in Magway Region). This training centre was opened in 2010 with the assistance of the Republic of India. It provides the following nine courses for 216 trainees per year: machinist – turner course; machinist – miller course; CNC machinist course; industrial electrician course; electronic mechanic course; heat treatment worker course; automobile mechanic course; sheet metal and welding worker course; and gas tungsten arc welding (TIG)/metal inert gas (MIG) welding worker course.

Industrial training centre Magway (located at Magway Industrial Complex in Magway Region). This training centre was opened in 2011 with the assistance of the Republic of Korea. It provides the following six automobile specialized courses for 150 trainees per year: automobile maintenance course; engine maintenance module; automobile electricity and electronic module; transmission and chassis module; body repair and painting module; and CAD/CAM course.

¹⁹⁵ It is reported that the MOI is quite open, which is why GIZ is focusing its work with them. Source: Interview 14, 2013: GIZ, Yangon, Myanmar, 19 June 2013.

¹⁹⁶ <http://www.industry.gov.mm/en/content/industrial-training-centers> [accessed 20 Oct. 2014].

Industrial training centre Myingyan (located at Myingyan Industrial Complex in Mandalay Region). This centre was opened in 2011 with the assistance of the Republic of India. It is in the implementation stage and will provide the following eight courses for 200 trainees per year: machinist – fitter course; machinist – turner/miller course; tools and die making course; CNC machinist course; industrial electrician course; electronic mechanic course; sheet metal and welding worker course; and foundry course.

In addition to the ITCs, the MOI has recently established the SME Development Centre.¹⁹⁷ The main responsibilities of the SME Development Centre include:¹⁹⁸

- a) the establishment of an SME database;
- b) to indicate requirements through setting up a database on SME;
- c) to provide recommendations to get loans;
- d) to provide advisory services and information for business start-ups through cooperation and coordination;
- e) to cooperate with regional and international organizations on holding workshops, meetings, and training courses;
- f) to hold SME festivals and trade fairs in cooperation with partners;
- g) to give online services linking ASEAN SME portals; and
- h) business matching with regional and international SMEs.

4.5 Cooperation with business and industry

This is based on the information gathered from the interviews conducted with officials of the MOLES, MOST, MOE, and MOI. As stated previously, it is very important that TVET providers (public or private) are demand-driven. One of the indicators that can demonstrate the extent to which TVET providers are demand-driven in Myanmar can be obtained by investigating private industry involvement in different stages of the TVET system. The focus is on the participation of business in decision-making, planning, and implementation of TVET.

4.6 Business involvement in decision-making

One of the indicators that shows the involvement of businesses and industry in the TVET system is the extent of their participation in decision-making of any kind or at any level (national or regional). From the interviews conducted, the situation seems to be similar in almost all of the four key ministries interviewed. Interviewee comments include:

- a) “There is no cooperation in any way. No, it is not involved in decision-making in any way.”¹⁹⁹
- b) “Right now private industry and business have no influence in decision-making in the universities or in the TVET system.”²⁰⁰
- c) “So far we don’t have any practice of business involvement; that is why I cannot say anything. So far we don’t have any system of cooperation between private business and government. Up to now, the businesses have had only advisory services.”²⁰¹
- d) “Right now there is not much involvement. But if the private businesses or organizations want to open a training centre, the MOLES is giving the land for free, and they can construct there.”²⁰²

¹⁹⁷ Interview 4: Central Department of SME Development, MOI, Yangon, Myanmar, 11 June 2013.

¹⁹⁸ This information is relevant for the bigger picture of TVET in Myanmar because, along with these responsibilities, the entrepreneurs of SMEs and the SME Development Centre have to deal with HRD as one of the main pillars of business development.

¹⁹⁹ Interview 15: CESR team, MOE, Yangon, Myanmar, 20 June 2013.

²⁰⁰ Interview 10: Steering Committee of Yangon Technical University and advisor for the MOST, Yangon, Myanmar, 14 June 2013.

²⁰¹ Interview 4: Central Department of SME Development, MOI, Yangon, Myanmar, 11 June 2013.

²⁰² Interview 1: STC, MOLES, Yangon, Myanmar, 10 June 2013.

- e) “Some companies ask for STC’s collaboration. They bring their workers to be trained in the STC, and the STC offers trained workers when there is an opening in these companies. However, the training that they provide for the private companies’ workers is done with the material contribution of the companies – in terms of facilities, equipment, consumable materials, electricity – whereas the STC [the government] is paying the salary of the teacher, lecturer, or instructor, depending on the course.”²⁰³

There is also some representation from bigger interest groups like the UMFCCI. They usually represent the interests of business in designing laws, as part of the working groups with the government.²⁰⁴ It appears that businesses are not involved as partners in TVET planning and designing skills standards, with the exception of a few small initiatives from the MOLES in the implementation level. Also, there seems to be little understanding of what “involvement in decision-making” means, due to the very long period of separation between the government and private industry.

Decisions on which TVET courses are to be offered

The MOST, as the institution with the largest number of providers, has a centralized decision-making system, and no business or industry partner is involved in the decision to open or close a TVET course. The MOST decides on the type of courses to be offered. At times, the management team of the provider makes proposals to the MOST, and the proposal is considered. Officially, it is the National Education Committee (NEC) that gives permission for a course to open or not.

The MOLES seems to be more open and to have more experience with regard to collaboration with private businesses. If a private business or industry requests that a course is offered, in order to train its workers, the director of the STC forwards the request to the supervisor in Department of Labour. If it is approved, the STC can offer that course. The director of the STC in Yangon has stated that they are providing what the employers request. However, there are very limited possibilities in terms of financial resources. They cannot offer a course more than twice a year, due to a lack of materials and other necessary conditions for realizing the course more often.²⁰⁵

Decision on the number of students

Interviewees have reported that decisions regarding the number of students are made in an arbitrary manner by the relevant ministry, often at the expense of the quality of education. Due to the large number of universities and students, decisions on capacity have left the institutions ill-equipped to deliver high quality.

When asked how the ministries make decisions on the number of students to enrol, interviewees reported that:

- a) the ministries are just doing “guess work” from the impressions and complaints of students or employers;
- b) there is no survey or coordinated collection of statistics being carried out;
- c) there are no tracer studies; and
- d) one interviewee commented, “We know only how many are getting in and how many are getting out, nothing else regarding their employment.”²⁰⁶

In some institutions, the number of students is fixed and it is not possible to change it according to varying needs, because of the limited resources of the relevant ministry. For example, skilled workers

²⁰³ Interview 1: STC, MOLES, Yangon, Myanmar, 10 June 2013.

²⁰⁴ Interview 10: Steering Committee of Yangon Technical University and advisor for MOST, Yangon, Myanmar, 14 June 2013.

²⁰⁵ Interview 1: STC, MOLES, Yangon, Myanmar, 10 June 2013.

²⁰⁶ Interview 10: Steering Committee of Yangon Technical University and advisor for MOST, Yangon, Myanmar, 14 June 2013.

in the construction sector are in high demand, but it is not possible to offer courses in that area because the ministry does not have the funds, and nor does the centre have the space to establish a workshop.²⁰⁷

All interviewees from the ministries recognized the need for more coordinated decision-making among the ministries, but this is considered a difficult task. The idea of involving businesses and industries in deciding the number of students nationwide or regionally is still very new for the ministries and the providers' staff as well. Also, the mechanism for involving businesses and industries is not yet fully operational.

However, there is a high awareness within the private sector that the government does not yet have the capacity to make decisions about the TVET in the country. The government needs to have statistics and data on demand, upon which to base its decisions, but business associations claim to be the only reliable sources that have authentic data.²⁰⁸

Curricula design

The DTVE is responsible for all curricula in pre-university TVET, but not in higher education TVET (e.g. technical universities). There is a curriculum development committee and there are groups of people in the DTVE who decide what should be taught. Many of these people have been trained abroad, and they are reported to have the right qualifications and knowledge for the job.²⁰⁹

The STCs have revised their curricula since 1988 using the old curricula and modules of the UNDP and ILO adopted since 1976. However, in the future they will be using the competency-based curricula developed by the NSSA. Currently, several stakeholders (private and public) are being trained on how to design competency-based curricula. Singapore Polytechnic International is training 90 people who will be designing the competency-based curricula. The training is organized for eight days per month for five months.²¹⁰

Currently, there seems to be no relation between the needs of industry and what public TVET providers are offering in their curricula. In the future, private TVET providers and public providers, which are part of the NSSA training on the competency-based curricula, are expected to have a more demand-driven curriculum. Much remains to be seen on the results of the CESR process. However, public providers under the MOST, like universities, colleges, and technical high schools, need to have a mechanism of involving industries and businesses in their curricula design process.

Percentage of practice work in the curricula

The time dedicated to practice in the curricula is implemented by working in the business and also working in the centre-owned workshops. The percentage of practice in the curricula is, again, an indicator of the opportunity for students and trainees to acquire practical skills and to make sure they are well prepared for the labour market. It is reported that the MOST has recently reformed the curricula and now, in the new-graduate level, there is 30 per cent practice and laboratory work. For the technician level in the GTI, there is between 40 per cent and 50 per cent practice in the curricula.²¹¹

The STCs from the MOLES have revised the curricula since 1988 after using the UNDP and ILO curricula from 1976. For the basic courses, the distribution is 70 per cent practical and 30 per cent

²⁰⁷ Interview 1: STC, MOLES, Yangon, Myanmar, 10 June 2013.

²⁰⁸ Interview 11: TRC Hotel and Vocational Training School, Yangon, Myanmar, 17 June 2013. In this part, the interviewee was speaking from a position as a hospitality business association representative.

²⁰⁹ Interview 10, 2013. Steering Committee of Yangon Technical University and advisor for MOST, Yangon, Myanmar, 14 June 2013.

²¹⁰ Interview 1: STC, MOLES, Yangon, Myanmar, 10 June 2013.

²¹¹ Interview 10: Steering Committee of Yangon Technical University and advisor for MOST, Yangon, Myanmar, 14 June 2013.

theoretical training, because the trainees predominantly have middle-school education. For the supervisors' courses, the distribution is 30 per cent practical and 70 per cent theoretical training, as these participants all have a bachelor's degree, which is a prerequisite in order to become a supervisor according to the STC director.²¹²

However, the percentage of practice in the curricula cannot be an indicator considered in isolation. Taking into account the ill-equipped public providers, the implementation of this practice time assigned, and its quality, are both uncertain.²¹³

Practice in businesses and apprenticeships (via contract or agreement)

Practice in a business or apprenticeship (via a contract or an agreement) is also an indicator of a demand-driven TVET system, because in this way it can foster better relations between the public institutions and businesses and industries; it can bring businesses and industries to the providers, and the providers can cater to the needs of businesses and industries in a better manner.

Regarding the higher-education TVET providers from the MOST, it is reported that students have a month-long practical experience during their vacations every year. This is called practical industrial training, and is a mandatory part of the curricula. They also have to complete an internship in a company during the second half of their final year. Additionally, they have to submit a report and defend it. Unfortunately, for the technical colleges, over the past ten years, due to the large number of students, it has been reported that it was not possible to find places for practice in businesses.²¹⁴

On the other hand, the understanding of "apprenticeship" from the STCs is quite different. Practice in business is not part of their job with the trainees, but after the trainees receive training in the STCs, they are sent to the Labour Exchange Office, where they are placed in industry jobs or receive on-the-job training.²¹⁵

Teacher training in new technologies

With regard to teachers' qualifications in, and learning about, new technologies and services in the businesses and industry, all of the interviewees from the public providers stated that there is no such practice in place.²¹⁶ The comments included:

- a) "There are not many places in industry";
- b) "Industry in the country is not well advanced";
- c) "The universities are considered elite and are ahead or leading"; and
- d) "Cooperation between universities and businesses is non-existent."²¹⁷

Business investment in TVET providers

There are some donations from individual entrepreneurs and businesses to universities, but there is no data available on the amounts or kinds of investments. Due to this almost non-existent relationship, as with teachers' qualifications, there are no statements or facts on investments of any kind, from

²¹² Interview 1: STC, MOLES, Yangon, Myanmar, 10 June 2013.

²¹³ As declared by all the interviewees, the public providers have great difficulties in implementing practice, within the bad conditions in the facilities, and with the lack of equipment and consumable materials.

²¹⁴ Interview 10: Steering Committee of Yangon Technical University and advisor for MOST, Yangon, Myanmar, 14 June 2013.

²¹⁵ Interview 1: STC, MOLES, Yangon, Myanmar, 10 June 2013.

²¹⁶ Interview 1: STC, MOLES, Yangon, Myanmar, 10 June 2013.

²¹⁷ Interview 10: Steering Committee of Yangon Technical University and advisor for MOST, Yangon, Myanmar, 14 June 2013.

businesses to public institutions.²¹⁸ The reasons presented by the public institution representatives refer more to the lack of vision from employers in Myanmar. Ideally, they should think about their employees' work lives as a continuous development (lifelong learning). The director of the STC in Yangon explained that in order to address this issue, it is necessary to establish evening schools, but she was not sure if employees would be interested in this.²¹⁹ On the other hand, businesses do not trust the government in terms of engagement, or the government-owned providers in terms of quality of training.²²⁰

Private-public partnerships and cooperation

As observed in the interviews, meetings, and the CESR studies, there are very few initiatives to promote cooperation between the public and private sectors in Myanmar. The education sector, and especially TVET, is not very different in this respect. There is a wide gap and, as a result, a strong need for partnership and cooperation between all the relevant ministries responsible for TVET providers, and the private sector.

The interviews were limited to a few representatives of the government and public institutions, but the majority (the MOST, MOE, and MOI)²²¹ confirmed that there is no collaboration with, and no involvement of business with regard to TVET or HRD in the country. Therefore, decisions on TVET, such as offers and curricula, are mainly taken without any consultation with the main beneficiaries.

Only the MOLES, via its STC, Yankin, reported to have a closer but limited relationship with businesses and business associations in addressing their needs for training. The MOLES reported that it is providing the courses asked for by the employers. It has established collaboration with the Myanmar Industrial Association, the Myanmar Engineering Society (MES), and the Myanmar Timber Association since 2002, in order to train workers, supervisors, and technicians from the private sector.²²² Additionally, some private companies have asked for collaboration from the STC. They have sent their workers to be trained in the STC, and the STC has proposed training for workers when there are openings in the companies. Currently, they are facing difficulties due to a lack of budget and a lack of international donor support since 1988. New teaching materials and equipment is needed, and the number of workshops has to be increased. At present, they are not able to implement more than one course at a time, and they have a limited number of courses per year.

Often, the training that they provide to the private companies' workers is performed with material contributions from the companies themselves (in terms of facilities, equipment, consumable materials, and electricity) whereas the STC (the government) pays the salaries of the teachers, lecturers, and instructors.²²³

The process of how to develop TVET cooperation with businesses and industry starts first with developing skills standards, which are developed further into training (curriculum) standards. These skills standards should be developed in close consultation with industry, to ensure that the required technical competencies and qualifications are those that industry requires in a particular occupation or skill. For example, in the construction sector, there are several occupations or skills – carpenter, electrician, plumber, bricklayer, mason, and welder, among others. When the standards and competencies – for example, of a welder – are developed, the industry should be involved, including

²¹⁸ Interview 1: STC, MOLES, Yangon, Myanmar, 10 June 2013. Interview 10: Steering Committee of Yangon Technical University and advisor for MOST, Yangon, Myanmar, 14 June 2013.

²¹⁹ Interview 1: STC, MOLES, Yangon, Myanmar, 10 June 2013.

²²⁰ Interview 10: Steering Committee of Yangon Technical University and advisor for MOST, Yangon, Myanmar, 14 June 2013.

²²¹ It is reported that the MOI collaborates closely with government-owned businesses and companies, but there is a need for more information on which areas they are collaborating in. Source: Interview 14: GIZ, Yangon, Myanmar, 19 June 2013.

²²² Interview 1: STC, MOLES, Yangon, Myanmar, 10 June 2013.

²²³ Interview 1: STC, MOLES, Yangon, Myanmar, 10 June 2013.

developing the assessment and certification tools to qualify and license the welder. In like manner, in the professional field, doctors, for example, receive their qualification after passing an assessment and certification process (board examination), to allow them to be a licensed doctor.

Figure 29. Education Directory and Guide for Everyone 2013



4.7 Taking stock of private training providers

Urban areas in Myanmar, and Yangon in particular, are experiencing an increase in the development of “edu-business”. As a result, unlike in other developed and developing countries, the privatization of education in Myanmar represents not so much a threat to the strengthening of a national education system, but an alternative for young people migrating to the cities, or when the places offered by public providers of TVET are not sufficient or do not meet the demand of the labour market.²²⁴

However, at this stage of development of the education system, and specifically of the TVET system, the access to reliable information is limited. The desk research and interviews show that one of the most challenging tasks is mapping the private TVET providers.

The difficulty lies in the very wide variety of private providers, from training centres and vocational schools, to training centres and overseas employment agencies, and religious groups (like Don Bosco)²²⁵ and others. There is also a wide variety of offers, different skill levels, occupations, durations, and certification recognized by different ministries in Myanmar or by international bodies. Therefore, the differentiation between all the private providers and the identification of their role in HRD is not a straightforward task. Their role, offers, and characteristics – e.g. the role of a provider as a training centre – overlap with their role as an overseas employment agency, or a shipbuilding company, and vice versa. For example, the TRC Hotel and Vocational Training School was a training centre, an employment agency, and a hotel establishment support service company for local and foreign businesses.²²⁶

²²⁴ *Evolving in Myanmar: the interplay of state business and the community*, 2007, p. 129.

²²⁵ Interview 14: GIZ, Yangon, Myanmar, 19 June 2013.

²²⁶ Interview 7: Kabar Services Co. Ltd., Yangon, Myanmar, 12 June 2013. Interview 11: TRC Hotel and Vocational Training School, Yangon, Myanmar, 17 June 2013.

4.7.1 Mapping private TVET providers

During the interviews, information on private TVET providers was requested in the form of lists and databases that could serve as a source for the fieldwork, but not every interviewee had information on private providers. As the CESR team noted, there is no central institution or organization that deals with the registration or licensing of private TVET providers. The private TVET providers are all registered in different ministries, usually the one related to their vocational field or to the service provided.²²⁷

Three lists with the contact information of private TVET providers were collected during the interviews.²²⁸ The lists were provided by:

- a) the director of the SCT, Yankin (MOLES);
- b) the MES (a business association); and
- c) Tech Training Centre (a private TVET provider).

As noted, the number of private TVET providers is large, and this presented a difficulty in the selection of representatives to be interviewed, so the focus was put on the most recommended providers.

One of the private TVET providers interviewed informed the team about the existence of a publication entitled *Education Directory and Guide for Everyone 2013*²²⁹ which shows that the private sector is attempting to be organized and visible to young people in Myanmar. This directory lists a large number of private training centres, which offer a wide variety of training in different occupations. The majority of these centres are reported to be very small, due to the fact that some of these private providers are just one part of a company's several other services. They undertake training for employment, and train workers to work abroad, often locating an overseas role for them. The students are trained for six to eight weeks, and are tested either by the training providers themselves or by the foreign companies who want to hire them. They are then sent to countries such as Thailand, Singapore, Japan, Malaysia, or the UAE, depending on the needs of the labour market in those countries.²³⁰ Some of the private providers interviewed reported that they are participating in the competency-based curricula training in the NSSA.²³¹

Profiling the private TVET providers

The number of private TVET providers directly interviewed was limited due to the tight schedule. However, some useful information was collected on how they operate, as shown in tables 15 to 20, and conclusions can be made on the way the private TVET sector is functioning in Myanmar.

²²⁷ Interview 15: CESR team, MOE, Yangon, Myanmar, 20 June 2013.

²²⁸ See Annex III for the detailed list of stakeholders interviewed.

²²⁹ EDGE: *Myanmar Education and Guide for Everyone*, MMRD publication. Available at <http://www.myanmar-education-directory.com/#home> [accessed 20 Oct. 2014].

²³⁰ Interview 3: MGMA, Maple Trading Co. Ltd., 11 June 2013. Interview 5: Tech Training Centre (Engineering), Yangon, Myanmar, 12 June 2013. Interview 6: Dual Tech Vocational Training Centre and Engineering Co., Ltd., Yangon, Myanmar, 12 June 2013. Interview 7: Kabar Services Co. Ltd., Yangon, Myanmar, 12 June 2013. Interview 11: TRC Hotel and Vocational Training School, Yangon, Myanmar, 17 June 2013.

²³¹ Interview 5: Tech Training Centre (Engineering), Yangon, Myanmar, 12 June 2013. Interview 6: Dual Tech Vocational Training Centre and Engineering Co., Ltd., Yangon, Myanmar, 12 June 2013.

Table 15. Dual Tech Training Centre

Institution or organization	Dual Tech Training Centre
When did the institution/organization begin operating?	Established in 1997 but registered in 2003. They have three buildings or branches, in the centre and in two other areas of Yangon.
Number of trainees	Annually, approximately 669 on average.
Number of teachers and instructors	Approximately 26 teachers and instructors They are well qualified. They are former or retired GTI teachers.
What is the target group for your services?	The age group is 15–40 years old, but the majority is 20–30 years old. Some have degrees of all kinds in different fields, but came here because they cannot find a job. Trainees are mostly finding jobs in the local and overseas labour market.
What kind of courses do you offer? Diploma and certification?	The courses you can see in the leaflet, but some of them are not available anymore. The duration of the courses is two to six months (from 72 to 216 hours). The diploma is valid even for the UK.
Costs for trainees?	Between 38,000 kyats and to 65,000 kyats per course, and a maximum of 300 hours, or five to six months' duration. "The trainees come several times for different training within the profession, because the first time they get 35 percent of the profession, then they come another time to get training and become really skilled." ²³²

Table 16. Tech Training Centre (Engineering)

Institution or organization	Tech Training Centre (Engineering)
When did the institution/organization begin operating?	1998.
Number of trainees:	Yearly approximations: HND – 25 students. City and Guilds – 575 students. Vocational courses – 200 students.
Number of teachers and instructors	35 teachers and instructors.
What is the target group for your services?	Those who want academic degrees are aged 17–25. They are high-school graduate students, distant learning students, or government technical college graduates who want a foreign certificate.
What kind of courses do you offer? Diploma and certification?	HND started this year (Academic). City and Guilds.

²³² Interview 6: Dual Tech Vocational Training Centre and Engineering Co., Ltd., Yangon, Myanmar, 12 June 2013.

Table 17. Hotel and vocational training

Institution or organization	TRC Hotel and Vocational Training School, Yangon	Mandalay Hotel and Vocational Training School (MHVT), Mandalay
When did the institution/organization begin operating?	2006.	September 2012.
Number of trainees:	Approximately 350 (TRC).	Approximately 800 (MHVT).
Number of teachers and instructors	10.	14.
What is the target group for your services?	Hospitality staff.	Hospitality staff.
What kind of courses do you offer? Diploma and certification?	Hotel and vocational courses. Preparing students for the local labour market and for employment overseas in hospitality jobs.	Hotel and vocational courses.

Table 18. Kabar Services

Institution or organization	Kabar Services Co. Ltd.
When did the institution/organization begin operating?	Established five years ago.
Number of trainees	Yearly from 300 to 600.
Number of teachers and instructors	19 trainers.
What is the target group for your services?	Age group 18–40 years old.
What kind of courses do you offer? Diploma and certification?	Pipe fitting. Structure fitting. Welding.

Table 19. Arbourfield

Institution or organization	Arbourfield
When did the institution/organization begin operating?	2000.
Number of trainees	Approximately 800 yearly, of which 400 are employed overseas.
Number of teachers and instructors.	Six full-time and four part-time.
What is the target group for your services?	19–35 years old, of different levels of education (middle school for general, semi-skilled workers, and high school or university for technician level).
What kind of courses/services do you offer? (Specify field and duration of the course.) Diploma and certification?	Mainly basic training courses on pipe fitting, steel fitting, welding (3G, 4G, and 6G) of six to eight weeks' duration. Employment services for overseas jobs to Singapore, UAE, and Malaysia, and mostly for shipyard staff.

Table 20. Centre for Vocational Training Myanmar

Institution or organization	Centre for Vocational Training (CVT) Myanmar
When did the institution/organization begin operating?	December 2002. Vocational training centre established by development partner contribution.
Number of teachers and instructors:	37 teachers and instructors.
Number of trainees (yearly):	500.
What is the target group for your services?	18 to 22 years old, ninth grade level and 11th grade level of basic education.
What kind of courses do you offer? (Specify field and duration of the course.) Diploma and certification?	Cabinet maker, metal worker, commercial assistant, hotel and gastronomy; all are three-year apprenticeship programmes.

4.7.2 Cooperation with businesses and industry

Via the interviews, the report also looks at private TVET providers with regard to how demand-driven they are, and how they understand cooperation with businesses.

The interviewees reported that some private providers are cooperating with private businesses and are catering to their needs for a trained and skilled labour force. By being less bureaucratic, more open and flexible, they have more opportunities than public providers to collaborate with private businesses. Some of the private providers expressed concerns about the capacity of their training centre to cater properly, in terms of quality and quantity, to the needs of businesses for a skilled labour force. They also lack support in terms of facilities, rooms, equipment and tools, qualified teachers, and well-structured curricula.²³³

Private providers also have their own understanding of collaboration with private business, which is quite broad. When posed the same question of whether they are cooperating with private businesses, the replies included:

- a) “Yes, I am cooperating with the business sector. For example, sometimes we train their workers if they ask us, and we train workers that they need to employ. Sometimes we are asked by the companies to provide workers, so we collect CVs and place them in jobs in the electronics field or battery manufacturing.”²³⁴
- b) “Yes, we are cooperating with some companies like the Max Company, Myanmar Beer, London Cigarette, in sending our trainers to train their workers in the companies. Other training we have had in collaboration with the companies is on hydraulics, automobile maintenance and repair, air-conditioning repair, and electronic control.”²³⁵
- c) “Yes, we train apprentices from the private enterprises, also from public enterprises.”²³⁶

Due to the very different nature of private TVET providers in comparison with public ones, the ways in which they collaborate with businesses and industry differ considerably. These TVET providers are businesses as well, and are profit-oriented and naturally seek more ways to fulfil the human resources needs of private businesses.

²³³ Interview 5: Tech Training Centre (Engineering), Yangon, Myanmar, 12 June 2013. Interview 6: Dual Tech Vocational Training Centre and Engineering Co., Ltd., Yangon, Myanmar, 12 June 2013.

²³⁴ Interview 5: Tech Training Centre (Engineering), Yangon, Myanmar, 12 June 2013.

²³⁵ Interview 6: Dual Tech Vocational Training Centre and Engineering Co., Ltd., Yangon, Myanmar, 12 June 2013.

²³⁶ Questionnaire from CVT, 2013.

Business involvement in decision-making

In terms of involvement of businesses in decision-making, only the Centre for Vocational Training (CVT) reported involving industry representatives at some level of decision-making, together with their professional teachers and experts.²³⁷

Decision on which TVET courses to offer

CVT reported that it engages in discussions with enterprises on the application of the dual education system for young people, and explains to employers that this vocational education will improve their productivity, efficiency, and, as a result, their overall business.²³⁸ The other providers reported that there are several ways in which they decide to offer a course:

- a) “The demand to open a certain course comes from the businesses, their clients, and the federation of business associations where they adhere.”²³⁹
- b) “If the industry has a special request to open a special course, if we don’t have these courses, we try to cooperate with other private providers who can offer them, who have the facilities and trainers.”
- c) “When specific employers or companies ask for courses, we open them.”²⁴⁰
- d) “We also have some fixed or regular training that does not depend on the demand of businesses, but the demand of the students. Whether we can open these courses depends on the consumable materials, electricity, or facilities at our disposal.”²⁴¹

Decision on the number of students

A decision on the number of students depends on approximately the same criteria:

- a) “The number of students depends on the request of the business; any number that they request.”²⁴²
- b) “They have regular courses but it depends on the number of students requests.”²⁴³
- c) “Within their capacity, facilities, and resources, including teachers, although here is higher demand.”²⁴⁴

Curricula design

Curricula design is also a very important consideration in the implementation of TVET. The concern for private providers is that by being registered under different ministries, covering different offers for very different target groups, and catering to the various needs of businesses, the immediate question is what kind of curricula they should be operating and how far the businesses are involved in designing or updating their curricula.

CVT is adopting curricula that have been designed by a Swiss partner school. But the Swiss expert teachers and local teachers have worked together and adapted the courses to local needs, industry needs, and ASEAN standards.²⁴⁵

²³⁷ Questionnaire from CVT, 2013.

²³⁸ Questionnaire from CVT, 2013.

²³⁹ Interview 11: TRC Hotel and Vocational Training School, Yangon, Myanmar, 17 June 2013.

²⁴⁰ Interview 5: Tech Training Centre (Engineering), Yangon, Myanmar, 12 June 2013. Interview 7: Kabar Services Co. Ltd., Yangon, Myanmar, 12 June 2013. Interview 9: Arbourfield Manpower and Training Services Co. Ltd., Yangon, Myanmar, 13 June 2013.

²⁴¹ Interview 6: Dual Tech Vocational Training Centre and Engineering Co., Ltd., Yangon, Myanmar, 12 June 2013.

²⁴² Interview 5: Tech Training Centre (Engineering), Yangon, Myanmar, 12 June 2013.

²⁴³ Interview 6: Dual Tech Vocational Training Centre and Engineering Co., Ltd., Yangon, Myanmar, 12 June 2013.

²⁴⁴ Questionnaire from CVT, 2013.

²⁴⁵ Questionnaire from CVT, 2013. Interview 11: TRC Hotel and Vocational Training School, Yangon, Myanmar, 17 June 2013.

The tourism training centre uses curricula developed under the Asia-Australia Cooperation Programme.²⁴⁶

In other private providers, the trainers and specialists develop the relevant curricula. But in the case of some specific courses, they negotiate the curricula and adjust the programme length and course fees according to the needs of the businesses.²⁴⁷

One private provider reported that it is still using the curriculum that the technical high schools followed before 1988. However the curriculum has been modernized and modified by the teachers, who previously taught in the technical high schools. Another provider reported that it does not have its own curriculum. Its references are the curriculum and teaching materials delivered by the certification body which is the counterpart of the overseas company.²⁴⁸

Percentage of practice in the curricula

There are a variety of models on the practical content of the curricula used by the different providers:

- a) CVT has quite a specific model, because it is implementing the dual apprenticeship system. Thirty per cent is practical training, but the apprentices also work in businesses and industry throughout the week.²⁴⁹
- b) TRC Hotel and Vocational Training School reported 60 per cent theory and 40 per cent practice (the model is six weeks of theory, four weeks of practice, but it can be changed based on needs), plus there is also three months of practice or on-the-job training.²⁵⁰
- c) Tech Training Centre reported only 20 per cent to 30 per cent practice, because it lacks the necessary facilities for practice. Mostly the students train in theory.²⁵¹
- d) Dual Tech reported approximately 70 per cent practice.²⁵²
- e) Kabar Services, as one of the very demand-driven and mostly well-equipped providers, reported 20 per cent theory and 80 per cent practice, and during exams the same ratio – one hour of theory and four hours of practice.²⁵³

What is striking is the fact that there are so many different options due to the different methods of implementing TVET by these varied providers.

Practice in businesses or apprenticeships (via contract or agreement)

As mentioned before, the only provider that has an apprenticeship system is CVT. Its students have to work in the relevant business (training company), and this is based on an agreement between the CVT, each apprentice, and the training company. The company is required to report on progress every six months.²⁵⁴

In other cases, for some courses – for example, in welding – the students have one week of practice in companies in the industrial zones, but without a contract.²⁵⁵

²⁴⁶ Interview 11: TRC Hotel and Vocational Training School, Yangon, Myanmar, 17 June 2013.

²⁴⁷ Interview 5: Tech Training Centre (Engineering), Yangon, Myanmar, 12 June 2013. Interview 6: Dual Tech Vocational Training Centre and Engineering Co., Ltd., Yangon, Myanmar, 12 June 2013.

²⁴⁸ Interview 7: Kabar Services Co. Ltd., Yangon, Myanmar, 12 June 2013.

²⁴⁹ Questionnaire from CVT, 2013.

²⁵⁰ Interview 11: TRC Hotel and Vocational Training School, Yangon, Myanmar, 17 June 2013.

²⁵¹ Interview 5: Tech Training Centre (Engineering), Yangon, Myanmar, 12 June 2013.

²⁵² Interview 6: Dual Tech Vocational Training Centre and Engineering Co., Ltd., Yangon, Myanmar, 12 June 2013.

²⁵³ Interview 7: Kabar Services Co. Ltd., Yangon, Myanmar, 12 June 2013.

²⁵⁴ Questionnaire from CVT, 2013.

²⁵⁵ Interview 6: Dual Tech Vocational Training Centre and Engineering Co., Ltd., Yangon, Myanmar, 12 June 2013.

Some providers reported a desire to establish an apprenticeship model in the future,²⁵⁶ but there is the risk of misunderstanding of what an apprenticeship model might mean in TVET, since there is no established model in the country as yet.

Teachers and businesses

CVT reports that its teachers and instructors consult with businesses to learn about new technologies and services, to update the curricula, and also to carry out continuous coaching for teaching methods to businesses.²⁵⁷

In other private providers of TVET, the observed process is quite different. One stated that it sends its teachers to learn air-conditioning servicing with Mitsubishi, and to upgrade their skills and knowledge of new technologies. It also plans to send its teachers to car-repair companies to learn about modern electronics in cars.²⁵⁸

In another TVET provider, the majority of its teachers were over 60 years old and not very motivated to undergo further training. Some of its part-time teachers were around 40 years old, and were more willing to seek ways to train themselves. The provider reported being in need of new and well-qualified teachers.²⁵⁹

Business investment in TVET providers

It was generally reported that there are no investments in TVET providers by other private businesses, or the government, and that the providers just manage with their own financial resources.²⁶⁰ Some private business owners are very willing to invest and contribute towards TVET and HRD, but overall it was reported that businesses contribute only rarely.²⁶¹

Public-private cooperation

Cooperation is limited in the private sector too. On one hand, private and public TVET centres cooperate with each other in terms of exchange of information.²⁶² On the other hand, private providers cooperate with each other by offering and utilizing services they cannot offer to their students themselves:

- a) “Yes, we collaborate with other private providers, like the Kabar training centre or the General Services Organizations (for engineering). They are both training and service providers for the industry. Kabar is also an overseas testing centre, and we send our students to be tested there.²⁶³
- b) “We do not have pneumatics courses, so we are sending our students to visit the companies. The same is for the Programme Logic Controller (PLC) courses. We are hoping for further collaboration in putting together other courses in the future.”²⁶⁴

Another kind of collaboration among providers is in sharing trainers and sometimes teaching materials and methods.²⁶⁵

²⁵⁶ Interview 5: Tech Training Centre (Engineering), Yangon, Myanmar, 12 June 2013.

²⁵⁷ Questionnaire from CVT, 2013.

²⁵⁸ Interview 5: Tech Training Centre (Engineering), Yangon, Myanmar, 12 June 2013.

²⁵⁹ Interview 6: Dual Tech Vocational Training Centre and Engineering Co., Ltd., Yangon, Myanmar, 12 June 2013.

²⁶⁰ Interview 11: TRC Hotel and Vocational Training School, Yangon, Myanmar, 17 June 2013. Interview 5: Tech Training Centre (Engineering), Yangon, Myanmar, 12 June 2013.

²⁶¹ Questionnaire from CVT, 2013.

²⁶² Questionnaire from CVT, 2013.

²⁶³ Interview 5: Tech Training Centre (Engineering), Yangon, Myanmar, 12 June 2013.

²⁶⁴ Interview 5: Tech Training Centre (Engineering), Yangon, Myanmar, 12 June 2013.

²⁶⁵ Interview 6: Dual Tech Vocational Training Centre and Engineering Co., Ltd., Yangon, Myanmar, 12 June 2013.

The governmental institutes have discussed the possibility of training the students of the governmental technical colleges, but this has not happened yet.²⁶⁶

In one case, teachers from private providers worked with the Ministry of Energy to train the ministry's staff, but such instances are rare.²⁶⁷

Kabar Services has collaborated with the government (the MOL and especially STCs) by providing the syllabus; sometimes providing facilities for skills competitions in fitting and welding work; and in testing X-ray machines.²⁶⁸

However, one of the interviewees stated that the cooperation between training centres and private or governmental centres and schools cannot be considered cooperation in the full meaning of the term, since discussions regarding competency standards do not constitute active cooperation.²⁶⁹

Demand-driven TVET initiatives

This question was perceived as difficult to understand by the majority of the respondents. Except for CVT, there were no reported models or initiatives that prepare students for the labour market.²⁷⁰ Many of the interviewees stated that they had no information on other demand-driven models, and no information on demand-driven TVET initiatives.²⁷¹

4.8 Informal vocational training

As might be expected, there is a degree of informality within the TVET provisions. When the question was raised with interviewees if they knew of informal TVET providers, many asked what this meant, and provided different definitions, such as: not registered, not licensed for the specific purpose, not regular, or curricula not recognized or accredited by the NSSA, among others.

There are some training providers who are carrying out informal training, but this is not recognized training. These providers are sometimes registered as organizations, or not registered at all. Those that are registered, are registered under different ministries, making it a very challenging task to map them all.²⁷²

As an example, there are private, informal training centres for tailoring in Yangon, but also throughout the rest of the country. Most are very small, with five to six domestic sewing machines. The trainees learn basic skills using the machines, and pay approximately MMK30,000 (\$30) per month to learn to make clothes. The courses usually take three months, which translates to MMK90,000 (approximately \$100 as the cost of the whole course). There are many similar centres around the country.

In order to address this problem, the deputy minister of labour, who is also the chair of the NSSA, has asked local governments in each state and division to collect data about the private training centres (or private TVET providers), in order to assess the supply and demand for skills. Only five or six states and regions have finalized their data collection. Taking into consideration the fact that there are seven states and seven regions in Myanmar, the majority have not yet provided the required information. The idea

²⁶⁶ Interview 6: Dual Tech Vocational Training Centre and Engineering Co., Ltd., Yangon, Myanmar, 12 June 2013.

²⁶⁷ Interview 5: Tech Training Centre (Engineering), Yangon, Myanmar, 12 June 2013.

²⁶⁸ Interview 7: Kabar Services Co. Ltd., Yangon, Myanmar, 12 June 2013.

²⁶⁹ Interview 11: TRC Hotel and Vocational Training School, Yangon, Myanmar, 17 June 2013.

²⁷⁰ Interview 11: TRC Hotel and Vocational Training School, Yangon, Myanmar, 17 June 2013.

²⁷¹ Interview 5: Tech Training Centre (Engineering), Yangon, Myanmar, 12 June 2013. Interview 6: Dual Tech Vocational Training Centre and Engineering Co., Ltd., Yangon, Myanmar, 12 June 2013.

²⁷² Interview 10: Steering Committee of Yangon Technical University and advisor for MOST, Yangon, Myanmar, 14 June 2013.

is that in the future, each state and region will have to take care of its own supply and demand issues regarding TVET. However, the problem now is that the local staffs do not have the capacity, knowledge, or skills to collect the initial data.²⁷³

Also under the “informal” designation falls job training and classroom training. In this sense, there is a lot of informal training, because nearly all employers train their own workers on the job. Informal training is widespread, especially in handicrafts and food and beverage production, and especially in the Upper Myanmar region. There have been no surveys or other data collection processes on these training programmes, which cover informal training in different professions like tailoring, motor and engine repair in small workshops, waiters in tea shops, and hairdressers.²⁷⁴

Some interviewees stated that they don’t have much specific information on informal training, but they were aware that nearly every town and village must have some sort of training centre that is not registered.²⁷⁵ In the Rakine State, for example, there is much informal training in food and beverages, bakery, and carpentry, among others.²⁷⁶ Another informal initiative is a French restaurant in Yangon whose owner delivers training via supervised trainees, like a private school. It caters to the needs of students from villages.²⁷⁷

Many NGOs are also providing informal training, depending on the regional need. Save the Children is working with drop-out students in the 8–19 age group to help them find work according to the needs of the regions. There are also many reintegration training programmes, including for people returning from China, Thailand, and other countries in the region. Local NGOs are supported by UNICEF, the International Organization for Migration (IOM), and ADB, among others.²⁷⁸ More importantly, there are also programmes on the reintegration of ex-child soldiers

Monastic schools provide English, Japanese, some hotelier service, and some computer skills training, which are not recognized by the MOST or other relevant ministries.²⁷⁹ Indeed, there is a lot of monastery training throughout the country (see the informal education group in the CESR).²⁸⁰ Sometimes, teachers from private TVET providers are asked to teach in the monasteries, in subjects such as food and beverage services, English, and computer skills.²⁸¹

4.9 Training capacity versus demand

When it comes to training capacity versus demand, the focus becomes the matching of the needs or demands of private businesses and industry, and the supply from the education and training system. At this point, the issue with regard to TVET supply is not only the quantity, but also the quality of TVET graduates and trainees. As one of the interviewees stated, and as mentioned in the previous chapters, discussing demand-driven TVET is difficult without reliable statistics.²⁸² Therefore, the centre of the discussion in this section will be the opinions of the interviewees on the satisfaction of employers in

²⁷³ Interview 1: STC, MOLES, Yangon, Myanmar, 10 June 2013.

²⁷⁴ Interview 5: Tech Training Centre (Engineering), Yangon, Myanmar, 12 June 2013. Interview 15: CESR team, MOE, Yangon, Myanmar, 20 June 2013.

²⁷⁵ Interview 7: Kabar Services Co. Ltd., Yangon, Myanmar, 12 June 2013. Interview 2: MES, Yangon, Myanmar, 11 June 2013. Interview 4: Central Department of SME Development, MOI, Yangon, Myanmar, 11 June 2013.

²⁷⁶ Interview 6: Dual Tech Vocational Training Centre and Engineering Co., Ltd., Yangon, Myanmar, 12 June 2013.

²⁷⁷ Interview 14: GIZ, Yangon, Myanmar, 19 June 2013.

²⁷⁸ Questionnaire from CVT, 2013.

²⁷⁹ Interview 13: MTF, Yangon, Myanmar, 19 June 2013.

²⁸⁰ Interview 14: GIZ, Yangon, Myanmar, 19 June 2013.

²⁸¹ Interview 11: TRC Hotel and Vocational Training School, Yangon, Myanmar, 17 June 2013.

²⁸² Interview 10: Steering Committee of Yangon Technical University and advisor for MOST, Yangon, Myanmar, 14 June 2013.

Myanmar on education level, vocational profile, knowledge and skills within the profile, and work attitude.

Annex III shows that there is a long list of public institutions offering some kind of TVET. However, it is still reported that these are not sufficient, and the quality is not up to the standards required by private businesses and industry. Several interviewees reported that the current TVET system is not prepared to meet the demands of the future. While the system might respond to some requirements of the labour market, the private sector has not established a systematic approach to this. Bigger companies conduct their own training, while in some developing sectors like construction, there are a lot of foreign workers already in Myanmar.

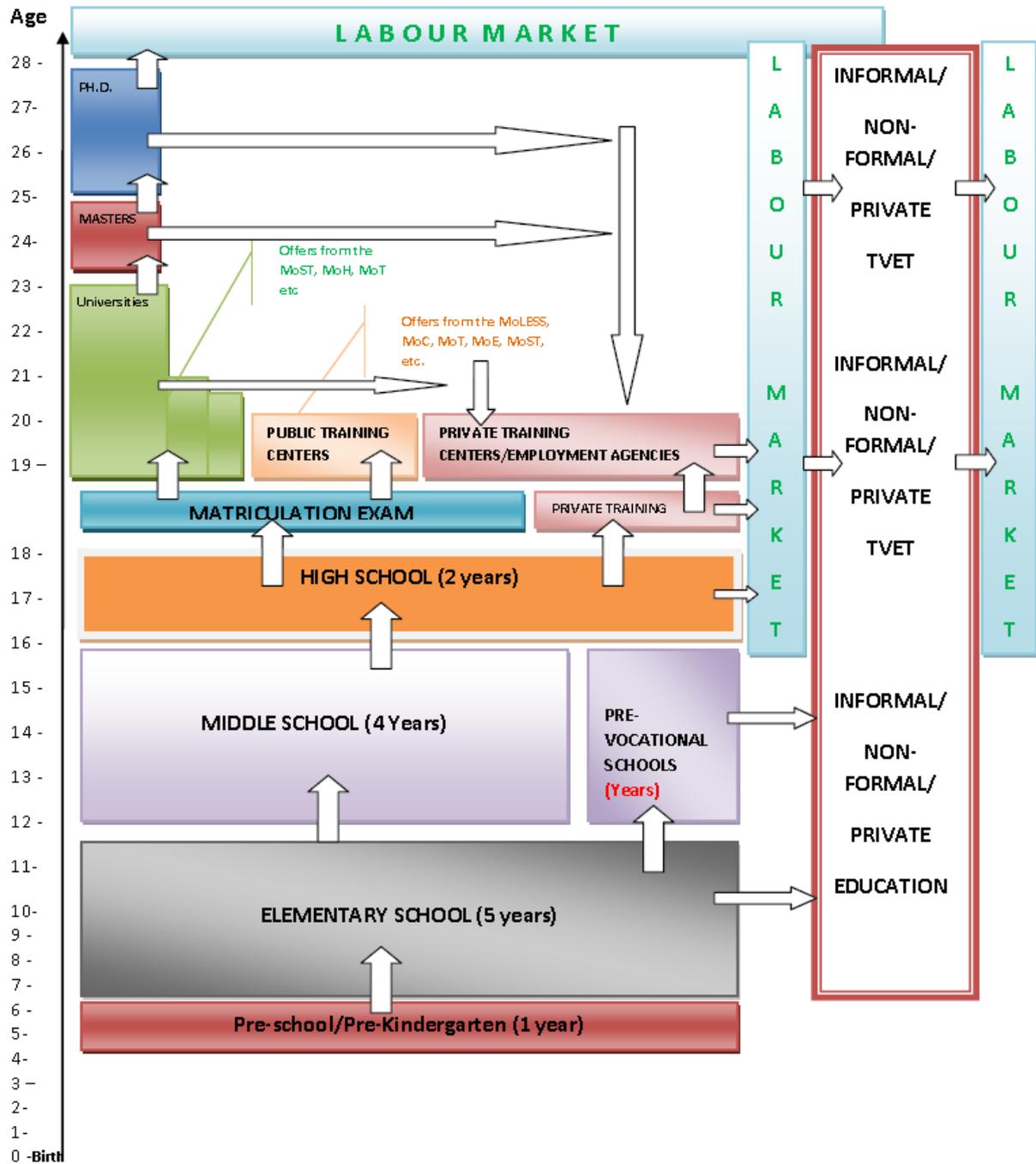
In the interviews, it was reported that the majority of graduates from the formal TVET system (higher-education institutions) turn to private TVET providers or undergo industry training (including on-the-job-training) to fill in the gaps in basic practical learning, laboratory work, or technological updates within their field of study.²⁸³ This statement was often repeated during the interviews, from representatives of public and private TVET providers alike. One interviewee stated: “Students go back from the formal education system to the private training centres because they completely lack practical skills.”²⁸⁴

In order to give a clear overview, Figure 30 below shows the current HRD situation in Myanmar, and not only the formal TVET system. This scheme shows the career paths of students who, even with a PhD or master’s-level education, turn to the private training centres or undertake other informal training in order to acquire the practical skills needed for their profession.

²⁸³ Interview 8: Newest Garment Manufacturing, Yangon, Myanmar, 13 June 2013. Interview 10: Steering Committee of Yangon Technical University and advisor for MOST, Yangon, Myanmar, 14 June 2013.

²⁸⁴ Interview 10: Steering Committee of Yangon Technical University and advisor for MOST, Yangon, Myanmar, 14 June 2013.

Figure 30. Scheme of the TVET system and HRD in Myanmar²⁸⁵



²⁸⁵ In this figure, monastic education is excluded due to its specific educational purpose.

Figure 30 illustrates what the interviewees reported on how the labour force in Myanmar is prepared, and how workers – professional, skilled, and unskilled alike – reach the local or overseas labour markets.

4.9.1 Employers' satisfaction

In this section, the skills and competences required for the development of economic sectors and their relation to the satisfaction of the employers will be reviewed. One group of interviewees shared a common opinion that the satisfaction of employers depends on what kind of employers they are, from which field of the economy, and from which country.²⁸⁶ In general, Myanmar companies are happy with their employees, but foreign companies are not. The companies from foreign countries are asking for pre-qualification records of the people they want to hire, because this is related to the safety rules in their own countries.²⁸⁷

Another group of the interviewees were of the opinion that employers are not satisfied at all.²⁸⁸ The schools are not providing quality, and they are only supply-driven, not demand-driven.²⁸⁹ One interviewee commented, “When employees graduate from the state schools or even private schools, they are mostly not qualified for the job that they are doing.”²⁹⁰

The opinions from the construction sector regarding the level of skills and knowledge of the students who graduate from the MOST institutions – engineers and technician indistinguishably – were very low. The graduates have very poor knowledge and skills. Employers complain that graduates cannot even answer simple questions regarding their profile.²⁹¹

Other opinions were that employers might not be happy, but the employers and business owners themselves do not know the procedures, and do not have knowledge within the relevant vocational field or economic sector. That is why they say sometimes that students are not good. For example, most of the hotel owners are operating without prior study or training. That is why there is a need for more trained staff in the tourism sector.²⁹²

Production workers have mostly a middle-school education, while middle managers have a degree-level education. According to STC, Yankin, employers should be happy with the education level.²⁹³ However, businesses and business associations claim that most production workers have not even reached 8th grade education.²⁹⁴ Most workers in the industrial zones have a very low education.²⁹⁵ For some jobs, workers need to have passed at least the 8th grade (which is middle school), but for some others, like the garments workers, it is not so important. One interviewee commented, “For our industry, there is no limit in terms of education. Workers’ education can be from any level. Education it is not important at all, since we need to train them to use the machines. They start as helpers and after five months to a year on the sewing machine they become skilled workers in that specific process, but still it depends on the supervisors and how they train the new workers.”²⁹⁶ With regard to the supervisors, we

²⁸⁶ Interview 7: Kabar Services Co. Ltd., Yangon, Myanmar, 12 June 2013.

²⁸⁷ Interview 7: Kabar Services Co. Ltd., Yangon, Myanmar, 12 June 2013. Interview 6: Dual Tech Vocational Training Centre and Engineering Co., Ltd., Yangon, Myanmar, 12 June 2013.

²⁸⁸ Interview 5: Tech Training Centre (Engineering), Yangon, Myanmar, 12 June 2013.

²⁸⁹ Interview 13: MTF, Yangon, Myanmar, 19 June 2013.

²⁹⁰ Interview 5: Tech Training Centre (Engineering), Yangon, Myanmar, 12 June 2013.

²⁹¹ Interview 10: Steering Committee of Yangon Technical University and advisor for MOST, Yangon, Myanmar, 14 June 2013.

²⁹² Interview 11: TRC Hotel and Vocational Training School, Yangon, Myanmar, 17 June 2013.

²⁹³ Interview 1: STC, MOLES, Yangon, Myanmar, 10 June 2013.

²⁹⁴ Interview 2: MES, Yangon, Myanmar, 11 June 2013.

²⁹⁵ Interview 4: Central Department of SME Development, MOI, Yangon, Myanmar, 11 June 2013.

²⁹⁶ Interview 3: MGMA, Maple Trading Co. Ltd., 11 June 2013.

do not train them, they already have skills and experience, but since 2008 the association has established the Garment Training Centre, and they organize training for the supervisors, mechanics for garments factories, quality control, and top management training for company owners.”²⁹⁷

Thus, for the garments manufacturing industry, education level is not an important factor for those seeking a job. The main training provider in the garments industry states that the minimum level for becoming a supervisor is to pass the matriculation exam, with working experience compensating for lack of further education.²⁹⁸ Those who want to work in the garments sector have different levels of education; some barely know how to read and write, while some have a university education. After training, they are sent to the factories, and they are trained again depending on the needs. “So people of different education levels who do not have, or could not find, a job come here and get trained for a few weeks and then they get a job – certainly.”²⁹⁹

There are other skills except education level and diplomas, which are mentioned as required from the employers. One of the interviewees from a private training provider stated: “I am an engineer and I have many friends like myself, and they are employers. Many of the employers I meet say that their employees have a BA or MA, but they do not have practical skills for work. The employees do not have critical and analytical thinking. They also lack creative thinking and initiative.”³⁰⁰

Another interviewee commented, “Some employees do not have proper thinking. They want to be wealthy, but they don’t know how.”³⁰¹

Satisfaction with education levels depends on the company. Some companies require very advanced and qualified workers. However, the majority of companies are moderate in size, and technical skills matter.³⁰²

In the tourism sector, the situation is different. Most of the workers in this sector have passed the matriculation exam. However, there are no tourism or hospitality schools at the secondary level after the 8th grade. Tourism business representatives are aware that neighbouring countries like Thailand, Malaysia, and Singapore all have education in hospitality, and that the quality of tourism services in those countries is better. They recognize that the tourism sector in Myanmar has a very urgent need of mid-level to top-level management. Mid-level managers need to have an undergraduate-level of hospitality education, or a bachelor’s degree.³⁰³

Employers in general are not happy with the knowledge and skills of their new employees. For example, university graduates often do not have management skills, and so they need to be trained further. Employers also train their workers on the job, and they never send a new worker to receive training for supervision before acquiring several months of work experience.³⁰⁴

Regarding vocational profile and knowledge and skills, on one hand, interviewees from public providers reported that businesses are doing on-the-job-training, either part-time or full-time, therefore they

²⁹⁷ Interview 3: MGMA, Maple Trading Co. Ltd., 11 June 2013.

²⁹⁸ Definition of the matriculation exam presented in the CESR, Focal Area B (ii) Basic Education Policy: “The current matriculation exam at the end of Class 11 is conducted for two purposes: one for basic education high-school completion, and the other for university entrance. Students who pass the matriculation exam are considered qualified to attend institutions of higher learning; however, fewer than half of the enrolled students are believed to pass this exam,” p.32.

²⁹⁹ Interview 16: Myanmar Garment Human Resources Development Centre, Yangon, Myanmar, 20 June 2013.

³⁰⁰ Interview 5: Tech Training Centre (Engineering), Yangon, Myanmar, 12 June 2013.

³⁰¹ Interview 5: Tech Training Centre (Engineering), Yangon, Myanmar, 12 June 2013.

³⁰² Interview 10: Steering Committee of Yangon Technical University and advisor for MOST, Yangon, Myanmar, 14 June 2013.

³⁰³ Interview 13: MTF, Yangon, Myanmar, 19 June 2013.

³⁰⁴ Interview 1: STC, MOLES, Yangon, Myanmar, 10 June 2013.

should be satisfied with their workers.³⁰⁵ On the other hand, representatives from the private sector said that they are not fully satisfied. Vocational profile knowledge is currently very low. This may be caused by a lack of secondary education in vocational schools. In the past (20–30 years ago) there were many vocational schools, but the government decided to close them. Because of this, Myanmar now suffers from a shortage of skilled workers. At the same time, there are some skilled workers who do not have, or cannot find, opportunities in their fields. Currently there are 3 million workers from Myanmar in Thailand, and 1 million in Malaysia.³⁰⁶ There is also a general problem reported that, in Myanmar, employers do not permit their workers to get further qualifications once they are fully hired.³⁰⁷

Regarding work attitude, some interviewees believed that everything was established in the work contract (which is compulsory for each employee), and that specifications about attitude are supposed to be followed by the workers.³⁰⁸ Some interviewees reported that the work attitude of employees depends on the employer. Statements included:

- a) “The work attitude depends on the employer’s discipline towards the workers.”³⁰⁹
- b) “In terms of workers’ attitude, it all depends on the management. The type of management establishes the attitude of the workers.”³¹⁰
- c) “Some have very good attitudes and are hard-working; however, this depends on their internal motivation. Support and incentive programmes for employees are very important.”³¹¹

Some interviewees believed that attitude is related to prior vocational education and experience, and that if employees have previous education and training, they also have good attitude.³¹²

4.10 Strengthening education and training capacity

In this section the study attempts to find common ground and ways for businesses and industry to participate in programme and curricula design – in the form of forums, consultations, work-placement development, exchanges of expertise, students’ work practice, and apprenticeships, among others.

The interviewees were asked: How can private industry and businesses get involved in the TVET system across all levels? Thus, how can TVET be improved and be more demand-driven?

Suggestions from the interviewees in terms of collaboration with industry and private businesses were divided into groups according to the topics, and in terms of strengthening the education capacity of the country’s TVET providers.

List of suggestions from the interviewees

Among the responses to the questions were the following:

- a) **Involvement of businesses in high-level committees.** The NEC supervises 168 universities and colleges under 13 ministries. The MOE is the chair, because it has 66 institutions. The other Ministries are the MOST with 62 institutions, the Ministry of Health (MOH) with 15 institutions, and other members under 13 ministries. The private sector should be part of the NEC. Only in this way can the system become more demand-driven.³¹³

³⁰⁵ Interview 1: STC, MOLES, Yangon, Myanmar, 10 June 2013.

³⁰⁶ Interview 2: MES, Yangon, Myanmar, 11 June 2013.

³⁰⁷ Interview 6: Dual Tech Vocational Training Centre and Engineering Co., Ltd., Yangon, Myanmar, 12 June 2013.

³⁰⁸ Interview 1: STC, MOLES, Yangon, Myanmar, 10 June 2013.

³⁰⁹ Interview 6: Dual Tech Vocational Training Centre and Engineering Co., Ltd., Yangon, Myanmar, 12 June 2013.

³¹⁰ Interview 2: MES, Yangon, Myanmar, 11 June 2013.

³¹¹ Interview 5: Tech Training Centre (Engineering), Yangon, Myanmar, 12 June 2013.

³¹² Interview 11: TRC Hotel and Vocational Training School, Yangon, Myanmar, 17 June 2013.

³¹³ Interview 15: CESR team, MOE, Yangon, Myanmar, 20 June 2013.

- b) **An apprenticeship model should be established.** Businesses have to get workers with general and basic knowledge in the relevant field, but for specific professions, the businesses themselves have to train the skilled workers they need.³¹⁴
- c) **Better matching of TVET offers and regional needs and conditions.** Instead of opening courses in a region where there are no factories, the government should train more people in the construction sector – carpenters, bricklayers, metal workers, electricians, and plumbers. This basic training should be emphasized for the whole country.³¹⁵
- d) **Industrial zones’ representatives to be involved officially in TVET planning.** In order to achieve demand-driven TVET, it is important to involve the representatives of the 18 industrial zones in the NEC.³¹⁶
- e) **Expanding of TVET offers.** In order to achieve a skilled labour force, there is the need to invest in other TVET offers, like post-secondary. The framework should be open; if young people make mistakes, they can go back to try again. There should be other long-term offers, but always taking financing into consideration.³¹⁷
- f) **A multifaceted and multi-level approach in the dialogue between the supply and the demand sides.** For the creation of a demand-driven TVET, it is necessary to have a very close relationship with businesses, and support for government-business dialogue on issues like how an existing industry can be involved in occupational standards and curricula design, the industrial coordinator’s role, and the flexibility of the schools.³¹⁸
- g) **Measures towards decentralization and flexibility of the public TVET providers.** The current education system is very strict, with lots of rules and regulations; it is very centralized, and therefore not flexible or able to meet the needs of businesses. The government should change the rules by giving more flexibility to the schools (top-down development).³¹⁹

Box 6
Quality in the TVET system

On one hand, “quality” itself is a very complex and challenging issue, but on the other hand “quality assurance” of the TVET system is a very important and cross-cutting theme, tied closely to a demand-driven TVET system. As the studies and analysis on the framework of the CESR have pointed out, there are numerous challenges with regard to quality in the current TVET system, and there is a total lack of quality assurance mechanisms in place in the whole education system, and specifically the TVET system, in Myanmar.

The interviews also confirm the lack of quality and quality assurance mechanisms in training offers and delivery; teacher training and qualifications; curricula and curricula design; facilities, equipment, consumables, and teaching materials; and the certification and accreditation of providers. Additionally, as observed during the interviews, lack of quality and quality assurance mechanisms touches not only the public TVET providers but also the majority of private TVET providers in Myanmar. As noted in the previous chapters, a quality assurance system is under way and several efforts are being made.

There is not yet a National Qualification Framework (NQF); however, attempts are being made to establish one that also meets the standards of ASEAN countries. The NSSA will take a major role in the future accreditation and certification of TVET providers. Competency-based curriculum training is taking place, and private providers are also involved.

³¹⁴ Interview 2: MES, Yangon, Myanmar, 11 June 2013.

³¹⁵ Interview 3: MGMA, Maple Trading Co. Ltd., 11 June 2013.

³¹⁶ Interview 15: CESR team, MOE, Yangon, Myanmar, 20 June 2013.

³¹⁷ Interview 14: GIZ, Yangon, Myanmar, 19 June 2013.

³¹⁸ Interview 14: GIZ, Yangon, Myanmar, 19 June 2013.

³¹⁹ Interview 14: GIZ, Yangon, Myanmar, 19 June 2013.

5. Labour market information and training planning

The labour market in Myanmar has been going through substantial reform, driven by the need to respond to international and regional commitments, domestic needs, and a changing political and economic environment. The most recent changes include an overhaul of the legal framework through the introduction and amendment of rules and regulations guiding relations between employers and employees. A number of laws show an improvement in thinking regarding the link between the labour market and skills and training.³²⁰

The new laws include the Labour Organization Law,³²¹ which sets out the rules for the establishment, duties, and responsibilities of labour organizations – to protect the rights of the workers, to maintain good relations among the workers and between the employer and the workers, and to enable the labour organizations to work systematically and independently.

With regard to training planning, the law suggests the direct involvement of the committees of the labour organizations in the following skills development functions:

- a) to provide job training and skills training with a view to the emergence of workers with improved qualifications, to support the development of productivity (Article 16 [d]); and
- b) to use the fund of the labour organizations for matters provided in their constitutions and rules, such as social welfare, education, health, culture, sports, and training courses related to skills, or for those matters adopted by the majority of the members at the general meeting of that organization, and called for such purposes (Article 27).

The Social Security Law, 2012 (Draft)³²² supports the development of the state's economy through production improvement and by providing more security and health care to workers, who are the major productive force of the country. On training, the law sets out that the unemployed have the right to skills training allowed by the Social Security Board (Article 38 [e]) and access to public employment centres, but can be subject to termination of unemployment benefits if they decline to attend vocational training.

In addition, the MOLES is developing a National Plan on Myanmar Workforce Skills Development to provide skills training for workers, strengthen employment services, and ensure job opportunities. The Employment and Skills Development Law has been approved by Parliament and provides a clear structure for the promotion and provision of training.

The effort towards creating a comprehensive framework for the functioning of the labour market has proceeded in parallel with the effort to create a stronger link between demand and supply in the labour market, and to raise awareness among employees of their right to participate in labour organizations, access training, and enjoy a balance between obligations and security.

The aspect that is yet to be developed is the creation of appropriate channels to collect, process, and transfer labour market information. This is the subject of the following section.

³²⁰ Existing labour laws in Myanmar include: the Employment and Training Act (1950), the Employment Restriction Act (1959), the Employment Statistics Act (1948), the Factories Act (1951), the Labour Union Law (2011), the Leave and Holidays Act (1951), the Minimum Wages Act (1949), the Oilfields Labour and Welfare Act (1951), the Payment of Wages Act (1936), the Social Security Act (1954), the Shops and Establishments Act (1951), the Trade Disputes Act (1929), and the Workmen's Compensation Act (1923).

³²¹ The Pyidaungsu Hluttaw Law No. 7/2011, 11 October 2011, <http://www.mol.gov.mm/en/wp-content/uploads/downloads/2012/05/Labour-Org-Law-ENG.pdf> [accessed 20 Oct. 2014].

³²² Draft law, 2012, <http://www.mol.gov.mm/en/wp-content/uploads/downloads/2012/06/21-6-2012SSB-Law-Drafteng.pdf> [accessed 20 Oct. 2014].

5.1 Availability and accessibility of labour-market information

The lack of labour market information has been pointed out as one of the reasons behind the skills mismatch, and as a major constraint for policy-making and human resource and skills development. Most recently, this topic was succinctly presented at a capacity-building workshop on labour market information and analysis in ASEAN, and includes the following:

- a) Myanmar has not yet had a population census, and has to refer to the estimate and projections made by the Department of Population. The current estimates show a total population of 58.38 million (2008).
- b) The Department of Labour conducted an LFS in 1990 and the projection data can only be available for later years. Total labour force: 29.95 million; labour force participation rate: 66.16 per cent.
- c) According to the 1990 labour-force survey, the national unemployment rate is about 4 per cent, and therefore the employment rate is about 96 per cent. In reality, updated data on unemployment is not available due to a lack of a new labour force survey or a special survey made for this purpose.
- d) The ILO, in cooperation with the MOLES and the CSO, is currently undertaking a comprehensive national labour force survey and a school-to-work transition survey. The data should be available in 2015, and will play a critical role in informing policy priorities and defining a human resources strategy.

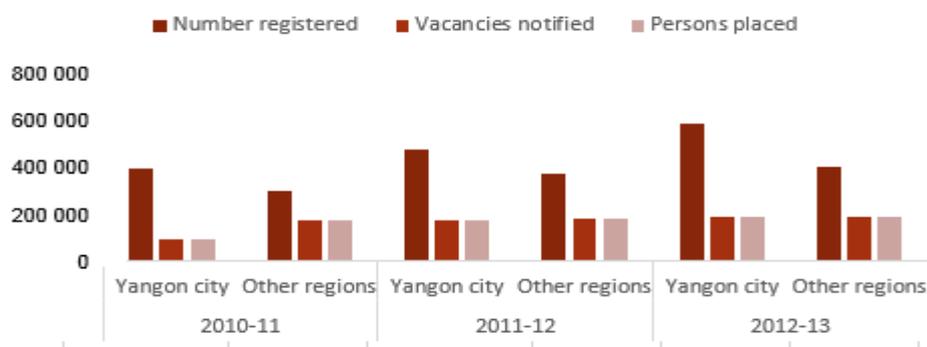
As the CESR Phase 1 observes, the only current labour market information comes from the office of the Department of Labour. The data is based on the number of workers registered at these offices, and can provide an estimate for the urban unemployment situation.

The unemployed can express interest in any vacancy referred to the offices by employers. The data is restricted to areas where the Department has offices and to the vacancies referred to the offices by employers. The CESR review also points out that no labour market programs were visible at the time of observation.³²³

The role of the Department of Labour in relation to the accessibility of information is the publication of vacancies for the 16 labour offices in Yangon and 61 others around the country, as shown in Figure 31. The Department of Labour is also involved in providing:

- a) staffing supply services to industries and establishments in the public, cooperative, and private sectors, through its network of labour officers in labour exchange offices; and
- b) jobseekers who are 18 years of age with the opportunity to register at any of the labour exchange offices.

Figure 31. Vacancies registered



Source: Department of Labour.

³²³ CESR Phase 1 Rapid Assessment, 2013. *Labour market analysis: The demand for higher education and TVET graduates*, draft.

5.1.1 Sources of labour and employment statistics

According to government data, the Department of Labour collects the number of workers and establishments in the 18 industrial zones, and conducts an Establishment Survey. This survey covers the private and joint-venture sector and could indicate the number of workers in various establishments. It also includes 62 types of self-employed workers in the informal sectors. This survey has been conducted on a yearly basis, but information is not widely available.

Information about employment agencies in Myanmar is listed by the Employment and Training Division, which covers both local employment agencies³²⁴ and overseas employment agencies.³²⁵ Since the adoption of the Overseas Employment Law, recruiting agencies have been allowed to freely operate in Myanmar and, to an extent, have driven the creation of various courses – in the languages of the destination countries and in skills demanded. The Myanmar government collects information on the employees legally working abroad, but it is often the case that it cannot keep a record of the workers and enterprises operating in the border areas, especially the border with Thailand.³²⁶

Other sources that produce labour statistics include the CSO. The CSO has conducted surveys that provide partial information on the labour market.³²⁷ The data from these surveys is not always widely available, and it has failed to feed into the policy-making process, since it is mostly based on projections and estimates. The surveys conducted by the CSO have limitations in their coverage, whereas the IHLCS has proven to be one of the most useful instruments, especially in the CESR review. The CSO's capacity to conduct sound labour market surveys will be strengthened through the partnership with the ILO for the LFS.

The review done is inconclusive on whether there is data available from the Department of Labour to users operating in HRD, education, and training, but also on how data is collected. Phase 2 of the CESR will explore options for enhancing the quality of programmes and their relevance to regional, national, and personal needs and aspirations, especially the labour market and the information availability on these aspects.

The Employment and Skills Development Law³²⁸ has been approved and passed by Parliament, and tasks ahead for the MOLES involve drafting the implementing guidelines and decrees. The law provides for the implementation of a mechanism to exchange information between the government employment agencies and employers (Article 4 [c]). More precisely, the law declares that: “The ministry shall arrange to ask the employer to inform of the vacant employment positions in his business to the relevant employment and labour exchange office, in accordance with the stipulation...” The importance of the law for the development of the sector requires the active support of the Ministry of Labour in setting up a structure for implementation.

Chapter 2 points to a stronger commitment of the government to “arrange easy opportunities and jobs to assist the job-seeker to select suitable to his age, capability to get the job to be stable in the job and develop the skills to assist the employer to get the suitable and compatible job.”³²⁹

³²⁴ Local Employment Agency Lists, <http://www.mol.gov.mm/en/departments/department-of-labour/employment-and-training-division/local-employment-agency-lists/> [accessed 20 Oct. 2014].

³²⁵ List of Overseas Employment Agencies, <http://www.mol.gov.mm/en/wp-content/uploads/downloads/2013/03/Agency-List18-2-2013.pdf> [accessed 17 Jan. 2014].

³²⁶ Interview 11: TRC Hotel and Vocational Training School, Yangon, Myanmar, 17 June 2013.

³²⁷ These include the Household Income and Expenditure Survey, the National Manufacturing Survey, and the Integrated Household Living Conditions Assessment, <http://www.adbi.org/files/2010.03.03.cpp.day2.sess4.6.country.myanmar.pdf> [accessed 20 Oct. 2014].

³²⁸ The Pyidaungsu Hluttaw Law, Chapter II: Labour Exchange, Article 4. Draft Law. Draft translation from Burmese.

³²⁹ The Pyidaungsu Hluttaw Law, Chapter II: Labour Exchange, Article 3. Draft Law. Draft translation from Burmese.

5.2 Vocational guidance

Career information and guidance systems are a key component to creating a system for lifelong learning. Vocational guidance can help make the best use of human resources in the labour market, as well as in education, by creating better matches between skills and interests and existing opportunities for work and learning. These systems have an important role in active labour market policies and active welfare-to-work policies.

An integrated vocational guidance system is absent in Myanmar's education and training system, and teachers and other staff are not prepared to take over the role of career counselling. This will remain a challenge in Myanmar due to the lack of timely labour market information and cooperation between the public and private sectors.

During the field study conducted in association with this report and in connection with the CESR Phase 1, information on the demand for TVET was collected from representatives of industry associations, professional associations, enterprises, and training offices. As seen during the fieldwork, and as the Myanmar government has acknowledged, the education and training system and the labour market are largely disconnected, and the system is not aimed at responding to market demand and the demands of students. Given the unavailability of data, the CESR is conducting further labour market analysis to assess the market demand for current and future TVET graduates.

The Government of Myanmar points out that with regard to human resources, the country benefits from three factors, which have to be built on and developed:³³⁰

- a) a considerable portion of the total population is at working age;
- b) there are semi-skilled and skilled migrants abroad; and
- c) there is extremely mobile internal migration.

As seen in Chapter 2, low-cost and low-skilled workers in Myanmar can give a short-term boost to manufacturing industry, but longer-term growth will eventually come from higher-value-added sectors. Skilled workers will be needed to generate longer-term economic development, and there is much to be done in this direction.

According to the 2010 data,³³¹ only 5 per cent of the country's workers had tertiary or higher-education diplomas, while only 15 per cent have completed secondary education. As seen in the previous chapter, this is much lower than the levels for the rest of the region.

During the interviews conducted in the field research, some employers expressed the opinion that workers are not prepared for jobs, and that vocational education and training is lacking.³³² Skilled workers and professionals in fields such as law, accounting, and economics are scarce.³³³

In its analysis of Myanmar's growth potential, McKinsey identified the following as urgent priorities for the government in raising the long-term supply of skills:

- a) boosting the output of the education system;
- b) eliminating barriers to job creation, especially in sectors that employ low- and semi-skilled workers; and
- c) creating a vocational training system that helps new job entrants as well as workers changing jobs mid-career.

³³⁰ T. M. Htwe, paper presented at "Seminar on Improving Organizations' Labour Management Systems to Strengthen Trade Cooperation among the ASEAN Community", Bangkok, Thailand, 2012.

³³¹ McKinsey. *Myanmar's moment: Unique opportunities, major challenges*, June 2013, http://www.mckinsey.com/insights/asia-pacific/myanmars_moment [accessed 20 Oct. 2014].

³³² Interview 9: Arbourfield Manpower and Training Services Co. Ltd., Yangon, Myanmar, 13 June 2013.

³³³ Interview 11: TRC Hotel and Vocational Training School, Yangon, Myanmar, 17 June 2013.

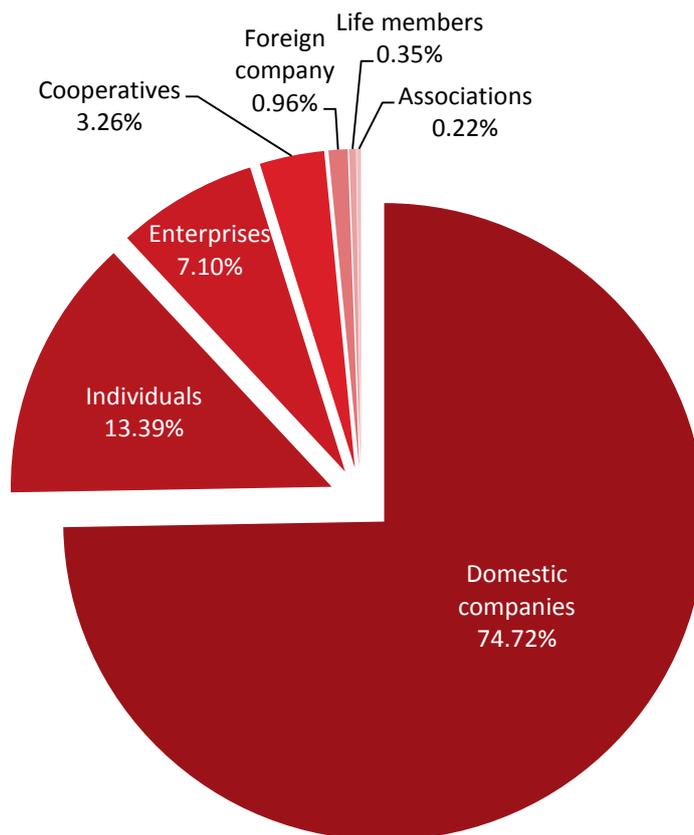
According to one of the interviewees, the lack of skilled labour makes some companies in Myanmar hire foreign workers, because they are better qualified and have better skills.³³⁴ They also pointed out that in order to have demand-driven TVET, it is important to involve the representatives of the 18 industrial zones in the NEC.³³⁵

The UMFCCI encompasses all private sectors and acts as an advocate in front of the government in policy formulation, and in voicing the interests of the business community. According to the interviews,³³⁶ the UMFCCI is comprised of 18,310 domestic-based companies, 53 associations, 1,742 enterprises, 800 foreign companies, 235 cooperatives, 3,280 individuals, and 85 life members; in total, 24,505 members, with the different proportions represented in Figure 32. The UMFCCI is cooperating with business associations, acting as a bridge between the state and the private sector, supporting SMEs towards stronger competitiveness, and leading the Myanmar business community into a globalized economy. This is achieved by:

- a) organizing HRD activities such as seminars, workshops, training, conferences, and business forums;
- b) representing business interests and the views of the private sector to the government;
- c) organizing and participating in local and foreign trade fairs and exhibitions; and
- d) dissemination of trade and market information.

These are some of the activities that are critical to creating a demand-driven TVET system.

Figure 32. Membership in the UMFCCI



Source: UMFCCI brochure collected during fieldwork.

³³⁴ Interview 5: Tech Training Centre (Engineering), Yangon, Myanmar, 12 June 2013.

³³⁵ Interview 15: CESR team, MOE, Yangon, Myanmar, 20 June 2013.

³³⁶ Interview 18: UMFCCI, Yangon, Myanmar, 21 June 2013.

SMEs are the major driving force for the economic development of the country.³³⁷ Approximately 92 per cent of all business enterprises are SMEs; they contribute to over 80 per cent of the country's yearly GDP, and employ nearly 90 per cent of the working population.

SMEs in Myanmar can be found not only in the private sector but also in the state sector. The largest number of SMEs is engaged in agricultural production. Rice milling, wheat flour mills, oil mills, small-scale sugar mills, production of plain sugar, cleaning and size separation of beans and pulses, among other activities, are all agricultural-based industries dominated by SMEs. In addition to those private businesses, there are private small and medium enterprises in other sectors of the economy such as tourism, transportation, mining and services.³³⁸

Up to November 2007, there were 9,799 registered industries in 18 industrial zones. Among them, 7,940 industries were of small or medium size. The majority of SMEs are located in the Yangon and Mandalay industrial zones.

5.3 Availability of TVET data

As an interviewee from a technical university summed up during the fieldwork: “You need reliable statistics to talk about demand-driven TVET.”³³⁹ So far, our observations, combined with the work done during the CESR Phase 1, Rapid Assessment, are that the availability and accessibility of TVET data is poor. This also relates to the missing link between the available TVET data and the labour market.

Data on the provision of TVET in Myanmar is very limited due to the lack of an overall technical and vocational education policy, the fragmented management of the TVET sector, and the lack of a common definition of what constitutes TVET. These three limitations add to the difficulty of clearly putting a line between the higher education subsector and the TVET sector.

As Chapter 4 explored, TVET data is available from the different ministries under which the institutions are supervised. In this way, the MOST provides data for those TVET students that take courses at the technical universities, GTCs, GTIs, and GTHSs.

The CSO collects information on vocational trainees by type of skill.³⁴⁰ The information covers the following academic years, which vary depending on the type of course, making comparison among courses difficult: 1990–91, 1995–96, 2000–01, 2004–05, 2005–06, 2006–07, 2007–08, 2008–09, 2009–10, and, most recently, 2010–11. The CSO tables, enclosed to this report in Excel format, present the number of students who sat the exams and the number who passed.

Table 21 below provides an example for five periods, for the number of vocational trainees by skill, for the GTIs. The information with regard to GTI trainees is the most detailed.

³³⁷ H. Si and C. C. Myint: *The expectations of small and medium enterprises towards their employee as a means of improving TVET institutions (A case study in Myanmar)*, 2008, p. 3., <https://mail.voitech.org.bn:987/online/PaperPresenters/06Curriculum/12HninSi.pdf> [accessed 17 Jan. 2014].

³³⁸ H. Si and C. C. Myint: *The expectations of small and medium enterprises towards their employee as a means of improving TVET institutions (A case study in Myanmar)*, 2008, <https://mail.voitech.org.bn:987/online/PaperPresenters/06Curriculum/12HninSi.pdf> [accessed 17 Jan. 2014].

³³⁹ Interview 10: Steering Committee of Yangon Technical University and advisor for MOST, Yangon, Myanmar, 14 June 2013.

³⁴⁰ CSO data collected during fieldwork.

Table 21. GTI vocational trainees by skill

Course	Vocational trainees by type of skill – GTIs					
		2006–07	2007–08	2008–09	2009–10	2010–11
GTIs total	A	10 137	9 929	13 427	11 778	38 856
	P	8 464	7 152	12 499	10 858	28 919
a. Civil engineering	A	1 751	2 042	2 843	2 387	11 491
	P	1 491	1 577	2 727	2 242	9 029
b. Electrical communication	A	1 543	1 478	1 895	1 694	6 218
	P	1 169	1 076	1 758	1 642	5 079
c. Electrical power	A	1 988	1 990	2 492	1 955	6 096
	P	1 556	1 265	2 265	1 819	4 324
d. Mechanical power	A	1 746	1 326	2 006	1 785	7 615
	P	1 566	987	1 788	1 625	5 286
e. Machine tools and design	A	-	-	-	-	-
	P	-	-	-	-	-
f. Mining	A	16	27	81	45	130
	P	12	16	71	35	71
g. Plastic and rubber engineering technology	A	84	86	148	97	-
	P	77	56	144	86	-
h. Food and chemical engineering technology	A	64	118	206	158	-
	P	58	75	197	137	-
i. Information technology	A	646	678	1 018	981	2 280
	P	551	510	960	869	1 831
j. Mechatronic	A	590	512	686	710	1 629
	P	497	374	662	655	1 163
k. Computer numerical control (CNC)	A	1 196	1 000	1 304	1 180	1 005
	P	1 059	708	1 250	1 031	553
l. Petroleum	A	108	122	193	238	372
	P	85	62	173	214	171
m. Aqua technology	A	51	50	29	33	-
	P	48	41	26	32	-
n. Plant and tissue culture	A	29	26	21	16	-
	P	29	24	17	16	-
o. Bio-Gas and bio mass	A	14	29	10	23	-
	P	14	22	10	23	-
p. Textile	A	97	131	158	109	252
	P	82	95	145	91	170
q. Metallurgy	A	47	69	69	67	167
	P	32	53	62	56	121
r. Architecture	A	167	245	268	286	799
	P	138	211	244	271	578
s. Nuclear technology	A	-	-	-	14	70
	P	-	-	-	14	58
t. Biotech	A	-	-	-	-	49
	P	-	-	-	-	42
u. Chemical	A	-	-	-	-	683
	P	-	-	-	-	443

A = appeared; P = passed. According to CSO data, years refer to academic year, which varies depending on the type of course.
Source: Technical and Vocational Education Department.

The statistics that CSO publishes cover:

- a) GTIs – civil engineering, electrical communication, electrical power, mechanical power, machine tools and design, mining, plastic and rubber engineering technology, food and chemical engineering technology, information technology, mechatronics, computer numerical control, petroleum, aqua technology, plant and tissue culture, bio-gas and bio-mass, textiles, metallurgy, architecture, nuclear technology, biotech, and chemicals;

- b) GTIs (evening classes only for 2000–01) – civil engineering, electrical communication, electrical power, mechanical power, machine tools and design, and plastic and rubber engineering technology;
- c) engineering technology (evening classes only for 1995–96) – civil engineering, electrical power, and mechanical power;
- d) handicrafts – recent data available for totals up to 2008–09 and for the following subdivisions – hairdressing, tailoring training, home electrical repair, general machine repair, women's and children's wear, hand knitting and women's wear, woodworking, men's shirts and jackets, and shirts and women's wear;
- e) GTHSs – recent data for 2010–11 available only for building technology, electronic technology, electrical technology, building services technology, auto mechanics technology, and machining technology.

Table 22 below provides an example of the available data for five periods since 2006.

Table 22. Vocational trainees by course

S.N.	Institutes		Technical, agricultural, and vocational trainees				
			2006-07	2007-08	2008-09	2009-10	2010-11
I. Technical Institutes							
1	Government Technical Institutes	A	10 137	9 929	13 427	11 778	38 856
		P	8 464	7 152	12 499	10 858	28 919
2	Government Technical Institutes (Evening)	A	-	-	-	-	-
		P	-	-	-	-	-
3	Agricultural Institutes	A	739	174	76	331	253
		P	739	173	75	330	249
4	Education College (Grade I/JATC)	A	5 607	4 614	5 671	4 844	4 942
		P	5 607	4 614	5 671	4 844	4 942
5	Education College (Grade II/PATC)	A	1 399	245	219	75	112
		P	1 399	245	219	75	112
Cooperative Colleges							
6	Yangon	A	582	644	738	1 300	1 380
		P	570	619	700	1 284	1 262
	Others	A	523	675	1 012	1 112	1 243
		P	507	668	971	1 078	1 210
7	Myanmar Lacquerware College	A	30	45	45	103	102
		P	30	41	41	60	102
II. Technical Schools							
1	Government Technical High Schools	A	-	-	-	-	4 412
		P	-	-	-	-	3 952
2	Agricultural High Schools	A	-	-	-	-	-
		P	-	-	-	-	-
3	Commercial Training School	A	442	481	816	724	575
		P	394	463	772	687	575
4	Computer Operator course	A	223	79	51	35	108
		P	221	76	51	35	102
5	Engineering Technology Evening Classes	A	-	-	-	-	-
		P	-	-	-	-	-
6	Handicraft	A	419	350	392	-	-
		P	342	346	380	-	-
7	Weaving Schools	A	198	188	157	166	14
		P	198	188	157	166	14
8	Fishery Schools	A	588	628	709	829	776
		P	588	628	709	829	776
9	Others	A	2 445	2 964	2 887	4 188	4 369
		P	2 319	2 767	2 595	3 869	4 070

A = appeared; P = passed. According to CSO data, years refer to academic year, which varies depending on the type of course. Yangon Cooperative Degree College has awarded bachelor's degrees since 2000-2001. Other colleges (Phaunggyi, Mandalay and Sagaing) give diplomas.

Sources: 1. Technical and Vocational Education Department; 2. Small-Scale Industries Department; 3. Department of Agricultural Planning; 4. Fisheries Department; 5. Co-operatives Department; 6. Department of Educational Planning and Training; 7. Department of Social Welfare.

This information is insufficient in providing an overall picture of the participants in the sector, and updated information on other types of schools except the GTIs is needed.

The other statistical summary provided by the CSO on the TVET sector includes the number of technical, agricultural, and vocational trainees over the same periods as above, and, once again, the duration and start and end dates of the academic years differ between the different courses. This is one of the few sources that combines this information, not only from the MOST but also from other TVET-

responsible departments such as the Small-Scale Industries Department, the Department of Agricultural Planning, the Fisheries Department, the Co-operatives Department, the Department of Educational Planning and Training, and the Department of Social Welfare. The data provides the numbers of trainees who have attended and passed the courses, for two large groups: technical institutes and technical schools. Data is not sufficient to feedback information for the development of the TVET sector, and therefore, further data collection will be essential during Phase 2 of the CESR.

Information that needs to be collected at this stage includes, but it is not limited to, the following:

- a) **Students involved in TVET-institution education in different education subsectors** – primary education, post-primary education (subgroups), by age group; according to the MOST, there were 79,771 trainees under the ministry. There is no data from other ministries, but with an early exit of approximately 1 million students from basic and secondary education, the Myanmar TVET system can only provide access to a limited number of these students,³⁴¹ but this also includes students in higher education (whose number should be deducted, as they are not part of the TVET system).
- b) **Number of private and public vocational education institutions, and enrolment figures** – currently estimated at 459 public training institutions providing TVET in Myanmar. There are no statistics for the number of private training providers, but a qualified assumption is that in total, there are no more than 800 to 1,000 training institutions, including private providers.
- c) **Number of TVET institutions and student enrolment in urban and rural areas** – this information is needed, to inform of equitable access to TVET and to distinguish between different regional needs.
- d) **Breakdown between male and female enrolment in public and private TVET institutions.**
- e) **Number of elementary schools, high schools, and universities with TVET courses, and enrolment figures** – according to the JICA Data Collection Survey in November 2012, the total enrolment of the skills development centres was 9,549 trainees for 2011 and 2012, but only 445 of the 9,540 trainees were enrolled for vocational training. The rest were enrolled for Korean-language courses (1,426) and overseas induction (7,678).³⁴² There is no information on short-course delivery from other ministries like the Ministry of Transport, MOHT, Ministry of Border Affairs, or other ministries involved in TVET delivery.
- f) **Tuition, fees, and scholarships in TVET institutions** – the JICA study team, using the statistical data of the MOST (2012) and the *Statistical Yearbook 2010*, calculated the distribution of the DTVE's budget to individual TVET institutions (in millions of kyat), but there is no similar information on the financial status or distribution of budgets from other ministries involved in TVET.³⁴³

In order to improve the quality of TVET provision and the link with the labour market, further information is necessary on the issues outlined above.

³⁴¹ CESR, Phase 1 Rapid Assessment: *TVET Subsector Analysis: Policy, Legislation, Management and Service Delivery*, draft confidential, 2013.

³⁴² JICA, PADECO Co., Ltd., IC Net Limited: *Data Collection Survey on the Education Sector in Myanmar Final Report*, 2013.

³⁴³ JICA, PADECO Co., Ltd., IC Net Limited: *Data Collection Survey on the Education Sector in Myanmar Final Report*, 2013.

6. Industry training

The TVET system in Myanmar is very expensive because of the lack of coordination of resources among the implementers and stakeholders, the possible overlaps in implementation, as well as the dominance of one actor, namely the government. Chapter 4 explored how, for many years, the government has been wholly responsible for TVET and HRD. Over the past ten years, since government resources became scarce, the private sector has taken over the role, to help meet the demand for skills.

Recently in Myanmar, more efforts have been undertaken on the possibilities of involving businesses industry in TVET, and on ways of coordinating efforts. This chapter provides an overview of the industry training organizations and the TVET providers under their auspices. Major attention was given to exploring the way they operate, and whether these industry providers are more demand-driven than the public providers.

As stated previously, reforms are not solely dependent on the government, but conditional on the participation of business organizations, communities, private companies, and NGOs. The issue of the readiness and involvement of the private sector, industry, and businesses was discussed with the main stakeholders during the consultations.

Little data is available on industry training organizations, and this chapter focuses on analysing the data collected from the interviews: what arrangements are in place, how the industry is dealing with the lack of qualified staff, how they are being trained, and how far the private sector is involved and participating in TVET system planning and implementation.

6.1 Industry training organizations

There are various industry training organizations, as shown in Table 23 to Table 31, including the UMFCCI, industry and sector organizations, and professional societies that offer some kind of training or seminars.

Over the last four years, in collaboration with businesses, common competency standards for tourism and hospitality have been drawn up, under the mutual recognition arrangements (MRAs) for all ASEAN member states (AMSs). Private businesses and industries in the sector are aware of this.³⁴⁴

³⁴⁴ Interview 13: MTF, Yangon, Myanmar, 19 June 2013.

6.1.1 Profiling of industry and industry organizations interviewed

Table 23. The UMFCCI

Organization or business	Union of Myanmar Federation of Chambers of Commerce and Industry (UMFCCI)
When did the institution begin operating?	There is a long history behind the establishment of the UMFCCI, starting with the Burmese Chamber of Commerce in 1919, but finally in 1999 upgrading to its current name, UMFCCI.
Can you describe what kind of business, products, or services you offer?	Trade and information enquiry services. Current awareness services. Business contact and consultancy services. Membership database. Publications. Trade fairs and exhibitions. Business library. Arbitration and mediation services. Training and seminars. Business advisory services.
How many members do you have?	24,505 members as of June 2012 (69 affiliated associations, enterprises, cooperatives, foreign companies, individuals, life members, associations, and Myanmar companies). The UMFCCI has a well-structured organizational framework made up of several management committees, working committees, trade associations, and affiliated and regional and state chambers of commerce and industry.
Website	www.umfcci.net

Table 24. Myanmar Garment Manufacturers' Association

Organization or business	Myanmar Garment Manufacturers' Association (MGMA)
When did the institution begin operating?	The association was established in 2001.
Can you describe what kind of business, products or services you offer?	Relations to the government. Relations to the foreign companies. Training services for members via foreign governments' projects (Japanese, Singaporean, etc.).
How many members do you have?	The association has 260 members. Approximately 40 of them are foreign companies.
Website	

Table 25. Myanmar Tourism Federation

Organization or business	Myanmar Tourism Federation (MTF)
When did the organization begin operating?	Established May 2011; before, there were associations.
Can you describe what kind of business, products, or services you offer?	Provide training courses in different destinations all over the country, in collaboration with the Ministry of Tourism. Other services for members: Sharing of information – if hotels want to train their staff, MTF negotiates with the training centres. Lobby to the Ministry of Tourism to recognize the training of the staff of these hotels. Helping potential investors by giving information on what they have to look for, where they can be informed, and arranging meetings with the ministry if needed.
How many members do you have?	Under the MTF is the Myanmar Hospitality Training Centres Association (six training centres) and the Myanmar Hospitality Professional Association. Difficult to say, but approximately 100,000 members throughout the country (small, medium, and bigger businesses) in the tourism services sector.
Website	www.myanmar.travel

Table 26. Myanmar Engineering Society

Institution, organization, or business	Myanmar Engineering Society (MES)
When did the institution begin operating?	Originally established in 1916 but then abolished in 1963 and restructured and re-established in 1995.
Can you describe what kind of business, products, or services you offer?	Development of the engineering profession. Participation and representation in government committees. Organizing training workshops and seminars. Work placements for young engineers. Consultancy and advice. Activities with government departments and NGOs.
How many members do you have?	36,960 members divided into 33 committees and 21 technical divisions. They are a professional society not a business organization. They consider themselves an NGO.
Website	www.mes.org.mm

Table 27. Maple Trading

Organization or business	Maple Trading Co. Ltd. (garments factory)
When did the business begin operating?	The business was established in 1996.
Can you describe what kind of business, products, or services you offer?	Garments factory producing for the local market mostly.
How many workers do you have?	Currently the company has 900 workers.
Website	

Table 28. Newest Garment Manufacturing

Organization or business	Newest Garment Manufacturing (garments factory)
When did the business begin operating?	The business was established in 2000.
Can you describe what kind of business, products, or services you offer?	Garments factory producing for the local market mostly.
How many workers do you have?	Currently the company has 525 workers.
Website	

6.1.2 Profiling the industry TVET providers

Table 29. Myanmar Garment Manufacturers' Association Training Centre

Organization or business	Myanmar Garment Manufacturers' Association Training Centre
When did the institution begin operating?	Human Resources Development Centre (part of the Garment Association) was established in 2009. The training centre started in 2011.
Number of trainees	Over 1,000 trainees since 2011.
Number of teachers and instructors	There are four instructors who teach mostly the operator's course. The other specialized trainers come from the Japanese support projects.
What is the target group for your services?	Unemployed people. Age group 18–30. Mostly women for the operator's course, and men for the mechanics course.
What kind of courses do you offer?	Operator's course, supervisor's course, and mechanic's course for upgrading skills from member factories; production management training for supervisors. Management training, from member factories. Mostly free of charge. Operator's training free of charge. The Garment Association pays for all.
Website	

Table 30. MES Skills Training

Organization or business	
When did the organization begin operating?	1995.
Number of trainees	Not clear.
Number of teachers and instructors	Not clear.
What is the target group for your services?	Young engineers just graduated from technical universities.
What kind of courses do you offer?	A variety of courses on engineering skills.
Website	www.mes.org.mm

Table 31. UMFCCI Training Institute

Organization or business	
When did the institution begin operating?	2002.
Number of trainees	Not clear/not available.
Number of teachers and instructors	Not clear/not available.
What is the target group for your services? What kind of courses do you offer?	Open to everyone, staff of member businesses and individuals. Basic Japanese language. Business manner in Japanese companies. Certificate course for office management. Certificate course for systematic distribution and management. Certificate course for sales and marketing management. Other courses related to business and economics. Mainly supported by the Japanese government.
Website	www.umfccci.net

6.2 Industry involvement in TVET, and demand-driven industry training

This section will be examined in two aspects:

- a) whether the industry associations and chambers of commerce feel that they are being consulted by the public providers and government, and how involved they are; and
- b) whether the industry, associations and chambers of commerce have some influence in the training (TVET or not) organized by their own trainings centres, and therefore judge how demand-driven the industry training is.

These two issues are often overlapping in discussions with private industry and business representatives, which is why they are treated together.

For some of the industry training centres, it was difficult or impossible to get information on all the relevant issues, partly because the interviewees were not informed, or were very limited by their field of responsibility.

6.2.1 Business involvement in decision-making

When asked whether they are involved in any kind of decision-making, interviewees from the MTF felt that they were not involved at all. Taking the example of the opening of the new bachelor's degree course in tourism, they stated that the ministry did not consult with them in regard to this decision, and whether if it was the right kind of training offer.³⁴⁵

The MES feels that it is a duty to share knowledge, to always give advice and participate in decision-making or -taking. The interviewees stated that they give advice and collaborate with governmental TVET providers in different ways, and with representation on different committees:

- a) the Committee of the Engineering Faculty (MOST);
- b) SME committee (MOI);
- c) Energy Sector Committee (Ministry of Energetics);
- d) Standards and Specifications Committee (MOST, Technological University);
- e) Myanmar Investment Committee (a special committee under the president's supervision); and
- f) NSSA Committee (MOLES).³⁴⁶

³⁴⁵ Interview 13: MTF, Yangon, Myanmar, 19 June 2013.

³⁴⁶ Interview 2: MES, Yangon, Myanmar, 11 June 2013.

6.2.2 Decisions on which TVET courses to offer

In the Garment Association Training Centre, requests for training come either from the member companies or, very often, the trainees simply come to the training centre and ask to be trained. Eventually, they find jobs in the member factories.³⁴⁷ In a way, the centre serves as a place where jobless people independently get short-term training on how to use industrial sewing machines, and then they are employed.

In the MES STC, the situation is different because it operates as a professional society, and they mostly organize engineering courses for newly graduated engineers, based on the trainees' requests.

6.2.3 Decisions on the number of students

The industry representatives stated that they are not consulted on the number of students, e.g. regarding the newly established tourism departments in universities; it is decided quite arbitrarily by the ministry what the number should be.³⁴⁸

In the Garment Association Training Centre, there seems to be a regular course³⁴⁹ for sewing machine operators every ten days. The Japanese Government has supported the training through the Garment Association. The supervisor's course is also supported by the Japanese Government via a three-year project. The machines were also donated by the Japanese Embassy. Some machines are donated by member companies; others by Japanese companies.³⁵⁰ In other more specialized training courses, they are also dependent on the Japanese project that supports the centre – for example, a one-week mechanic's course is being provided by Japanese instructors.

6.2.4 Curricula design

It may be too early to talk about the curricula design issue with businesses and industry, and indeed, in terms of curricula, it seems that the industry sector does not have any influence.³⁵¹

The case with regard to public providers, as discussed in Chapter 4, is that they develop their curricula centrally, whereas the industry providers like the Garment Association Training Centre for example, have their curricula dictated from the foreign project supporters, such as the Japanese. The textbooks are brought by the Japanese project as well.³⁵²

6.2.5 Percentage of practice in the curricula

It is impossible to talk about percentage of practice in the curricula that the industry training centres are using, since the interviewees were not well aware of the details of the training programmes.

6.2.6 Practice in businesses or apprenticeships (via contract or agreement)

Apprenticeships are one of the areas in TVET where the understanding may vary among the stakeholders in Myanmar. In the interviews, it was reported that there are some kinds of apprenticeship

³⁴⁷ Interview 16: Myanmar Garment Human Resources Development Centre, Yangon, Myanmar, 20 June 2013.

³⁴⁸ Interview 13: MTF, Yangon, Myanmar, 19 June 2013.

³⁴⁹ In one course there are usually over 30 people.

³⁵⁰ Interview 3: MGMA, Maple Trading Co. Ltd., 11 June 2013. Interview 8: Newest Garment Manufacturing, Yangon, Myanmar, 13 June 2013. Interview 16: Myanmar Garment Human Resources Development Centre, Yangon, Myanmar, 20 June 2013.

³⁵¹ Interview 2: MES, Yangon, Myanmar, 11 June 2013.

³⁵² Interview 16: Myanmar Garment Human Resources Development Centre, Yangon, Myanmar, 20 June 2013.

or practice in businesses and industries. However, the organization modalities, duration, and implementation differ from institution to institution, from the private sector to the public sector, and from one economic sector to another. An apprenticeship system has yet to be established in Myanmar.

There are some forms of apprenticeship in traditional, on-the-job training, or informal training (mechanics, car repairing, hairdressing, tea shops, among others). However, the interviewees from the businesses did not mention any case of apprenticeships via contract, although they indicated that they could contribute to the establishment of such a system.³⁵³

6.2.7 Teachers learn in business about new technologies

This section is intended to reveal some initiatives that were not mentioned by the public or private providers with regard to TVET teacher training and qualifications, or the exchange of technical expertise between vocational institutions and businesses and industry. However, it seems that this practice is not yet in place. The interviewees' comments included:

- a) "No, not yet. No real exchange, but the professors and lecturers come to our skills training and certification centre and attend the seminars on new technologies [in the field of mechanics, electrical and civil engineering]. The courses can go on for two months, and they are organized by the foreign organizations we are collaborating with."³⁵⁴
- b) "Exchanges of expertise do not really exist. Teachers do not come to businesses for learning. Most of the teachers were former employees in industry, and they changed their career. Most of the teachers were trained in Singapore or other countries."³⁵⁵

6.2.8 Business investment in TVET providers

In the interviews, sometimes one person represented all the different TVET stakeholders – individual businesses, business associations, industry organizations, or professional societies. There is a variety of ways to understand investment, and to investment particularly in TVET. Business organizations and all of their representatives (individual businesses and organisations, chambers, federation etc.), claim that TVET is of great importance to them, and a priority.³⁵⁶

The interviewees were asked: Are you involved in TVET in any way? Are you investing in TVET? If yes, in what form? How much is your organization investing in terms of percentage of the company's payroll? The difficulty with these questions lies in what "investing" means for each of the interviewees, and that sometimes they are not very well informed on the topic. This has not been addressed, but has been constantly discussed for many years in Myanmar.

Business associations and professional societies have different understandings depending on their own interests, aims, and objectives. A representative from the MES, a professional society, stated: "As an association, we are not really investing because we are an NGO. Our organization does not invest directly in TVET because we are a non-profit, volunteer organization. Members are all volunteers. But our way of investing or contributing to TVET is different. We do testing and certification of welders when our member businesses ask us to. There are also other ways in which we contribute, but I am not very well informed, especially in the wood processing and carpentry profession."³⁵⁷

For an organization like the MTF, it is hard to say how much staff training it is organizing for its members in different states and regions of Myanmar, even though it does provide training and subsidise

³⁵³ Interview 2: MES, Yangon, Myanmar, 11 June 2013. Interview 13: MTF, Yangon, Myanmar, 19 June 2013.

³⁵⁴ Interview 2: MES, Yangon, Myanmar, 11 June 2013.

³⁵⁵ Interview 13: MTF, Yangon, Myanmar, 19 June 2013.

³⁵⁶ Interview 2: MES, Yangon, Myanmar, 11 June 2013. Interview 3: MGMA, Maple Trading Co. Ltd., 11 June 2013. Interview 13: MTF, Yangon, Myanmar, 19 June 2013.

³⁵⁷ Interview 2: MES, Yangon, Myanmar, 11 June 2013. Interview 12: MES, Yangon, Myanmar, 18 June 2013.

up to 50 per cent of the course fees. Additionally, it is contributing to the newly created tourism bachelor's degree programmes in Yangon and Mandalay universities. In the future, the MTF is planning to:

- a) open its own TVET institutions for hospitality training, offering long-term education (a two-year diploma), and to buy the curricula from other countries;
- b) build vocational schools in the Mandalay hotel zone project, and in towns that have hotels; and
- c) open a training hotel and a training school in Yangon.

The ideas are clear on why the MTF wants to open many vocational schools, and it is also to have the local community involved. The MTF wants to establish the hotel training centre and schools in order to give rural people the chance of employment in the tourism sector. It is aware that, for the moment, people attend vocational training courses just to get basic skills to be able to get an overseas job.³⁵⁸

On the individual business level, involvement and investment depends on the needs of the specific business for new workers on one hand, and on the owner's vision and feeling of responsibility to the community on the other hand. One of the garments company owners stated: "I have new workers all the time, because I lose 10 per cent of the trained workers every month. They go to the Korean or Japanese companies because they pay better salaries and also give lunch for free, which I don't. I have to train four to five new workers in every line of 70 to 80 workers."³⁵⁹

Another company calculated that the monthly donations to TVET were less than 1 per cent of the company's payroll.³⁶⁰ However, the company did donate sewing machines to the Garment Association Training Centre, and provided the on-the-job training within the workplace.

Additionally, it was reported that a few bigger companies (for example, Monarch and Caterpillar) invested in training, but there was no precise information available on how much and in what exactly.³⁶¹

6.3 Public-private cooperation on TVET

Public-private cooperation on TVET is very rare in the current context in Myanmar. The interviews with both individual businesses and business associations confirmed this, although there are some plans for the future, but nothing concrete has been undertaken.

Among the business associations, there are scattered initiatives and plans to organize training in collaboration with the relevant ministry – the MTF with the Ministry of Tourism, and the MES with the MOI and Ministry of Construction.³⁶²

Cooperation seems to be limited to using the experts from businesses and industry associations or professional associations to train people in government-owned training centres.³⁶³ One recent example is that the MOI requested two trainers from the MGMA to train 150 trainees in Upper Myanmar.³⁶⁴

Among individual businesses, TVET cooperation is even more difficult because it depends on the type of business, the flexibility of the public provider, and the existence of the relevant vocational training, and no specific cooperation was reported.

³⁵⁸ Interview 13: MTF, Yangon, Myanmar, 19 June 2013.

³⁵⁹ Interview 3: MGMA, Maple Trading Co. Ltd., 11 June 2013.

³⁶⁰ Interview 8: Newest Garment Manufacturing, Yangon, Myanmar, 13 June 2013.

³⁶¹ Interview 14: GIZ, Yangon, Myanmar, 19 June 2013.

³⁶² Interview 2: MES, Yangon, Myanmar, 11 June 2013. Interview 12: MES, Yangon, Myanmar, 18 June 2013. Interview 13: MTF, Yangon, Myanmar, 19 June 2013.

³⁶³ Interview 2: MES, Yangon, Myanmar, 11 June 2013. Interview 12: MES, Yangon, Myanmar, 18 June 2013.

³⁶⁴ Interview 16: Myanmar Garment Human Resources Development Centre, Yangon, Myanmar, 20 June 2013.

One of the main obstacles is the lack of TVET offerings in some of the developing economic sectors. One business owner stated: “No, we cannot have that kind of collaboration, because the governmental providers do not offer the courses needed for our industry.”³⁶⁵

6.4 Demand-driven TVET initiatives

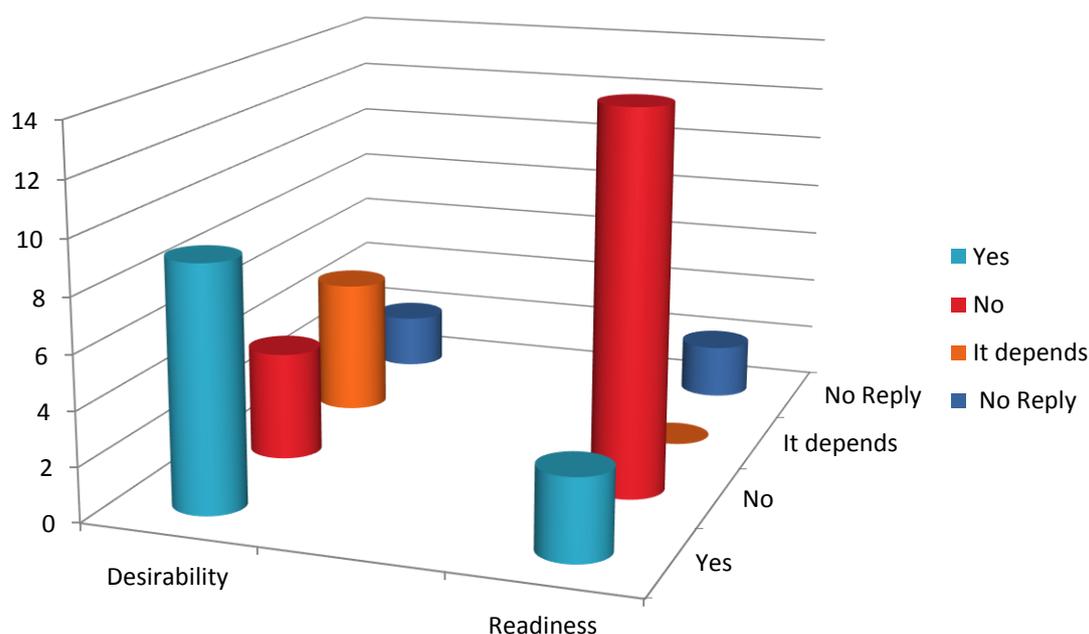
From the interviews and the CESR studies, it was noticed that it is impossible to talk about demand-driven TVET initiatives under the current situation in Myanmar. The majority of interviewees replied that they have no information on demand-driven TVET models in Myanmar, with exceptions to the CVT (operating with the dual model).

Additionally, during the interviews, the impression was that this set of questions was quite difficult for almost all the interviewees to understand. Even though the questions were formulated in different ways, the responses did not reveal a good understanding of the relationship between supply and demand.

6.5 Desires and readiness of private industry and business

When it comes to the establishment of a more demand-driven TVET system, the approach has to take into consideration the interests, wishes, and readiness of private-sector businesses. This is illustrated in Figure 33 below, and this section will present the findings of the in-country consultations on the readiness of the private sector to be involved in the TVET system.

Figure 33. Desirability versus readiness of businesses to be involved in TVET



Source: Fieldwork, LSE calculations.

The figures presented in Figure 33 map the responses from 19 respondents (18 interviews and one questionnaire collected). The respondents come from a mix of business associations and public and private training providers. Annex II gives the full list of interviewees, including the MES, MGMA, Maple Trading Co. Ltd., Tech Training Centre (Engineering), Dual Tech Vocational Training Centre and Engineering Co. Ltd., Kabar Industrial Training Centre, Newest Garment Manufacturing, Arbourfield Manpower and Training Services Co. Ltd., the MTF, TRC training centre, and others.

³⁶⁵ Interview 3: MGMA, Maple Trading Co. Ltd., 11 June 2013.

When it comes to the desirability of being involved, the respondents were divided, but on readiness they very clearly agreed that industries and businesses in Myanmar are not prepared.

Reasons presented for yes desirability

Business and industry in general lacks a skilled workforce. The private sector wants to be involved because it needs to train workers or wants to hire skilled workers from the training providers.³⁶⁶

The private sector has an interest and would like to be involved in all the levels proposed. Businesses are interested in having qualified workers, as in Thailand, where workers need less instruction and are more aware of safety rules. Nowadays many companies in Myanmar are hiring foreign workers, who are more expensive but are better qualified and have better skills.³⁶⁷

Business associations are ready and would like to contribute with ideas in policy-making. They would like to be involved in every stage and level of TVET planning and implementation in order to improve their businesses and country.³⁶⁸

Reasons presented for no desirability

In Myanmar's private sector, employers are not willing to be involved in the TVET system because they are not familiar with what the TVET system actually offers.³⁶⁹

Employers are not well aware of the advantages for their business if they invest in TVET, or why they would need well-trained and certified students or staff in the future.³⁷⁰

Companies do not send their workers for more training, and in this way they allow for poor-quality work. In a situation where there is total lack of accountability, there is no interest and desire to be involved in TVET. Therefore, the government has to deal with quality assurance, and should investigate examples of why the constructions collapse.³⁷¹

Businesses are sceptical of the government, believing that it does not have sustainable policies. They do not trust the government because government policy can change overnight. That is why private businesses are reluctant to collaborate with, or to invest in, public institutions; they would rather invest in their own training centres rather than in cooperation with the government. They need better guarantees.³⁷²

"It depends" reasons

Interviewees reported that readiness for involvement will depend on the business opportunities and job opportunities, which in turn will mostly depend on the foreign direct investments in the country. For

³⁶⁶ Interview 5: Tech Training Centre (Engineering), Yangon, Myanmar, 12 June 2013. Interview 12: MES, Yangon, Myanmar, 18 June 2013.

³⁶⁷ Interview 5: Tech Training Centre (Engineering), Yangon, Myanmar, 12 June 2013.

³⁶⁸ Interview 2: MES, Yangon, Myanmar, 11 June 2013. Interview 13: MTF, Yangon, Myanmar, 19 June 2013.

³⁶⁹ Interview 1: Skills Training Centre, MOLES, Yangon, Myanmar, 10 June 2013. Interview 12: MES, Yangon, Myanmar, 18 June 2013.

³⁷⁰ Interview 11: TRC Hotel and Vocational Training School, Yangon, Myanmar, 17 June 2013.

³⁷¹ Interview 7: Kabar Services Co. Ltd., Yangon, Myanmar, 12 June 2013.

³⁷² Interview 10: Steering Committee of Yangon Technical University and advisor for MOST, Yangon, Myanmar, 14 June 2013.

example, if gas pipeline projects come to the country, a lot of welders will be needed. Therefore, when many more skilled workers are needed, businesses might be more willing to get involved.³⁷³

Some think that everything depends on the individual business attitude and vision. It was reported that some businesses would like to be involved in the skills training of their employees or workers especially.³⁷⁴ There is willingness, but they feel they are not ready because there is a need for more advanced businesses and more visionary business leaders – people who are ready to invest in HRD – and this differs from sector to sector. The tourism sector seems very interested in investing in HRD.³⁷⁵

Some other interviewees were of the opinion that it is the role, responsibility, and main job of the government to involve businesses and industry in every stage of planning and implementation of TVET, especially in the context of a school-based system, as there is now in Myanmar.³⁷⁶

There is also a need for organized business groups without political affiliation to take a leading role. There may be many businesses that would like to contribute, but not all of them have the capacity because TVET is very expensive.³⁷⁷

Only if the TVET providers can demonstrate that they can produce qualified and skilled professionals, then businesses will invest in these institutions (being private or public).³⁷⁸ Companies would like more of the apprenticeship or dual training system.³⁷⁹

Proposals on where businesses can collaborate or contribute

Decision-making (e.g. in offering a TVET course and the number of students or trainees). Some of the respondents reported that businesses would be quite interested in being involved in decision-making of any kind when it comes to TVET implementation. Business associations said that they can be involved in every step of planning, implementation, and decision-making, at different levels.³⁸⁰

TVET curricula design. There seemed to be no specific interest expressed in relation to the involvement in curricula design, but many representatives of business associations expressed the will to be involved in every stage of TVET. There is, somehow, a misunderstanding or limitation in understanding on how businesses can be involved with curricula design. One of the private providers stated: “No, they don’t want to be involved in this. In the future, industry will develop the competency standards and we the providers will do the curricula.”³⁸¹

TVET students’ apprenticeship and practice places (via contract or agreement). Many respondents reported that this is possible, and that businesses would like to be involved in apprenticeships. Businesses are ready to welcome students, and would see the benefit of using apprentices for their own profit, especially if there would be no salary. Practical implementation of apprenticeships therefore remains a challenge. An interviewee from one of the companies stated: “Yes, I would be very happy to

³⁷³ Interview 2: MES, Yangon, Myanmar, 11 June 2013. Interview 7: Kabar Services Co. Ltd., Yangon, Myanmar, 12 June 2013.

³⁷⁴ Interview 6: Dual Tech Vocational Training Centre and Engineering Co., Ltd., Yangon, Myanmar, 12 June 2013.

³⁷⁵ Interview 14: GIZ, Yangon, Myanmar, 19 June 2013.

³⁷⁶ Interview 7: Kabar Services Co. Ltd., Yangon, Myanmar, 12 June 2013. Interview 14: GIZ, Yangon, Myanmar, 19 June 2013.

³⁷⁷ Interview 7: Kabar Services Co. Ltd., Yangon, Myanmar, 12 June 2013. Interview 14: GIZ, Yangon, Myanmar, 19 June 2013.

³⁷⁸ Interview 15: CESR team, Ministry of Education, Yangon, Myanmar, 20 June 2013.

³⁷⁹ Interview 14: GIZ, Yangon, Myanmar, 19 June 2013.

³⁸⁰ Interview 13: MTF, Yangon, Myanmar, 19 June 2013.

³⁸¹ Interview 5: Tech Training Centre (Engineering), Yangon, Myanmar, 12 June 2013.

accept apprentices in the areas of quality control and cutting. But we do not have these experiences; I don't know how to do it. And sincerely speaking, we are not systematic in doing these things.”³⁸²

TVET teacher training and qualifications, and exchange of technical expertise between vocational institutions and businesses and industry. The TVET providers reported that businesses and industry would like to be involved in TVET teacher training and the exchange of technical expertise for qualification purposes.³⁸³ However, there is a need for more opinions from businesses and industry representatives on this issue.

Investment in equipment for TVET. Interviewees stated that only the big businesses may be interested in investing, but no specifications were given. Some assumed that all the big and successful companies know that they have to have skilled workers, and therefore they might be willing to invest in TVET.³⁸⁴

Reasons presented for no readiness and obstacles

Scepticism about TVET systems as a priority for the government. Interviewees reported that there are so many problems and more urgent needs to be intervened in – for example, the quality of basic education in general, and the healthcare system – in comparison to upgrading the TVET system, which might not appear to present an urgent problem.³⁸⁵

Lack of awareness among employers regarding the need for certified and qualified workers. There is a need to raise awareness among employers that more of their workers need to have skills and a training certificate of some kind. Only large companies are willing and ready to be involved, but in general the employers are not interested. The reason is that local companies do not want to waste their money. They think “right now we are doing fine.”³⁸⁶ Also, businesses are afraid to spend money on their workers because they do not have long-term plans for production, and currently are more interested in trading than production.³⁸⁷

Lack of information among employers regarding the formal TVET system. The majority of private businesses lack knowledge on what the TVET system offers, or how it is structured and operates.³⁸⁸

Small and weak local businesses that do not require workers with specialized skills and qualifications. The so-called manufacturers are not real manufacturers; most of them are assemblers. The only manufacturing is in the garment industry, which does not need many skilled workers at present.³⁸⁹ The garments sector is currently doing only phase-change materials (PCM) and this is one explanation why skilled labour is not yet essential. There are not so many big businesses or big industries in the country that have the potential to employ numerous skilled workers and apprentices. Industrial zones, as well, are lacking advanced technologies, and so the demand for highly qualified workers is low.³⁹⁰ Local businesses do not have enough capacity to accept students or apprentices, with the exception of a few big businesses.³⁹¹

³⁸² Interview 3: MGMA, Maple Trading Co., Ltd., 11 June 2013.

³⁸³ Interview 5: Tech Training Centre (Engineering), Yangon, Myanmar, 12 June 2013.

³⁸⁴ Interview 5: Tech Training Centre (Engineering), Yangon, Myanmar, 12 June 2013. Interview 14: GIZ, Yangon, Myanmar, 19 June 2013.

³⁸⁵ Interview 2: MES, Yangon, Myanmar, 11 June 2013.

³⁸⁶ Interview 1: Skills Training Centre, MOLES, Yangon, Myanmar, 10 June 2013. Interview 2: MES, Yangon, Myanmar, 11 June 2013.

³⁸⁷ Interview 2: MES, Yangon, Myanmar, 11 June 2013.

³⁸⁸ Interview 1: Skills Training Centre, MOLES, Yangon, Myanmar, 10 June 2013. Interview 2: MES, Yangon, Myanmar, 11 June 2013.

³⁸⁹ Interview 2: MES, Yangon, Myanmar, 11 June 2013.

³⁹⁰ Interview 6.

³⁹¹ Interview 11: TRC Hotel and Vocational Training School, Yangon, Myanmar, 17 June 2013.

Lack of involvement and participation in the government initiatives to improve the TVET system.

There is very little participation by the private sector in general. For example, in the NSSA training for curriculum design, 70 per cent of the participants are from the public and governmental sector, and only 30 per cent are from the private providers or private-sector business associations.³⁹²

Lack of a sustainable relationship with the government. The business representatives feel that their advice is not taken seriously by the government. The government conducts formal and informal consultations but there is little reciprocity in relations with businesses. The same happens with the needs of businesses when they are forwarded to the government; there is still no reaction.³⁹³

Private providers' quality is also not up to the standards. There is a degree of self-awareness among the private providers as well, that they lack collaboration with businesses and industry due to the low quality of their services. It was reported that private providers are not well qualified, not well organized, and lack appropriate planning. The owners of the private providers interviewed reported that they are collaborating with the NSSA and are part of the competency-based curricula training, because they want to be recognized and offer better quality training.³⁹⁴

Shortage of qualified workers prevents the continuous qualification of the staff. Some sectors are particularly difficult and fragile. It was reported that even if training is offered in the Garment Training Centre, most of the companies do not send their supervisory staff because they are short of qualified workers, even if the training is just for five days.³⁹⁵

The segmentation of responsibilities over various ministries creates confusion. There are too many ministries and a lack of coordination and communication among them.³⁹⁶

Lack of TVET offers in some crucial economic sectors. The tourism, garments, and construction sectors were reported to lack offers from the formal TVET system. For the construction industry there are no vocational training schools (secondary long-term education) for masonry, carpentry, and other professions needed in the field.³⁹⁷

Lack of a quality assurance system in the TVET system. Certification is a big problem, in terms of individuals and in terms of public and private training providers. If the country wants to compete internationally, it has to have quality training within international standards. Business associations stated that there is a need for a better assessment body that can certify training schools for the whole country, and also there is a need of standardized tests to assess each and every individual, based on a common curricula accepted by ASEAN.³⁹⁸ Interested businesses strongly repeated the need for standardized certificates, and not just a certificate. They asked for skilled trainees and internationally recognized certificates.³⁹⁹ The business associations encourage all providers to improve their curricula and programmes. Additionally, students, apprentices, and interns from the formal TVET system are not well skilled, and they can even disturb rather than help businesses.⁴⁰⁰

Lack of a quality assurance system in all economic sectors. The government has not yet fixed the problem related to the quality of workers. There is no obligation for companies to hire skilled workers

³⁹² Interview 2: MES, Yangon, Myanmar, 11 June 2013.

³⁹³ Interview 3: MGMA, Maple Trading Co. Ltd., 11 June 2013.

³⁹⁴ Interview 5: Tech Training Centre (Engineering), Yangon, Myanmar, 12 June 2013.

³⁹⁵ Interview 3: MGMA, Maple Trading Co. Ltd., 11 June 2013.

³⁹⁶ Interview 5: Tech Training Centre (Engineering), Yangon, Myanmar, 12 June 2013.

³⁹⁷ Interview 13: MTF, Yangon, Myanmar, 19 June 2013.

³⁹⁸ Interview 13: MTF, Yangon, Myanmar, 19 June 2013.

³⁹⁹ Interview 5: Tech Training Centre (Engineering), Yangon, Myanmar, 12 June 2013.

⁴⁰⁰ Interview 11: TRC Hotel and Vocational Training School, Yangon, Myanmar, 17 June 2013.

because there is no quality control system. Quality control in construction, for example, is lacking. Nobody pays attention to the quality of work or the skills of the workers, so why go to a vocational training school. That is why contractors use unskilled, cheap workers.⁴⁰¹ The study illustrated that this is one of the main concerns under the Employment and Skills Development Law, and an issue that needs to be addressed.

Reason presented for yes readiness

Even though the country is very poor compared to its neighbours, some interviewees reported that there are many well-established businesses in the country, and that they would want to invest in education and training with the government. For example, the government could invest in infrastructure and facilities, while businesses could invest in equipment and technicians from abroad. However, businesses would need official guarantees for this kind of engagement.⁴⁰² By guarantee, the interviewees previewed the introduction of protection against uncertainty in the political environment, which could stimulate investment.

Demands of the labour market over the next five to ten years

All interviewees reported that the demand for qualified workers is high, locally and abroad, in every sector. However, as priorities for the development of the country, they mentioned the need for skills in the following sectors and occupations: tourism, construction, banking, office workers, real estate, and agro-business.

⁴⁰¹ Interview 7: Kabar Services Co. Ltd., Yangon, Myanmar, 12 June 2013.

⁴⁰² Interview 5: Tech Training Centre (Engineering), Yangon, Myanmar, 12 June 2013. Interview 10: Steering Committee of Yangon Technical University and advisor for MOST, Yangon, Myanmar, 14 June 2013.

7. Conclusions

In order to assure quality in TVET and a demand-driven TVET system, it is necessary to involve the private sector in each of the components of TVET. The TVET institutions have to realize their role as a service provider for the economy in general, and in order for businesses to flourish in the country. The first objective of this study was to identify the involvement of private businesses and industry in the TVET system, and the role of private TVET providers.

The analysis presented in this study has confirmed that, presently, Myanmar's TVET system is very much supply-driven, with TVET from both public and private providers. The consultation system with entrepreneurs, business associations, and chambers of commerce that would enable the system to be more demand-driven is not yet in place, and there is no evidence of public or private enterprise involvement in the development of skills standards and curricula. The consequence has been that TVET is highly supply-driven, with little or no consultation on the needs of the labour market.

The interviews and desk analysis have suggested that there are ways to change the policy from supply-driven to demand-driven, such as:

- a) first of all, to understand the private sector's (businesses and entrepreneurs) needs; and
- b) second, to involve the private sector in designing the curricula so that there is more balance between theory and practice, and that the curricula content and the learning outcomes are closer to the needs of the labour market, i.e. competency-based.

The NSSA has been able to develop a number of skills standards for 175 occupations with remarkable speed. Fifty-five of these have already been approved by the government. The format used for the standards is a common, internationally recognized and adapted format. The question is whether the content of the standards have been adapted to fit into the world of training and work in Myanmar. This appears not to have been the case so far, with consequences on budget.

Further, the curricula have been developed with little or no involvement of industry partners, and the trainers have little industrial experience, making TVET delivery in Myanmar characterized as:

- a) theory-oriented rather than practice-oriented (competency-based); and
- b) classroom-based rather than industry- or business-based.

From the fieldwork undertaken, it is clear that TVET stakeholders in Myanmar on both sides – supply and demand – are aware that there are obstacles and problems in the system. These constraints result from the broader environment in Myanmar, where the country is only beginning to develop its key domestic sectors. Even though the government is supported by development partners, the work on building technical capacity across all state services has been a slow and challenging process. These processes are directly reflected in the issues outlined in this report.

With the help of the ILO and development partners, the consultant has attempted to cluster the issues that exist in the TVET and related sectors. It should be noted that the partner organizations continuously operate in this environment, and often face the same limitations. The issues have been clustered under two main headings: planning level and implementation level.

Planning level

The analysis suggested that the planning of TVET is relatively uncoordinated, with duplication and lack of knowledge on labour market needs. Some of the main aspects to be targeted are as follows:

Coordination among ministries, and duplication of work

- a) Currently, 14 ministries or agencies are actively involved in TVET. The responsibility for planning TVET is shared among the ministries, and they bring in a variety of understandings of TVET, which leads to a conspicuous number of offers, durations, target groups, overlapping, regional overlapping, and duplication of efforts from different ministries within the same skills training field.
- b) Also, there is lack of coordination among the ministries and their TVET providers, which results in either lower quality in the formal TVET delivery, or a lack of offers in some areas, causing confusion to young people who are choosing a career, or even adults trying to get a (re)qualification.

Cooperation with employers and employers' organizations

- a) There is very little evidence of the involvement of businesses organizations and employers representatives in the planning of TVET, or in determining the number of skilled workers needed regionally or nationally. Businesses are consulted occasionally, and not in a systematic way, as there is no well-established mechanism to allow for a regular consultation process.

Resources

- a) At the moment, the scarce resources allocated to TVET institutions do not allow them to take into account the specific needs for developing the necessary professional or skills profile.
- b) More resources should be allocated, to provide subsidies to employers for workplace training, or to those who can take on apprentices and mentor them successfully.

Implementation level

- a) A number of interviewees from the private TVET providers stated that there are many constraints in education system, and even in the private education sector. The CESR review revealed that the education sector, with its different subsectors, needs to be substantially reformed to support the development of the country. Therefore, the issues that relate to the TVET sector refer to the important link to the labour market and the rest of the economy.

Facilities and infrastructure

- a) Insufficient teaching materials and teaching aids, training laboratories, and computers to support school programmes, students, and teachers.
- b) Outreach is difficult due to the problems of accessibility to facilities and resources. Further, there is poor infrastructure in the country and, in some cases, no public transportation.

Curricula and guidance

- a) There are no well-developed curricula that are in line with skills standards and quality standards.
- b) Teaching methods focus primarily on theoretical approaches, and sometimes their quality is compromised due to inexperienced teachers.
- c) The combined issues of the quality of curricula and teaching methodology will affect the skills level of graduates.

Teacher's capacity

- a) The capacity of the education sector is constrained by the overall situation in the country. In deciding where to practice their profession, qualified teachers with good education and training

would opt to work in countries like Singapore, where they can enjoy better employment conditions.

- b) The motivation of teachers and trainers is notably low due to very low salaries, which is a direct effect of the state of the economy of Myanmar and the limited resources.

Regional and labour market needs

- a) Surveys on the demands of the labour market still have to be conducted. Students in some cases are trained in skills and technical areas that do not necessarily respond to labour market needs.
- b) The mentoring and coaching mechanisms to support the practical aspect of vocational education and training in companies have not been substantially developed.
- c) A high proportion of low-skilled labour is potentially in need of access to better quality TVET. However, very often, TVET centres, especially in rural areas, are not sufficient. It is important to map and involve the private training providers, since the government does not have the available resources and facilities to fulfil all the needs and requests of the growing population.
- d) The diversity of regional needs is not addressed through a fairer distribution of TVET providers across the territory.

Recommendations

From both the deskwork analysis and the fieldwork, a number of recommendations can be drawn to improve the current situation and to assist the overall transformation process in Myanmar.

Table 32. Recommendations

Issue	Short term	Medium term	Long term
Law and policy development			
Implementation of the Employment and Skills Law	✓	✓	
Greater cooperation and integration of policies		✓	✓
Support for the development of an integrated vocational guidance system		✓	✓
Training management and organization			
Capacity building of the management and organization of the TVET system overall		✓	✓
School assistance to students and teacher training	✓	✓	
Promoting access to TVET			
Development of more inclusive practices in TVET	✓	✓	
Support for policies for the protection of migrant workers		✓	
Planning and information			
Capacity building to create an LMIS for a competitive, industry-led, and demand-driven TVET			✓
Private TVET providers mapping and accreditation	✓		
Industry collaboration in TVET			
Support for raising awareness among employers with regard to skills levels and needed competencies	✓		
Support on establishing mechanisms for stakeholder involvement and a cross-ministerial, coordinated approach to TVET development		✓	✓

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Annexes

Annex I. Questionnaire and interview guide

Private-sector involvement in the Myanmar TVET system

The goal of the Technical and Vocational Education and Training (TVET) system is to prepare workers (students/trainees/apprentices) to easily enter the labour market. In order to assure quality in TVET and a demand-driven TVET system, it is necessary to involve the private sector in each of the components of TVET.

TVET institutions have to realise their role as service providers for the economy in general and for flourishing businesses in the country. Thus, the two main objectives of this study are to identify the involvement of private industry/business in the TVET system and the role of private TVET providers. The findings of this study aim to help the government TVET providers (and the relevant Ministries) to establish demand-driven TVET services.

The TVET system includes all the existing government and private institutions in all levels, Ministries, committees, organisations, schools and training centres which offer vocational courses (short term and long term), all of which contribute to skills development and human resource development.

TVET providers are considered to be all the schools, colleges and training centres that offer technical and vocational courses (short term and long term).

Background information about the interviewee

Name/Surname of the Interviewee:	
Name of the organisation/business:	
Position of the interviewee in the Institution/organisation/business:	
From how long are you in position:	
When did the institution/organisation/business begin operating?	
Can you describe what kind of business/products or services you offer?	
How many members do you have?	

Guiding questions for the private business associations' representatives:

Private industry/business involvement in TVET

1. Do you think the employers are satisfied with their employees' profiles in terms of:
 - a. Level of education

- b. Vocational profile
- c. Knowledge and skills within the profile
- d. Work attitude

1.1 If not, what kind of level of education, knowledge, skills and attitude you think they are looking for in their employees at the moment?

1.2 What skills (for example in which economic area? which level of education? etc.) do you think will be needed in the next five years? Ten years?

2. Is TVET a priority for your organisation/business?

3. Are you involved in TVET in any way? Are you investing in TVET?

3.1 If yes, in what form?

- a. How much is your organisation investing in terms of percentage of the company's payroll?

4. Are you cooperating with public or private TVET providers (technical and vocational schools or training centres)? Can you please specify with which?

4.1 If yes, are you collaborating in any of the followings ways:

- a. Are you part of decision-making and advising, for example in the offering of a TVET course and the number of students/trainees to be trained?
- b. Are you contributing in curricula design or teaching programs for TVET institutions?
- c. Are TVET students and trainees doing an apprenticeship (practice time) in your business via contract or agreement?
- d. Do TVET teachers come to your business for training and qualification?
- e. Did you have experiences of exchange of technical expertise between vocational institutions and your business/industry?
- f. Have you invested in equipment/machinery for TVET purposes in schools and training centres?

4.2 If not, why? Don't you think the collaboration of private business/industry sector with TVET can improve the quality and delivery?

5. Do think that the private business/industry sector in Myanmar is ready be involved in the TVET system across all levels, in planning and implementation?

6. As representative of business/industry would you like to be involved in the planning and implementation of the technical and vocational education and training system?

6.1 If yes, how? In what forms (please specify)? Or where would you propose your involvement?

- Forums or committees

- Consultation or advisory boards
- Apprenticeships
- Other forms?

6.2 If not, why? Are you facing any obstacles in taking a more active role in the design and planning of TVET?

Private TVET providers

7. Do you know of private training schools or centres (from private business organisations or others)?

7.1 If yes, do you have a list of these private training providers?

7.2 If not, can you help us find one or identify them?

8. Are you aware of/do you have any information on informal (unregistered) training programmes that might be organised (especially in provinces/areas that are not reached by the formal TVET institutions?)

8.1 If yes, can you explain more who are these training providers or what are these training for?

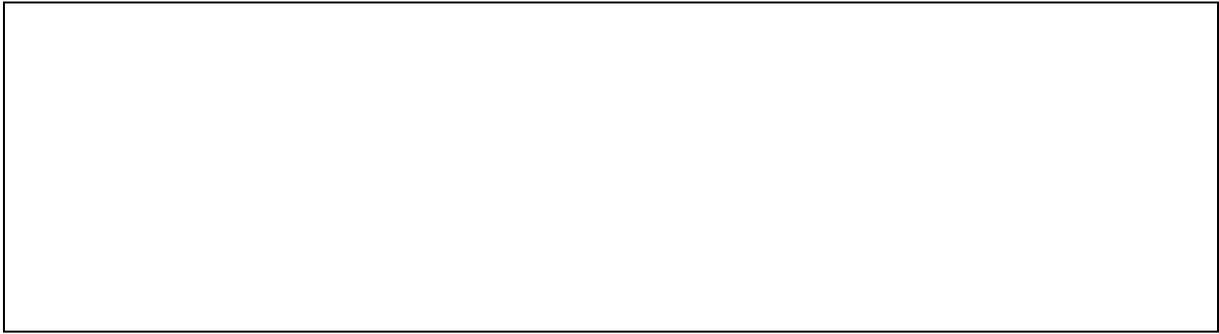
8.2 If not, who can help us find one or identify them?

Other demand-driven TVET initiatives/models

9. Are you aware of any other industry training initiatives/practices?

Do you know of existing TVET initiatives or models of cooperation that help to better match supply of the TVET offer with the demand of the labour market in TVET skills needs so that we can recommend them as models to be taken into consideration by the TVET system in all levels?

10. Is there any donor or project working or who has experience in labour-market-oriented or demand-driven TVET initiatives?



Can you give us any documents and contact people to further support us in this research?

Thank you for your time and support!

If you need any further information, please contact:

Dr Simona Milio: s.milio@lse.ac.uk

Ms Alma Shkreli: almashkreli@yahoo.it

Private sector involvement in the Myanmar TVET system

The goal of the Technical and Vocational Education and Training (TVET) system is to prepare workers (students/trainees/apprentices) to easily enter the labour market. In order to assure quality in TVET and a demand-driven TVET system, it is necessary to involve the private sector in each of the components of TVET.

TVET institutions have to realise their role as service providers for the economy in general and for flourishing businesses in the country. Thus, the two main objectives of this study are to identify the involvement of private industry/business in the TVET system and the role of private TVET providers. The findings of this study aim to help the government TVET providers (and the relevant Ministries) to establish demand-driven TVET services.

The TVET system includes all the existing government and private institutions in all levels, Ministries, committees, organisations, schools and training centres which offer vocational courses (short term and long term), all of which contribute to skills development and human resource development.

TVET providers are considered to be all the schools, colleges and training centres that offer technical and vocational courses (short term and long term).

Background information about the interviewee

First name and surname of the interviewee:	
Name of the institution/organisation:	
Position of the interviewee in the institution/organisation/business:	
How long have you been in position for:	
When did the institution/organisation begin operating:	
Number of teachers and instructors:	
What is the number of trainees: (yearly)	
Who is the target group of your services (age, education level)?	
What kind of courses do you offer? (Please specify field and duration of the course.)	

Guiding questions for the TVET providers' representatives:

Private industry/business involvement in TVET

1. Do you think employers are satisfied with their employees' profiles in terms of:
 - a. Level of education
 - b. Vocational profile
 - c. Knowledge and skills within the profile
 - d. Work attitude

2. Are you cooperating with the private industry/business sector in any way? Is private business involved in giving advice or decision-making in any way, in your institution?

2.1 If yes, please specify?

- a. How do you decide which TVET courses to offer?
- b. How do you decide about the number of students that you are going to enrol in each specific course?
- c. Who designs the curricula you are using?
- d. What is the percentage of practice in the curricula you are using?
- e. Do the students have practice in the business/apprenticeship (via contract or agreement)?
- f. Do your teachers and instructors go to businesses to learn about new technologies/services, etc.?
- g. Does the private sector/business invest in your institution?

a.

b.

c.

d.

e.

f.

g.

2.2 If not, why not? Don't you think the involvement of private industry/sector can improve the quality and delivery of TVET?

3. Do think that the private industry/business would like to collaborate with the TVET system in any of the following:

- a. Decision-making (e.g. in opening of a TVET course and number of students/trainees)
- b. TVET curricula design
- c. TVET students' apprenticeship/practice places (via contract or agreement?)
- d. TVET teacher training and qualification
- e. Exchange of technical expertise between vocational institutions and business/industry
- f. Investments in equipment for TVET purposes

4. Do think that the private industry/business is ready be involved in the planning and implementation of technical and vocational education and training systems?

4.1 In what form (please specify)? Or where would you propose their involvement?

- Forums
- Consultation boards
- Apprenticeships
- Other?

4.2 If not, why, what are the reasons or obstacles?

Other private TVET providers

5. Do you know of private training schools or centres (from private business organisations or others)?

5.1 If yes, do you have a list of these private training providers?

5.2 If not, can you help us find one or identify them?

6. Are you aware of/do you have any information on informal (unregistered) training programmes that might be organised (especially in provinces/areas that are not reached by the formal TVET institutions)?

6.1 If yes, can you explain more who are these training providers or what are these trainings for?

6.2 If not, who can you help us find one or identify them?

7. Is your institution cooperating with any other private/public TVET provider?

7.1 If yes, please explain how/where?

Other demand-driven TVET initiatives/models

8. Are you aware of any other industry training initiatives/practices?

9. Do you know of existing TVET initiatives or models of cooperation that help to better match supply of the TVET offer with the demand of the labour market in TVET skills needs so that we can recommend them as models to be taken into consideration by the TVET system in all levels?

10. Is there any donor or project working or who has experience in labour-market-oriented/demand-driven TVET delivery initiatives?

Can you give us any documents and contact people to further support us in this research?

Thank you for your time and support!

If you need any further information, please contact:

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Ms Alma Shkreli: almashkreli@yahoo.it

Private-sector involvement in the Myanmar TVET system

The goal of the Technical and Vocational Education and Training (TVET) system is to prepare workers (students/trainees/apprentices) to easily enter the labour market. In order to assure quality in TVET and a demand-driven TVET system, it is necessary to involve the private sector in each of the components of TVET.

TVET institutions have to realise their role as service providers for the economy in general and for flourishing businesses in the country. Thus, the two main objectives of this study are to identify the involvement of private industry/business in the TVET system and the role of private TVET providers. The findings of this study aim to help the government TVET providers (and the relevant Ministries) to establish demand-driven TVET services.

Background information about the interviewee

First name and surname of the interviewee:	
Institution/organisation:	
Position:	
How long has he/she held the position (optional):	
When did the institution/organisation start functioning/operating:	

Guiding questions for Ministries and related central institutions:

Private industry/business involvement in TVET

1. What is the budget assigned for TVET within your Ministry?
2. Do you think the employers are satisfied with their employees profiles in terms of:
 - a. Level of education
 - b. Vocational profile
 - c. Knowledge and skills within the profile
 - d. Work attitude
3. With regards to TVET, are you cooperating with the private industry/business sector in any way? Is private industry/business involved in TVET decision-making in any way?
 - 3.1 If yes, how?
 - a. How do you decide which TVET courses to offer?
 - b. How do you decide about the number of students that you are going to enrol in each specific course?
 - c. Who designs the curricula your TVET institutions are using?

- d. What is the percentage of practice in the curricula you are using?
- e. Do the students have practice in the business/apprenticeship (via contract or agreement)?
- f. Do teachers go to businesses to learn about new technologies/services, etc.?
- g. Does the private sector/business invest in your TVET institutions?

3.2 If not, why not? Do you think the involvement of private industry/business could improve the quality and delivery of TVET?

4. Do you think that private industry/business would like be involved in the TVET system in terms of:

- a. Decision-making (e.g. in offering a TVET course and number of students/trainees)
- b. TVET curricula design
- c. TVET student apprenticeship/practice places (via contract or agreement?)
- d. TVET teacher training and qualification
- e. Exchange of technical expertise between vocational institutions and business/industry
- f. Investments in equipment for TVET purposes

5. Do you think that private industry/business is ready be involved in the TVET system across all levels?

5.1 If yes, in what form (please specify)? Or where would you propose their involvement?

- Forums
- Consultation boards
- Apprenticeships
- Other?

5.2 If not, why, what are the reasons?

Private TVET providers

6. Do you know of private training providers (from private business organisations or others)?

6.1 If yes, do you have a list of these private training providers?

6.2 If not, can you help us find one or identify them?

7. Are you aware of/do you have any information on informal training programmes that might be organised (especially in provinces/areas that are not reached by the formal TVET institutions)?

7.1 If yes, can you explain more who are these training providers or what are these trainings for?

7.2 If not, who can you help us find one or identify them?

Other demand-driven TVET initiatives/models

8. Do you know about OTHER existing TVET initiatives/models that help to better match supply of TVET offer with the demands of the labour market in TVET skills needs so that we can recommend them as models to be taken into consideration by the governmental TVET in all levels?
9. Is there any donor or project working or who has experience in labour-market-oriented/demand-driven TVET delivery initiatives?

Can you give us any documents and contact people to further support us in this research?

Thank you for your time and support!

If you need any further information, please contact:

Dr Simona Milio: s.milio@lse.ac.uk

Ms Alma Shkreli: almashkreli@yahoo.it

Private-sector involvement in the Myanmar TVET system

The goal of the Technical and Vocational Education and Training (TVET) system is to prepare workers (students/trainees/apprentices) to easily enter the labour market. In order to assure quality in TVET and a demand-driven TVET system, it is necessary to involve the private sector in each of the components of TVET.

TVET institutions have to realise their role as service providers for the economy in general and for flourishing businesses in the country. Thus, the two main objectives of this study are to identify the involvement of private industry/business in the TVET system and the role of private TVET providers. The findings of this study aim to help the government TVET providers (and the relevant Ministries) to establish demand-driven TVET services.

Background information about the interviewee

First name and surname of the interviewee:	
Institution/organisation:	
Position:	
How long has he/she held the position (optional):	
When did the institution/organisation start functioning/operating:	

Guiding questions for development partners (with experience in labour-market-oriented/demand-driven TVET delivery)

Private industry/business involvement in TVET

1. Do you have any experience or initiatives within your organisation's projects related to making TVET more demand-driven?
 - 1.1 If yes, can you please describe them?
 - 1.2 If not, do you have any plans to implement any demand-driven TVET initiatives or interventions in the next five years?
2. Do you have information if the private industry/business invests in TVET institutions?
 - 2.1 If yes, how much (as percentage of company payrolls)?
3. Are there cooperation initiatives between industry/business and public or private TVET providers?
 - 3.1 If yes, can you please describe them?
 - 3.2 If not, do think that the private sector would like be involved in the TVET system in terms of:
 - a. Decision-making (e.g. in offering a TVET course and number of students/trainees)
 - b. TVET curricula design
 - c. TVET student apprenticeship/practice places (via contract or agreement?)
 - d. TVET teacher training and qualification

- e. Exchange of technical expertise between vocational institutions and business/industry
 - f. Investments in equipment for TVET purposes
4. Do think that private industry/business is ready be involved in the TVET system across all levels?
- 4.1 If yes, in what form (please specify)? Or where would you propose their involvement?
- Forums
 - Consultation boards
 - Apprenticeships
 - Other?
- 4.2 If not, why, what are the reasons?

Private TVET providers

5. Do you know of private training providers (from private business organisations or others)?
- 5.1 If yes, do you have a list of these private training providers?
- 5.2 If not, can you help us find one or identify them?
6. Are you aware of/do you have any information on informal training programmes that might be organised (especially in provinces/areas that are not reached by the formal TVET institutions)?
- 6.1 If yes, can you explain more who are these training providers or what are these trainings for?
- 6.2 If not, who can you help us find one or identify them?

Other demand-driven TVET initiatives/models

7. Do you know about OTHER existing TVET initiatives/models that help to better match supply of TVET offer with the demands of the labour market in TVET skills needs so that we can recommend them as models to be taken into consideration by the governmental TVET in all levels?
8. Is there any donor or project working or who has experience in labour-market-oriented/demand-driven TVET delivery initiatives?

Can you give us any documents and contact people to further support us in this research?

Thank you for your time and support!

If you need any further information, please contact:

Dr Simona Milio: s.milio@lse.ac.uk

Ms Alma Shkreli: almashkreli@yahoo.it

Annex II. Interviews and key points

No.	Full name	Organization	Main points during the interview, outcome of the interview, relevance of the interview for our study
1	Khin Mar Aye	STC (MOL)	This meeting and interview were crucial to having an understanding of all the relevant, state-owned TVET stakeholders. Also, a contact list of the private TVET providers was given, together with advice on whom to meet.
2	Mr U Ohn Myint	Myanmar Engineering Society (Business association)	This interview was very useful because it was possible to get a list of their member businesses, and some of them are training centres or providers. Also, the interviewee suggested who to meet from the list.
3	Dr Aung Win	Myanmar Garment Manufacturers' Association (MGMA); Maple Trading Co. Ltd. (Garments factory)	During the interview with the MGMA, and at the same time, the owner of Maple Trading Co. Ltd. (a garments factory), we obtained contacts for four other garments companies.
4	Ms Aye Aye Win	Central Department of SME Development, Ministry of Industry (MOI)	This interview had some limitations with regard to the purpose of the study, but was a good opportunity to introduce the ILO to this newly established office, and obtain some contacts with the Ministry of Industry (MOI) HRD department, related to the industrial training centres.
	Dr. Ei Shwe Sin Htut	Central Department of SME Development, MOI	
	Ms. Daw Thein Thein Oo	Central Department of SME Development, MOI	
	Ms. Daw Swe Zin Soe	Central Department of SME Development, MOI	
5	U Aung Naing Tun	Tech Training Centre (Engineering) (private provider)	The interviewees provided a very frank and broad understanding of the functioning of the private TVET providers, their problems, and the need for support.
	Mr Myint Oo	Tech Training Centre	
6	U Aye Shwe Managing Director	Dual Tech Vocational Training Centre & Engineering Co. Ltd. (Private provider)	This interview gave a clear understanding and confirmation of how private providers operate. The visit to the training centre gave us an understanding of the quality of training.
7	U Soe Aung Kyaw	Kabar Industrial Training Centre (Private provider)	This was a crucial interview due to the very special nature of this business. Initially, Kabar was considered to be a private TVET provider, but during the interview it transpired that it had multiple functions, such as being an overseas employment agency, a test and measurement service, a fabrication service, as well as a ship and vessel builder. The interviewee was extremely helpful and provided us with the <i>Education Directory: A Guide for Everyone</i> , with the contacts of education providers at different levels.
8	U Kyin Tun	Newest Garment Manufacturing	Two outcomes of this interview were: 1. private businesses want to be engaged and involved in TVET, but do not know how to achieve this; and 2. the approach to different TVET areas based on the economic sector or skills needed for each sector should be differentiated and tailored according to the needs of companies.

9	Lt. Colonel Sein Pe	Arbourfield Manpower and Training Services Co. Ltd. (Private provider)	This interview dug deeper into the way overseas employment agencies operate, and their relations with industries abroad.
10	Professor Nyi Hla Nge	Steering Committee of Yangon Technical University and advisor for the MOST	This interview was extremely important in providing a more thorough understanding of the possible changes and interventions at different levels of the government. There is certainly great desire for public-private collaboration, but there is a deep mistrust between businesses and the government.
11	Kyaw Kyaw Sint	TRC training centre	TRC is a private provider in the hotel and tourism sector. It was a very important meeting because we were given important contacts from the Myanmar Federation of Tourism and other training schools. See detailed transcript.
	Ms May Thazin	TRC Hotel and Vocational Training School	
12	U Ko Ko Gyi	Myanmar Engineering Society	It was important to meet with this society in order to understand how involved they are in TVET, and to try to distribute the questionnaire to private businesses. The society is collaborating with the construction training centre.
13	Mr Phyo Way Yar Zar	Myanmar Tourism Federation (MTF)	The MTF is strongly involved in training and wishes to be involved in TVET across all levels. Part of the federation is an Association of Tourism and Hospitality Training Centres. They distributed the questionnaire among their member TVET providers and businesses.
	Mr Kyaw Htun	MTF	
	Ms Lin Lin	MTF	
14	Mr Konrad de Bortoli	GIZ	There are many points in common between what GIZ and the ILO will be doing in the future: SME development, banking sector development, and organizational development for the NSSA, skills development, among others. A follow-up assessment will be necessary to review the results.
15	Ms Tin Tin Shu	CESR office task manager	This interview was made in two parts due to the engagements of Ms. Tin Tin Shu. This meeting produced a lot of very good ideas on how private businesses and industry can be involved in decision-making bodies with regard to education in general and TVET in particular. Permission for the study to be within the framework of the CESR.
	Ms Ohnmar Thein	CESR office assistant task manager and deputy director	
16	Ms Daw Mya Thida Soe	Myanmar Garment Human Resources Development Centre	This interview was important in enabling a closer look and understanding of how these training centres are working under the business associations.
17	Mr Peter Tschumi	SDC	This was a very good interview in terms of collaboration establishment and exchange of information. There are many points of synergy between the SDC and ILO. In September, the SDC had a bid for more projects that might be aligned with the ILO's interests.
	Mr Nay Myo zaw	SDC	
18	Dr Myi Thet	Union of Myanmar Federation of Chambers of Commerce and Industry (UMFCCI)	This interview confirmed again that the understanding of what a TVET system is, and how business involvement in TVET can be implemented, are not yet clear for employers' organizations and employers in general.
	Mr U Aung Myint	UMFCCI	
	Ms Thuzar Kywe	UMFCCI	

Annex III. Stakeholders interviewed

Type	Full name	Organization	Email contact	Telephone number	Day and time of interview	Category	Note
Interview	Ms Khin Mar Aye	STC – Ministry of Labour, Employment, and Social Security	Khinmaraye61@gmail.com	+951564773	10/06/13 09.30	State-owned TVET provider	PP of 81 slides. Collected list of 26 providers.
Interview	Mr U Ohn Myint	Myanmar Engineering Society	mes@mptmail.net.mm 586omyint@gmail.com	+95003546	11/06/13 08.40	Business association	Collected: Brochure of activities; List of 72 member businesses.
Interview	Dr Aung Win	Myanmar Garment Manufacturers' Association (MGMA); Maple Trading Co. Ltd. (garments factory)	winmaple@mptmail.net.mm doctoraungwin@gmail.com	+951638550 +95195781	11/06/13 11.00	Business association and private business (garments industry)	
Interview	Ms Aye Aye Win	Central Department of SME Development, Ministry of Industry	smscentre35b@gmail.com ayeayethu7@gmail.com	+951559239 +951650087 +9595129249	11/06/13 14.00	SME Development Centre, Ministry of Industry	Collected the following documents: SMI Statistics 2012, MOI; SME Development Centre; MOI brochure; SME Conditions and framework of SME Development, MOI; HRD Department, MOI.
Interview	Dr Ei Shwe Sin Htut	Central Department of SME Development, Ministry of Industry	minminshwe1@gmail.com	+951545932 +9595407715 +95973018186			

Interview	Ms Daw Thein Thein Oo	Central Department of SME Development, Ministry of Industry	theintheinoo.yie@gmail.com	+9518603826/ +9518603827			
Interview	Ms Daw Swe Zin Soe	Central Department of SME Development, Ministry of Industry	swezin.soe@gmail.com	+95944801672. +95546051			
Interview	Mr U Aung Naing Tun	Tech Training Centre (Engineering)	techengg.mm@gmail.com	01523579, 012304055	12/06/13 10.00	Private TVET provider	Collected: Brochures of the company.
Interview	Mr Myint Oo	Dual Tech Vocational Training Centre & Engineering Co., Ltd.	myintoo@gmail.com	523579,0973043681, 09420117374			
Interview	Mr U Aye Shwe Man'g Director	Dual Tech Vocational Training Centre & Engineering Co., Ltd.		018550596/ +95137649	12/06/13 11.30	Private TVET provider	Collected Brochure of the company; Profile of the company, CD.
Interview	Mr U Soe Aung Kyaw	Kabar Services Co. Ltd.	kabartionseng.otc@gmail.com	01-639449 01-639450	12/06/13 15.00	Private TVET provider – training centre, overseas employment agency, test and measurement services, and fabrication services for ship and vessel building	Collected: Brochure of the company; Education directory and guide (book with contacts and information for all education providers including employment agencies) produced by Myanmar Marketing Research and Development Services Ltd.

Interview	Mr U Kyin Tun	Newest Garment Manufacturing	ukyintun@gmail.com	590531 591093	13/06/13 10.00	Private industry (garments)	
Interview	Lt Colonel Sein Pe	Arbourfield Manpower and Training Services Co. Ltd.	arbour2008@gmail.com	+95193459	13/06/13 13.00	Private TVET provider – training centre, overseas employment agency	Collected: Brochure of the company.
Interview	Prof Nyi Hla Nge	Steering Committee of Yangon Technical University and advisor for the MOST	nyihlange1@gmail.com	+95132066	14/06/13 10.00	Ministry-level and state-owned provider	Collected: Access and Quality of TVET CESR phase 1 (Ed. Restructuring); Final draft education policy report; Labour market analysis; Old and New Technical Education System; Teacher education; Technical education system in Myanmar; UNESCO input to the CESR Rapid Assessment – Focal Area B (i).
Meeting	Ms Hnin Wai	Myanmar Women Entrepreneurs' Association.	mhwhninwai@gmail.com mwea2008@gmail.com	+95110809	14/06/13 14.00	Business association	Was a meeting, not an interview, but she will send the questionnaire via email. She promised to also distribute the questionnaire to 10–20 businesses, part of the executive board of the association.
Interview	Mr Kyaw Kayw Sint	TRC Hotel and Vocational Training School	kksint@trc-mm.com	+9595005596	17/06/13 15:00	Private training provider – training centre, hotel consultancy, international hospitality staff recruitment	Collected: Brochure with services; Updated situation of Myanmar tourism.
Interview	Ms May Thazin	TRC Hotel and Vocational Training School	contact@trc-mm.com maytz@trc-mm.com	+9595098453			

Interview	Mr U Ko Ko Gyi	Myanmar Engineering Society	kokogyi.kokogyi@gmail.com mes@mptmail.net.mm	+9595010386	18/06/13 10.00	Business association (professional society)	Collected: Brochure on activities.
Interview	Mr Phyo Way Yar Zar	Myanmar Tourism Federation	pwyarzar@myanmar tourismboard.org	+9595138576	19/06/13 10.00	Business association	Collected: List of member hospitality and tourism TVET providers; They also promised to distribute the questionnaire to some of their main member businesses and TVET providers.
Interview	Mr Kyaw Htun	Myanmar Tourism Federation	khtun@myanmar tourismboard.org	+9592005429			
Interview	Ms Lin Lin	Myanmar Tourism Federation	Myanmartourismboard@gmail.com info@myanmartourismboard.org	+9595176380			
Interview	Mr Konrad de Bortoli	GIZ	konrad.debortoli@giz.de	+959420021652	19/06/13 14.00	Development partner	Collected: CESR-TVET Rapid Assessment Draft Report Part 1.pdf; MGI_Myanmar_Full_report_June2013.pdf.
Interview	Ms Ohnmar Thein	CESR office assistant task manager and deputy director	ohnmartheinomt@gmail.com	+9512304284 +95973038275 +95943040353	20/06/13 09.00	Ministry of Education	
Interview	Ms Daw Mya Thida Soe	Myanmar Garment Human Resources Development Centre	garment.mgma@gmail.com	+95973254504	20/06/13 13.00	Private provider by business association	
Interview	Ms Tin Tin Shu	(CESR office) task manager	Mstintinshu4@gmail.com	+9512304287 +95949243348	20/06/13 17.00	Ministry of Education	
Interview	Mr Peter Tschumi	SDC	Peter.Tschumi@eda.admin.ch	+951534754, 512873, 507089 +9525319390	21/06/13 09.00	Development partner	

Interview	Mr Nay Myo zaw	SDC	nay.myo.zaw@eda.admin.ch	+951534754, 512873, 507089 + 9595085346			
Interview	Dr Myi Thet	Union of Myanmar Federation of Chambers of Commerce and Industry	umcci@mptmail.net.mm umfcci@mptmail.net.mm	+951214343, 214344/9 +9595040871	21/06/13 14.00	Business association	Collected: Brochure of the activities of the UMFCCI; Brochure of the activities of the UMFCCI training institute.
Interview	Mr U Aung Myint	Union of Myanmar Federation of Chambers of Commerce and Industry	aung.myint900@gmail.com	+951214344/49			
Interview	Ms Thuzar Kywe	Union of Myanmar Federation of Chambers of Commerce and Industry	ird.umfcci29@gmail.com umfcci@mptmail.net.mm	+951214344/9 + 9512301564			
Meeting	Mr Carsten Hutte-meier	ADB-CESR consultant	cah@aarhustech.dk	+4530559280 +4589373533	21/06/13 17.00	Development partner	Was a meeting, not an interview Collected: Merged draft of TVET assessment not for citation.
Meeting	Mr Andreas Dernbach	GIZ-CESR consultant	andreas@dernbach.net	+4915114 62852	22/06/13 12.30	Development partner	Was a meeting, not an interview.
Questionnaires	Ms Yin Yin Aye; director, principal	Centre for Vocational Training Myanmar					

Annex IV. Meetings

Table 33. Meetings attended

No.	Name of attendee	Organization
1	Carmela Torres	ILO
2	Carmela Torres and Steve Marshall	ILO
3	Education Development Partner Group meeting	Education development partner
4	Consultation meeting with Lower Myanmar representatives on the CESR Phase 1	CESR team – MOE
5	Piyamal Pichaiwogsee	ILO Myanmar
6	Political briefing to embassies in Myanmar	ILO Myanmar and embassy representatives
7	ILO staff meeting	All ILO staff in Yangon
8	Ms Hnin Wai	Myanmar Women Entrepreneurs' Association
9	CESR TVET Work Group	CESR development partner
10	Carsten Huttemeier	ADB
11	Andreas Dernbach	GIZ

Table 34. Interviewees contacted

No.	Full name	Organization, institution, or business	Obstacles, problems, reasons why it was not possible to meet
1	Contact name not available	Myanmar Glogan (Garments factory)	They accepted the meeting but later cancelled because they said there were other urgent issues.
2	Contact name not available	Lat War (Garments factory)	No reply.
3	Contact name not available	Anita Asia (Garments factory)	No reply.
4	U Min Zan (principal)	Construction Training Centre	No reply.
5	Contact name not available	Shwe Taung Group (Construction company)	We made several attempts via phone to set up a meeting; however, it was impossible due to prior engagements. An email was also sent with the questionnaire, but there was no reply.
6	Contact name not available	Myanmar Computer Industry Association (MCIA)	An email was sent on 19 June, but it failed to be delivered. They contacted via phone.

Annex V. Documents reviewed

CESR documents

Title	Date	Type	Note	Section of draft report to which it pertains
CESR Phase 1 Rapid Assessment Summary	28/03/13	Presentation – summary	The presentation summarizes key recommendations and findings of the CESR Phase 1 Rapid Assessment. It covers all subsections of the education system: basic education, early childhood development, non-formal education, teacher education, higher education, and TVET. On TVET – access to TVET to be improved; take into consideration non-formal TVET, and the severed link between TVET and labour market.	Relevant for Chapter 3 on the national education system.
Myanmar CESR: Phase 1; Secondary Education Subsector. Draft	07/03/13	Report	Full summary in DropBox: detailed description of the dynamics of the labour market and employment policies, and the link to the TVET sector; mismatch between the skills needs per industry and the outcomes from the education and training sector; post-school programmes outdated and lack of practical and workable skills (p. vii); improving the visibility of the TVET sector and involving the private sector in programme design and implementation (p. viii); development of alternative approaches to learning required (p. viii).	Relevant for Chapter 4 on TVET and Chapter 5 on the labour market; data on labour market to be included in the introduction.
Myanmar CESR: Subsector: Technical and Vocational Education and Training (TVET) (Revised) Draft Report Part I: Policies, Legislation, Management, Rapid Assessment	2012	Report	Full summary in Dropbox: 1. As the Myanmar TVET system is dominated by a supply-driven mind-set of government officials, there is an absolute need to work in partnership with entrepreneurs, business associations, and chambers of commerce in order to change the system from supply-driven to demand-driven TVET (p.21). 2. Based on this collaboration, there is the need to review the skills standards for 175 occupations, using a common and internationally recognized format adapted accordingly so it fits into the world of training and work in Myanmar. 3. Develop curricula in partnership with the private sector so that there is more balance between theory and practice, and demand and supply.	Relevant for Chapter 4 on TVET.

			<p>4. Once the curricula are developed, review budget in order to allocate resources for adequate equipment, recruitment, and training of teachers, in order to deliver the curricula.</p> <p>5. Address the TVET gap in order to improve the delivery of courses to disadvantaged youth, as well as rural areas, which at the moment are left out.</p>	
Myanmar CESR: Phase 1, Labour-Market Analysis – the Demand for Higher Education and TVET Graduates	18/01/13	Report	<p>Full summary in Dropbox:</p> <ol style="list-style-type: none"> 1. The capacity of the people and organizations is limited, and a lot of the information is simply not available (p.31). 2. Limited engagement from private industry in the education and training sector. 3. There is a mismatch between the performance sought by industry from the workforce, and the outcome of the education sector. 4. There are three economic growth sectors: construction, tourism, and manufacturing. 5. Agriculture still remains an important sector. 6. Employment in the informal sector is higher than in the formal sector. 7. Higher education and TVET are largely undifferentiated from each other. 8. Quality assured private training provisions should be encouraged. 9. An analysis of current training in the sectors and subsectors, and a strategy for engagement is needed. 	Relevant for Chapter 5 on the labour market; data on labour market to be included in the introduction.
Myanmar CESR: Phase 1, Higher Education Subsector. Draft. Previous version in drafts	27/02/13	Report	<p>Full summary in Dropbox:</p> <ol style="list-style-type: none"> 1. More data needed on relative public and private spending on education, as well as data related to the inclusiveness of education (p.vi). 2. Need for a wide consultation of all stakeholders on an overall long-term strategy for the development of the education sector; consultation to also include public and private education institutions and representatives from the labour market (p.vi). 3. Clearer definition of higher education and how it is differentiated from TVET (p.vi). 4. Need for quality assurance measures – national QA or through more resources on a ministerial level (p.vi). 	Relevant for Chapter 3 on the national education system.

Data Collection Survey on the Education Sector in Myanmar Final Report	Feb 2013	Final report	<p>Very important document, since it provides not only secondary but also primary information on the education sector in Myanmar. A full chapter on TVET is very useful to present the state of play. Critical issues on access to TVET: significant TVET enrolment gap across regions; gap between supplies of TVET programmes and demands for middle-level technical workers; lack of financial support for economically disadvantaged students.</p> <p>Quality: lack of opportunities for students to gain practical experience; centred on rote-learning; capacity of teaching staff to be strengthened; private companies' low confidence and trust in TVET institutions.</p> <p>Management: the levels and contents of TVET programmes vary significantly due to the lack of coordination across relevant ministries and institutions; the existing laws and policies have become outdated and do not reflect the realities of TVET today.</p>	Relevant for national education, chapter 3; TVET, chapter 4; labour market, chapter 5; and general overview.
Teacher Education Review in Myanmar Technical Input for CESR Working Group	14/01/13	Report	<p>The report specifically covers teacher education policies and opportunities. Some of the critical issues include an absence of a "Teacher Education Policy" in Myanmar, since pieces of directives so far have not been consolidated to make one systematic policy document. Lack of professional standards makes the long-term goals for teachers unclear, which makes it difficult to figure out the framework of continuing professional development (CPD).</p> <p>Management and leadership training for head teachers has not yet been organized.</p>	Can be used for a discussion on the role of teachers in capacity building.
National Curriculum Review in Myanmar Technical Input for CESR Working Group	31/01/13	Report	<p>A detailed analysis of the national curriculum system including comparisons with the Japanese system. It reviews the current situation, looking at curriculum revisions, quality of textbooks and lessons, assessment systems, and matriculation.⁴⁰³ It includes primary, in addition to secondary data, which is useful for further analysis, even though there is no information specific to the TVET system.</p>	Important for a detailed review of the curriculum.
Focal Area B (ii) Basic Education Policy Supported by UNICEF	Jan 2013	Report	<p>Presents background to the education policy environment, basic education policies, and recommendations included in the Basic Education Subsector Report.</p>	

⁴⁰³ The examination conducted for basic education high school completion and for university entrance.

Situation Analysis of Early Childhood Care and Development in Myanmar	01/12/12	Report	This report presents baseline information on early childhood care and development (ECCD) with regard to pregnant women, mothers, and children from birth to age eight years. Looking into the potential for a policy on ECCD to ensure the provision of comprehensive services for child survival, development, growth, and support through the coordination of sectoral, multi-sectoral, and integrated services in the fields of education, health, nutrition, sanitation, and child protection. In relation to TVET, the information that can be extracted is related to human development indicator tracking and the scene-setting of perceptions of ECCD in Myanmar.	Not immediately relevant for the chapters of the report. Part of the systemic approach to education and TVET.
Myanmar CESR Labour-Market Analysis – The Demand for Higher Education and TVET Graduates	18/01/13	Report	See: Labour-Market Analysis – the Demand for Higher Education and TVET Graduates Draft, 18 January 2013 reformatted above.	Earlier draft of another document – difference only in reformatting.
Myanmar CESR: Higher Education in Myanmar	05/02/13	Report	Background information on the higher education sector in Myanmar for the CESR. Combination of ADB and UNESCO data on the education system. The information is included in the report on the higher-education subsector. Important to note is that efforts were made to collect primary data through DHEL DG's office from all 12 ministries having higher education institutions (HEIs), and one Union Public Services Centre encountered delay in receiving response within a short timeframe.	Relevant to the national education system description; good presentation of data and information.
Myanmar CESR Phase I Implications of Education-Sector Restructuring, Education Policy and Reform Unit, UNESCO Bangkok	07/01/13	Report	The report presents the simulation results of various possible scenarios based on the reform plans of the government of Myanmar, excluding a financial simulation due to the lack of data. UNESCO's Education Policy and Strategy Simulation (EPSSim) generic model was adapted to reflect the current general education system structure in Myanmar, which includes primary, junior secondary, and senior secondary levels. The report concludes that in all cases different than the status quo, significant investment in the education system will be required: teachers, textbooks, among others.	Important for a general idea of the developments and possible scenarios in the policy framework behind the education system.

<p>Education Systems in ASEAN+6 Countries: A Comparative Analysis of Selected Educational Issues Comparative analytical report prepared for the CESR</p>	<p>01/07/13</p>	<p>Working paper</p>	<p>The aim of the report is to help the CESR taskforce, established by the Myanmar Ministry of Education, to undertake the Rapid Assessment phase of the CESR, and to identify the main areas of focus for change for the education system in Myanmar during the following CESR phases. It provides a regional perspective on education development in the Asia-Pacific region, as well as a detailed account of the ASEAN+6 countries' statuses on selected education system issues from a comparative perspective. Most important for our purposes is Section 3 of Chapter 2, which looks into the TVET system, with subthemes focusing on legal, institutional, and policy frameworks; financing; the TVET delivery system; and relevance and quality of TVET.</p> <p>Recommendations: key ideas from the report applicable to the situation in Myanmar include the need to align TVET with the industrial policy of the country, either formally through development plans or through establishing specific practices. It is important to increase the influence of private providers on the TVET system, and increase coordination on TVET: horizontal (different ministries) and vertical (between national and local authorities). With regard to public and private partnerships, the report explains the need for partnerships at all levels – not only between the national government and employers but also locally and within specific institutions. TVET public funding to be complemented by private sources such as tuition fees and training fees paid by firms. Other possible recommendations applicable to Myanmar include issues surrounding demand-driven TVET. On one hand, with the rapid expansion of the technology and knowledge-intensive sectors, traditional TVET graduates are in lower demand in the market. On the other hand, aspects of demand-driven TVET include: relevance and efficiency of TVET, practice directed by the labour market, a multiple-exit-and-entry-points system to ensure flexibility, national competency-based curriculum relevant to industry requirements, and modular curriculums.</p>	<p>This report will be especially relevant for formulating the recommendations sections of the report, since it looks at ASEAN+6 examples of TVET management and quality assurance.</p>
<p>Myanmar CESR Subsector: Technical and Vocational Education and Training (TVET) Revised Draft Summary</p>	<p>12/11/12</p>	<p>Report</p>	<p>The note summarizes findings of the CESR of the TVET subsector, and repeats the information presented in other resources.</p>	<p>Relevant to Chapter 4 on TVET, as well as in the evaluation of demand for TVET.</p>

of Findings Rapid Assessment				
TVET in Myanmar Access and Quality of TVET	26/12/12	Report	The report explores the immediate concerns related to the development and adaptation of the national skills standards relevant to the labour market, and revision of the training programmes to meet these needs, to increase skills levels. It outlines the need for the TVET system to be responsive to the needs of employers and to more quickly address their priorities through a revised system. The report follows closely the issues and recommendations in the CESR reports, focusing on the features of the competency-based training system, evaluation, and needed equipment.	Relevant to Chapter 4 on TVET.
Textbook Printing and Distribution for Basic Education in Myanmar: An evaluation and strategy study prepared by Julian Watson with Ei Ei Khine and Thein Myint for the Myanmar Comprehensive Education Sector Review	Dec. 2012	Report	This study feeds in to the component Focal Area F: Special Study on Textbook Printing and Distribution of the CESR. The report is a comprehensive review of the textbook printing, editing, and distributing process in Myanmar, which gives a number of recommendations for the improvement in quality and extended life of the textbooks (from one to three years). Other recommendations include the updating of the design and improving the physical quality, while undergoing a thorough content review of the curriculum. The report covers textbooks and teaching guides.	Not directly relevant to any section.
Rapid Assessment of the Financing of the Education Sector in Myanmar – First Draft	22/01/13	Report	Explores the volume of resources spent on education, the resources allocated across various types of education, and presents an analysis of how well these resources have been spent. Overall private household spending on education is unusually high in Myanmar, funding 70 per cent of total spending on education, while public resources to education accounts for around 25 per cent of the total. Also, overall spending (private, public, and donor-financed) is exceptionally small compared to the size of Myanmar's economy and the government's available resources. The note explores how low spending levels lead to sub-optimal quality and insufficient learning outcomes. At the same time, they argue that the data on learning outcomes is not of sufficient quality to allow for analysis and comparisons.	

Comprehensive Education Sector Review: Rapid Assessment; Focal Area B (i) Overarching Legislation, Policy, and Management; UNESCO input to the Rapid Assessment		Report	The report reviews overarching legislation, key policies, and strategies, planning, management, and monitoring systems, institutional structures and capacity, and explores the various cross-cutting issues of the education sector. It presents a comprehensive framework for approaching legislative and policy reform. With regard to TVET, the key issue identified is that there is no sector plan for TVET, and although there is connection between secondary education and TVET, the MOE is almost bypassed in discussions on TVET. Overall, other issues include: missing an effective support mechanism for private-sector involvement in education; missing sector-wide development priorities (priorities are set for individual subsectors only), and weak coordination and cooperation between the MOE and other ministries involved in education.	
Final Draft: CESR Rapid Assessment of overarching legislation	Nov. 2012	Report	The report presents an assessment of Myanmar's education legislation on its own merit and with regard to international commitments. It also includes a comparison with the Lao PDR in terms of content of the law. It proposes a structure for a comprehensive education reform law, and specific recommendations for all laws part of the overarching legislation: the Constitution of Myanmar (2008), the Basic Education Law (1973), the University Education Law (1973), the Educational Research Law (1973), the Technical, Agricultural, and Vocational Education Law (1974), the Private Tuition Class Law (1984), and the Child Law (1993). With regard to the law covering TVET, the report suggests that an important issue is the lack of preamble to this law, and the definitions relate mainly to the institutions offering TVET and the content of disciplines.	
Myanmar CESR Summary, Secondary Education Sector, Rapid Assessment (Phase 1)		Draft	Draft of report already reviewed.	
Myanmar CESR: Phase 1 TVET Subsector Analysis – Policy, Legislation, Management, and Service Delivery	08/03/13	Draft	Draft of report already reviewed.	

Draft – 20 February 2013 (minor editing/reformatting on 8 March 2013)				
Phase 1: Rapid Assessment Secondary Education Sector Analysis January 2013 TA 46369-001 MYA: Support for Education-Sector Planning	Jan. 2013	Draft	Draft of report already reviewed.	
Technical and Vocational Education and Training (TVET) Component Concept Note	29/05/13	Concept note	Very important for the structure of the report and for our work	
Policy, Legislation, Management, and Finance (PLMF) Component Concept Note	28/05/13	Concept note	For the records. Proposed capacity-building workshops: 1. Policy Formulation and Monitoring (three- to four-day workshop); 2. Decentralized Education Planning (three-day workshop); 3. Education Indicators, Data Analysis, and EMIS Development (three-day workshop); 4. Financial Planning and Management (two-day workshop); 5. Teacher Policies (three-day workshop).	
CESR Phase 2, In-Depth Analysis Terms of Reference (TOR)	07/04/13	TOR	Draft of report already reviewed.	
Consultation Meeting on the Comprehensive Education Sector Review Report – Volume (1)	29/05/13	Invitation	Invitation for the records.	
Support for Decentralized Financing in Education (proposed work to be carried out under Phase 2 of the CESR, under “4.2.7 Support for Financial	2013	Concept note	Includes a summary of financing for four types of activities over a five-year period by external funders: 1. on-budget transfers to the Ministry of Education to help expand the resources available for school grants; 2. on-budget transfers to the MOE to help expand the resources available for targeted stipends to students; 3. on-budget transfers to cover the costs of professional development to be undertaken at central, regional, and township levels, aimed at	Important for coordination with other stakeholders.

Decentralization and Targeting")			building permanent capacity to manage, target, and report on the use of decentralized funding; and 4. international and national technical assistance.	
Consolidated Report of Comprehensive Education Sector Review Phase I (Draft)	Mar. 2013	Two files	This document presents a summary of tasks planned for CESR Phase 2: Further analysis of curriculum and course design, delivery modality, and inclusion of workplace experience or attachment will be conducted. Likewise, a suitable method of assessment and objective scoring will be determined, as will quality assurance criteria and their comparability to the National Qualifications Framework (NQF). Teacher-student ratios will be analysed, and training standards established, along with effective institutional management and organizational structures. Attention will be given to recruitment and promotion policies for instructors, and scholarship and exchange student programmes will be initiated.	This concept note relevant for background information.
The Consultation Meeting on the Comprehensive Education Sector Review Report - Volume (1)	May 2013	Invitation	Invitation for the records.	
CESR Phase 2: Component 2 (ECDBE) Indicative Activities and Timeline	May 2013	Excel sheet	ECDBE (Component 2) Indicative Activities and Timeline, to be read together with the concept note. Informs the developments to be achieved in this area.	This concept note relevant for background information.
Early Childhood Development and Basic Education (ECDBE)	May 2013	Concept note	This concept note sets out the objective to undertake priority analytical ECDBE (Component 2) activities, informed by the findings of the CESR Rapid Assessment. The scope of work is set out in the Phase 2 TOR, under Section 4.2.	This concept note relevant for background information.
CESR Phase 2 Development partner technical assistance framework	28/03/13	Concept note	Development partner technical assistance framework consists of tasks by component.	Relevant to avoid duplication of efforts and keep track of work done.
CESR Phase 2 In-Depth Analysis Terms of Reference (TOR)	15/02/13	Working paper	Outline of the aims and objectives of each component of the Phase 2 of the CESR. On TVET, the TOR explains that a strong emphasis will be given to consultation and dialogue, building on Phase 1 roundtables, particularly given the large number of agencies currently	

			involved in this subsector and the need for TVET system-industry linkages. In some cases, selective emphasis may be given to TVET's feed-in to fields expected to play key roles in driving rebalanced economic growth, and including construction, tourism, manufacturing, and agriculture.	
Basic Education Group results, Yangon	May 2013	Presentation	Burmese	
ECCD, TE, NFE Group results, Yangon	May 2013	Presentation	Burmese	
Higher Education Group results, Yangon	May 2013	Presentation	Burmese	
TVET Group results, Yangon	May 2013	Presentation	Burmese	
Development Partner Coordination Group Meeting Minutes	Mar. 2013	Meeting minutes	The objectives of the meeting are to: 1. Update the status of Rapid Assessment report dissemination and consultation plans. 2. Discuss development partners' support of CESR Phase 2. 3. Discuss work by different stakeholders in education development and how to ensure linkages to the CESR process.	
Informal Note on IHLCS Household Survey Analysis as an Input to the CESR	Jan. 2013	Methodological note	This methodological note drafted in November 2012 by Chris Spohr, senior education economist, ADB, at the request of the CESR office, with minor updates in January 2013, focuses on the use of the Integrated Household Living Conditions Survey in Myanmar, 2009–10 (IHLCS) to complement administrative data available in the EMIS and other data sources. The analysis explains the differences and similarities between the results from the IHLCS and other sources, especially with regard to the gross enrolment rate (GER) and net enrolment rate (NER) for different regions, age groups, and educational levels. Analysis on TVET data is limited, and it shows very low participation rates, particularly in rural areas and among the poor. The analysis also looks into the socio-economic and geographical gaps that the IHLCS and the Multiple Indicator Cluster Survey, 2009–10 (MICS) reveal.	
Phase 1: Rapid Assessment TVET Sector Analysis – Policy, Legislation,	Feb. 2013	Concept note		

Policy

Title	Date	Type	Note
Employment and Skills Development Law	2013	Draft law	Approved and passed by Parliament on 30 August 2013.
Foreign Investment Law	2012	Law	
Labour Organization Law	2011	Law	
Minimum Wage Law	2012	Draft law	
Settlement of Labour Dispute Law	2012	Law	Safeguarding the right of workers, good relations between employers and workers, a peaceful workplace, and obtaining rights fairly, rightfully, and quickly by settling disputes between employer and worker justly.
Social Security Law	2012	Law	
Minimum Age for Work			Concluding Observations: CRC/C/15/Add.237, 30 June 2004. Second periodic report: CRC/C/70/Add.21, 5 November 2003. Initial report: CRC/C/8/Add.9, 18 September 1995.
Child Law	1993	Law	
Technical, Agricultural, and Vocational Education Law	1974	Law, as amended by Law No. 20/89	Promulgated in 1974 and amended in 1989. The activities of the Department of Technical and Vocational Education under the Ministry of Science and Technology are based on this existing law.
University Education Law	1973	Law	Promulgated in 1964, repealed in 1973, and amended in 1983, 1989, and 1998. Universities are established in accordance with this existing law. Universities established by this law are categorized into arts and science universities and professional institutions. The establishment of colleges and academies affiliated to universities requires the consent of the law. Only the universities founded in compliance with this law can confer degrees, diplomas, certificates, and other university honorary degrees. Preparations are being made to reform the law to be in line with the development of the state.
Myanmar Responsible Tourism Policy	2012		
Framework for Myanmar Tourism Master Plan (Draft)	2012		
Framework for Economic and Social Reform	14/01/13		Policy priorities for 2012–15 towards the Long-Term Goals of the National Comprehensive Development Plan.
The Constitution of the Republic of the Union of Myanmar	2008		
Basic Education Law	1973		
Educational Research Law	1973		
Private Tuition Class Law	1984		

Studies and reports

Title	Date	Type	Note
Telecoms in Myanmar: in Myanmar, cheap SIM card draw may herald telecoms revolution	24/04/13	News article	The article is interesting because it explores the potential of the telecoms industry in Myanmar, signified by the following statistics: the government says mobile penetration is around 9 per cent; the Swedish company Ericsson last year put the figure at less than 4 per cent, while President Thein Sein has set a goal of 80 per cent penetration by 2015. Ericsson estimated the total economic impact of the mobile sector in Myanmar could potentially be as high as 7.4 per cent of GDP over the first three years after the new licences are issued.
Access to and Quality of Education: Education for All in Myanmar	12/02/12	Presentation	This presentation by Mr Bo Win, director-general of the Department of Educational Planning and Training of the Ministry of Education, outlines the tasks for ensuring access to education and the quality of education. He provides a detailed list of recommendations for the basic education sector, specifically, and the education system in general. It also includes assessment based on the Myanmar EFA Target by 2015, and in relation to the Millennium Development Goals.
Seminar on Improving Organizations' Labour Management Systems to Strengthen Trade Cooperation Among the ASEAN Community; the Republic of the Union Of Myanmar, Tin Mar Htwe (Ms), director, Department of Labour, Ministry of Labour	04/07/12	Presentation	The document was presented at the ASEAN labour management seminar on 4–5 July 2012 in Thailand, discussing improving organizations' labour management systems to strengthen cooperation within ASEAN. The focus of the presentation on Myanmar was to outline the different labour laws, especially the new labour organization law and its effects. A suggestion included in the presentation was the need for capacity building for labour officers, labour inspectors, employers, and workers. The reason behind this need is to strengthen relations between labour organizations, employees, and employers.
Myanmar sanctions update: EU permanently lifts economic sanctions	Apr. 2012	Clifford Chance Briefing note	Update on Myanmar sanctions.

The Unemployment Insurance System of Myanmar, presented by Yu Lwin Aung, chairman, Social Security Board	20/11/12	Presentation	Presented at the ASEAN-ILO/Japan Project on Unemployment Insurance and Employment Services in ASEAN. Roundtable on the design of unemployment insurance systems: learning from ASEAN experiences 19–20 Nov 2012. Outlines priorities and challenges in reform of the social security system of Myanmar. It provides background on the current developments around the formulation of an unemployment insurance system, and the new Social Security Law implemented towards the end of 2013. Calls for technical and financial assistance, especially for raising awareness on the benefits of the social security system due to the fact that currently only 600,000 people are actively insured. Only 1 per cent of the population is insured under the social security scheme.
The 2013 Resource Governance Index	2013	Revenue Watch Report	The Resource Governance Index (RGI) measures the quality of governance in the oil, gas, and mining sector. Myanmar's natural resources include gems, industrial minerals, oil, and offshore natural gas reserves estimated at 10 trillion cubic feet. The extractive sector accounted for 39 per cent of exports in 2010.
Investing in the Future: Rebuilding Higher Education in Myanmar Report on the IIE Myanmar Initiative	Apr. 2013	Institute of International Education	
TVET education system in Myanmar			
Monastic Education in Myanmar (2009–10)	2013	Ministry of Labour Figure	
The Myanmar economy: tough choices	Sep. 2012	Global Economy and Development Working Paper 51	Interesting document, since it reviews important development challenges for the Myanmar government, without proposing a specific solution, but formulating clearly what the issues to be resolved are. This paper draws on a draft prepared for the International Academic Symposium "Myanmar in Reform 2012," June 18–20, 2012, convened by the Faculty of Social Sciences, University of Hong Kong, and the Centre for Myanmar Studies, Yunnan University. The draft was co-authored by Lex Rieffel and Khin Maung Nyo, senior research fellow at the Centre for Economic and Social Development in the Myanmar Development Resource Institute.

Orienting TVET for Sustainable Development Approaches and Concerns In Myanmar. Report. Author: Naing Yee Mar	Sep 2005	Report	Problems associated with access to TVET: economic poverty, language problems due to membership of different ethnic minority groups, and hardships associated with living in rural areas or in an isolated location, including more practical issues such as limited computer-based teaching and need to redefine the concept of lifelong learning.
Strengthening TVET to Achieve Lifelong Learning for All: Historical Snapshots and Recent Initiatives in Myanmar. Author: Naing Yee Mar		Report	
Reorienting TVET policy towards education for sustainable development in Myanmar	17/08/09	Report	Dr (Ms) Theingi, deputy director-general Department of Technical And Vocational Education, Ministry of Science And Technology. Presented at the International Experts Meeting on Reorienting TVET Policy Towards Education for Sustainable Development. Berlin, Germany Ministry of Science and Technology (Myanmar).
BTI 2012 (Bertelsmann Stiftung, Gütersloh)	2012	Myanmar Country Report	
Myanmar: Opportunities in Asia's Last Frontier Economy	Jul. 2012	IE Insights Report	This report presents the opportunities ahead for Singaporean investors in Myanmar, by outlining current developments and prospects in the economic sphere. The key sectors identified for investment are financial, power generation, urban and industrial development, and manufacturing. Key statistics used are FDI and export earnings by sector.
Myanmar Business Guide	Aug. 2012	PwC Report	Outlines legislative changes in the past few years affecting the business climate. Does not add new information compared to other sources.
Myanmar: Staff-Monitored Programme	Jan. 2013	IMF Country Report	Full update on the macroeconomic and financial situation in Myanmar. Important for the data included and for the comparison with other countries in the region.
The Rise of the South: Human Progress in a Diverse World Explanatory note on 2013 HDR composite indices on Myanmar	2013	Explanatory note	
Support for Education-Sector Planning	2013	ADB Project Data Sheet	
Support for Post-Primary Education Development	2013	ADB Project Data Sheet	

Comparative study of TVET system in Myanmar, England, and Germany: Lessons learned for developing countries	2006	Article	Mr Kyaw Htin Si Thu Department of Technical and Vocational Education of Myanmar Email: sithukyawhtin@gmail.com
Education for All: Access to and Quality of Education in Myanmar	Feb. 2012	Conference paper	(Conference on Development Policy Options with Special Reference to Education and Health in Myanmar) (13–16 February, 2012, Nay Pyi Taw, Myanmar).
8: Evolving Education in Myanmar: the interplay of state, business, and the community Marie Lall	2007	Article	
McKinsey Report: Myanmar's moment: Unique opportunities, major challenges	June 2013	Report	
TVET Myanmar case		Article	
Reorienting TVET Policy towards Education for Sustainable Development in Myanmar	2012	Presentation	Dr Theingi Department of Technical and Vocational Education, Ministry of Science and Technology, Myanmar.
The expectations of small and medium enterprises towards their employees as a means of improving TVET institutions (a case study in Myanmar)	2007	Article	Dr Hnin Si/Dr Cho Cho Myint Materials Science and Materials Engineering Research Department Ministry of Science and Technology Email: hnin2005@gmail.com.
TVET response to poverty alleviation in subregional Asia-Pacific countries (Philippines, Malaysia, Mongolia, and Myanmar)	2007	Article	By Mr Romeo O. Talosig, Technical Education and Skills Development Authority (TESDA), Philippines; Mr Mohamad Amin Hamat; Ms Halimah binti Che Hassan, Polytechnic and Community College Research And Development Centre, Department of Polytechnic and Community College Education, Ministry of Higher Education, Malaysia; Mrs Tungalag Chimid, National Methodology Centre; Ministry of Education, Culture, and Science, Mongolia; Prof Dr Khin Maung Aye, Department of Technical and Vocational Education, MOST, Myanmar.

International Development Association And International Finance Corporation: Interim strategy note for the Republic of the Union of Myanmar for the period FY 2013–14	30/10/12	World Bank Strategy note	The World Bank's strategy in Myanmar is based on three pillars: transforming institutions, building confidence, and preparing for the resumption of a full World Bank country programme. The strategy note sets out the current situation by identifying priority areas of work according to the government of Myanmar, but also development partners and fieldwork. The strategy note presents good analysis of the economic situation in the country, where the most interesting comments focus on prospects for the agriculture and finance sectors.
TVET Education System in Myanmar		Article	Southeast Asian Ministries of Education Organization; Regional Centre for Vocational Technical Education and Training (SEAMEO VOCTECH) – last updated 2007. The paper provides an overview of the function, objectives, and activities of the Department of Technical and Vocational Education (DTVE). It lists the institutions under the DTVE and the curricula they follow. More importantly, the paper investigates the human-resource requirements of future trends in industry and the economy by looking at: <ul style="list-style-type: none"> • introducing competency-based curricula and new courses; • entrepreneurial training to promote self-employment; • establishing more training institutions; and • promoting high-technology training, research and development (p.5).
TVET – Group results Yangon, at the CESR consultation meeting	31/05/13	Presentation	
ADB Myanmar in transition: Opportunities and challenges	Aug. 2012	Report	
STC, Department of Labour, Ministry of Labour, Employment, and Social Security (MOLES)	29/11/11	Presentation	
Country report Myanmar	Jan. 2011	EIU reports	
Country report Myanmar	Aug. 2011	EIU reports	
Country report Myanmar	July 2010	EIU reports	
Myanmar: White elephant or new tiger economy?	2012	EIU reports	
Asian Development Bank and Myanmar	31/12/12	Fact sheet	Summary of the involvement of the ADB in Myanmar as of the end of 2012; data on GDP – to be cross-checked with other organizations.
2012 Entrance Guide Book Day	2012	Burmese	
2012 Education Regional Workshop	2012	Burmese	
2012 Education Regional Workshop Report	2012	Burmese	

2012 Education Regional Workshop Report 03	2012	Burmese	
2012 Education Regional Workshop Report 05	2012	Burmese	
Yangon minister's speech	2012	Burmese	
KPMG Infrastructure in Myanmar Report	2012	Report	
First Myanmar Development Cooperation Forum MICC, Nay Pyi Taw, 19–20 January 2013 “Partnerships for action, implementation and success”	2013	Summaries	Summaries of the presentations of all participants in the 1st Myanmar Development Cooperation Forum in English.

Data and statistics

Title	Date	Type	Note
Local employment agency list	2013	Snapshot Ministry of Labour	List of 27 local employment agencies.
Oversees employment agency list	Mar. 2013	List from the Ministry of Labour	List of 159 oversees employment agencies, together with names of managing directors, licences, and address.
Demand on local workers to be recruited by licensed local employment agency	2013	Snapshot Ministry of Labour	Information on type of employees needed.
Selected Monthly Economic Indicators Report	Jan. 2012	Full data	1. Foreign trade. 2. Customs Duties. 3. Import by type of commodity. 4. Import of principal commodities. 5. Import by major trading partner. 6. Export of principal commodities. 7. Export by major trading partner. 8. Production of selected commodities of the state economic enterprises. 9. Electric power generated and sold by Myanmar. 10. Electric power generation by type. 11. Production of precious materials and pearls. 12. Mineral extraction. 13. Production of non-metallic minerals. 14. Meat and fish supply in Yangon. 15. Retail prices of selected commodities. 16. Consumer price index (union). 17. Spot price of gold at Yangon. 18. Money supply. 19. People's savings. 20. Two-year government treasury bonds; three-year government treasury bonds; five-year government treasury bonds. 23. Foreign exchange rates. 24. Revenue from taxes. 25. Foreign investment of permitted enterprises by sector. 26. Foreign investment of permitted enterprises by country of origin. 27. Transportation. 28. Registered motor vehicles by type. 29. Merchant shipping. 30. Overseas visitors. 31. Tourist arrivals by nationality. 32. Employment through labour offices;
Selected Monthly Economic Indicators Report	Feb. 2012	Full data	1. Foreign trade. 2. Customs duties. 3. Import by type of commodity. 4. Import of principal commodities. 5. Import by major trading partner. 6. Export of principal commodities. 7. Export by major trading partner. 8. Production of selected commodities of the state economic enterprises. 9. Electric power generated and sold by Myanmar. 10. Electric power generation by type. 11. Production of precious materials and pearls. 12. Mineral extraction. 13. Production of non-metallic minerals. 14. Meat and fish supply in Yangon. 15. Retail prices of selected commodities. 16. Consumer price index (union). 17. Spot price of gold at Yangon. 18. Money supply. 19. People's savings. 20. two-year government treasury bonds; three-year government treasury bonds; five-year government treasury bonds. 23. Foreign exchange rates. 24. Revenue from taxes. 25. Foreign investment of permitted enterprises by sector. 26. Foreign investment of permitted enterprises by country of origin. 27. Transportation. 28. Registered motor vehicles by type. 29. Merchant shipping. 30. Overseas visitors. 31. Tourist arrivals by nationality. 32. Employment through labour offices.

Selected Monthly Economic Indicators Report	Mar. 2012	Full data	1. Foreign trade. 2. Customs Duties. 3. Import by type of commodity. 4. Import of principal commodities. 5. Import by major trading partner. 6. Export of principal commodities. 7. Export by major trading partner. 8. Production of selected commodities of the state economic enterprises. 9. Electric power generated and sold by Myanmar. 10. Electric Power generation by type. 11. Production of precious materials and pearls. 12. Mineral extraction. 13. Production of non-metallic minerals. 14. Meat and fish supply in Yangon. 15. Retail prices of selected commodities. 16. Consumer price index (union). 17. Spot price of gold at Yangon. 18. Money supply. 19. People's savings. 20. two-year government treasury bonds, three-year government treasury bonds, five-year government treasury bonds. 23. Foreign exchange rates. 24. Revenue from taxes. 25. Foreign investment of permitted enterprises by sector. 26. Foreign investment of permitted enterprises by country of origin. 27. Transportation. 28. Registered motor vehicles by type. 29. Merchant shipping. 30. Overseas visitors. 31. Tourist arrivals by nationality. 32. Employment through Labour offices.
Selected Monthly Economic Indicators Report	Apr. 2012	Full data	1. Foreign trade. 2. Customs Duties. 3. Import by type of commodity. 4. Import of principal commodities. 5. Import by major trading partner. 6. Export of principal commodities. 7. Export by major trading partner. 8. Production of selected commodities of the state economic enterprises. 9. Electric power generated and sold by Myanmar. 10. Electric power generation by type. 11. Production of precious materials and pearls. 12. Mineral extraction. 13. Production of non-metallic minerals. 14. Meat and fish supply in Yangon. 15. Retail prices of selected commodities. 16. Consumer price index (union). 17. Spot price of gold at Yangon. 18. Money supply. 19. People's savings. 20. two-year government treasury bonds, three-year government treasury bonds, five-year government treasury bonds. 23. Foreign exchange rates. 24. Revenue from taxes. 25. Foreign investment of permitted enterprises by sector. 26. Foreign investment of permitted enterprises by country of origin. 27. Transportation. 28. Registered motor vehicles by type. 29. Merchant shipping. 30. Overseas visitors. 31. Tourist arrivals by nationality. 32. Employment through Labour offices.
Selected Monthly Economic Indicators Report	May-12	Full data	1. Foreign trade. 2. Customs Duties. 3. Import by type of commodity. 4. Import of principal commodities. 5. Import by major trading partner. 6. Export of principal commodities. 7. Export by major trading partner. 8. Production of selected commodities of the state economic enterprises. 9. Electric power generated and sold by Myanmar. 10. Electric power generation by type. 11. Production of precious materials and pearls. 12. Mineral extraction. 13. Production of non-metallic minerals. 14. Meat and fish supply in Yangon. 15. Retail prices of selected commodities. 16. Consumer price index (union). 17. Spot price of gold at Yangon. 18. Money supply. 19. People's savings. 20. two-year government treasury bonds, three-year government treasury bonds, five-year government treasury bonds. 23. Foreign exchange rates. 24. Revenue from taxes. 25. Foreign investment of permitted enterprises by sector. 26. Foreign investment of permitted enterprises by country of origin. 27. Transportation. 28. Registered motor vehicles by type. 29. Merchant shipping. 30. Overseas visitors. 31. Tourist arrivals by nationality. 32. Employment through Labour offices.

Selected Monthly Economic Indicators Report	Jun. 2012	Full data	1. Foreign trade. 2. Customs Duties. 3. Import by type of commodity. 4. Import of principal commodities. 5. Import by major trading partner, 6. Export of Principal Commodities. 7. Export by major trading partner. 8. Production of selected commodities of the state economic enterprises. 9. Electric power generated and sold by Myanmar. 10. Electric Power generation by type. 11. Production of precious materials and pearls. 12. Mineral extraction. 13. Production of non-metallic minerals. 14. Meat and fish supply in Yangon. 15. Retail prices of selected commodities. 16. Consumer price index (union). 17. Spot price of gold at Yangon. 18. Money supply. 19. People's savings. 20. two-year government treasury bonds; three-year government treasury bonds, five-year government treasury bonds. 23. Foreign exchange rates. 24. Revenue from taxes. 25. Foreign investment of permitted enterprises by sector. 26. Foreign investment of permitted enterprises by country of origin. 27. Transportation. 28. Registered motor vehicles by type. 29. Merchant shipping. 30. Overseas visitors. 31. Tourist arrivals by nationality. 32. Employment through Labour offices.
Selected Monthly Economic Indicators Report	Jul. 2012	Full data	1. Foreign trade. 2. Customs Duties. 3. Import by type of commodity. 4. Import of principal commodities. 5. Import by major trading partner, 6. Export of Principal Commodities. 7. Export by major trading partner. 8. Production of selected commodities of the state economic enterprises. 9. Electric power generated and sold by Myanmar. 10. Electric Power generation by type. 11. Production of precious materials and pearls. 12. Mineral extraction. 13. Production of non-metallic minerals. 14. Meat and fish supply in Yangon. 15. Retail prices of selected commodities. 16. Consumer price index (union). 17. Spot price of gold at Yangon. 18. Money supply. 19. People's savings. 20. two-year government treasury bonds, three-year government treasury bonds, five-year government treasury bonds; 23. Foreign exchange rates. 24. Revenue from taxes. 25. Foreign investment of permitted enterprises by sector. 26. Foreign investment of permitted enterprises by country of origin. 27. Transportation. 28. Registered motor vehicles by type. 29. Merchant shipping. 30. Overseas visitors. 31. Tourist arrivals by nationality. 32. Employment through Labour offices.
Selected Monthly Economic Indicators Report	Aug. 2012	Full data	1. Foreign trade. 2. Customs Duties. 3. Import by type of commodity. 4. Import of principal commodities. 5. Import by major trading partner, 6. Export of Principal Commodities. 7. Export by major trading partner. 8. Production of selected commodities of the state economic enterprises. 9. Electric power generated and sold by Myanmar. 10. Electric Power generation by type. 11. Production of precious materials and pearls. 12. Mineral extraction. 13. Production of non-metallic minerals. 14. Meat and fish supply in Yangon. 15. Retail prices of selected commodities. 16. Consumer price index (union). 17. Spot price of gold at Yangon. 18. Money supply. 19. People's savings. 20. two-year government treasury bonds, three-year government treasury bonds, five-year government treasury bonds. 23. Foreign exchange rates. 24. Revenue from taxes. 25. Foreign investment of permitted enterprises by sector. 26. Foreign investment of permitted enterprises by country of origin. 27. Transportation. 28. Registered motor vehicles by type. 29. Merchant shipping. 30. Overseas visitors. 31. Tourist arrivals by nationality. 32. Employment through Labour offices.

Selected Monthly Economic Indicators Report	Sep. 2012	Full data	1. Foreign trade. 2. Customs Duties. 3. Import by type of commodity. 4. Import of principal commodities. 5. Import by major trading partner, 6. Export of Principal Commodities. 7. Export by major trading partner. 8. Production of selected commodities of the state economic enterprises. 9. Electric power generated and sold by Myanmar. 10. Electric Power generation by type. 11. Production of precious materials and pearls. 12. Mineral extraction. 13. Production of non-metallic minerals. 14. Meat and fish supply in Yangon. 15. Retail prices of selected commodities. 16. Consumer price index (union). 17. Spot price of gold at Yangon. 18. Money supply. 19. People's savings. 20. two-year government treasury bonds, three-year government treasury bonds, five-year government treasury bonds. 23. Foreign exchange rates. 24. Revenue from taxes. 25. Foreign investment of permitted enterprises by sector. 26. Foreign investment of permitted enterprises by country of origin. 27. Transportation. 28. Registered motor vehicles by type. 29. Merchant shipping. 30. Overseas visitors. 31. Tourist arrivals by nationality. 32. Employment through Labour offices.
Selected Monthly Economic Indicators Report	Oct. 2012	Full data	1. Foreign trade. 2. Customs Duties. 3. Import by type of commodity. 4. Import of principal commodities. 5. Import by major trading partner, 6. Export of Principal Commodities. 7. Export by major trading partner. 8. Production of selected commodities of the state economic enterprises. 9. Electric power generated and sold by Myanmar. 10. Electric Power generation by type. 11. Production of precious materials and pearls. 12. Mineral extraction. 13. Production of non-metallic minerals. 14. Meat and fish supply in Yangon. 15. Retail prices of selected commodities. 16. Consumer price index (union). 17. Spot price of gold at Yangon. 18. Money supply. 19. People's savings. 20. two-year government treasury bonds, three-year government treasury bonds, five-year government treasury bonds. 23. Foreign exchange rates. 24. Revenue from taxes. 25. Foreign investment of permitted enterprises by sector. 26. Foreign investment of permitted enterprises by country of origin. 27. Transportation. 28. Registered motor vehicles by type. 29. Merchant shipping. 30. Overseas visitors. 31. Tourist arrivals by nationality. 32. Employment through Labour offices.
Selected Monthly Economic Indicators Report	Nov. 2012	Full data and TOC	1. Foreign trade. 2. Customs Duties. 3. Import by type of commodity. 4. Import of principal commodities. 5. Import by major trading partner, 6. Export of Principal Commodities. 7. Export by major trading partner. 8. Production of selected commodities of the state economic enterprises. 9. Electric power generated and sold by Myanmar. 10. Electric Power generation by type. 11. Production of precious materials and pearls. 12. Mineral extraction. 13. Production of non-metallic minerals. 14. Meat and fish supply in Yangon. 15. Retail prices of selected commodities. 16. Consumer price index (union). 17. Spot price of gold at Yangon. 18. Money supply. 19. People's savings. 20. two-year government treasury bonds, three-year government treasury bonds, five-year government treasury bonds. 23. Foreign exchange rates. 24. Revenue from taxes. 25. Foreign investment of permitted enterprises by sector. 26. Foreign investment of permitted enterprises by country of origin. 27. Transportation. 28. Registered motor vehicles by type. 29. Merchant shipping. 30. Overseas visitors. 31. Tourist arrivals by nationality. 32. Employment through Labour offices.

Technical and Vocational Education and Training System (TVET)	2012	Excel	CSO_data collection_up to 2012_25062013
Agricultural GDP and FDI data	Mar. 2012	Excel	CSO_data collection_up to March 2012_26062013
Energy imports, net #	June 2012	Excel	CSO statistics via email.
Education statistics level and by region and state	Up to 2010–11	Excel	t1701 - table
Existing number of school teachers by level of education and by region and state	Up to 2010–11	Excel	t1702 - table
Growth index of schools, teachers, and students by level of education	Up to 2010–11	Excel	t1703 - table
Teacher-student ratio by level of education	Up to 2010–11	Excel	t1704 - table
Teacher educators by rank and by gender	Up to 2010–11	Excel	t1705 - table
Percentage of female teachers by rank	Up to 2010–11	Excel	t1706 - table
Teachers by rank, by gender, by urban and rural	Up to 2010–11	Excel	t1707 - table
Teaching staff by academic qualifications	Up to 2010–11	Excel	t1708 - table
Monastic education statistics by level and by region and state	Up to 2010–11	Excel	t1709 - table
Students appearing for matriculation examination	Up to 2010–2011	Excel	t1710 - table
Number of persons appearing for matriculation examination	Up to 2010–11	Excel	t1711 - table
Enrolment at institutes of higher education	Up to 2010–11	Excel	t1712 - table

Teaching and research staff at institutes of higher education	Up to 2010–11	Excel	t1713 - table
Graduates of higher education by field of specialization	Up to 2010–11	Excel	t1714 - table
Enrolment in university of distance education, and institute of education by class and by subject	Up to 2010–11	Excel	t1715 - table
State scholars for training abroad, by field of study	Up to 2010–11	Excel	t1716 - table
Education colleges by region and state	Up to 2010–11	Excel	t1717 - table
Technical, agricultural and vocational trainees	Up to 2010–11	Excel	t1718 - table
Vocational trainees by type of skill	Up to 2010–11	Excel	t1719 - table
Salary Survey 2012, by Myanmar Survey Research	10/04 /12	2 files	
Indicators by UNICEF	2013	Data	
Education levels	-	File	
UNDP Integrated Household Living Conditions Survey in Myanmar (2009–10)			MDG Data Report is composed of: Executive Summary; Introduction; chapters on MDG goals: eradicating extreme poverty, promotion of gender equality and empowerment of women, reducing child mortality, improving maternal health, combating HIV/AIDS, malaria and other diseases, and ensuring environmental sustainability. Includes a summary of trends on key MDG indicators for 2005–2010.

ADB Myanmar economic data	2012	From Key Indicators for Asia and the Pacific 2012	
Foreign Trade	Mar. 2013	Selected Monthly Economic Indicators	Table 1. Foreign Trade Table 2. Trade by normal and border Table 3. Export and import by government and private Table 4. Trade by type of commodities Table 5. Import of principal commodities Table 6. Import of principal commodities by country 2013 (March) Table 7. Export of principal commodities Table 8. Export of principal commodities by country 2013 (March) Table 9. Export and import by major trading country Table 10. Customs duties
Production	Mar. 2013	Selected Monthly Economic Indicators	Table 11. Production of selected commodities of the state economic enterprises Table 12. Electric power generated and sold by the Myanmar Electric Power Enterprise Table 13. Electric power generation by type Table 14. Production of precious minerals and pearls Table 15. Mineral extraction of the state economic enterprises Table 16. Production of non-metallic minerals of the state economic enterprises Table 17. Production of meat, fish, milk, and eggs
Prices	Mar. 2013	Selected Monthly Economic Indicators	Table 18. Retail prices of selected commodities Table 19. Consumer price index (Union) and rate of inflation Table 20. Spot price of gold at Yangon
Finance	Mar. 2013	Selected Monthly Economic Indicators	Table 21. Money supply Table 22. People's savings Table 23. Two-year government treasury bonds Table 24. Three-year government treasury bonds Table 25. Five-year government treasury bonds Table 26. Domestic interest rate Table 27. Foreign exchange rates Table 28. Revenue from taxes
Investment	Mar. 2013	Selected Monthly Economic Indicators	Table 29. Myanmar citizens' investment, enterprises by sector Table 30. Foreign investment of permitted enterprises by sector Table 31. Foreign investment of permitted enterprises by country of origin
Transportation and Travel	Mar. 2013	Selected Monthly Economic Indicators	Table 32. Transportation Table 33. Registered motor vehicles by type Table 34. Merchant shipping Table 35. Overseas visitors by type of visa Table 36. Tourist arrivals Table 37. Tourist arrivals by nationality
Labour and employment	Mar. 2013	Selected Monthly Economic Indicators	Table 38. Employment through labour offices Table 39. Overseas employment
International Monetary Fund, World Economic	Apr. 2013	Excel	

Outlook Database, April 2013			
Data on foreign investment, local investment and company registration	May 2013	Excel	

Annex VI. Milestones and Timeline

Table 35. Milestones

Main activities	Outputs
1. Deploying experts in the field	1. Experts deployed in Yangon for four weeks.
2. Design of research methodology	2. Work plan and outline of research methodology.
3. Conducting desk research	3. Summarized data sets from desk research.
4. Conducting in-country consultations, data gathering, and attending consultation meetings	4. Summary of country consultation meetings.
5. Mapping of data sets	5. First mapping.

Table 36. Timeline of activities

Main activities	Outputs	Date
1. Revision of methodology following fieldwork results	1. Revised methodology.	1–10 August 2013
2. Summarize tables and data sets; draft preliminary analysis	2. Preliminary analysis.	10–30 August 2013
3. Submit first draft of study	3. First draft of study.	30 August 2013 September 2013
4. Revision and finalization of study	4. Revised and final draft of study.	30 September 2013

Assessment study of technical and education and training in Myanmar

The goal of the labour market TVET system is to prepare workers to easily enter the labour market. In order to assure quality in TVET and a demand-driven TVET system, it is necessary to involve the private sector in each of the components of TVET. TVET institutions must realize their role as a service provider for the economy in general, and for flourishing businesses in the country.

The analysis presented in this study has confirmed that, presently, Myanmar's TVET system is dominated by supply-driven TVET for both public and private providers. The consultation system with entrepreneurs, business associations, and chambers of commerce that would enable the system to be more demand-driven is not yet in place. At this stage, there is no evidence of public- or private-enterprise involvement in the development of curricula. The consequence has been that TVET is highly supply-driven and the training subjects are defined with little or no consultation on the needs of the labour market.

The study has suggested that there are ways to change the policy from supply-driven to demand-driven, through: (i) understanding the needs of the private sector (businesses and entrepreneurs); and (ii) involving the private sector in designing the curricula so that there is more balance between theory and practice, and the curricula content and learning outcomes are closer to the needs of the labour market, i.e. competency-based.

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