

Myanmar

PART
04

TVET for Youth Employment in Myanmar during the COVID-19 Pandemic and After

TVET for Youth Employment in Myanmar during the COVID-19 Pandemic and After

Maw Maw Tun (Ministry of Education)
Pyae Kyaw Thu (Ministry of Education)

Abstract

The COVID-19 pandemic has had a huge impact on Technical and Vocational Education and Training (TVET) worldwide due to the closure of TVET institutions and training centers and the limitations of social distancing, making it difficult to arrange training and employment for youths. Currently, to promote the TVET sector, youth employment, and continued learning in Myanmar during the pandemic, a digital learning management system has been introduced in TVET institutions for regular full-time students and adult learners. Additionally, digital campuses and IT infrastructure, including affordable access to computers/laptops and the internet for teachers, have been established. Furthermore, digital learning content related to TVET programs is being made available via the Myanmar Digital Education Platform.

This study aims to highlight the implemented TVET activities for youth employment across Myanmar during the pandemic and after. To achieve this aim, we collected, synthesized, analyzed, and evaluated the data on the TVET programs and implemented activities in Myanmar, based on previous literature and reports. Based on the analysis, we have specified the major human resource development activities being implemented for youth employment in Myanmar during the pandemic and after—the national COVID-19 response and recovery plan, a digital learning management system, capacity building of teachers and trainers, school management training, training via blended teaching-and-learning methods, preparation for the reopening of schools, etc. Moreover, a comparison between the regular and new approach in the TVET sector for youth employment in Myanmar is also presented. Finally, along with the descriptions of challenges and opportunities related to the TVET sector, the

lessons learned from other countries and suggestions for the way forward are discussed.

Keywords: COVID-19, TVET, Youth Employment, Digital Learning Management System, Human Resource Development, National COVID-19 Response and Recovery Plan

I . Background of the Study

Technical and Vocational Education and Training (TVET) is expected to provide training opportunities and skilled manpower for sustainable development (CPSC, 2020). The TVET sector is crucial for the sustainable socioeconomic development of a country, as it equips its youths with the relevant employment skills, fulfilling the local labor market demand and driving the nation's economic development.

However, the ongoing COVID-19 pandemic has led to widespread school closures in many countries, affecting 89% of the global student population (1.54 billion children and youths enrolled in school or university, including nearly 743 million girls) across 185 countries, as reported by UNESCO (Majumdar and Araiztegui, 2020; UNESCO, 2020). Additionally, there globally encountered 400 million full time job losses, accounting for 14% and 235 million full-time jobs have been lost in the Asia-Pacific region (Lamichhane, 2020a). The TVET sector has been affected the most in this pandemic because of its structure—a combination of theoretical learning and practical training.

To mitigate the long-term impact of the pandemic, governments have implemented strategies and approaches corresponding to the

preparedness of their respective countries to tackle the issue on different fronts (Majumdar and Araiztegui, 2020). Regarding the TVET sector, most countries, including Malaysia, Myanmar, the Philippines, Korea, and China, have initiated distance learning (online and offline) and blended learning (online learning and practical training at workplaces) (Hu, 2020; MoE, 2020; Park, 2020; Urdaneta, 2020). Likewise, several countries have started training (skilling, upskilling, reskilling) for capacity building of teachers and trainers to improve digital teaching and learning methods, with the aim of building digital infrastructure and ensuring full access to digital devices for teachers and students (Hu, 2020; Kay, 2020; Korea Ministry of Education, 2020; Lamichhane, 2020a; MoE, 2020; Park, 2020; Urdaneta, 2020). In addition, some of the institutions are also supporting the national crisis response, such as crisis management, reopening plans, and the post-COVID-19 situation and smooth operations, with blended learning (Lamichhane, 2020a; Majumdar and Araiztegui, 2020; MoE, 2020).

Several online teaching and learning modes have been deemed useful and helpful for not only developed countries but also developing ones, covering education that takes place over the internet (e-learning), “distance learning” via correspondence courses (mail), tele-courses (radio or television broadcast), CD-ROM courses (static computer content), and mobile learning (cellphones, iPods, iPads, MP3 players) (Lamichhane, 2020b).

1. The TVET sector in Myanmar

Myanmar’s education system is divided into five segments: early childhood care and development, basic education, alternative education, TVET, and higher education (MoE, 2020). The government provides TVET

at the upper secondary and post-secondary levels as part of the National Education System (UNESCO, 2019). The TVET sector has been established by thirteen different line ministries, and the Ministry of Education (MoE) is the largest public provider of formal TVET (UNESCO, 2019).

DTVET (Department of Technical and Vocational Education and Training) (2020) reported that, as of 2019, it has 69 institutions ((3 government technical colleges (GTCs), 25 government technical institutes (GTIs), 35 government technical high schools (GTHSs), and 6 vocational training institutes (VTIs)) under it, offering training to a total of 87,046 students over a 4-year period. Additionally, in the 2018-2019 academic year, DTVET also started evening diploma courses, training 669 students in two GTIs in Mandalay and Insein. Under competency-based short courses to acquire TVET, and for skills development and employment opportunities, TVET institutions, in cooperation with development partners (INGOs and NGOs), have offered several to 41,954 trainees in the last 4 years and to 1,057 trainees from disadvantaged and vulnerable groups since 2007.

To promote school and industry partnerships, mutual training of trainers by schools and industries and dual apprenticeships have been conducted—for instance, dual apprenticeship training for culinary skills and agricultural machinery mechanic training via cooperation between DTVET, Swisscontact, and Industry. Furthermore, a labor market demand-based curriculum has been developed with European Union (EU) budget support to meet local industrial needs. Training for capacity building of TVET leaders, teachers, and trainers has been conducted nationwide—9 school management training sessions for 253 leaders, 24 pedagogy training sessions for 1,519 pre-service teachers/trainers, and 202 technical skills training sessions for 3,686 in-service teachers (DTVET, 2020).

The Vocational Education–School Quality Assurance Standard Framework has been implemented to a reasonable extent for quality assurance in TVET institutions under DTVET. National Skills Standard Authority–testing centers for TVET graduates have been established in TVET institutions. With the implementation of an informational management system, TVET websites of TVET institutions, EMIS, and communication for management have been launched (DTVET, 2020).

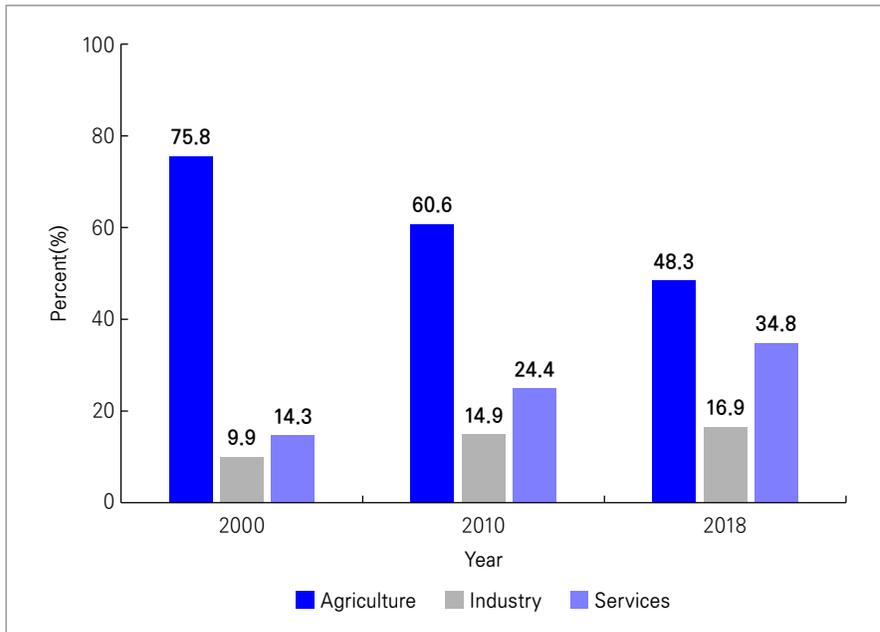
The development partners involved in TVET, extending support through grants, loans, and technical assistance to the sector in Myanmar, include the Asian Development Bank, EU, Swiss Development Agency, German Society for International Cooperation, KfW, Japan International Cooperation Agency, Japan Fund for Poverty Reduction, Danish International Development Agency, Finland, International Labour Organization (ILO), Norwegian Refugee Council, and Government of Singapore.

2. The employment sector in Myanmar

Myanmar’s working-age population (15 and above) is about 35 million people (54% female and 44% male), whereas its labor force is estimated at 24 million people—45% female (9.8 million) and 55% male (11.9 million) (UNESCO, 2019; World Bank, 2018a). Moreover, 71% of the working-age population lives in rural areas and 29% in urban areas (MOLIP, 2016). Though agriculture was the main source of employment for nearly half of the labor force until 2018 (Figure 4-1), 2010 and 2018 saw a decrease in the number of people engaged in it owing to the shifting trend in Myanmar’s economy—from agriculture to the service and industry sectors: this was mainly because jobs in the agriculture sector are particularly prone to seasonality, and farmers have to deal with the

adverse impacts of severe weather events such as massive flooding (UNESCO, 2019).

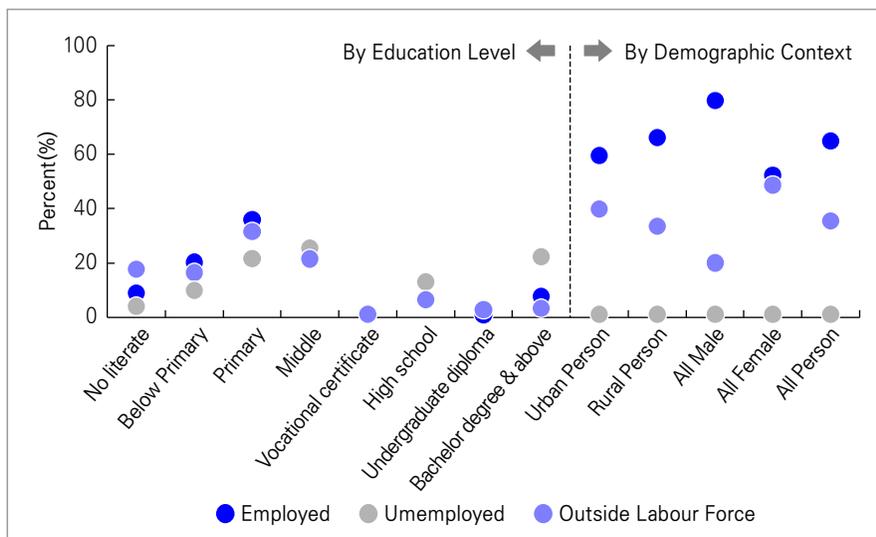
[Figure 4-1] Employment by sector (% of total employment)



Source: World Bank (2018b)

Based on the projected 18% population growth for Myanmar, labor force participation rate is expected to rise, to 77.7% (UNESCO, 2019). Figure 4-2 shows the distribution of persons aged 15 and above by labor force status (sex, education, and location). The number of persons with primary education in Myanmar’s labor force is higher than those with vocational certificate, high school education, undergraduate diploma, and bachelor’s degree and above. It is expected that the promotion of the TVET sector will increase employment opportunities for TVET graduates to a reasonable extent.

[Figure 4-2] Distribution of persons aged 15 and above by labor force status



Source: MOLIP (2016)

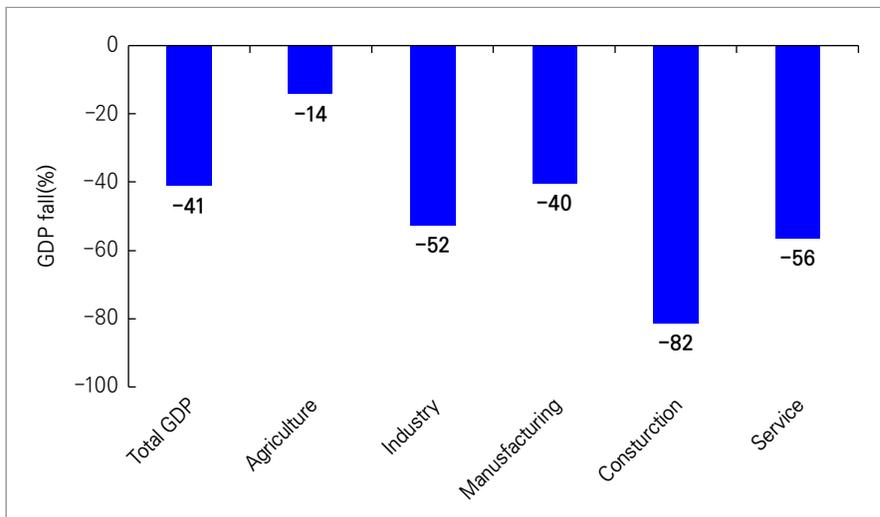
II. Impact of COVID-19 on the Youth Employment and TVET in Myanmar

1. Impact of COVID-19 on the employment

Myanmar confirmed its first two cases of COVID-19 on March 23, 2020 (MoE, 2020). To curb the spread of the disease, the government has implemented various measures, including international travel restrictions since February, a ban on public events and festivals, and restrictions on business and workplace operations (ILO, 2020). *Xinshen* (2020) stated that the restrictions on business and workplace operations have adversely affected the agri-food system in the form of falling

consumer and export demand, not to mention the negative impact due to the closure of factories. Additionally, it was estimated that five million jobs in the non-farm sector would be lost during the lockdown period. Overall, according to ILO’s (2020) estimates, 6.9 million to 7.3 million jobs could be lost in Myanmar as a result of the pandemic and related containment measures. By industry, job losses could impact nearly 3.5 million workers in agriculture, 1.5 million in wholesale and retail trade, 1.2 million in manufacturing, and approximately 400,000 in both construction and transport (ILO, 2020). As a result, a 41% drop has been predicted in Myanmar’s overall GDP during the two-week lockdown period, compared with a no-COVID-19 situation during the same period (Xinshen, 2020) (Figure 4-3).

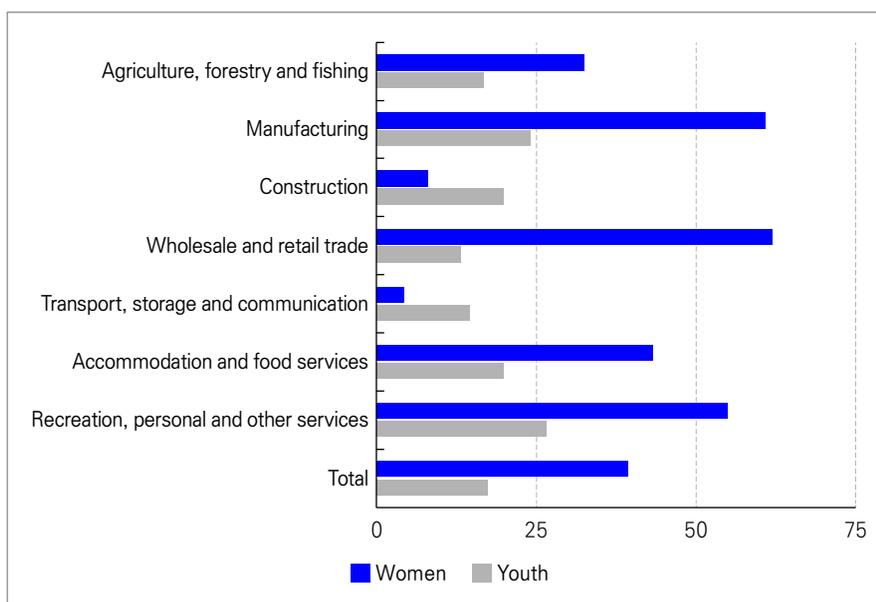
[Figure 4-3] Fall in total and sectoral GDP during the lockdown period (%) (relative to a no-COVID situation)



Source: Xinshen(2020)

Figure 4-4 shows the share of employed women and youths in sectors facing medium to high impact due to the pandemic. ILO (2020) has reported that jobs are especially vulnerable and precarious in these sectors. Owing to the higher number of women employed in these sectors, they are more vulnerable to job loss than youths aged between 15 and 24 who account for approximately one in six workers in the at-risk industries (ILO, 2020).

[Figure 4-4] Share of employed women and youths in sectors facing medium to high impact due to the pandemic (%)



Source: ILO (2020)

2. TVET for youth employment in Myanmar during the pandemic

Following Myanmar's first two COVID-19 cases on March 23, 2020, the MoE called for the closure of all schools, higher education institutions (HEIs), and TVET institutions. The closure of HEIs and TVET institutions is expected to affect 1.5 million and 15,712 students, respectively (MoE, 2020). In addition, the number of dropouts and out-of-school children is likely to increase, as both students and teachers have limited exposure to distance learning (MoE, 2020).

In this context, the MoE, in collaboration with UNESCO and partners for the Education and TVET Sector Coordination Group, has developed a national response and recovery plan for the education sector, aligned with the overarching aims of the current 2016-2021 National Education Strategic Plan (NESP) to “Improve teaching and learning, vocational education and training, research and innovation[,] leading to measurable improvements in student achievement in all schools and educational institutions,” and providing an opportunity to inform priority setting in the ongoing preparation of the next NESP (MoE, 2020).

In addition to the national response and recovery plan, DTVET has, to a reasonable extent, provided IT infrastructure, and upgraded internet access to its TVET institutions. Moreover, human resource development for TVET leaders, trainers, teachers, students, and trainees has been considerably promoted via online training, blended learning, international webinars, virtual workshops, and online knowledge-sharing events in Myanmar during the pandemic. Reopening of TVET institutions is being planned under the guidance of Myanmar's Ministry of Health and Sports.

III . Research Need and Study Aim

The pandemic has had a huge impact on TVET worldwide due to the closure of TVET institutions and training centers and the limitations of social distancing, leading to difficult arrangements for trainings and employment for the youths. Currently, to promote the TVET sector, youth employment, and continued learning in Myanmar during the pandemic, a digital learning management system (DLMS) has been introduced in TVET institutions for regular full-time students and adult learners. Additionally, digital campuses and IT infrastructure, including affordable access to computers/laptops and the internet for teachers, have been established. Furthermore, digital learning content related to TVET programs is being made available via the Myanmar Digital Education Platform (MDEP). However, as far as we are aware, only a few studies have focused on the impact of the pandemic on the employment sector (ILO, 2020; *Xinshen*, 2020), national response and recovery (MoE, 2020), and implemented activities (DTVET, 2020; Thu, 2020) in Myanmar. Therefore, this study aims to highlight the implemented TVET activities for youth employment across Myanmar during the pandemic and after, to understand how the TVET sector has been set up for the national TVET response and recovery in this time of crisis and after.

Though Myanmar's TVET sector has been set up by 13 line ministries across the country, DTVET, under the MoE, is the focal point, mainly responsible for its functioning. Therefore, the data collected in this study is primarily from previous literature and reports related to DTVET. In addition, since most of the data was collected during the pandemic, some of it as well as the planned activities may change with time.

IV. Methodology

To achieve the aim of this study, we collected, synthesized, analyzed, and evaluated the data on the TVET programs and implemented activities in Myanmar, based on previous literature and reports. Based on it, we have specified the human resource development activities implemented for TVET during the pandemic and after. Finally, along with the descriptions of challenges and opportunities related to Myanmar's TVET sector, we have discussed the lessons learned from other countries and suggestions for the way forward.

V. Results and Discussion

1. National COVID-19 response and recovery plan (2020-2021)

Due to the spread of COVID-19, TVET institutions in Myanmar have been closed since the last week of March 2020. Hence, in collaboration with UNESCO and partners for the Education and TVET Sector Coordination Group, the MoE has developed the national sector-wide response and recovery plan with the objective of providing an overall framework to ensure the continuity of quality and equitable education in Myanmar during the pandemic in the short, medium, and long term (MoE, 2020). To achieve this goal, this plan is divided in two phases, as shown in Figure 4-5 (MoE, 2020):

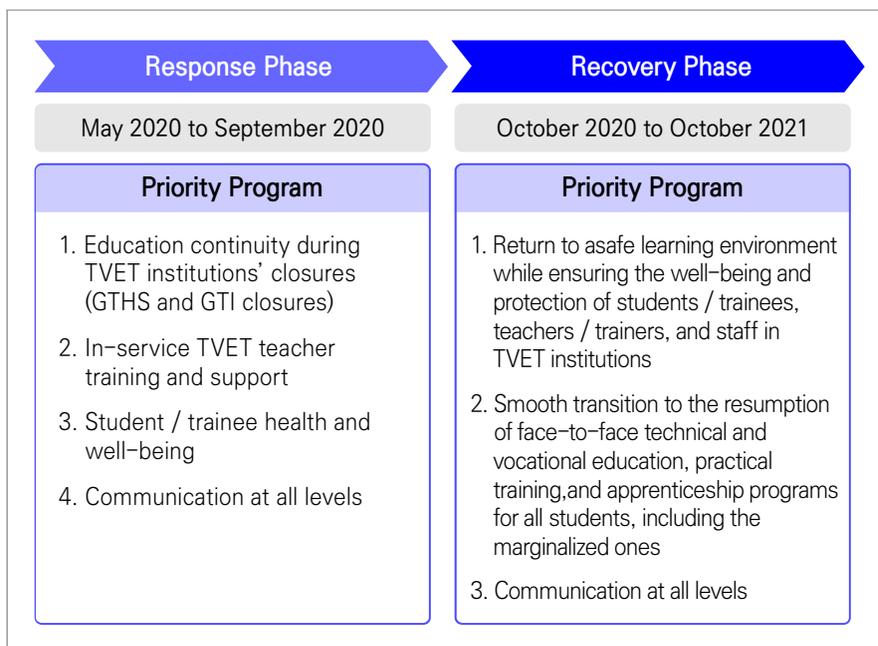
i. *The response phase*, from May to September 2020, aims to ensure education continuity through diverse distance learning modalities, considering the closure of educational institutions.

ii. *The recovery phase*, from October 2020 to October 2021, focuses on planning the reopening of educational institutions in an appropriate manner while protecting the health and well-being of learners and the education workforce.

In addition to these phases, the framework provides for a crosscutting focus on the strengthening of the education system through crisis-sensitive educational planning.

In Myanmar, the aspects to be addressed as part of the EPR policy framework include national curriculum, distance learning, infrastructure preparedness, use of ICT for education, school emergency preparedness, teacher training and professional development, student and education workforce well-being, examinations, community engagement, communication flows and coordination, departmental officials' capacity building, and data production and management, including EMIS (MoE, 2020).

[Figure 4–5] Myanmar’s COVID–19 national response and recovery plan for the TVET Sector



Source: MoE (2020)

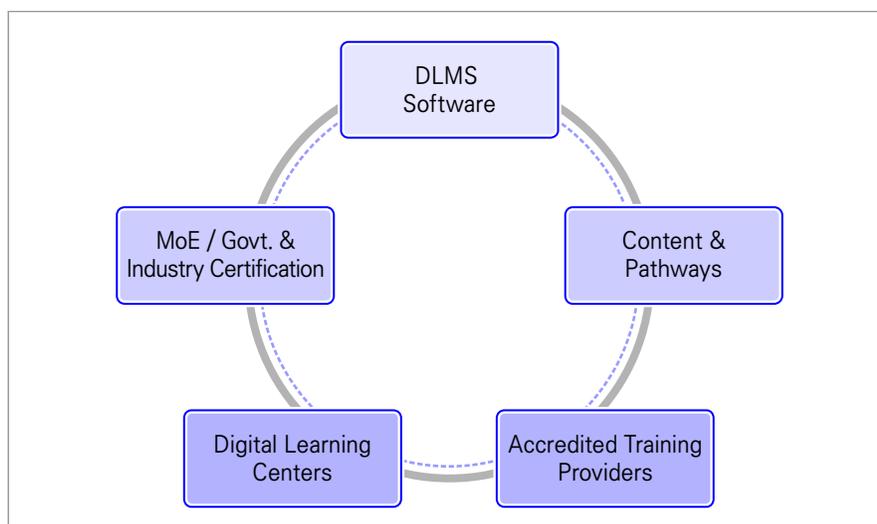
2. Introduction of a digital learning management system for the TVET sector

Considering the pandemic and its impact so far, DTVET plans to maximize the many benefits of 21st-century skills to expand access to quality TVET for students and adults interested in new TVET qualification—certificates, diplomas, and degrees. The most efficient and cost-effective way to expand TVET capacity and improve quality is by establishing a TVET DLMS. A quality TVET DLMS will enable DTVET to provide training opportunities to youths and workers in a wide range of TVET courses in all stages and regions, for example, NVFC, competency-

based modular short courses, and certificate and diploma courses via (a) blended learning (face-to-face training and offline self-learning) and (b) offline self-learning.

Figure 4-6 illustrates a proposed quality TVET DLMS comprising five aspects: DLMS software, content and pathways, accredited training providers, digital learning centers, and MoE/government and industry certification.

[Figure 4-6] A proposed quality TVET Digital Learning Management System (DLMS)



i. DLMS software

Good-quality learning management system software is available at a low cost, which DTVET can customize; and DTVET has secured funding from the capital development fund to conduct a rapid assessment, in September-October 2020, of the best international software that it can use in its TVET DLMS.

ii. Content and pathways

A quality TVET DLMS must have an extensive range of content that is easy to learn for a wide variety of learners, for example, youths starting their careers, and mid-career technical workers and professionals. The learning content must be presented in modular form so that learners can learn at their own pace. Content on the DLMS must be structured around career pathways, which will help learners acquire new knowledge and skills in their chosen career pathway.

iii. Accredited training providers

A quality TVET DLMS must have content delivered by accredited training providers to expand its range of content and qualifications on offer. These providers will enable DTVET to deliver quality TVET courses through (i) blended learning and (ii) offline self-learning. DTVET has contracted a company to document all government and private TVET providers in 41 cities and towns, and it is developing a pilot project with MCTC to offer international standard short courses for youths and professional workers in five competency areas: banking, insurance, logistics, retail, and health and safety. The course content for these will be provided by the Institute of Technical Education (Singapore) and Myanmar Industry Associations.

iv. Digital learning centers

A digital learning center is a facility where youths, workers, and professionals can access TVET DLMS courses—a large classroom (or) may be 2-3 smaller ones in a GTI or GTHS with desktop computers, tablets, work stations, free internet, and group meeting tables. Each center will be managed by a team of trained DTVET trainers and work experience

volunteers; the former will provide mentoring support to students, workers, and professionals to help them select and complete the TVET courses listed in the DLMS. The centers will stay open from 7.30 am to 9.30 pm every day.

v. MoE/government and industry certification

The TVET DLMS will offer MoE, TVET partner ministries, and industry recognized qualifications (NVFC, CBMSCs, certificates, and diplomas) to youths, workers, and professionals who complete the course requirements and acquire the related competency. Such certification is a very important incentive for youths, workers, and professionals to complete the courses listed in the TVET DLMS.

Currently, the content of introduction to digital literacy has been planned with TPTC (Baelin) and the University of Computer Studies (Yangon). The proposed content is instant meeting using Zoom/Google Meet, scheduled meeting using Zoom/Google Meet, course creation, uploading/managing learning materials, topics and content creation, control during a meeting (change host, share screen, chat, breakout room, file sharing record), system testing, Gnimio Moodle and question bank preparation, assignment and question preparation, and test creation. Additionally, the content of basic computer has been defined with TPTC (Baelin), and that of basic English with ELPS (Nay Pyi Taw).

To ensure successful implementation of the DLMS, three phases have been designed: (a) preparation of human resources, procurement of IT infrastructure, provision/upgrading of internet access, etc.; (b) preparation of blended learning content on the DLMS, contracting with accredited training providers, website development, and launching blended learning, assessment, and certification; (c) establishment of the

TVET Studio and all related IT professional works, and creation and innovation of the TVET Digital Platform for regular TVET courses, as well as pilot tests for it through the DLMS.

3. Human resource development for TVET leaders, trainers, teachers, and students/trainees during the pandemic

During the pandemic, increasing capacity building of leaders and teachers in TVET institutions and training centers under DTVET, and training of trainers and principals have been offered via online/offline sessions, namely for pedagogy training, soft skills training, and technical skills (i.e., ICT skills, e-learning management, etc.). All these sessions have been national as well as international, and by both local and international experts and experienced teachers. Moreover because the webinars and virtual workshops play a crucial role in enhancing capacity building of teachers and leaders/principals, those organized by CPSC, KRIVET, Korea World Bank, RECOTVET, UNEVOC, etc. have been helpful and useful to teachers and trainers as well as students and trainees.

There have been several online TVET courses on offer. One of the modes followed is blended learning: (i) online training for theoretical background and (ii) practical work, organized by DTVET in cooperation with the development partner Finnish Refugee Council. The number of students in each group is 3, and the course is available nationwide, with a training duration of 120 hours. The target trainees are youths aged 15 and above as well as dropouts. The training is designed for 120 hours with a combination of 3 hours of online training and 3 hours for practice at the workplace. The trainers involve teachers from TVET institutions, who teach theory online, and local mechanics, who train at their own

workplace. The assessment systems constitute questions and assignments for theory, while practical assessment is carried out at a motorbike workshop. It is a helpful pilot course and adapted for other training courses.

In addition, the DTVET is planning to implement the MDEP for secondary education, technical and vocational education, and higher education in the country. It has continued to set up the secondary education sector and been planning to set up the TVET sector since 2020. Through the MDEP, students and trainees can get free access to learning resources online. The platform has been supported by major telecommunication companies, including MPT, Telenor, and Ooredoo, which are the local development partners for the education sector. The platform is very resourceful and informative for students/trainees, to ensure their continued learning.

4. A Comparison between the regular and new approach in the TVET sector for youth employment in Myanmar

Considering the pandemic, the TVET sector in Myanmar needs to shift from its regular approach to a new one. The latter relates to digitalization with digital campuses, DLMSs, online learning resources, etc. A comparison between these approaches in the TVET sector for youth employment in Myanmar has been done based on seven features—infrastructure, resources, personnel (leader, trainers, staff), methods/delivery modes, learning materials, assessment, and transition—as shown in Figure 4-7 below.

[Figure 4-7] A comparison between the regular and new approach in the TVET sector for youth employment in Myanmar

Regular Approach		New Approach
TVET institution	Infrastructure	TVET institution + digital campus / ICT infrastructure
Regular teaching aids (machines, hand tools, equipment, devices, etc.)	Resources	Regular teaching aids + internet, computer / laptop + virtual reality / learning platforms, etc.
Relevant skills and competency	Personnel (leader, trainers, staff)	Relevant skills and competency, ICT skills, DLMS, etc.
Face-to-face learning, practical work	Methods / delivery modes	Face-to-face learning, practical work, online / offline / distance learning methods, blended learning methods
Lectures, assignments, jobs, etc.	Learning materials	Lectures, assignments, jobs +video lectures, PPT presentations, interactive online teaching and learning
Paper assessments, assignments, and practical tests	Assessment	Paper assessments, assignments, practical tests, and online assessments
A regular and steady approach to digitalization	Transition	A quick transition to digitalization

5. Challenges and opportunities for the TVET Sector due to digitalization

Digitalization could give rise to unavoidable challenges as well as favorable opportunities. These are presented in Table 4-1.

〈Table 4-1〉 Digitalization challenges and opportunities for the TVET sector

Challenges	Opportunities
<ul style="list-style-type: none"> • Difficulty in managing additional and inadequate workforce • Reduction in employment opportunities • Difficulty in addressing the new demand for quality skills programs • Linkages with enterprises • Need of ICT and DLM skills for teachers and staff as well as trainees • Challenges in responding to urgent reskilling needs • Lack of full access to learning devices (laptops, computers, smartphones) for all students / trainees • Lack of knowledge and awareness of online learning and teaching among most teachers, parents, and students • Dependence on internet connectivity at the teachers' and students' locations • Perceptions and awareness of most students and teachers • Limited practical skills training and certifications due to social distancing and closure of workplaces / training centers • Inadequate training of administrators, trainers, and trainees for remote / distance education • Limited access to internet, learning platforms, devices or media, and other related resources for TVIs / trainers / trainees 	<ul style="list-style-type: none"> • Skilling, reskilling, and upskilling with new technology • Emergence of a new employment sector • Flexible enterprise-based / apprenticeship training • Government priority on TVET sector development • Support of development partners (NGO, INGO) • Transition from a regular form of learning to blended learning (a combination of regular form and digital platform) • Development of DLMSs • Establishment of the Digital TVET Campus • Curriculum development adapted to online / distance learning • More access to online and distance learning resources for students / trainees and teachers • Ease of TVET-related data collection, including online surveys • Establishment of TVET networks and effective communication channels among TVET institutions • TVET priorities from NESP strategies and policies • Achieving SDGs as the overarching principles of future TVET development

Source: Hu (2020), Kay (2020), Korea Ministry of Education (2020), Lamichhane (2020a), MoE (2020), Park (2020), Urdaneta (2020)

6. Lessons learned from other countries

With COVID-19 affecting almost every country in the world, most have successfully managed to respond to the crisis, preventing the spread of the disease, planning a digital transition in teaching and learning in schools and universities, and fulfilling the need to change the labor market demand vis-à-vis the pandemic. Table 4-2 shows the responses to the pandemic in brief, especially for the TVET sector in the selected countries.

Some countries have implemented blended learning methods and distance learning resources. Myanmar has introduced the DLMS, established IT infrastructure in all TVET institutions, and undertaken capacity building of TVET leaders, staff, and teachers. Digital campuses have been introduced for select institutions (e.g., GTI (Insein)). It will, however, take students and teachers in Myanmar some time to adapt to the DLMS and blended learning environment. Learning lessons from other countries (e.g., the Philippines' Technical Education and Skills Development Authority (TESDA) and Korea's Smart Training Education Platform (STEP)) will be valuable and helpful.

<Table 4-2> Responses in brief to the COVID-19 pandemic in the selected countries

Country	Responses	Source
Singapore	ITE, Singapore <ul style="list-style-type: none"> • Safe reopening of campuses from June 2 • Home-based learning (HBL) for current students • Division into groups (on-campus and HBL) • Cancellation of the 2020 Graduation Ceremony (July) • Cancellation of all face-to-face short courses 	Lamichhane (2020a)

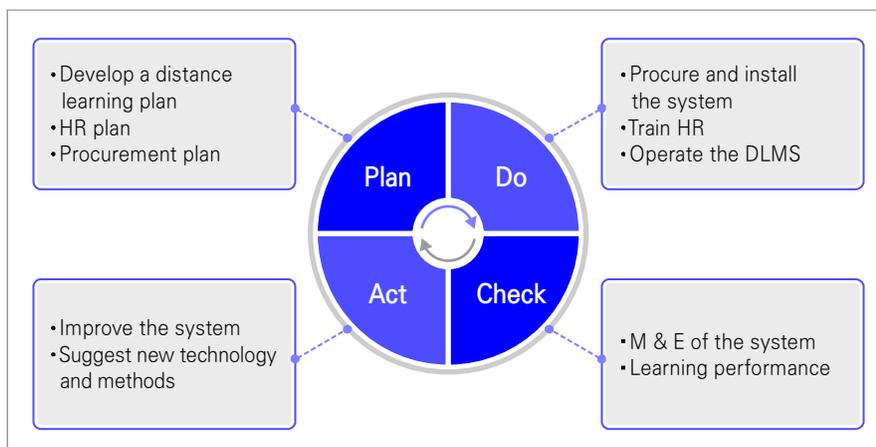
Country	Responses	Source
Thailand	<ul style="list-style-type: none"> • Online courses • VEC TV Channel 53 • VEC joins hands with ICDL Thailand to enhance knowledge and skills in using digital technology to expand learning and readiness to adapt to a new way of life (the new normal) 	Lamichhane (2020a)
Malaysia	<ul style="list-style-type: none"> • Online, on campus for all theory classes • Online, off campus for all theory and online able classes • Plan for face-to-face learning for practical classes and industrial attachment 	Lamichhane (2020a)
Australia	<ul style="list-style-type: none"> • Various types of online training • Free courses (public providers) • Use of existing LMS to allow multiple learning platforms • Contextualization of online courses by teachers, lowering resistance to use • Resource sharing between institutions and across jurisdictions • Changing the way trainers and assessors work 	Kay (2020)
China (Xinjiang and Gansu)	<ul style="list-style-type: none"> • A ban on most face-to-face activities, including teaching, by the government • Initiation of “Disrupted Class, Undisrupted learning” • Training Needs Survey to investigate the specific challenges encountered by teachers in TVET institutions • Provision of technical support using IT infrastructure • Classroom teaching and learning in project schools (during the pandemic) 	Hu (2020), Wang (2020)
Philippines	<ul style="list-style-type: none"> • Suspension of all TVET classes nationwide, initiation of work-from-home arrangements • TESDA Online Program for TVET learning and other flexible modes of learning, processes, and systems 	Urdaneta (2020)
Korea	<ul style="list-style-type: none"> • School closure • Preparation and operation of online classes (expanding public infrastructure, supporting teachers’ capacity building, revamping online education systems) • Online learning assistants • Facilitating teacher-to-teacher communication • Introduction of STEP in the wake of the TVET innovation strategy preparing for a digital economy • Development of an integrated system for provision of customized TVET 	Korea Ministry of Education (2020), Park (2020)
Nepal	<ul style="list-style-type: none"> • Counseling • Distance classes (online / offline) • Virtual and industry-based practical classes • Completion of examination 	Lamichhane (2020a)

Country	Responses	Source
Myanmar	<ul style="list-style-type: none"> • GTI and GTHS closures • Building a DLMS • Introduction of IT infrastructure and the DLMS in all TVET institutions • Enabling access to digital devices and supplements for TVET teachers and trainers • Capacity building of TVET leaders, staff, and teachers • Introduction of digital campuses for select institutions 	MoE (2020), Thu (2020)

7. Suggestions for the way forward

For the management system of the distance learning environment in a TVET institution, the *Plan-Do-Act-Check* model suggested by Lamichhane (2020b) will be helpful and useful to a reasonable extent (Figure 4-8). The model highlights the distance learning management system, from a development plan to the upgraded one, systematically. Furthermore, Majumdar and Araiztegui's (2020) study recommends three kinds of responses to the crisis in TVET institutions: (a) an immediate response, which should include mitigating learning disruption through the promotion of online education, making provisions to supply medical equipment and devices on demand; (b) a medium-term response, which is related to repositioning to support workforce retraining, supporting community-based solutions and strengthening of local industries, and preparing flexible learning solutions that include pandemic risk in planning; and (c) a long-term response, which focuses on SDGs as the overarching principles of future TVET development, global citizenship, and peace education as the pillars of individual growth, and encouraging institutions to innovate and connect with community actors.

[Figure 4-8] Management system of the distance learning environment in a TVET Institution



Source: Lamichhane (2020b)

Note: HR : Human resources; DLMS: Distance learning management system

Overall, learning lessons and knowledge transfer from other countries will be, to some extent, helpful in tackling challenges and grasping opportunities. Support from NGOs and INGOs, too, will be valuable for achieving our goals quickly. Moreover, locally available resources should be acknowledged because they highlight our strengths and weaknesses. Likewise, a proactive approach to the labor market demand and public-private partnership could be applied to utilize new emerging opportunities. Furthermore, short-term, medium-term, and long-term response and recovery plans are the most effective for tackling the issues that arise during such a crisis and after. The “One size fits all” approach will not be effective in the TVET sector; only holistic and alternative approaches that can utilize all available resources and meet local urgent needs can help achieve the sector’s sustainable development.

VI. Conclusion

The TVET sector has been affected the most due to the pandemic because of its structure—a combination of theoretical learning and practical training. Currently, to promote the TVET sector, youth employment, and continued learning in Myanmar, a DLMS has been introduced in TVET institutions for regular full-time students and adult learners. Additionally, digital campuses and IT infrastructure, including affordable access to computers/laptops and the internet for teachers, have been established as per CERP, 2020. Furthermore, digital learning content related to TVET programs is being made available via the MDEP. In other words, Myanmar’s TVET sector needs to shift from its regular approach to a new one related to digitalization, with digital campuses, DLMSs, online learning resources, etc.; though there will be unavoidable challenges, these will also bring favorable opportunities. Therefore, only holistic and alternative approaches that can utilize all available resources and meet local urgent needs can help achieve the sector’s sustainable development.

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Authors

Maw Maw Tun

- Affiliation & Position: Human Resources Development Section, Department of Technical and Vocational Education and Training, Ministry of Education, Myanmar
- Address: : Human Resources Development Section, Department of Technical and Vocational Education and Training, Ministry of Education Office (21), Nay Pyi Taw, 15011, Myanmar
- e-mail: bdtmawmawtun@gmail.com

Pyae Kyaw Thu

- Affiliation & Position: Human Resources Development Section, Department of Technical and Vocational Education and Training, Ministry of Education, Myanmar
- Address: : Human Resources Development Section, Department of Technical and Vocational Education and Training, Ministry of Education Office (21), Nay Pyi Taw, 15011, Myanmar
- e-mail: pyaekyawthu@dtve.org