

# Factbook Education System: Laos

**Report****Author(s):**

CES Chair of Education Systems

**Publication date:**

2022-09

**Permanent link:**

<https://doi.org/10.3929/ethz-b-000569627>

**Rights / license:**

In Copyright - Non-Commercial Use Permitted

**Originally published in:**

CES Factbook Education Systems 15

# Factbook Education System: Laos

CES Chair of Education Systems

CES Factbook Education Systems, No. 15, 2022



## Editing and Acknowledgement

This Factbook was edited by Aranya Sritharan. We want to thank Alex Benhauresch for the elaboration of the contents.

# Contents

<b>Foreword</b>	<b>5</b>	
1.1	Laotian Economy	7
1.2	The Labour Market	9
1.2.1	Overview of the Laotian Labour Market	9
1.2.2	The Youth Labour Index for Low Income Countries	12
1.2.3	The YLILI for Lao PDR	12
1.3	Laotian Political System	13
1.3.1	Overview of the Laotian Political System	13
1.3.2	Politics and Goals of the Education System	14
<b>2.</b>	<b>Formal System of Education</b>	<b>16</b>
2.1	Formal System of Education	16
2.2	Pre-Primary Education	20
2.3	Primary and Lower Secondary Education	20
2.4	Upper Secondary Education	21
2.5	Higher Education	22
2.6	Continuing Education (Adult Education)	23
2.7	Teacher Education	23
<b>3.</b>	<b>The System of Vocational and Professional Education and Training</b>	<b>25</b>
3.1	Vocational Education and Training (VET; Upper Secondary Education Level)	25
3.2	Professional Education and Training (PET; Post-Secondary Level)	29
3.3	Regulatory and Institutional Framework of the VPET System	30
3.3.1	Central Elements of VPET Legislation	30
3.3.2	Key Actors	31
3.4	Educational Finance of the VPET System	32
3.5	Curriculum Development	33
3.5.1	Curriculum Design Phase	34
3.5.2	Curriculum Application Phase	34
3.5.3	Curriculum Feedback Phase	34
3.6	Supplying Personnel for the VPET System (Teacher Education)	35
<b>4.</b>	<b>Major Reforms in the Past and Challenges for the Future</b>	<b>36</b>
4.1	Major Reforms	36
4.2	Major Challenges	38
<b>5.</b>	<b>References</b>	<b>39</b>

## List of Abbreviations

CBT	Competency bases training
CLC	Community learning centre
DGE	Department of General Education
DHE	Department of Higher Education
DPE	Department of Pre-School Education
DTVE	Department of Technical and Vocational Education
ECE	Early Childhood Education
EODB	Ease of doing business
ESQAC	Education Standards and Quality Assurance Centre
GDP	Gross Domestic Product
GER	Gross enrolment rate
GII	Global Innovation Index
GIZ	Gesellschaft für Internationale Zusammenarbeit
GPI	Gender Parity Index
ISCED	International Standard Classification of Education
ILO	International Labour Organization
IVET	Integrated Vocational Education and Training
KOF	Swiss Economic Institute
LPRP	Lao People's Revolutionary Party
MOES	Ministry of Education and Sports
MOIC	Ministry of Industry and Commerce
MOH	Ministry of Health
MOLSW	Ministry of Labour and Social Welfare
NER	Net enrolment rate
NSDF	National Skills Development Fund
OECD	Organisation for Economic Co-operation and Development
PDR	People Democratic Republic
PESS	Provincial education and sports service

PET	Professional Education and Training
SD	Skills development
TUP	Teacher upgrading program
TVET	Technical and vocational education and training
UNESCO	United Nations Educational, Scientific and Cultural Organization
VEDC	Vocational Education development centre
VEDI	Vocational Education Development Institute
VET	Vocational Education and Training
VPET	Vocational Professional Education and Training
VTED	Vocational Teacher Education Department
WEF	World Economic Forum
YLMI	Youth Labour Market Index

## List of Figures

Figure 1: Employment by sector (as % of total employment), 1991-2019 ..... 9

Figure 2: The Laotian education system ..... 17

Figure 3: Share of population (%) by educational attainment, population 25 years and older (2010)..... 199

Figure 4: General, TVET, and IVET stream after lower secondary education ..... 277

Figure 5: General, TVET, and IVET stream after upper secondary education ..... 299

Figure 6: Curriculum Value Chain..... 33

## List of Tables

Table 1. Key Statistics and Information on Laos ..... 7

Table 2: Value added and employment by sector, 2019 ..... 8

Table 3: Labour force participation rate and unemployment rate by age in 2019 ..... 111

Table 4: Labour force participation rate and unemployment rate by educational attainment in 2017 (persons aged 25–64) ..... 11

Table 5: Worldwide Governance Indicator (WGI) for Lao PDR, 2019 ..... 144

Table 6: Net enrolment rate (NER) and gross enrolment rate (GER), 2019 ..... 188

Table 7: Gender Parity Index (GPI) for Lao PDR and East Asia and Pacific region, 2019 .. 199

Table 8: Qualification level for TVET, SD, and higher education..... 266

# Foreword

The increasing competitiveness of the world economy as well as the high youth unemployment rates after the worldwide economic crises in 2008/9 have put pressure on countries to upgrade the skills of their workforces. Consequently, vocational education and training (VET) has received growing attention in recent years, especially amongst policy-makers. For example, the European Commission defined common objectives and an action plan for the development of VET systems in European countries in the Bruges Communiqué on Enhanced European Cooperation in Vocational Education and Training for 2011-2020 (European Commission, 2010). In addition, a growing number of US states and other industrialized, transition, and developing countries (for example Hong Kong, Singapore, Chile, Costa Rica, Benin and Nepal) are interested in either implementing VET systems or making their VET system more labour-market oriented.

The appealing outcome of the VET system is that it improves the transition of young people into the labour market by simultaneously providing work experience, remuneration and formal education degrees at the secondary education level. If the VET system is optimally designed, VET providers are in constant dialogue with the demand-side of the labour market, i.e. the companies. This close relationship guarantees that the learned skills are in demand on the labour market. Besides practical skills, VET systems also foster soft-skills such as emotional intelligence, reliability, accuracy, precision, and responsibility, which are important attributes for success in the labour market. Depending on the design and permeability of the education system, VET may also provide access to tertiary level education (according to the ISCED classification): either general education at the tertiary A level or professional education and training (PET) at the tertiary B level. PET provides occupation-specific qualifications that prepare students for highly technical and managerial positions. VET and PET systems are often referred to together as “vocational and professional education training (VPET)” systems.

Few countries have elaborate and efficient VPET systems. Among these is the Swiss VPET system, which is an example of an education system that successfully matches market supply and demand. The Swiss VPET system efficiently introduces adolescents to the labour market, as shown by Switzerland’s 2007-2017 average youth unemployment rate of 8.1 % compared to 14.8 % for the OECD average (OECD, 2017).

Though not many countries have VPET systems that are comparable to Switzerland’s in terms of quality, efficiency and permeability, many have education pathways that involve some kind of practical or school-based vocational education. The purpose of the CES Education System Factbook Series<sup>1</sup> is to provide information about the education systems of countries across the world, with a special focus on vocational and professional education and training.

In the CES Factbook Education Systems: Lao PDR, we describe the Laotian vocational system and discuss the characteristics that are crucial to the functioning of the system. Essential components comprise the regulatory framework and the governance of the VPET system, the involved actors, and their competencies and duties. The Factbook also provides information regarding the financing of the system and describes the process of curriculum development and the involved actors.

The Factbook is structured as follows: First, we provide an overview of Laotian economy, labour market, and political system. The second part is dedicated to the description of the formal education system.

<sup>1</sup> From 2013 to 2019, the Factbooks were produced within the framework of the Education Systems research division at the KOF Swiss Economic Institute. From 2020 they will be produced by the Chair of Education Systems (CES) group.



The third section explains the Laotian vocational education system. The last section offers a perspective on Lao PDR's recent education reforms and challenges to be faced in the future.

**Suggested citation:**

CES Chair of Education Systems (2022). Factbook Education Systems: Lao PDR. CES Factbook Education Systems, ed. 1. ETH Zurich.

The Education System Factbooks have to be regarded as work in progress. The authors do not claim completeness of the information which has been collected carefully and in all conscience. Any suggestions for improvement are highly welcome!

**Contact:** [factbook@ethz.ch](mailto:factbook@ethz.ch)

# Laotian Economy and Political System

**Table 1. Key Statistics and Information on Laos**

Category	Outcome
Population	7'226'000
Area	236'800 km <sup>2</sup>
Location	Southeast Asia
Capital City	Vientiane (Viangchan)
Government	Unitary single-party people's republic with one legislative house
Official Language	Lao
National Currency	kip

Source: own table based on (Encyclopaedia Britannica, 2020)

One of the main purposes of an education system is to provide the future workforce with the skills needed in the labour market. The particularities of a country's economy and labour market are important factors determining the current and future demand for skills. Therefore, these are briefly described in the first chapter of this Factbook. In addition, this chapter provides an overview of the Laotian political system with an emphasis on the description of the education politics. Table 1 reports key statistics and information about Laos, which are further discussed in this chapter.

## 1.1 Laotian Economy

Over the past twenty years, Lao People's Democratic Republic (PDR) has achieved positive development progress (World Bank, 2021; Noonan, 2020). Apart from reducing malnutrition and improving education and health outcomes, it has halved poverty (World Bank, 2021). Simultaneously, Lao PDR has more than quadrupled its Gross domestic product (GDP) per capita<sup>2</sup>. Nevertheless, in 2019 Lao PDR's GDP per capita was relatively low at US\$8,172 (adjusted for PPP) when compared to the average of East Asia & Pacific<sup>3</sup> countries at US\$15,054 (adjusted for PPP) or OECD members at US\$46,331 (adjusted for PPP) (World Bank, 2021b).<sup>4</sup> As of February, 2021 Lao PDR still belongs to the least developed countries (United Nations - Committee for Development Policy, 2021).

<sup>2</sup> Current international \$, at purchasing power parity (PPP).

<sup>3</sup> East Asia & Pacific excluding high income: East Asia & Pacific excluding high income: American Samoa, Cambodia, China, Fiji, Indonesia, Kiribati, South Korea, Lao PDR, Malaysia, Marshall Islands, Micronesia (Fed. Sts.), Mongolia, Myanmar, Nauru, Papua New Guinea, Philippines, Samoa, Solomon Islands, Thailand, Timor-Leste, Tonga, Tuvalu, Vanuatu, Viet Nam

<sup>4</sup> The GDP per capita current US\$ unadjusted for PPP in 2019 was \$2,545 for Lao PDR, \$8,194 for East Asia & Pacific, and \$39,412 for the OECD Members.

From 1990 to 2019, the Laotian economy grew at an average annual rate of 6.8%. This is significantly higher than the growth rate of the OECD members with 2.1%. However, during the same period the real GDP growth rate throughout the East Asia & Pacific region was at 8%, surpassing the one of Lao PDR. In addition, Lao PDR's real GDP growth rate has been declining since 2010, dropping to 4.6% in 2019 (World Bank, 2021b). The COVID-19 pandemic has further slowed the real GDP growth. It is expected to decrease to 0.6% in 2020 (World Bank, 2021; Lloyds Bank, 2021). A drop in private consumption (due to deteriorating labor market conditions) and rising poverty has driven this decline in growth. However, a recovery to a higher growth rate of 5% is forecasted for 2021 (OECD, 2021).

Despite having achieved strong growth for many years, the impact on income distribution was negative for Lao PDR with a Gini coefficient of 0.388 in 2018<sup>5</sup>. In previous years, the Gini coefficient was at a lower level, fluctuating within the range of 0.326 and 0.336 between 1997 and 2012 (World Bank, 2021b). This means that since poverty has halved during the same period, '(...) the poor of Laos have become better off in real terms, but that the rich have benefited more in both proportionate and absolute terms' (Eastasiaforum, 2015, S. sect. 3).

Table 2 summarizes the distribution of the value added and labour force by sector for Lao PDR and the member states of the European Union (EU-28). Over the past 30 years, Lao PDR has experienced a shift in employment from the primary to the secondary and tertiary sectors. In 2019, the tertiary sector in Lao PDR and EU-28 accounted for most of the value added. Nevertheless, more than 60% of Lao PDR's workforce is still employed in the primary sector. Despite its high proportion of the workforce, the primary sector contributes only 15.2% of the value added, which is the smallest percentage of the three sectors. In other words, the distribution of employment by sector stands in stark contrast to the value added by sector. In EU-28, the primary sector accounts for only a minor share of 1.8% of the value added respectively 4% of the employment. The tertiary sector, however, accounts for an even larger proportion than in Lao PDR. Regarding the secondary sector, in both the EU-28 and Lao PDR, the share of employment is smaller than the share of value added. This implies a higher labour productivity in the industry sector compared to the whole economy.

**Table 2: Value added and employment by sector, 2019**

Sector	Laos: Value added (%)	EU-28: Value added <sup>6</sup> (%)	Laos: Em- ployment (%)	EU-28: Em- ployment (%)
Primary sector	15.3	1.6	61.4	4
Secondary sector	31	24.4	12.9	21.6
Tertiary sector	42.7	70.5	25.6	74.3

Source: own table based on (Eurostat, 2021; Eurostat, 2021b; World Bank, 2021b)

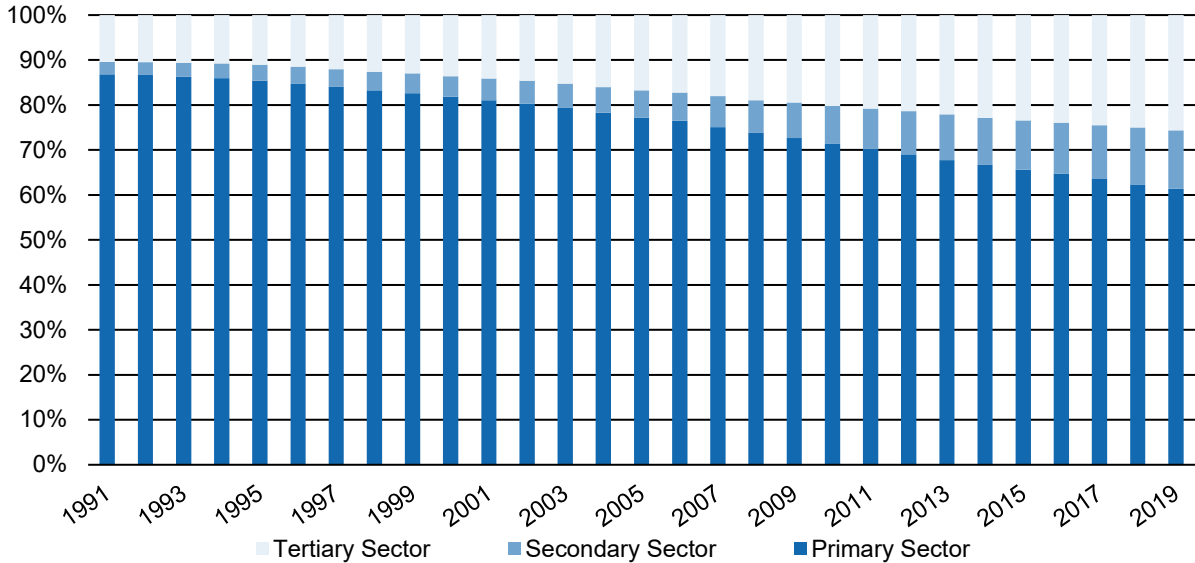
In the context of educational systems, a key aspect of the economic structure is the percentage of labour force employed in the respective sectors. Figure 1 shows that the Laotian employment share of the secondary and tertiary sector has steadily increased in recent years. From 4.56% in 2000 to 12.94% in 2019 (3.57% to 25.62% respectively). However, even as manufacturing and services grew in importance, agriculture remains the key pillar of the Laotian economy, accounting for nearly three quarters of the workforce. Over the medium term, Lao PDR will transform its economy from an agricultural to an industrial and service one (giz, 2018). An announcement of the new government at the beginning of 2021 supports this transformation. It consists of seven priorities and aims to reduce Lao PDR's reliance on natural resource extraction and capital-intensive infrastructure investments. Although this strategy

<sup>5</sup> The Gini index is a measure indicating the extent to which the income distribution deviates from a perfectly equal distribution. A Gini index of 0 indicates perfect equality, whereas a Gini index of 1 indicates perfect inequality (World Bank, 2021d)

<sup>6</sup> Due to rounding differences, the sum of all sector falls below 100 %. In most developing countries, frequent censuses and survey of industry and businesses are not the norm. Due to this irregularity, a lot of economic activity go unreported and therefore unrecorded, including work that women and children do for little or no pay, work of self-employed, one-person businesses or also large businesses or corporates, that operates in the informal sector. Such activities must often be estimated, using techniques that are not that accurate. This makes it difficult to have coherent numbers. This might be a reason for numbers, that are not summing up to 100 percent.

has generated economic growth over the past two decades, it has been less successful in creating jobs and has led to a high level of public external debt (World Bank, 2021).

**Figure 1: Employment by sector (as % of total employment), 1991-2019**



Source: own table based on (World Bank, 2021b)

In the WEF Global Competitiveness Report 2019, Lao PDR has lost one place compared to 2018. In 2019 they were listed on the 113th position. With this ranking, Lao PDR is the lowest ranked country in the East Asia and Pacific region. The next country from the same region is Cambodia at position 106. Analysing the different sub-indices, Lao PDR performed worse in all of them than the East Asia and Pacific average. Lao PDR scored particularly poorly in macroeconomic stability, ICT adoption and business dynamism compared to the East Asia and Pacific Region (WEF, 2019).

According to the Global Innovation Index (GII) 2020, Lao PDR ranks 113th out of 131 countries. Until 2020, Lao PDR was not included in the GII. When comparing Lao PDR's 2020 ranking by income group and region respectively, Lao PDR is at 23rd and 16th position, respectively. On one hand Lao PDR's achieves relatively good ratings for the pillars business sophistication (72nd overall), creative outputs (86th overall), knowledge & technology outputs (108th overall) and human capital & research (113th overall). On the other hand, Lao PDR underperforms in institutions (130th overall), infrastructure (118th overall) and market sophistication (117th overall) (Dutta, Lanvin, & Wunsch-Vincent, 2020).

## 1.2 The Labour Market

In the first part of this section, we describe the general situation of the Laotian labour market. In the second part, we focus on the youth labour market in particular.

### 1.2.1 Overview of the Laotian Labour Market

The cornerstone of employment protection in Lao PDR is the labour law. 2006 a revised version was issued (ILO, 2011). Among other things, it regulates weekly rest and public holidays, sick leave, employment contracts, wages and social security (Lao PDR, 2007). However, according to the International Labour Organization (ILO) (2011) the implementation of the law remains limited due to confined financial and human resources.

Trade unions are regulated by the Laotian law on trade unions (Lao PDR, 2007b). All trade unions must be affiliated with the Lao Federation of Trade Unions (ITUC CSI IGB, 2008). The Lao Federation of Trade Unions is strictly controlled by the sole party in Lao PDR (cf. 1.3.1) (Stuart-Fox, 2006, S. 65); (ITUC CSI IGB, 2008). In addition, Article 5 of the 2007 trade union law states that a trade union must 'Organize and conduct its activities in line with the principles of democratic centralism and unified leadership under the Lao Revolution Party' (Lao PDR, 2007b).

In terms of business regulation and property rights protection, the Laotian business environment did not score particularly well on the latest Ease of Doing Business (EODB) Index. Lao PDR ranked 154th out of 190 economies assessed in the 2020 EODB Index. This is the same rank as in 2019 (World Bank, 2020). Lao PDR performs particularly poorly in the topics getting electricity, protecting minority investors, paying taxes, enforcing contracts and resolving insolvency. Since 2018 the monthly minimum wage is 1,100,000 Kip (US\$132). Prior to this, the monthly minimum wage was 900,000 kip (US\$108) and 626,000 kip (US\$74.7) respectively until 2015<sup>7</sup>. However, the new minimum wage has not yet been implemented (Asean Briefing, 2021). On one hand, the increase intends to address the rising cost of living and on the other hand to motivate the considerable number of Laotians working in the neighbouring countries to return to Lao PDR (Asean Briefing, 2018; The Diplomat, 2018).

Labour shortage is according to the Gesellschaft für internationale Zusammenarbeit (GIZ) and the Diplomat (2018; 2018) one of the biggest challenges in the development of the private sector. Reasons for the labour shortage are among others low education, difficulties associated with the transition from an agricultural to an industrial economy, and as mentioned above the considerable number of Laotians working abroad due to higher wages (giz, 2018). Another problem that is common across all sectors is the difficulty for companies to find semi-skilled workers (giz, 2018). Furthermore GIZ (2018) mentioned the need for better prepared and skilled workforce to realise the opportunities for economic development, which will increase as Lao PDR links up with other ASEAN economies.

Table 3 shows the labour force participation rate by age group for Lao PDR along with the OECD average for 2019. The overall labour force participation rate in Lao PDR is generally above the OECD average in all three age groups displayed<sup>8</sup>. With exception of the age group 15-24 years, the participation rate has been steady over the last 10 years. For the age group 15-24 years the participation rate has been slightly declining (2010: 63.9%). Regarding gender, there is no significant difference between men and women in the participation rate. For the geographical distribution, however, there is a clear gap. The rates for rural areas are higher than in urban areas in all age categories.

Assessing the unemployment ratio for Lao PDR is difficult due to the limited data available. Apart from 2017, the only available data points are for the year 2010. For the available data, the unemployment rate in Lao PDR is almost 50% higher than the OECD average for both youth and adults. The driving force for the higher rates in Lao PDR are the unemployment rates in rural areas, which are significantly higher than the rates for urban areas<sup>9</sup>. Both Lao PDR and the OECD figures show higher values for youth unemployment compared to the adult age group. For Lao PDR, the male unemployment rates exceed the female rates for every age group. These differences were not observed for the OECD values, where gender unemployment rates are less than one point apart for all age groups. When making these comparisons it is important to consider that the concept of unemployment can only be compared to a very limited extent between high- and low-income countries. This is shown in Kudrzycki, Günther, & Lefoll (2020)'s paper about the youth labour market index in low-income countries. Thus, Table 3 must be interpreted with care. Regarding the age group 15 to 24 years it has to be highlighted in addition that child labour remains a significant issue in Lao PDR. Especially in rural areas minors forgo schooling to help out in agricultural work or to take care of younger family members (Radio Free Asia, 2021).

<sup>7</sup> The dollar values were obtained from the quoted source

<sup>8</sup> The figures for Lao PDR have to be viewed with caution as they represent ILO modelled estimates. In 2017 the overall labour force participation rates were significantly lower: 15-64 years: 42.9%, 15-24 years: 28.4%, 25+ years: 45.4% (ILO, 2017).

<sup>9</sup> 15-64 years: rural 12.6% and urban 5.4%, 15-24 years: rural 20.2% and urban 14%, 25+ years: rural 10.2% and urban 3.9%. Values are for the year 2016 (ILO, 2017)

**Table 3: Labour force participation rate and unemployment rate by age in 2019**

Age group	Labour force participation rate		Unemployment rate	
	Lao PDR	OECD average	Lao PDR (2017)	OECD average (2017)
Total (15–64 years)	81.4	72.8	9.4	6.1
Youth (15–24 years)	58.9	48.1	18.2	12.4
Adults (25–64 years) <sup>10</sup>	86	78.4	7.4	5.2

Source: Own table based on (OECD, 2021b; ILO, 2021; ILO, 2021b)

Table 4 shows the link between the labour force participation and unemployment rate and the level of education for the age group 25 to 64. In all three educational levels, the labour force participation rate of Lao PDR is lower compared to the OECD average. On the contrary, Lao PDR has lower unemployment rates than the OECD average. For both Lao PDR and the OECD values, the labour force participation rate increases with the level of education. Furthermore, the unemployment rate decreases with the level of education. In summary, the higher the education the higher the participation rate and the lower the risk of being unemployed.

**Table 4: Labour force participation rate and unemployment rate by educational attainment in 2017 (persons aged 25–64)**

Education level	Labour force participation rate		Unemployment rate	
	Lao PDR	OECD average	Lao PDR	OECD average
Less than upper secondary education	47	58.0	9.2	10.5
Upper secondary education	68.2	75.3	4.4	6.3
Tertiary education	81.9	84.8	3.2	4.3

Source: Own table based on (ILO, 2021a; OECD, 2021a; OECD, 2021c)

<sup>10</sup> Data for Lao PDR only available for age group 25+.

## 1.2.2 The Youth Labour Index for Low Income Countries

Building on KOF Youth Labour Market Index (Renold, Bolli, Egg, & Pusterla, 2014), which primarily relies on high-income country data, Kudrzycki et al. (2020) proposed an **index for low income countries**. This index, which is the first to combine indicators specifically tailored to the realities of low-income countries, provides an assessment of individual countries' progress in addressing the needs of young workers. The YLILI helps to make a complex and multidimensional phenomenon more tractable by generating country-specific rankings that allow for comparisons across countries.

To construct the index, **12 youth-specific labour market indicators** were selected from three broad dimensions that best reflect the situation of the youth in the labour market: transition from education to the labour market, working conditions in the labour market, and educational background. The indicators were obtained from three reputable compilers of international data: the ILO, UNESCO and the Demographic and Health Surveys. The index score is calculated as the arithmetic mean of the three dimensions and is scaled to vary from 0 (dysfunctional youth labour market) to 100 (functioning youth labour market).

The transition dimension reflects the **quantity of employment** for youth and encompasses (1) the share of youth not in employment, education or training (NEET), which captures the share of inactive youth, (2) the relative unemployment ratio, which measure the degree to which unemployment affects young people more than adults and (3) the skills mismatch rate, which show whether unemployment disproportionately affects those with high or low education.

The working condition dimension captures the **quality of employment** and contains six indicators. The youth working poverty rate measures the proportion of working youth in poverty. The youth underemployment rate measures the share of employed youths who are willing to increase their workload. The informal employment rate captures the share of young people employed without contracts and/or social security. The vulnerable employment rate measures the share of own account workers and contributing family workers. The share of workers in elementary occupations measures the proportion of young workers in low-skilled basic tasks, which may require great physical effort and can carry a high risk of injury. Finally, the share of workers in agriculture complements the previous indicator, as jobs in agriculture are generally low-paid and labour-intensive.

Finally, the education dimension captures the **skill level of youth** and comprises (1) the proportion of youth with no secondary education, (2) the proportion of illiterate youth, and (3) a measure of schooling quality in the form of harmonized test scores.

Dimensions and indicators of the YLILI
<b>Transition</b> <ul style="list-style-type: none"> <li>- Share of youth not in education, employment, or training (NEET rate)</li> <li>- Relative unemployment ratio</li> <li>- Youth skills mismatch rate</li> </ul>
<b>Working conditions</b> <ul style="list-style-type: none"> <li>- Youth working poverty rate</li> <li>- Youth time-related underemployment rate</li> <li>- Share of youth in informal employment</li> <li>- Youth Vulnerable employment rate</li> <li>- Share of youth in elementary occupations</li> <li>- Share of youth in agriculture, fishery, or forestry</li> </ul>
<b>Education</b> <ul style="list-style-type: none"> <li>- Share of youth with no secondary education</li> <li>- Youth illiteracy rate</li> <li>- Harmonized test scores</li> </ul>
Source: (Kudrzycki, Günther, & Lefoll, 2020)

## 1.2.3 The YLILI for Lao PDR

All the required 13 indicators for the calculation of the YLILI are obtainable for Lao PDR. The last available year for all indicators ranges between 2015 and 2020. Thus, the scores of the individual dimensions are not fully comparable as the year of data obtainment varies. Nonetheless, the YLILI gives a good comprehensive measure of a low-income countries' youth labour market.

The Laotian score of 66.24 (out of a 100) approximately equals the average of all the countries for which the YLILI can be computed<sup>11</sup>. This result leads to a rank of 15 out of 29 lower-middle and low-income countries ranked for this period. Compared to the other countries Lao PDR gets an especially high score for the dimension underemployment (97.62). This result suggests that most of the Laotian labour force is working at their full capability. In contrast, Lao PDR achieves relatively poor values in comparison in the dimension NEET score and harmonized test score. For these dimensions, Lao PDR receives a score of 57.92 and 20.96 respectively. Regarding the working conditions and transition scores Lao PDR also performs below average (Kudrzycki, Günther, & Lefoll, 2020).

<sup>11</sup> Average = 66.433

To conclude, in addition to the higher youth unemployment rate of Lao PDR compared to the OECD average (see Table 2), the conditions and the quality under which employment takes place are also low. Additionally, as mentioned in 1.2.1, there is a problem concerning child labour. Between 2015 and 2020 28.2% of children aged five to 17 performed labour (Radio Free Asia, 2021).

## 1.3 Laotian Political System

Understanding the basics of a country's political system and getting to know the political goals with respect to its education system are crucial points for the understanding of the education system in a broader sense. Therefore, in Section 1.3.1 we start by presenting the Laotian political system in general. Then, in Section 1.3.2, we focus on the politics and goals of the education system.

### 1.3.1 Overview of the Laotian Political System

The Lao People's Revolutionary Party (LPRP) is currently running Lao PDR and is the only political party in the country (Human Rights Resource Centre, 2013). According to Stuart-Fox (2006) the structure of the LPRP is typical for communist parties of the former Soviet model. Thus, there are various dual roles of party members as officers of the state and officials of the party such as the president of the party who is also state president, and the vice-president who is a member of the party as well. Through this structure, the LPRP holds complete control and decision-making power in the government and politics (Croissant, 2016).

Lao PDR is a decentralized unity state. The state is divided into three administrative levels. Below the national level are 17 provinces, which are further divided into districts and districts in turn into villages. A unicameral, popularly elected national assembly represents the legislative branch and acts as the supreme body of government. It is responsible for the election of the president, who serves as the head of state, and of the vice-president. The prime minister, who is appointed by the president after being approved by the National Assembly, leads the executive branch (government). It consists of 18 ministries and three ministry-equivalent organisations. On a local level, the government is divided administratively into 16 provinces and the capital, Vientiane (total of 17 provinces). The people's courts include the people's supreme court, regional courts, provincial courts, district courts and military courts and compose the judiciary branch of the state. Of these, the people's Supreme Court is the highest judicial organ of the state (Urban LEDS, 2018; Croissant, 2016).

Table 5 displays the six different Worldwide Governance Indicators for the year 2019 for Lao PDR. The indicators are based on over 30 underlying data sources reporting the perceptions of governance of a large number of survey respondents and expert assessments. The measure estimate ranges between -2.5 (weak governance) and 2.5 (strong governance). The rank equals the percentile rank of Lao PDR among all countries, whereas 0 is the lowest and 100 the highest possible rank (World Bank, 2019). Compared to the average of the East Asian and Pacific Region, Lao PDR performed relatively well in Political Stability and absence of violence/terrorism in 2019. For the indicators voice and accountability, government effectiveness, regulatory quality, rule of law and control of corruption on the other hand, Lao PDR performs significantly worse than the average regional performance in 2019. For the indicators political stability and absence of violence/terrorism as well as for regulatory quality a positive development can be observed over the past 20 years. The other four indicators have changed negatively or only slightly in recent years and reach a percentile rank of 4% to 24% in 2019 (World Bank, 2019). Overall, these results indicate that Lao PDR has not been able to significantly improve its governance in the past years.



**Table 5: Worldwide Governance Indicator (WGI) for Lao PDR, 2019**

Worldwide Governance Indicators (WGI)	Estimate	Rank (0-100)
Voice and Accountability	-1.8	3.94
Political Stability and Absence of Violence/Terrorism	0.53	64.76
Government Effectiveness	-0.78	20.67
Regulatory Quality	-0.71	23.56
Rule of Law	-0.94	17.31
Control of Corruption	-1.06	13.46

Source: own table based on World Bank (2019a).

In the Economist Intelligence Unit's Democracy Index 2020, Lao PDR ranked 161<sup>st</sup> of 167 countries. Along with this poor ranking, their overall score has dropped from 2019 to 2020, after being steady for the past 15 years. If the ranking is put into regional comparison, it is even worse. Lao PDR is ranked second to last in the Asia and Australasia region, only ahead of North Korea, with the regime type being called authoritarian (The Economist, 2020). Regarding corruption, the Corruption Perception Index 2020 ranks Lao PDR 134<sup>th</sup> out of 180 countries with a score of 29 out of 100. Since 2012, Lao PDR has moved up 26 places and increases its score by eight points (Transparency International, 2020).

### 1.3.2 Politics and Goals of the Education System

The education system in Laos is divided between different public and private institutions. However, the ministry of education and sport (MOES) has the overall responsibility for general education and technical and vocational education and training<sup>12</sup>. MOES is, however, only responsible for the initial education up to the point of entry into the labour market. The education and training after entering the labour market is the responsibility of the Ministry of labour and social welfare (MOLSW). Other ministries also provide education programs in their respective fields of specialization (Noonan, 2020).

According to UNICEF (2021), current challenges in education include among others the following:

- 70% of five-year-olds are not enrolled in early childhood education programmes.
- Many of the children do not speak Lao, the language of instruction. There are four ethno-linguistic families in Lao PDR: Lao-Tai, Mon-Khmer, Sino-Tibetan, and Hmong-Mien. In 2002/2003, over 75% of Lao-Tai children went to school. For comparison, in the other ethno-linguistic groups it was 50% for Mon-Khmer and Hmong-Mien children and 33% of Sino-Tibet children (Save the Children).
- Primary grades have a high repetition and dropout rate.
- Lack of quality of primary education.

In addition, GIZ (2018, S. 12) states that in 2012 only 70 % of students in second grade were able to read and 60 % in fourth grade had achieved reading fluency.

In the Education and Sports Sector Development Plan 2016-2020 (ESDP) the MOES defines the following overall objectives until 2025. First, to improve the educational system to develop human re-

<sup>12</sup> Note that this factbook refers to the Ministry of Education and Sports (MOES). This reference also includes the Ministry of Education (MOE), as the ministry responsible for education has had different names over the years (Noonan, 2020).

sources, which can ensure the growth of the economy. Second, to strengthen the education, administration and management systems to support effective and efficient use of resources and third, to advance the sport sector. The overall goal until 2020 was '(...) to provide equitable access to quality education and sports and to benefit from socio-economic development in order for the Lao PDR to be eligible to graduate from least developed country status by 2020' (Ministry of Education and Sports, 2015, S. 8).

In the long run the vision of the MOES is the following: 'By 2030 all Lao population equally and equitably have access to quality education in order to become good citizens, disciplined, healthy, knowledgeable, highly-skilled with professionalism in order to sustainably develop the country, to align and be compatible with the region and the world' (Ministry of Education and Sports, 2015, S. 7)

# 2. Formal System of Education

## 2.1 Formal System of Education

In Lao PDR the MOES is managing the education at national level. At a lower level, the Provincial Education Services and Sports Service (PESS) coordinate the educational development within their jurisdiction. Below them are the District education bureaus (IBE UNESCO, 2012)<sup>13</sup>.

The Laotian education system is organised in five levels. Pre-primary, primary, lower secondary, upper-secondary and higher education. Pre-school education is non-compulsory, it is for children up to six years and includes nurseries, kindergarten and pre-primary school offers. Primary school starts at the age of six, it is compulsory and encompasses five grades until the age of ten. After primary school, students continue their education at a lower secondary school (IBE UNESCO, 2012; UNESCO, 2011)<sup>14</sup>. The education law, which was revised 2015, defines lower secondary education as compulsory. Additionally, it states the English language as a compulsory subject from Grade three onwards of primary education (Noonan, 2020).

Secondary education lasted six years under the previous system. Three years of lower and three years of upper secondary education. 2009/2010, however, a new structure was implemented which included four years of lower and three years of upper secondary education (IBE UNESCO, 2012; KWPF, 2015). In other words, a system change was carried out from a 5+3+3 system to a 5+4+3 system (Noonan, 2020).

Upper secondary education is available to all students who have successfully passed the lower achievement examination. On completion of the upper secondary education, students will receive a diploma provided they have successfully passed the achievement examination (IBE UNESCO, 2012). Lower secondary education lasts from age 11 to 14 and upper secondary education lasts from 15 to 17 years old. Alternatively, to the upper secondary education, students may attend technical/vocational training programmes. Subsequent to the upper secondary education, students can pursue tertiary education via higher technical and vocational education diplomas or the university (UNESCO-UNEVOC, 2021; UNESCO, 2011).

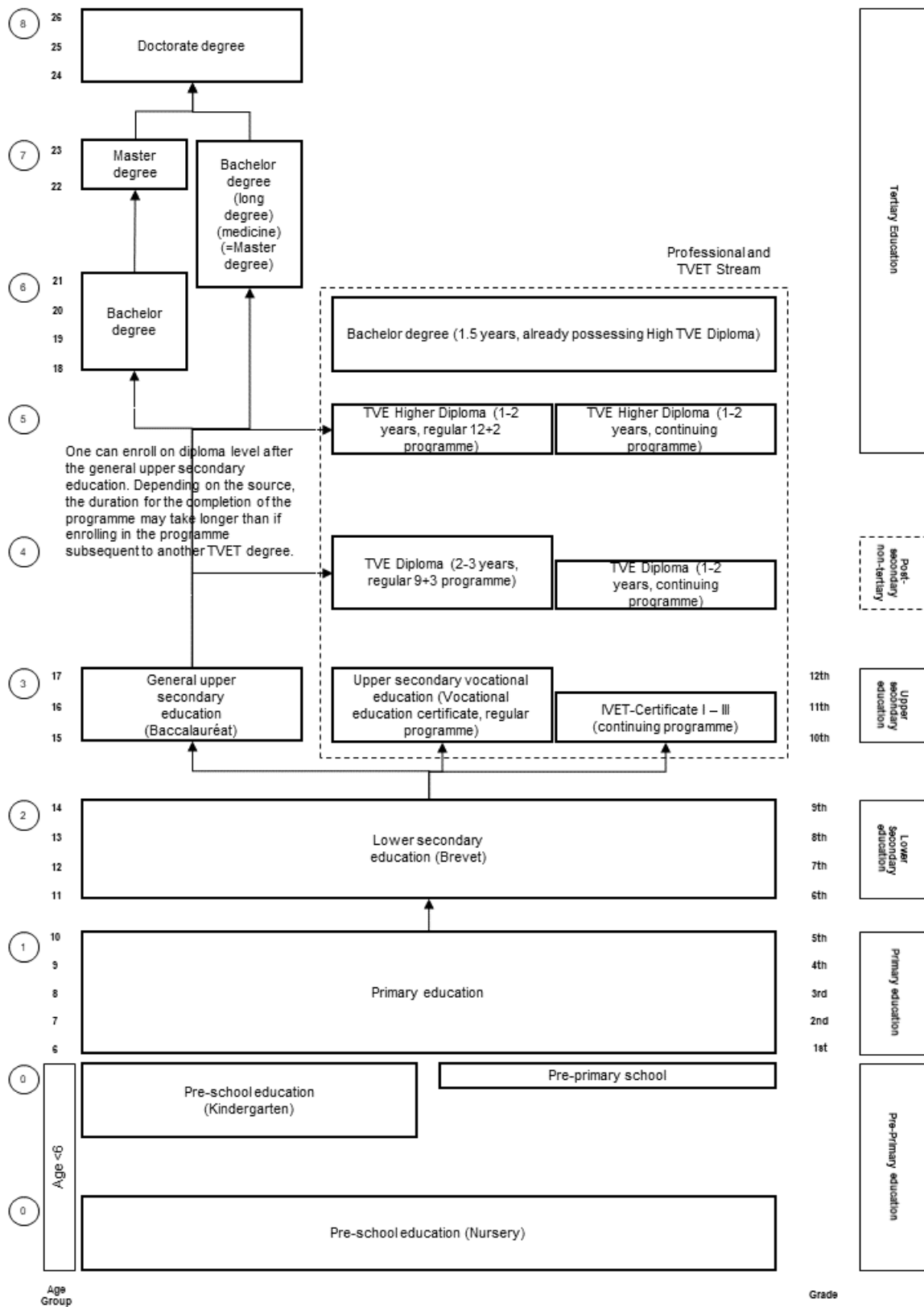
Figure 2 below provides a detailed illustration of the Laotian education system with its various education pathways.

With regard to of funding, Article 57 of the Laotian education law states that 18% of the national budget should be used for education. However, these values have not been reached over the last couple of years (Lao PDR, 2007a). In 2015/2016, the share of the national budget invested in education was 15.8%, in 2019 13.7% and in 2020 13.1%. Thus, not only was the target missed, but also the values are decreasing. Looking at education spending as a percentage of GDP, it shows that Lao PDR invests less of its GDP in education than the average in most ASEAN countries, with 2.6% of the Laotian GDP being invested in education. In comparison, Vietnam allocated over 5% of the GDP to education and Thailand over 4% (UNICEF, 2020).

13 Note that this factbook refers to the Provincial Education and Sports Service (PESS). This reference also includes the Provincial Education Services (PES), since the institution is called differently depending on the source and the assumption has been made that, as with the MOES/MOE, the name of the institution has changed over the years.

14 Certificate I and II are qualifications for those who dropped out from the formal education system before completing lower secondary education (Goncalves, Dung, & Duong, 2019) (see 3.1).

**Figure 2: The Laotian education system**



ISCED 2011; Personal communication (July 20, 2021); UNESCO, 2013, s. 18; UNESCO, UNEVOC 2021; UNESCO, UNEVOC, 2020, s.4.5; Noonan, 2020; Bai & Paryono, 2019

Source: own table based on sources mentioned at the bottom of the figure. Note: Based on the mentioned sources, there are many possibilities, ideas and plans for the TVET system in Lao PDR. However, the sources give the impression, that the individual programmes are not clearly defined and separated from each other, which is why it is not clear from which programme one can move to the other programmes. For this reason, no arrows have been incorporated in Figure 2 in the TVET area.

## Enrolment

Table 5 shows the GER<sup>15</sup> and NER<sup>16</sup> by education level for 2019 for Lao PDR. The NER quantifies the total number of students in the theoretical age group for a given education level enrolled at that level expressed as a percentage of the total population of that age group. The GER quantifies the number of students enrolled at a given education level—irrespective of their age—as a percentage of the official school-age population corresponding to the same level of education. For example, for the primary education level, the NER indicates how many students of the typical primary school age are actually enrolled in primary school, while the GER sets the actual number of students in primary education—irrespective of their age—in relation to those who are in the official age to attend primary education<sup>17</sup>. For Lao PDR, only limited data for the NER is available.

**Table 6: Net enrolment rate (NER) and gross enrolment rate (GER), 2019**

Education level	ISCED 2011	Net Enrolment Rate	Gross Enrolment Rate
Pre-primary	010	n.a.	48.46
Primary education	1	91.58	100.45
Secondary education	2–3	n.a.	65.77
<i>Lower secondary education</i>	2	72.41	75.45
<i>Upper secondary education</i>	3	56.18	52.31
Post-secondary non-tertiary education	4	n.a.	5.45
Tertiary education	5–8	n.a.	14.45

Source: (World Bank, 2021a; UNESCO, 2019)

## Attainment

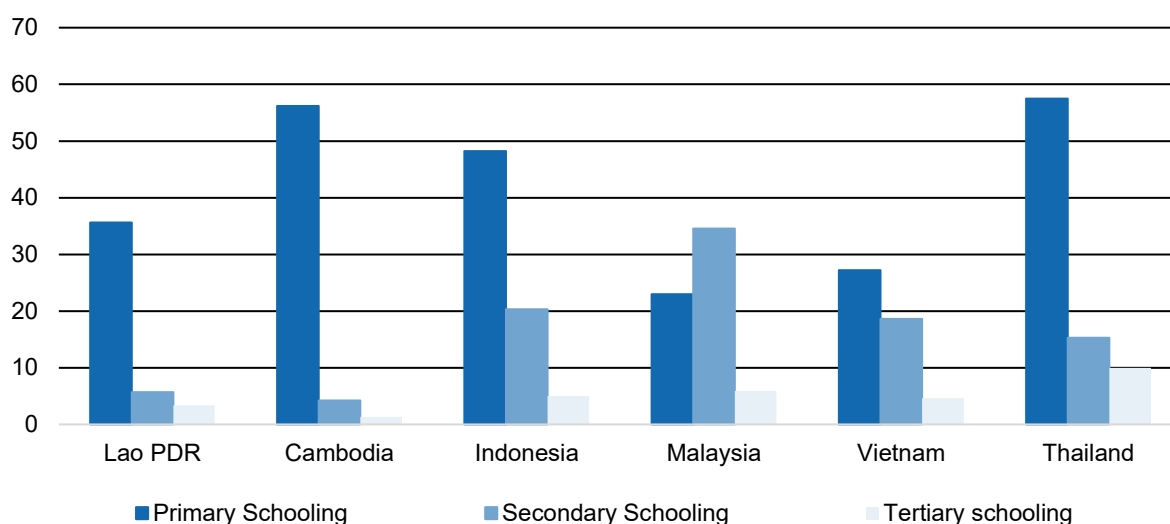
Figure 3 displays the share of population older than 25 years with primary education, secondary education, and tertiary education for Lao PDR and selected South East Asian countries. Compared to other South East Asian countries except Cambodia, Lao PDR exhibits lower attainment values for secondary and tertiary education. In terms of primary education, Lao PDR is in the middle of the spectrum compared to the other countries.

<sup>15</sup> The UNESCO Institute for Statistics (UIS) **Invalid source specified**. defines the gross enrolment rate as the “number of students enrolled in a given level of education, regardless of age, expressed as a percentage of the official school-age population corresponding to the same level of education.”

<sup>16</sup> The UIS **Invalid source specified**. defines the net enrolment rate as the “Total number of students in the theoretical age group for a given level of education enrolled in that level, expressed as a percentage of the total population in that age group.”

<sup>17</sup> A gross enrollment rate of 100 corresponds to a situation where each child in a given country is enrolled in the corresponding education level. A value above 100 could occur due to students who are older than the typical enrolment age for primary education (e.g. have to repeat grade, adult learners). A value below 100 implies that not everyone who is in the typical age for primary education is actually enrolled.

**Figure 3: Share of population (%) by educational attainment, population 25 years and older (2010)**



Source: (Worldbank, 2010)

### Gender Parity

Table 7 displays the indices for gender parity by level of education. The Gender Parity Index (GPI) is determined by dividing the number of enrolled females by the number of enrolled males. A GPI between 0.97 and 1.03 indicates parity between the genders. A GPI below 0.97 indicates inequality in favour of men. A GPI above 1.03 indicates an inequality in favour of women. The numbers indicate similar GPIs across all levels of education within Lao PDR. The only outlier represents “Post-secondary non-tertiary education”, in which women are underrepresented relative to men. In comparison to the average values of the East Asia and Pacific region, there are no significant differences, except for upper secondary education, where the GPI in Lao PDR is over 10% below the East Asia and Pacific region average representing an inequality in favour of men.

**Table 7: Gender Parity Index (GPI) for Lao PDR and East Asia and Pacific region, 2019**

Education level	ISCED 201199	GPI Lao PDR	GPI East Asia & Pacific Average <sup>18</sup>
Pre-primary	010	1.03	0.98
Primary education	1	0.97	0.99
Secondary education	2–3	0.94	1.02
Lower secondary education	2	0.96	1.01
Upper secondary education	3	0.89	1.03
Post-secondary non-tertiary education	4	0.61	n.a.
Tertiary education	5–8	1.1	1.17

Source: (World Bank, 2021c)

<sup>18</sup> East Asia & Pacific excluding high income: American Samoa, Cambodia, China, Fiji, Indonesia, Kiribati, South Korea, Lao PDR, Malaysia, Marshall Islands, Micronesia (Fed. Sts.), Mongolia, Myanmar, Nauru, Papua New Guinea, Philippines, Samoa, Solomon Islands, Thailand, Timor-Leste, Tonga, Tuvalu, Vanuatu, Viet Nam

## 2.2 Pre-Primary Education

This chapter focuses in depth on the pre-primary education, for which the Department of Pre-school Education (DPE) is responsible (Noonan, 2020).

The Early Childhood Education (ECE) represents a sub sector of the Laotian education system and is part of the basic education. It consists of the Nursery, the Kindergarten, and the pre-primary schools. ECE admits children up to six years old. The Nursery covers an age range from three months to three years old, the Kindergarten one from three to six years old and the pre-primary schools one from five to six years old (Manivanh, 2005; UNESCO, 2011).

Preschool education is voluntary. Nevertheless, the enrolment ratios have risen sharply in the past ten years and this development is expected to continue in the future. The enrolments for early childhood education and pre-primary schools have increased from 11.07% in 2011 to 25.49% in 2019 and 21.54% to 48.46% respectively (Noonan, 2020; World Bank, 2021a). Noonan (2020, S. 78) summarizes the development as follows “(...) ECE began the century with gross and net enrolment ratios of under 10%, but enrolments began to rise rapidly in the latter half of the first decade”. Moreover, the GPI shows a balanced picture in terms of gender parity (Table 7). According to World Bank (2021e) in 2019, 20.4% of enrolments in early childhood education programmes were in private institutions, and for early childhood educational development programmes, 59% of enrolments were in private institutions.<sup>19</sup>

The Laotian Law on education states in Article 8 that the purpose of the pre-educations is ‘to conduct physical, mental, ideological, intellectual, emotional and talent development to prepare for entry to primary school.’ (Lao PDR, 2000). In 2005, there were 969 nurseries and Kindergartens including 136 private Kindergartens. These catered around 45’328 children of whom 22’773 were girls. The education was provided by 2’702 teachers, of whom 2’688 were women (Manivanh, 2005). In 2009 it was declared, that preschool education is free of charge (Ministry of Education and Sports, 2015a).

## 2.3 Primary and Lower Secondary Education

Primary education encompasses five years of education. Education starts at the age of six and consists of five grades until the age of ten. Attendance is compulsory and with the successful completion of the primary education exam pupils receive a certificate (UNESCO, 2011; IBE UNESCO, 2012).

Primary education in Lao PDR is free of charge since 1996 (Ministry of Education and Sports, 2015a). In 2000, the access to education was strengthened further with article 3 of the Laotian Education Law. Article 3 states, that all Laotian citizens have a right to education regardless of their ethnical background, origin, religion, sex, age or social status (Lao PDR, 2000).

In 2009, general education was amended. Until then, the general education lasted 11 years (5 in primary + 3 in lower secondary + 3 in upper secondary). This duration was extended to 12 years (5 in primary + 4 in lower secondary + 3 in upper secondary). With the amendment it was stipulated that primary and lower secondary education is compulsory. In addition, education from preschool to upper secondary education is free of charge at public schools (Ministry of Education and Sports, 2015a). However, lower and upper secondary schools are allowed to demand registration fees and fees for specific purposes (IBE UNESCO, 2012).

During the five years of primary education, the teacher assesses the pupils through monthly, half- and end-of-the-year examinations and quizzes (IBE UNESCO, 2012). A successful completion of the final examination at the end of grade five is a requirement to pass primary education officially (UNESCO, 2011; IBE UNESCO, 2012). With the successful completion, children enter the lower secondary education (UNESCO, 2011; IBE UNESCO, 2012). According to UNESCO (2011a) the average transition rate to lower secondary was 79% in 2011. However, there was a significant difference between income classes. For the poorest, the rate was just 48%, whereas the richest segment of the population had a rate of 94%. By 2018, the transition rate had risen sharply to 86% (UNICEF, 2019).

<sup>19</sup> The source does not explain in detail the difference between the two programmes

Lower secondary education lasts for four years until the pupils reach the age of 14. Monthly tests are conducted in lower secondary education. Additionally, semester tests are carried out. Each school is self-responsible for the assessment of its students. Students achieve graduation from lower secondary school by successfully passing the final examination. The examination is conducted at provincial level (IBE UNESCO, 2012).

The NER in the primary school has risen sharply in recent years. In 1998, the rate was at 74% and in 2019 at 91%. However, it has been declining slightly since 2013. Regarding the GER, a similar pattern exists, which has also been declining since 2010 and was at 100% in 2019. For lower secondary education, NER was slightly lower in 2019 (72.4%) than the value in 1998 (75.6%). The GER, on the other hand, has increased significantly since 2003, from 51.04% to 75.45% in 2019 (World Bank, 2021c) (World Bank, 2021e). This development has occurred due to the high number of pupils who are outside of the official age range of lower secondary school (Noonan, 2020). The GPI for primary school and lower secondary education shows, that boys and girls are equally represented in schools. Furthermore, there were no significant changes in the two GPIs over the past 10 years. In 2019, the GPI in primary schools was 99.7% and in lower secondary education 101.4% (World Bank, 2021c; World Bank, 2021e).

Private Schools have existed since 1991. According to Noonan (2020), private schools represented 2% of primary school enrolments at the beginning of the century. Since then, the value has gradually risen. In 2020, the share of private schools is expected to reach 7%. Regarding private schools in lower secondary education, they account for only a small but growing proportion of the enrolments. In 2014/2015, they represented 3% of the enrolments.

Primary education is the responsibility of the Department of General Education (DGE). In addition, the DGE is responsible for the general lower and upper secondary education (Noonan, 2020). Above the DGE stands the MOES, which oversees all education services. The DGE organizes in primary education nearly 8,500 schools across 11,640 villages (Ministry of Education and Sports, 2015a). Half of the schools (57%) offer all of the five years of the primary education programme. In 2009/2010, there were 920,000 children in primary school (IBE UNESCO, 2012). According to Article 17 of the Laotian Education Law the primary education should ensure the following: '[a] general knowledge of natural and social sciences, of mankind, to have knowledge of listening, reading, speaking, seeing, questioning, writing Lao language and calculation, to love health, cleanliness, environment and knowing the Lao artistic culture, to learn foreign language from the third years of elementary education upward.' The secondary education subsequently has the aim to ' (...) provide general knowledge and necessary basic knowledge for continuing education and engaging in suitable professions' (Lao PDR, 2007a, S. Article 18).

Students at primary school receive education in nine subjects. These include Lao Language, mathematics, handicraft, moral education, world around us, physical education, art, music, and English, which is introduced in Grade 3. The primary curriculum includes the three elements: formal curriculum, class and school activities, and extracurricular activities (Ministry of Education and Sports, 2015a). The lower secondary curriculum comprises additional subjects. These include biology, chemistry, physics, history, geography, civics, French, information and communication technology, basic vocational training, sports education, classroom and school activities, extracurricular activities, vocational guidance, and national security education. In return, the subjects handicraft, moral education, world around us, physical education, and music are dropped (Noonan, 2020).

## 2.4 Upper Secondary Education

Upper secondary education encompasses three years of education. The education includes the grades 10 to 12. Students have the choice between general upper secondary education or entering upper secondary vocational education training programmes (UNESCO, 2011; IBE UNESCO, 2012; UNEVOC, UNESCO, 2020). As mentioned above, upper secondary education is legally free of charge. However, the schools may raise registration fees and fees for specific purposes (IBE UNESCO, 2012). The DGE is responsible for the general lower and upper secondary education (Noonan, 2020). Above the DGE stands the MOES, which oversees all education services (Ministry of Education and Sports, 2015a).

Prerequisite for upper secondary education is the certificate of brevet (UNESCO, 2011). The transition rate from lower to upper secondary was 93% in 2011. Surprisingly, the gap between poor (70%) and rich (97%) was less pronounced compared to the transition rate to lower secondary education (UNESCO, 2011a).



In upper secondary education teachers conduct monthly tests and semester tests to assess student's learnings. Students achieve graduation from upper secondary school by successfully passing the final examination. The examination is in contrast to the lower secondary education performed on national level by MOES (IBE UNESCO, 2012). With the completion of the upper secondary education, students receive a certificate. The name of the certificate depends on the pathway chosen by the student (UNESCO, 2011).

The upper secondary NER has increased over the past 20 years. From 43.98% in 1998 to 56.18% in 2019. Yet, the values have been decreasing since 2016 (62.71%). In 2019, the GER was 52.31%. It has risen sharply since 2011 (31.25%) (World Bank, 2021c) (World Bank, 2021e). Furthermore, there were no significant changes in the GPI over the past 10 years. In 2019, the GPI was 1.031 (World Bank, 2021c) (World Bank, 2021e). However, the GPI in the lowest wealth quantile at upper secondary level was only 0.58 in 2017, which indicates a significant under-representation of girls at this level (UNICEF, 2019).

Private schools in upper secondary education account for a slightly lower proportion of the enrolments compared to lower secondary education. In 2014/2015 they represented 2.1% of enrolments. Similar to lower secondary education, the share of private school enrolments is expected to rise (Noonan, 2020).

The upper secondary education should 'upgrade and extend' the contents learned. Furthermore, upper secondary education shall develop the 'knowledge, capacity and talent of the learners' through specialisations in specific subjects (Lao PDR, 2007a, S. Article 18). The upper secondary curriculum is similar to the one of the lower secondary education. The only difference is instead of natural science, chemistry and biology are being taught. (Noonan, 2020).

## 2.5 Higher Education

Higher education programmes are the responsibility of the Department of Higher Education (DHE) and the MOES. The focus of this chapter is on tertiary education. In addition to tertiary education, there is also post-secondary non-tertiary education which represents an alternative for students to tertiary education or a possibility to improve performance for entrance exams to tertiary education programmes. (Noonan, 2020).

There are four different types of higher education institutions. The academy, the institute, the college, and the university. Academies are specialized post-secondary institutions addressing a specific sector. Institutes are similar to academies, but are in addition to post-secondary also tertiary institutions. Colleges are post-secondary institutions, typically private and demand a fee. Universities are at the top of the education structure and provide undergraduate diploma to PhD programmes and may offer diverse or highly specialized curricula (Noonan, 2020).<sup>20</sup>

Normally students are 18 years old when starting their higher education. Tertiary education usually includes 3 to 4-year undergraduate diploma programmes (UNESCO, 2011; Noonan, 2020). Prior to the system change from 5+3+3 to 5+4+3 students would typically start with a 1- or 2-year foundation programme (ISCED 4) and afterwards enter a degree programme. However, together with the system change the foundation programme was removed (Noonan, 2020). The master degree takes two years and the doctorate three years, although these durations may differ depending on the subjects. For instance, medical studies consist of six years of study (UNESCO, 2011).

In terms of curriculum, all programmes must cover three subjects as compulsory subjects. These are political economy (which includes the history and role of the Party), military training, and information technology. Most higher education institutions regard this regulation as a burden. Often, they have to hire external teachers as they do not want to hire permanent staff for subjects that they would otherwise not be teaching (St George, 2020).

There are currently five universities in Lao PDR. MOES is responsible for four of them. The fifth University, the University of Health Sciences, is under the responsibility of the Ministry of Health (MOH). Four

<sup>20</sup> The source does not explain the individual programmes further at this point.

of the five universities were established in the past 19 years. In addition to these universities, there are eight Teacher Education Institutions. Moreover, there is a large number of private higher education institutions (Noonan, 2020).

Until 2010/2011, students at regular university programmes did not pay any fees. Fees had to be paid only for special courses. However, since 2010/2011, fees have to be paid for regular university courses as well. In addition to these fees, higher education institutions finance themselves through fees for academic services. Private higher education institutions '(...) receive additional financing from the property, capital, or loan of the proprietor and donation from individuals, organizational persons, groups, and domestic or international organizations' (Noonan, 2020, S. 200).

Admission to the tertiary education programmes is based on one of three results. Either it is dependent on the upper secondary school leaving examination result, or on the entrance examination result, or on a combination of the two results. Each university conducts the entrance examination itself. Many students who do not make it to the national universities enrol in private colleges (Noonan, 2020). As in lower secondary education, there is a gap between poor and non-poor. 'Students from lower income families are underrepresented at universities' (Hirosato, 2009, S. 294).

There are no data points for the NER in tertiary education. Regarding GER, there has been a strong growth over the past years. However, the values have been declining since 2013. In 2013, the GER was at 19.02% and in 2019 at 14.45% (World Bank, 2021c; World Bank, 2021e). The GPI has experienced a positive development. While it was at 76.95% in 2008, it grew to 107.04% by 2019 (World Bank, 2021c; World Bank, 2021e).

Concerning Private Schools Article 24 of the Laotian Education law explicitly states that the establishment of education buildings is the responsibility of the state. In addition, however, it mentions that '(...) the State promotes and encourages the private sector to establishment of school, center and educational institution' (Lao PDR, 2007a). In 2015/2016 private institutions accounted for 15% of enrolments at the higher tertiary education level and for 36% of enrolments in short-cycle tertiary programs (Noonan, 2020). Private education has grown significantly during the period 1900-2005. In 2000, there were 14 private colleges and by 2005, there were 31 private colleges (Hirosato, 2009).

## 2.6 Continuing Education (Adult Education)

There is only limited information regarding the continuing education in Lao PDR. One facility that is worth mentioning, however, are the community learning centers (CLC). The CLC act as '(...) the main source of adult education for village communities.' (Sengthong, 2008, S. 4). They provide literacy activities, continuing education, and basic vocational/skills training and support the educational activities of the formal system. The vocational/skills training offer includes courses on wood processing, construction, chicken, frog and fish raising, mushroom cultivation, cooking and beauty. In addition, the ministry of labour and social welfare has established skills development centres, which offer different training courses. The courses address mainly school drop-outs and unskilled adults (UNEVOC, UNESCO, 2020).

In 2007/2008, 44'099 people completed the literacy program (Sengthong, 2008). In 2015, the adult literacy rate was 84.7%. There was a significant difference, however, between rural areas (79.7%) and urban areas (93.5%). The difference is similar between the genders. Thus, women show a literacy rate of 79.4% in 2015 and men of 90% (World Bank, 2015).

## 2.7 Teacher Education

In Lao PDR, requirements for teaching classes vary depending on the level of education. Pre-primary and primary school teacher pathways include the 8+3 training based on the former education system (completed lower secondary plus 3 years of teacher training), the 9+3 program based on the current education system (completed lower secondary plus 3 years of teacher training), and the 12+2 program (upper secondary education plus two years of teacher education and training) (Noonan, 2020; IBE UNESCO, 2012). According to the UNESCO Mappings (2011), graduates of the 12+2 programme are able to teach lower secondary as well.

Upper secondary teachers attend the 12+4 programs, which involves the completion of secondary education followed by a bachelor's degree. Teachers may also complete a Master's degree to enhance their qualifications (Noonan, 2020).

According to Noonan (2020) there exist two different education programs for in-service teachers. To improve their own academic qualifications, teachers can attend teacher upgrading programs (TUPs) and to introduce new methods, contents, or policies professional development programs are used. Every province features a designated upgrading centre for primary school teachers. Refresher programs are conducted by district or provincial trainers (Noonan, 2020).

In 2019, 98.9% of pre-primary teachers were female. However, this gender imbalance decreases with the level of education being taught. Thus, the proportion of female primary teachers was 53.5% in 2019, for lower secondary education 51.2%, for upper secondary education 51.2%, and for tertiary education 41% (UNESCO, 2019a).

Teacher assignments are defined by the MOES and are distributed centrally. In theory, an additional staff member is assigned to a school when it reaches 33 students or more. In practice, however, teachers are assigned unevenly. This leads to an undersupply or oversupply of teachers depending on the school. In rural areas, schools are mainly dependent on local teachers to provide education (IBE UNESCO, 2012).

Teacher salaries are low in Lao PDR and less than the GDP per capita average. Primary school teachers earn on average 39\$ per month and lower secondary teachers 45\$ per month. The salary consists of base pay (85%) and bonuses, supplements and family allowances (15%). In rural areas teachers may additionally receive contributions from villagers such as rice or housing (IBE UNESCO, 2012; Noonan, 2020). In comparison, the average teacher salary in Asia is 2.5 times the GDP per capita. Furthermore, the in 2013 established poverty line of US\$1.5 per capita per day is higher than the earnings of a primary school teacher, which means primary school teachers cannot sustain a family with children solely on the primary teacher income (Benveniste, Marshal, & Santibanez, 2007).

# 3. The System of Vocational and Professional Education and Training

This section of the Factbook describes the vocational education and training (VET) system at the lower and upper secondary level and the professional education and training system (PET) at the tertiary level in more detail. Thereby, the term vocational and professional education and training (VPET) refers to both, the VET and the PET system. It is important to note that in Lao PDR, the VPET system as a whole is referred to as technical and vocational education and training (TVET) (Lao PDR, 2013a).

In general, there are two main ministries supervising TVET in Lao PDR. These are the MOES and the MOLSW. Other Ministries such as the Ministry of Industry and Commerce (MOIC) and the MOH also offer some skills development and vocational trainings. Skills development trainings up to 12 months (short-term trainings) are the responsibility of MOLSW. Additionally, the MOLSW is responsible for certification and testing. Longer trainings, called TVET, are the responsibility of the MOES (KWPF, 2015; giz, 2020; ILO, 2016; UNEVOC, UNESCO, 2020). ‘(...) separating TVET and skills development, however, (...) has led to some confusion and duplication of efforts, with the two ministries working on developing standards for the same occupation, for instance.’ (ILO, 2016, S. 12). 23 TVET institutions are under the jurisdiction of MOES, while 11 training institutes (including four private ones) are under MOLSW’s responsibility. Additionally, there are training institutions under the jurisdiction of other ministries and public organisations (giz, 2020).

TVET in Lao PDR is divided into three levels: first/basic level (at upper secondary level), middle level and higher level (at post-secondary level) (Bai & Paryono, 2019; UNEVOC, UNESCO, 2020). It contains three components. The formal TVET, the nonformal TVET and the integrated vocational education and training (IVET) (Noonan, 2020). In the following chapters, the focus lies on the two components TVET and IVET.

## 3.1 Vocational Education and Training (VET; Upper Secondary Education Level)

According to ILO (2016), the majority of lower secondary graduates proceed to general higher secondary school and later to university. The MOES aims to increase the proportion of graduates who choose the TVET pathway. Currently, however, most people value general higher education higher than TVET education (UNEVOC, UNESCO, 2020). Therefore, the government tries to persuade graduates to go into TVET with incentives. These incentives include voucher programmes, exemption from having to pass entrance exams, and so on. The TVET development plan 2016-2020 stipulated the goal that the TVET enrolments should be expanded to increase the access to TVET for approximately 60% of graduates of secondary schools (Ministry of Education, 2007). Additionally, 25% of the total enrolments should take place in MOES vocational institutes and the remaining in the private sector and other vocational institutes (Bai & Paryono, 2019).

The current legislation distinguishes between short-term skills development trainings, which last up to 12 months, and the continuous trainings taking more than 12 months, which are called TVET. The development trainings are under the management of the MOLSW and the TVET under the management of MOES (ILO, 2016; Bai & Paryono, 2019; Noonan, 2020). In other words, initial training, before entering the labour market represents skill creation and is thus responsibility of the MOES. Training for persons already in the working world, on the other hand, includes skills development, which is the responsibility of the MOLSW (Noonan, 2020).

Two types of institutions exist in the formal TVET system: TVET institutions and Integrated Vocational Education and Training (IVET) schools (UNESCO, 2013). TVET institutions comprise technical, vocational or technical/vocational schools or colleges. They offer programmes for lower secondary graduates (up to three-year programmes) and programmes for upper secondary graduates (post-secondary level programmes). IVET schools, on the other hand, provide formal TVET and non-formal basic vocational training for different groups such as adults, special and disadvantaged groups, and early school leavers. IVET schools represent a new type of TVET schools in rural areas with the MOES aiming to expand the IVET network to cover all provinces (Bai & Paryono, 2019; Noonan, 2020; World Bank, 2013).

The TVET quality in Lao PDR remains low. However, there is a wide range between the qualities of the individual institutions. There are also many different certificates, curricula, and diplomas. These are difficult to compare and to assess regarding the graduate's skills and possible performance in the job. A potential solution to this problem is the implementation of a national qualifications framework serving as a reference (ILO, 2016; KWPF, 2015). As per KWPF (2015) and UNEVOC-UNESCO (2020), such a national qualifications framework is currently in the making and contains an eight level structure in the most recent draft. However, the details, level description, implementation mechanisms, etc. still need to be developed, defined and approved (Bai & Paryono, 2019). Table 8 shows the national qualification frameworks certification levels for TVET, skills development (SD), and higher education.

Certificate I and II are introduced as new qualifications for those who dropped out from the formal education system before completing lower secondary education (Goncalves, Dung, & Duong, 2019).

**Table 8: Qualification level for TVET, SD, and higher education**

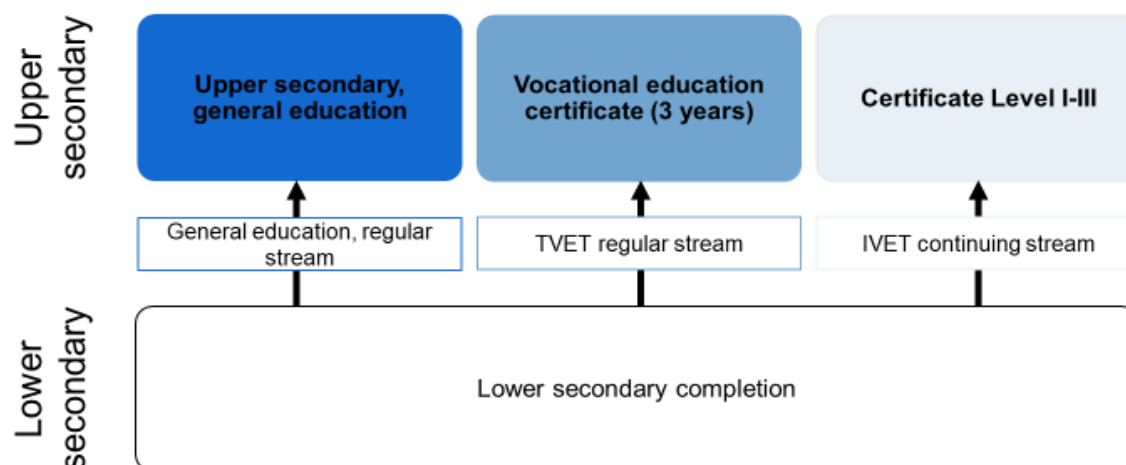
NQF Level	TVET and SD	Higher education	Duration of training
Level 1	Certificate I		3-6 months (after primary education or higher)
Level 2	Certificate II		After certificate I, 6 months (after primary education or higher)
Level 3	Certificate III		After certificate II or lower secondary, one year
Level 4	Diploma		After certificate III, min. one year. After lower secondary, min. three years. After upper secondary, min. two years
Level 5	Higher diploma	Advance diploma	After certificate III, min. three years. After diploma, one to two years. After upper secondary, three years.
Level 6		Bachelor	
Level 7		Master	
Level 8		Doctoral degree	

Source: (Noonan, 2020; Bai & Paryono, 2019; Goncalves, Dung, & Duong, 2019; Lao PDR, 2013a)

As shown above, the national qualification framework currently contains eight levels. Level 1 to 3 for certificate levels, level 4 and 5 for diplomas and high diplomas, level 6 for bachelor's degrees, level 7 for master's degrees, and level 8 for higher degrees (Bai & Paryono, 2019). Apart from the missing qualification framework, there is no national occupational standard as a reference for all TVET providers in Lao PDR. This is why the standards may vary for some professions depending on the training provider and for other professions there are no standards at all (ILO, 2016).

Upper secondary TVET education is open to lower secondary school graduates and the certificates I and II even for primary education graduates (Goncalves, Dung, & Duong, 2019). The possible education pathways of graduates after lower secondary school are shown in Figure 4.

**Figure 4: General, TVET, and IVET stream after lower secondary education**



Source: (Noonan, 2020; Bai & Paryono, 2019; UNEVOC, UNESCO)

The following TVET programmes are offered at upper secondary education level (Bai & Paryono, 2019, S. 92, 94; UNESCO, 2013; UNESCO-UNEVOC, 2021; Noonan, 2020):

- The Vocational Education (VE) Certificate (after 3 years regular programme with graduation from lower secondary education, 9+3 programme)
- Short courses in integrated vocational education and training schools (IVET) after the completion of lower secondary education. The duration of the courses varies depending on the certificate level:
  - IVET Certificate I (after 6 months of continuous education)
  - IVET Certificate II (after an additional 6 months of continuous education and completing IVET certificate I)
  - IVET Certificate III (after an additional year of continuous education and completing IVET certificate II)

UNEVOC, UNESCO (2020) explains, that students can access the labour market after the completion of each certificate or they can complete the three certificate courses consecutively. According to Noonan (2020), transfers between different education paths are possible. Diplomas earned in the TVET stream and IVET continuing stream are formally equal. Additionally, it is possible to change to the higher education path from the IVET path.

There were 50 different curricula offered in 27 areas in 2007<sup>21</sup>. These curricula covered mainly the fields of agriculture, business, industry, and handicraft (Ministry of Education). According to the Ministry of Education, the training can be divided into two categories, namely training aimed at

- 'increasing food security or generating supplementary income in villages; in impoverished rural areas in skills such as small plant, livestock production, development of cottage, handicraft production, eco-tourism activities' (Ministry of Education, S. 16)
- 'needs in urban or relatively advantaged areas in skills such as dress-making, hairdressing/beautician, using office computing software, hospitality/hotel services, general tourism services, foreign languages, plumbing, motorcycle repair, air conditioning/refrigeration'. (Ministry of Education, S. 16)

Vilaysone (2016) states in her work that from 2012 to 2014, most students graduated in business (38%). Next came industry (17%), electricity (17%), and agriculture (10%).

<sup>21</sup> The figures have to be viewed with caution. One page later, the same report refers to 58 different curricula in 2007.

TVET curricula for certificates and diplomas consists of two parts. 80% of the course content is determined at national level and 20% is adapted to local needs. In the non-formal training centres, for which the MOES is responsible, the individual local part accounts for 40% of the course content. TVET curricula are comprised of theory and practical elements, whereas the practical training has a duration of 2-3 months during the two- or three-year programme (UNESCO, 2013). However, it was noted by the Chmpasak Regional Chamber of Commerce that students in TVET school learned mainly theory and were lacking the basic skills needed to perform their job (UNESCO, 2013). Thus, the question arises, how much the students are learning during the practical training and whether this part of the curricula should be given more importance. Bai & Paryono (2019) stress as well, that employer and trade associations mentioned that TVET graduates at all levels have to be trained again by the economy units.

The curricula at Certificate I-III levels are built on the TVET reform strategy. These curricula have been implemented as part of a pilot project in seven public and three private TVET institutions. They are known under the name competency-based training (CBT) and are not yet completed for diploma and higher diploma level. The CBT curricula include general subject areas (basic numeracy, literacy, language, and IT literacy) and specific trade areas which cover theoretical and practical aspects. The three principle modules of instruction are basic, common and core modules (Noonan, 2020).

In terms of the gender distribution of enrolled students, in 2017 were 43% of all student's female. Although this figure underlines the increasing number of female students in TVET, their course selection remains heavily skewed towards occupations traditionally deemed "female" such as tailoring, basic business administration, and hospitality (ADB, 2017).

Acceptance to the individual TVET programmes is dependent on fulfilment of various points, among other pre-qualification, education background, health status, moral and ethical character, sense of responsibility, and an admission test (Noonan, 2020). Admission to technical programs at upper secondary level (9+3, certificate level) is based on interviews for public TVET institutions under the MOES (Noonan, 2020).

The TVET Law states, that there are three quality assurance mechanisms, including self-assessment, internal assessment, and external assessment. Internal assessment refers to the inspections and assessments performed by the TVET facility itself '(...) to boost, improve, and develop the quality of TVET (...)' (Lao PDR, 2007, S. Article 59). These types of assessments should be carried out at least annually comprising a technical team of institution representatives, other organizations and students. Internal assessment contains inspections and assessments carried out by the superior levels of the respective TVET facility. They should ensure consistency with the occupational standards and must take place at least annually. Thirdly, external assessments, are conducted by external organizations to ensure consistency with regional and global standards. They also take place at least annually. (Lao PDR, 2013a; KWPF, 2015). As per personal communication and the UNESCO report (2013), theoretical exams at the respective schools are conducted without the involvement of representatives from the labour market. Furthermore, practical examinations take place, which are conducted by the company at which the students complete their practical training. These examinations are observed by the teachers, who then send the practical results back to the school (personal communication, July 16, 2021).

The formal TVET system exhibits decent employment outcomes. A GIZ Study in 2013 found that 70% of graduates find employment within the first three months of graduation (World Bank, 2013). 75% of those got an employment in the field of their respective education (Bai & Paryono, 2019). It has to be highlighted, that almost 40% of the graduates noted that their social network was instrumental to finding an employment. Only 5% found work as a result of training or apprenticeships (World Bank, 2013). Additionally, 63% of employed graduates found work in state-owned institutions and only 25% in private companies. This 'may reflect limited job opportunities in the private sector and/or the limited relevance of current TVET programmes to the real needs of the labour market.' (Bai & Paryono, 2019, S. 100). Regarding enrolment rates, TVET has experienced significant growth between 2005 and 2011. However, certificate-level enrolments have decreased since 2005. The remarkable growth in TVET enrolment stems from private institutions and post-secondary level enrolments. Enrolments in MOES TVET institutions have also grown (UNESCO, 2013). Nevertheless, enrolment in upper secondary TVET programs is low. In 2014, only 4.4% of the total upper secondary enrolment was in TVET. In the past few years, this value has even been declining, hitting a low of 2.1% in 2019 (UNESCO, 2021).

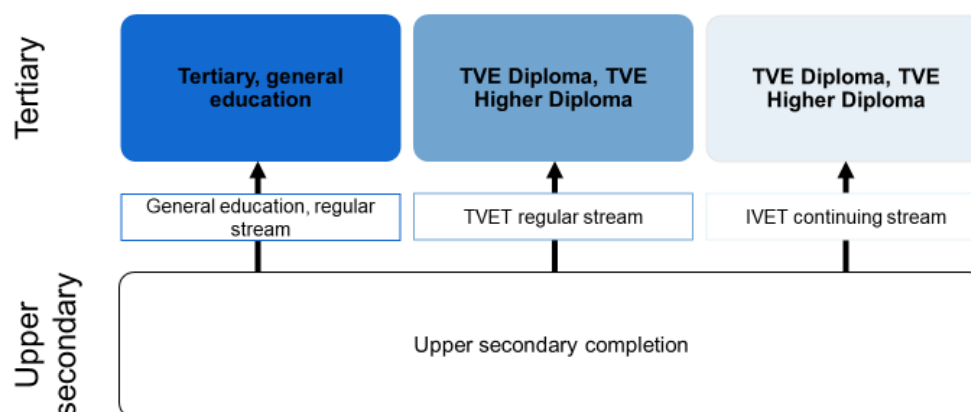
In Lao PDR, TVET is free of charge up to diploma level. Diploma and higher diploma programmes on the other hand, cost between LAK 1.5-2.0 million (US\$ 156,4 – 208.45<sup>22</sup>) per year, varying according to the programme (Goncalves, Dung, & Duong, 2019). Depending on the socio-economic situation and the fields and levels of TVET education students may receive financial support in the form of tuition fee exemption or living allowances. Financial assistance is being used as a leverage to attract students to TVET programmes of national priority and to promote inclusive education in TVET (UNESCO, 2013; Noonan, 2020). For example, students of manufacturing programmes receive full exemption of tuition fees and living allowance whereas students of business courses have to pay the full course fees (Vilaysone, 2016). However, these incentives do not appear to be effective in increasing the enrolment rates (giz, 2016). Additionally, UNESCO (2013, S. 35) suggests, '(...) that financial measures are more effective for students from rural communities. To attract students from urban areas, different measures need to be explored'.

There is a total of 69 private schools<sup>23</sup>. Private institutions need to be accepted by the MOES to be able to award officially recognized TVET certificates and diplomas. They offer TVET education primarily in the service sector, which does not require large investments in infrastructure. Courses are offered mainly in English, IT, marketing, finance, and business and mostly on diploma-level. These are the fields favoured by the youth. In 2013/2014 most students in private TVET schools graduated in courses for the service sector compared to 4.5% graduates in courses for the industry sector (Bai & Paryono, 2019; UNESCO, 2013). The problem with private programmes is that they are of low quality. This is partly caused by the lack of support from the Laotian government and also the limited resources and the lack of cooperation with public institutions (UNESCO, 2013).

## 3.2 Professional Education and Training (PET; Post-Secondary Level)

Post-secondary TVET education is open to upper secondary graduates. The possible education pathways are shown in Figure 5.

**Figure 5: General, TVET, and IVET stream after upper secondary education**



Source: (Noonan, 2020; Bai & Paryono, 2019)

Post-secondary TVET offers the following pathways (Bai & Paryono, 2019, S. 92, 94; UNESCO, 2013; UNESCO-UNEVOC, 2021; UNEVOC, UNESCO, 2020; Noonan, 2020):

- The TVE diploma (after 2-3 years and the completed TVE Certificate or completed upper secondary education. Regular programme)

<sup>22</sup> Exchange rate per August 30, 2021 1 US\$ = 9.592.01

<sup>23</sup> Noonan (2020) mentions 100 private TVET schools in 2014/2015.



- The TVE higher diploma (after 1-2 years and the completed TVE diploma or after 2-3 years and completed upper secondary education. Regular programme.)<sup>24</sup>
- The TVE diploma (after 1-2 years and certificate III, or after 2 years and completed upper secondary education. Continuing programme.)
- The TVE higher diploma (after 1-2 year and completed TVE diploma, or after 2 years and completed upper secondary education. Continuing programme).<sup>25</sup>
- The bachelor degree (after 1.5 years or more and already possessing the high TVE diploma, continuing programme. After 2-3 years for the normal programme).<sup>26</sup>

Acceptance is based on an admission tests for the technical diploma (12+2) in business administration, accounting, tourism, hotel management, ICT, electro-technical and electronics, mining, land management, geodetic engineering, and automotive technology. The same applies to the vocational diploma (12+3) in international commerce and trade, transportation services, marketing, and hydroelectric planning (Noonan, 2020).

In order to be eligible for the voucher programmes mentioned at the beginning of the previous chapter, the candidate has to be at least 16 years old, be enrolled in one of the four priority skill areas (construction and building trades, mechanics and machinery maintenance and repair, furniture-making, and basic entrepreneurship), have completed lower secondary school and primary school, and have recent employment experience (Noonan, 2020).

## 3.3 Regulatory and Institutional Framework of the VPET System

### 3.3.1 Central Elements of VPET Legislation

TVET in Lao PDR is specified as one of four sub-sectors of the education system in the education law (UNESCO, 2013; Lao PDR, 2007a). Additionally, there have been two decrees on TVET. The Decree No. 209 of 1998 and the Decree No. 036 of 2011, which replaced the one from 1998 (ILO, 2016).

The Decree No. 036 covers further definitions and regulations on Technical and Vocational Education and Training and Skills Development in addition to the education law (UNESCO, 2013). Furthermore, it also clearly defines the functions of the MOES (responsible for TVET) and of the MOLSW (responsible for skills development, certification, and testing) (UNEVOC, UNESCO, 2020; UNESCO, 2013). According to Noonan (2020), the decree was the first step towards close collaboration between the two ministries MOES and MOLSW in the allocation of roles and responsibilities regarding TVET.

In 2013 a new TVET Law was approved. It determines the principles, measures and management for the delivery and the organization of TVET programmes. The goal is to ensure that the Laotian labour force has the know-how and skills to satisfy the labour market demands and to define the role of TVET in supporting the national social-economic development of Lao PDR (Noonan, 2020; SEA-VET, 2013; giz, 2020).

The ILO (2016) mentions in its report that with regard to legislation, Decision No. 155 is also of relevance. It divides responsibilities between the Higher Education Department and the TVET Department within MOES and specifies that TVET schools may only offer programmes up to higher diploma. Bachelor's degrees can only be awarded by universities.

Furthermore, the TVET Master Plan, the Education Sector Development Framework, the Education Sector Development Plan (2011-2015), and the TVET Strategy 2006-2020 are considered key plans guiding the government initiatives in TVET (UNESCO, 2013). The TVET Master Plan identifies seven strategic projects regarding TVET. These consist of (1) construction, renovation and expansion of TVET, (2) expand TVET offer and approaches, (3) develop and improve the TVET teachers and staff, (4) set

<sup>24</sup> UNESCO-UNEVOC (2021) is the only source which states that the high TVE diploma can be completed after 3 years and the completed vocational education certificate.

<sup>25</sup> (UNEVOC, UNESCO, 2020) states that the TVE higher diploma can be completed after the vocational education certificate and 2 years.

<sup>26</sup> The programme duration is given within a range as it is reported in the same way in the sources and as the programme duration varies across different sources.

up quality assurance system of the TVET, (5) develop the information system of TVET, (6) improve the organization of TVET, (7) formulate the policy and tools at the macro level for the development of TVET (Ministry of Education).

### 3.3.2 Key Actors

Various agents contribute to the Laotian VPET system. As mentioned above, VET and PET are generally referred to as TVET in Lao PDR. Key actors are briefly described in the following chapter.

#### Government

The two main ministries in charge of the TVET in Lao PDR are the MOES and the MOLSW (Bai & Paryono, 2019; giz, 2020; UNESCO, 2013). The GIZ mentions in their report (2020) that the coordination between the MOES and MOLSW is weak and thus presents a challenge to systematically involve business and industry in TVET (see 4.2) (giz, 2020).

The MOES is responsible for TVET and the MOLSW for skills development, certification, and testing (UNEVOC, UNESCO, 2020). Additionally, the Department of Technical and Vocational Education (DTVE) under the MOES and the PESS under provincial government are supervising the TVET system (UNESCO, 2013). The DTVE has implemented regulations on the organization and administration of TVET schools and colleges and regulations on income generation in TVET institutions and more. It is responsible for private TVET, including private vocational training schools, colleges, and competence centres. In 2013 DTVE, together with the Department of Higher Education (DHE) and the Education Standards and Quality Assurance Centre (ESQAC) initiated the development of the National Qualifications Framework (Noonan, 2020).

In the context of the PESS, UNESCO (2013) speaks of the vertical coordination of the TVET system. They state that currently there is no adequate system to manage coordination between central-level and provincial-level TVET. For example, the central government has no accurate information concerning the financial situation of the individual schools.

#### Representation and advisory bodies

The National Training Council (NTC) can be referred to as the advisory body in Lao PDR. It is an inter-ministerial organization and consists of 35 members. They represent the youth, women, unions, employers and different ministries. The majority of the members belong to the MOES, MOLSW and the Lao national chamber of commerce and industry (LNCCI). The NTC's budget is provided by the MOES. However, its mandate is above the MOES. The NTC serves as the umbrella organization for all TVET, and serves as an advisory body on skills development issues. Further tasks that fall within the scope of responsibility of the NTC are the development and recommendations of TVET policy, coordination between public and private sectors regarding skills training, the overview and support of trade working groups to identify skill areas with representatives of enterprise associations and the public sector, and the determination and development of occupational standards (Bai & Paryono, 2019; UNEVOC, UNESCO, 2020; UNESCO, 2013). The ILO (2016) and GIZ (2020) explain, however, that the NTC needs to be strengthened and has not been very effective so far.

The LNCCI is the main national body representing the business sector in Lao PDR. The LNCCI performs the task of identifying problems and concerns of its members and presenting them to the government. However, its capacity to facilitate cooperation is limited. Additionally, its board is small and often occupied with members running their own business (giz, 2020).

Employers that would play a key role in the VPET system appear to be weakly embedded. Despite some arrangements for consultation with employers, their influence on policymaking, curriculum development, and qualification system design are restricted. When companies are involved in such decisions, it seems to be on the basis of individual invitations, implying no collective engagement (Bai & Paryono, 2019; giz, 2020). In other words, "(...) there still exists a strong need to improve the role of employers" (Bai & Paryono, 2019, S. 105). Overall, however, there is an understanding among TVET stakeholders regarding the importance of business engagement to improve the TVET relevance (giz, 2020).

## Education and training providers

TVET programmes are provided at several institutions. These include vocational training centres (under MOES), skills development centres (under MOLSW), upper secondary schools, TVET and IVET schools, colleges, institutes, and universities (Noonan, 2020). Most of the TVET education is delivered by institutions under the responsibility of the MOES (ILO, 2016).

In 2017/2018, there were 46 public and 67 private training providers distributed over 17 provinces of Lao PDR. 23 TVET institutions were registered under the MOES and 11 (four of which are private centres) were under the MOLSW (giz, 2020). At least one MOES institution can be found in every province of Lao PDR and several in Vientiane (ILO, 2016). Apart from MOES and MOLSW, there are eleven ministries as well as other organizations providing TVET (Bai & Paryono, 2019).

The provided courses in private schools are mainly on diploma-level in English, on IT and business and are primarily for the service sectors (Bai & Paryono, 2019).

## 3.4 Educational Finance of the VPET System

The Laotian TVET system is financed by the state, the private sector and industry, and international donor support.

Funding from the state is the main financial source for TVET. In 2011/2012, public funding was 54.027 million LAK (US\$ 5'643'848.67<sup>27</sup>). This equalled 4.4% of the total education sector expenditure. The TVET funding increased to 139,402 million LAK in 2015/2016 (US\$ 14'562'418,66). The increase was not only absolute but also relative, as the share of TVET investments rose to 8.4 % of the total educational budget. Nevertheless, the budget allocated to TVET is not sufficient for the resources needed. Additionally, the TVET investments mentioned above were lower than the originally planned payments. In 2011/2012, only 60.9% of the initially planned budget was allocated to TVET (planned was LAK 88,664 million) and in 2015/2016 only 27% (planned was LAK 511,981 million) (Goncalves, Dung, & Duong , 2019).

Financial support from the private sector and the industry is limited. Funding is provided on one hand by companies establishing training centres themselves and thus supporting the training of the Laotian workforce, and on the other hand by larger companies contributing to TVET by donating equipment and ensuring teacher training (Goncalves, Dung, & Duong , 2019).

International donor support has been of great importance for the TVET development in Lao PDR. Compared to the support for the other sub-sectors of education, international support for TVET is relatively high and accounts for 12% of international support in the education sector (Bai & Paryono, 2019). The main international donors between 2008 and 2020 were the ADB, the Swiss Agency for Cooperation and BMZ, the Swiss Agency for Cooperation and Luxembourg Cooperation, the KfW, the GIZ, the Thailand International Agency, and the Francophonie. The sums provided as part of the projects ranged from 0.15 million Euro to US\$ 23 million. The Swiss Agency for Cooperation and BMZ and the KfW projects specifically focused on the TVET funding of Lao PDR including the development of a training fund (Goncalves, Dung, & Duong , 2019; UNESCO, 2013).

The establishment of such a training fund has been discussed in recent years. The future fund is planned to be called the National Skills Development Fund (NSDF) (Goncalves, Dung, & Duong , 2019). Its creation was already mentioned in the Labour Law (e.g. Article 28, 136, and 137). It states that the fund will be financed as follows:

- 1% from tax on income which will be transferred by the Ministry of Finance
- 1% of payroll of workers, paid by the companies
- 5% of one month's salary for employees working abroad
- 15% of registration fees for work permits for companies importing foreign labour to work in Lao PDR.
- contributions by individuals, legal entities, international organizations, and social organizations

<sup>27</sup> Exchange rate per August 2, 2021 1 US\$ = 9.572,72 LAK

- benefits derived from the fund and other activities (Lao PDR, 2013; Ministry of Education).

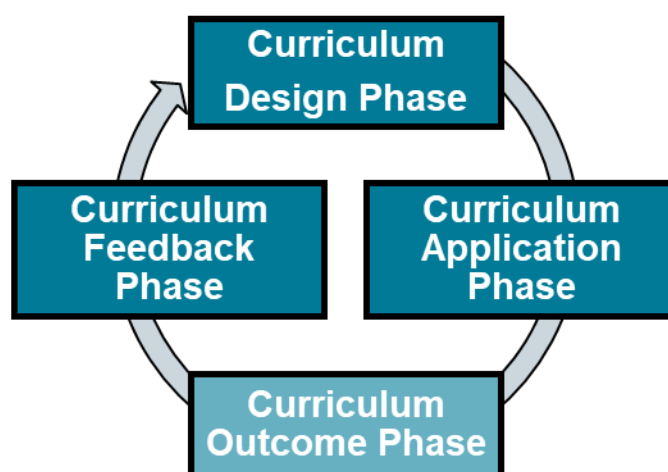
The NTC will be taking over the management of the fund in the future. Although the idea of the NSDF has been present for the past years, there were still discussions in 2016 about how the Fund should be operationalized. Additionally, the leadership for its implementation is lacking (Goncalves, Dung, & Duong, 2019; giz, 2020; UNESCO, 2013). According to the GIZ, the MOES has proposed in parallel the establishment of a second fund, the TVET fund. However, “The difference or complementarity of these funds is currently unclear.” Furthermore, there is a perception among some businesses that the government is responsible for providing training and that there needs to be an incentive for companies to invest in training. As with the training fund, the TVET Fund is currently not operational (giz, 2020; ILO, 2016).

In addition to external financial support, public TVET institutions are allowed to generate further income through product sales and providing fee-paying courses. The income can be used by the individual TVET institutions themselves. However, 10 % of the income must be reported to the government, the remaining 90 % does not have to be reported publicly (Goncalves, Dung, & Duong, 2019). UNESCO (2013, S. 34) criticises this practice, as it hinders transparency: ‘There is an apparent lack of transparency in the levels of TVET funding and on information regarding use of funds in specific areas. This is primarily due to the difficulty of defining and monitoring the amount of off-budget revenues and expenditures’. Furthermore, the ministries and provinces themselves may collect additional external donations without consultation with the TVET Department or the MOES. This further hinders the central government’s ability to have a clear overview over the financial inputs across the country (UNESCO, 2013).

### 3.5 Curriculum Development

The curriculum is a central element for the functioning of a VPET system because it defines the framework and the (quality) standards for the education system. The development of a curriculum can be decomposed into a three-step process with a curriculum design, a curriculum application and a curriculum feedback phase. This theoretical concept is called the curriculum value chain and is depicted in Figure 6 (for more details, see Renold et al. 2015; Rageth & Renold, 2019).

**Figure 6: Curriculum Value Chain**



Source: Renold et al. (2015) and Rageth & Renold (2019).

In the curriculum design phase, the relevant actors decide upon VET curriculum content and qualification standards. Therefore, the discussion in Section 3.5.1 focuses on the degree and the amount of stakeholder participation concerning curriculum design in Lao PDR. The curriculum application phase revolves around the implementation of the curriculum. Because learning environments differ substantially across countries, especially with respect to the prevalence of workplace learning, Section 3.5.2 focuses on those learning environments. Specifically, it addresses where learning takes place and whether the curriculum dictates both school and workplace learning or only one of the two. Finally, curriculum outcomes can be collected and analysed in the curriculum feedback phase. Section 3.5.3 focuses on the curriculum feedback phase. This evaluation process is important because it may render a more refined curriculum design than was possible in the first place.

### 3.5.1 Curriculum Design Phase

The design phase is crucial for the whole curriculum process. To ensure that the skills taught in the VPET programmes correspond to the needs of the labour market, experts from companies should be involved in defining the qualification standards and learning content of the curricula.

The MOES is responsible for the approval as well as the proclamation and abolition of the national curricula (KWPF, 2015; ILO, 2016). The admission by the MOES runs through the verification process of the Vocational Education Development Institute (VEDI) (UNESCO, 2013). 'This is to ensure that all requirements such as qualifications and number of teachers are met, including available equipment, classrooms, etc.' (UNESCO, 2013, S. 37). At the moment, the curricula, teaching, and learning methods in TVET are in a state of transformation. There is an attempt to shift from a traditional supply-driven approach to a demand-driven/labour market-oriented approach via competency-based training and dual cooperative training. In this context, traditional TVET curricula are being abolished step by step. Since 2011, the MOES has been introducing CBT. These trainings were implemented until 2015 as a pilot project<sup>28</sup>. CBT has not yet been implemented for diploma and higher diploma level (Noonan, 2020). In this connection, the ILO (2016) explains that the change to CBT is important for Lao PDR, as the neighbouring countries have already completed the switch and the Laotian workers would be at a disadvantage with the increased labour mobility across border.

Apart from the MOES and the VEDI, trade working groups (TWG) are mentioned in the literature. They fall under the responsibility of the NTC and oversee skills, occupational, or professional standards development, and curricula development (ILO, 2016; giz, 2020). The giz (2020) mentions, however, that there are overlaps and unclear responsibilities between the TWGs and the VEDI regarding curriculum development.

Neither employers nor students appear to have a major influence on curricula development. Different sources state the limited interactions between institutions and employers/students, the lacking input from students and employers in curriculum development, or the missing mechanisms for firms to provide schools with feedback about programs taught, or on quality of teaching (UNEVOC, UNESCO, 2020; Bai & Paryono, 2019; World Bank, 2013; ILO, 2016). The World Bank (2013) adds, that employers have much to contribute and the consideration of the needs of the labour market is of great importance.

In contrast to the employers and students, international donors have great influence and offer a lot of support in the development of occupational and competency standards, as well as in the development of curricula and training materials (Bai & Paryono, 2019; ILO, 2016).

### 3.5.2 Curriculum Application Phase

The way in which a curriculum is implemented, especially with respect to learning environments, is important to achieve the intended learning outcome.

The formal Laotian TVET programmes are mainly school-based. The TVET curricula are comprised of theory and practical elements, whereas the practical training has a duration of 2-3 months during the two- or three-year programme (UNESCO, 2013). However, as mentioned above, there is a transformation happening.

In addition to the high proportion of school-based TVET, the industry representatives feel that their involvement in the curriculum development process is not sufficient. For example, despite being invited to contribute to the development of a new hotel management curriculum, the Tourism Industry Association felt that the curriculum should consist of three weeks practical training and one week of theoretical training per month compared to the three months of practical training during the two- to three-year programme three years (ILO, 2016)

### 3.5.3 Curriculum Feedback Phase

The curriculum feedback phase deals with the questions of whether and how educational outcomes are analysed. Based on this, the curriculum could be reworked and improved.

<sup>28</sup> Possibly also in the past years, but the source only mentions the period up to 2015

The current model of quality assurance of VPET rests on three pillars: self-assessment, internal assessment, and external assessment (see 3.1). Nevertheless, the ILO (2016, S. 24) states that “in general, training quality at TVET institutions remains low, although (...), there is a large spectrum, with some institutions performing a lot better than others.”

An important part of quality assurance is the existence of feedback channels. In this context, it is mentioned, that self-assessments and administrative reviews are not systematically used within schools, despite the requirement to do so. Additionally, the majority of schools do not exhibit a curricular advisory committee. Also, information on graduate placement, school-to-work transitions, and graduate salaries is not available at school level (World Bank, 2013). The same problem exists on a national basis as well: UNESCO (2013) mentions the lacking consistent nationwide employment data, as there is no Labour Force Survey, which in turn leads to weak information regarding the labour market and hinders the comparison and monitoring of labour market development and trends. Furthermore, they highlight that most surveys on skills-needed were ad hoc and initiated by donors.

UNESCO (2013) states in its report that the enhancement of quality assurance of assessments of learning outcomes has to be a priority. Thus, new forms of assessment have to be designed for the intended CBT curricula. ‘The launch of a new curriculum without a reformed examination and assessment system often contradicts the intended impact of the curriculum reform. The two issues therefore need to be handled in tandem.’ (UNESCO, 2013, S. 40).

Furthermore, schools regularly work with development plans which cover a period of 3-5 years. However, the templates used are not consistent. There is also the impression that the trainings offered in schools are not aligned with the needs of provincial economies (Bai & Paryono, 2019; UNEVOC, UNESCO, 2020).

With regard to external feedback from companies or students, there is a clear deficit. On one hand, different curricula based on geographic areas, specific economic needs, and regional needs are missing. On the other hand, curriculum development receives little input from firms and students. The World Bank (2013, S. 105) describes the situation with the following words: ‘Curriculum development is somewhat disconnected from the needs of the students, [and] the labor market (...)’.

Another interesting aspect found by the World Bank (2013) is that the TVET schools analysed in their report have never shut down a programme, even if the respective programme offers no job prospects for graduates. This indicates a lack of incentives for efficiency, accountability and the use of public resources (World Bank, 2013).

Finally, institutions identified the lack of workbooks in Lao language, the shortage of skilled instructors, the insufficient financial resources and the lack of standardisation at the national level as constraints in the development of curricula and materials (World Bank, 2013).

## 3.6 Supplying Personnel for the VPET System (Teacher Education)

In Lao PDR no formal requirements or regulations exist for being employed by a school. In comparison, Thailand follows a strict selection process with a number of criteria, or Vietnam relies on the formal degree of the training programs, whereby different school levels require different training programme-degrees (Bai & Paryono, 2019).

In Lao PDR, formal requirements as set out by a government decree are not directly connected with a teacher training degree. The decree only states that a teacher candidate is required to have a certificate at least one level higher than the level of the course she or he would teach. Within this framework, the type of qualification is examined and balanced against the need of the TVET institutions (Bai & Paryono, 2019; UNESCO, 2013; UNEVOC, UNESCO, 2020). Based on the UNESCO mappings (2011), there are two teacher qualifications. First, the Vocational teacher higher diploma, which takes four years after the upper secondary education. Second, the vocational teacher bachelor’s degree, which takes an additional two years after the completed higher diploma (Euler, 2018).

Candidates for pre-service teacher training programme apply at the VEDI. VEDI then sends the application to all TVET institutions, which together with the provincial authorities select the suitable candidates and submit their selections to the ministry department for approval. After acceptance, the candidates can enrol in the programme. Upon completion of the programme, the graduates return to the TVET institutions they were selected by before (UNEVOC, UNESCO, 2020). Pre-service teacher training programmes aim to provide good teaching practices and cover technical and pedagogical competencies (Noonan, 2020; Euler, 2018). The breakdown is as follows: 50-60% technical competencies, 13-20% didactic competencies, 13-20% pedagogical competencies, 10-15% social/general competencies (Euler, 2018)

According to a report of the Faculty of Engineering of the national University of Lao PDR, the MOES has authorized several vocational colleges/schools, to train vocational teachers up to Bachelor level. For a long time, only the Vocational Teacher Education Department (VTED) and the Vocational Education Development Centre (VEDC) (Faculty of Engineering - National University of Laos) were allowed to conduct teacher training. However, as they were not able to supply a sufficient number of well-trained teachers, the MOES extended the institutes authorized to train vocational teachers. The downside of the additional authorizations is that they have led to an uncoordinated manner disregarding commonly recognized standards (Faculty of Engineering - National University of Laos). Soysouvanh et al. (2013) mention in their paper, that the VTED has been appointed by the MOES to develop standards for vocational teachers. These standards should provide the basis for the development of the vocational teacher curricula.

Per Bai and Paryono (2019) and Euler (2018), vocational and educational practices are compulsory as part of the teacher training programme. Vocational practice lasts 12 weeks during the school holidays. At the end of this internship, students are evaluated by the company supervisor. The educational practice, on the other hand, lasts 16-week. It takes place in the last semester of the programme. At the end students are assessed by a joint committee of the VEDI and related institutions.

Attracting quality teachers is one of the main objectives of the policies to improve TVET quality. However, there is evidence that TVET teacher is not seen as an attractive profession (Bai & Paryono, 2019). This is underlined by the finding of the Faculty of Engineering that a significant number of teacher graduates end up working in another field. The faculty states that 'it seems to be more necessary than ever to improve the conditions significantly under which teachers have to work (...)' (Faculty of Engineering - National University of Laos, S. 33). Additionally, the faculty points out, that graduates working in private companies earn on average about three times more than graduates who work as teachers. The MOES recognizes this problem in its TVET development plan report and states that appropriate solutions are being sought to ensure that teachers are competent and remain motivated (Ministry of Education). However, in general, appropriate measures should be found to in order to keep teachers motivated. After all, the working conditions and incentives of TVET teachers are currently on average better compared to those of teachers at general schools (Euler, 2018).

## 4. Major Reforms in the Past and Challenges for the Future

### 4.1 Major Reforms

This section focuses on the national reforms concerning the TVET system in Lao PDR. TVET in Lao PDR has undergone major reforms in the past decades. The first Technical College was established in 1936. Since then, many other TVET institutions have emerged. From 1997/1998 onwards, TVET has been reformed based on the "1997 Strategy Paper and Prime Minister Decree No. 209 on the Development of TVET in Lao PDR" (ILO, 2016; Vilaysone, 2016). About 10 years later, in 2007, the education law was revised and clearly defined TVET within the education system (Lao PDR, 2007a, S. Art. 10; Vilaysone, 2016). In doing so, TVET was established as one of the four education subsectors (Ratih, Sumbogo, Octanary, Tiharapitra, & Priyadi, 2019).

Also, in 2007, the "Strategic plan for the development of technical and vocational education and training from 2006 to 2020" was approved by the Prime Minister (Ministry of Education). In this document, TVET

is described as “an integral and crucial part of the National Education System. It is a means for preparing the work force and technicians at various levels for employment by training so that they are equipped with necessary knowledge, abilities, skills and attitude.” (Ministry of Education, 2007, S. 10). The strategic plan identifies seven major areas for the development of TVET including the construction, improvement and expansion of TVET institutions, the reform of TVET<sup>29</sup>, the pre- and in-service training of TVET teacher and administrative personnel, the quality insurance of TVET, the development of TVET information system, the improvement of TVET management apparatus and the formulation of regulatory framework and establishment of management mechanisms for TVET development.

Chapter four of the above-mentioned strategic plan contains an operation plan for the TVET development for the period 2010 to 2020. This operation plan encompasses, among others, the following elements (Ministry of Education, 2007):

- To establish an all-round skilled and competitive work force. Moreover, having sufficient work forces to ensure the further development of the country.
- To improve the infrastructure, provide the required technical equipment, develop curricula, textbooks and instructional media to meet international standards.
- To upgrade five TVET schools to technical colleges.
- To expand training occupations, which are intellectual potentials of the locality in different fields, among others hydro power electricity, ICT, processing industry, and electro mechanics.
- To make sure the demand for TVET teachers and administrative personnel of TVET institutions can be met sufficiently by carrying out pre-service and in-service training.
- To increase the accessibility of TVET for girls and disadvantaged people.
- To ensure that there are complete and effective systems for school organisation and management, quality assurance, and financial organisation and management in the TVET sector.

Regarding the second bullet point and as mentioned in chapter 3.5.1, the curricula and teaching and learning methods in TVET are currently in a state of transformation. The traditional curricula are gradually being abolished. Additionally, the MOES has introduced CBT in seven public and three private TVET institutions as a pilot project on the certificate level (Noonan, 2020). Furthermore, the strategic plan states that modular and credit training systems will be introduced to simplify the comparability and transferability of different qualification levels (Ministry of Education, 2007).

In connection with the strategic plan the “Master Plan Development of TVET from 2008 until 2015” was developed. The Master Plan contains the planning of the required activities as well as the necessary budget for the implementation of various initiatives (Ministry of Education, S. 5). Additionally, in 2013 a new TVET Law was approved.

Lastly, one of the Laotian core pillars to long-term economic growth is education as a whole. In the “Education and Sports Sector Development Plan 2016-2020” it is mentioned, that the government sees education and sports and their development as a key pillar for the national socio-economic development, which in turn should enable Lao PDR to graduate from the ranks of the least developed countries by 2020 (Ministry of Education and Sports, 2015, S. 1). As part of the Sector Development Plan 2016-2020, reforms for implementation by 2020 concerning TVET include:

- The Transition rate: The goal is to increase the transition rate of Grade 9 graduates to TVET to 5% and of Grade 12 graduates to TVET (public and private) to 60% (Regarding the Transition rate of Grade 9 to TVET it is not mentioned if also public and private institutions are considered).
- Different objectives, targets and strategies, which are listed below (S.62ff.):
  - 1. Objective: Encourage graduates of general education to enrol in TVET
  - 2. Objective: “Ensure that vocational graduates from both public and private sectors have skills that are acceptable to employers.”
  - 1. Target: “Establish at least one technical centre and vocational school in each province”.
  - 2. Target: Expand access to vocational education and training to reach 60% of general education graduates, especially women.
  - Eight different strategies are specified in the plan, which in turn have different objectives and key activities. Below, only the different strategies are mentioned.

<sup>29</sup> Namely to improve the TVET system building on the national education reform and “applying different types of training” and to develop and improve “curricula, instructional media, manuals, and training equipment” (S.12)



- Strategy 1: “Construct, improve and expand capacity of vocational education” (S.62)
- Strategy 2: “Encourage social and business agencies to contribute to vocational education and training development” (S.63)
- Strategy 3: “Improve vocational education and training modes” (S.63)
- Strategy 4: “Pre-service, In-service and developing vocational education and training staff” (S.63)
- Strategy 5: “Improve vocational education and training quality” (S.63)
- Strategy 6: “Develop vocational education and training information” (S.64)
- Strategy 7: “Improve management structure of vocational education and training” (S.64)
- Strategy 8: “Develop policy and materials for vocational education and training management” (S.64)

## 4.2 Major Challenges

The key challenges facing TVET in Lao PDR are the following (UNEVOC, UNESCO, 2020; Bai & Paryono, 2019; UNESCO, 2013; Noonan, 2020; World Bank, 2013; Vilaysone, 2016; Ministry of Education, 2007; giz, 2020; KWPF, 2015):

- **Insufficient funding** to improve TVET. TVET needs higher investments, but the budget for TVET is limited. Therefore, the **school infrastructure including the machines and tools for practical training remain insufficient** and the increasing number of trainees and students is difficult to accommodate.
- **Lack of alignment** between TVET training and labour market demand and needs, highlighting the missing integration of TVET with market needs and being also a result of the inadequate training materials and machines for practical training. Additionally, it underlines the weak involvement of employers.
- **Low qualification of teachers.** The teaching staff lacks teaching skills, relevant pedagogical preparation, and industrial experiences. Moreover, the low salary limits the attraction of quality teachers.
- **Effective practical training is limited.** “This is due to the poor state of the infrastructure in TVET schools and to institutional shortcomings and lack of guidelines in promoting effective practical learning” (UNESCO, 2013, S. 37).
- **Weak quality assurance system** of assessment, examinations and inspections. Additionally, institutional standards regulating curriculum development, levels of study and standards for TVET teachers are missing.
- **Higher valuation of general education compared to TVET**, which leads to the low enrolment rates for TVET and underlines the weak image of TVET in the Laotian community. Additionally, structured guidance on learning opportunities and perspectives in TVET is limited.
- **Accelerating the shift toward competency-based curricula.** However, to achieve this, practical training needs to be improved by providing the necessary material and improving the competencies of teachers and instructors.
- **Weak coordination between the lead ministries in charge MOES and MOLSW.** This hinders the systematic involvement of businesses and industries in TVET. Moreover, the responsibilities and roles of the two Ministries need further clarification to improve their coordination as well as their cooperation.
- **Unclear differentiation between different TVET programmes at different levels.** ‘The distinction between programmes at certificate level and higher levels seems unclear. For example, although the class hours of both theoretical and practical components are different at the 9+3 and the 12+2 programmes, students of both programmes in the same schools appear to use the same training facilities and the training content is nearly the same.’ (UNESCO, 2013, S. 37)

# 5. References

- ADB. (2017). *How Lao PDR is Using TVET to Break Gender Barriers at Work*. Asian Development Bank. Retrieved from <https://www.adb.org/results/how-lao-pdr-using-tvet-break-gender-barriers-work> (July 27, 2021)
- Asean Briefing. (2018). *Laos increases minimum monthly wage for the third time in eight years*. Retrieved from <https://www.aseanbriefing.com/news/laos-increases-minimum-monthly-wage-third-time-eight-years/> (June 30, 2021)
- Asean Briefing. (2021). *Minimum wages in ASEAN for 2021*. Retrieved from <https://www.aseanbriefing.com/news/minimum-wages-in-asean-for-2021/> (June 30, 2021)
- Bai, B., & Paryono. (2019). *Vocational Education and Training in ASEAN Member States*. Springer Singapore.
- Benveniste, L., Marshal, J., & Santibanez, L. (2007). *Teaching in Lao PDR*. Retrieved from <https://openknowledge.worldbank.org/handle/10986/7710>
- Croissant, A. (2016). *Die politischen Systeme Südasiens*. VS Verlag für Sozialwissenschaften.
- Dutta, S., Lanvin, B., & Wunsch-Vincent, S. (2020). *The Global Innovation Index 2020: Who will finance innovation?* Fontainebleau, Ithaca, and Geneva: Cornell University, INSEAD, and WIPO.
- Eastasiaforum. (2015). *Rising inequality hampers poverty reduction in Laos*. Retrieved from <https://www.eastasiaforum.org/2015/10/24/rising-inequality-hampers-poverty-reduction-in-laos/> (July 1, 2021).
- Economist. (2016). *Democracy Index 2016: Democracy and its Discontents*. London: The Economist Intelligence Unit Limited.
- Encyclopaedia Britannica. (2020). *Laos*. Britannica. Retrieved from <https://www.britannica.com/place/Laos/People> (28 June, 2021)
- Euler, D. (2018). *TVET Personnel in ASEAN - Investigation in five ASEAN states*. Retrieved from [https://sea-vet.net/images/seb/e-library/doc\\_file/360/euler-2018-tvet-personnel-in-asean-investigation-in-five-asean-statesrecotvetgizbmz.pdf](https://sea-vet.net/images/seb/e-library/doc_file/360/euler-2018-tvet-personnel-in-asean-investigation-in-five-asean-statesrecotvetgizbmz.pdf) (12 August, 2021)

- Eurostat. (2021). *Gross Value Added and Income by A\*10 Industry Breakdown (nama\_10\_a10)*. Retrieved from [https://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=nama\\_10\\_a10&lang=en](https://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=nama_10_a10&lang=en) (July 1, 2021)
- Eurostat. (2021b). *Employment by A\*10 Industry Breakdowns (nama\_10\_a10\_e)*. Retrieved from [https://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=nama\\_10\\_a10\\_e&lang=en](https://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=nama_10_a10_e&lang=en) (July 1, 2021)
- Faculty of Engineering - National University of Laos. (n.d.). *Development of Standards for Vocational Teachers at Bachelor level in Lao PDR*. Retrieved from <https://www.giz.de/de/downloads/giz2014-en-standards-vocational-teacher-laos.pdf> (August 5, 2021)
- giz. (2016). *Study on the Expectations and Aspirations of the Lao Youth*. Deutsche Gesellschaft für Internationale Zusammenarbeit. Retrieved from [https://www.giz.de/en/downloads\\_els/Final\\_Report\\_Youth\\_Study\\_ENG\(1\).pdf](https://www.giz.de/en/downloads_els/Final_Report_Youth_Study_ENG(1).pdf) (July 26, 2021)
- giz. (2018). *Labour Market Analysis - Lao PDR*. Deutsche Gesellschaft für Internationale Zusammenarbeit. Retrieved from <https://eccil.org/euro-lao-business/doing-business-in-lao-pdr/labour-market-analysis-lao-pdr/>
- giz. (2020). *Partnerships for Skilling ASEAN' Workforce*. Deutsche Gesellschaft für Internationale Zusammenarbeit. Retrieved from [https://www.sea-vet.net/images/seb/e-library/doc\\_file/698/partnership-for-skilling-aseans-workforce-2019-finalapr.pdf](https://www.sea-vet.net/images/seb/e-library/doc_file/698/partnership-for-skilling-aseans-workforce-2019-finalapr.pdf) (July 22, 2021)
- Goncalves, C. U., Dung, N., & Duong, D. (2019). *Financing TVET: A comparative analysis in six Asian countries*.
- Hirosato, Y. K. (2009). *The Political Economy of Educational Reforms and Capacity Development in Southeast Asia*. Springer Netherlands.
- Human Rights Resource Centre. (2013). *Business and Human Rights in ASEAN - A baseline study*. Retrieved from [http://www.menschenrechte.uzh.ch/publikationen/Business\\_and\\_Human\\_Rights\\_in\\_ASEAN\\_Baseline\\_Study\\_ebook.pdf](http://www.menschenrechte.uzh.ch/publikationen/Business_and_Human_Rights_in_ASEAN_Baseline_Study_ebook.pdf) (July 2, 2021).
- IBE UNESCO. (2012). *World Data on Education: Seventh edition 2010-2011*. International Bureau of Education, UNESCO. Retrieved from

<http://www.ibe.unesco.org/en/document/world-data-education-seventh-edition-2010-11> (July 8, 2021)

ILO. (2011). *Report on the review of the ILO Decent Work Country Programme: Lao PDR (2006-2009)*. International Labour Organization. Retrieved from [https://www.ilo.org/asia/info/research-and-data/WCMS\\_174765/lang--en/index.htm](https://www.ilo.org/asia/info/research-and-data/WCMS_174765/lang--en/index.htm) (July 5, 2021)

ILO. (2016). *Compilation of assessment studies on technical vocational education and training (TVET)*. International Labour Organization. Retrieved from [https://www.ilo.org/wcmsp5/groups/public/---asia/---ro-bangkok/documents/publication/wcms\\_458131.pdf](https://www.ilo.org/wcmsp5/groups/public/---asia/---ro-bangkok/documents/publication/wcms_458131.pdf) (July 22, 2021)

ILO. (2017). *Labour force participation rate by sex and age*. International Labour Organization. Retrieved from [https://www.ilo.org/shinyapps/bulkexplorer33/?lang=en&segment=indicator&id=EAP\\_DWAP\\_SEX\\_AGE\\_GEO\\_RT\\_A](https://www.ilo.org/shinyapps/bulkexplorer33/?lang=en&segment=indicator&id=EAP_DWAP_SEX_AGE_GEO_RT_A) (August 30, 2021)

ILO. (2017). *Unemployment rate by sex, age and rural/urban areas (%) - Annual*. Retrieved from [https://www.ilo.org/shinyapps/bulkexplorer59/?lang=en&segment=indicator&id=UNE\\_2EAP\\_SEX\\_AGE\\_GEO\\_RT\\_A](https://www.ilo.org/shinyapps/bulkexplorer59/?lang=en&segment=indicator&id=UNE_2EAP_SEX_AGE_GEO_RT_A) (August 24, 2021)

ILO. (2021). *Labour force participation rate by sex and age*. International Labour Organization. Retrieved from [https://www.ilo.org/shinyapps/bulkexplorer42/?lang=en&segment=indicator&id=EAP\\_2WAP\\_SEX\\_AGE\\_RT\\_A](https://www.ilo.org/shinyapps/bulkexplorer42/?lang=en&segment=indicator&id=EAP_2WAP_SEX_AGE_RT_A) (July 8, 2021)

ILO. (2021a). *Labour force participation rate by sex, age, education*. International Labour Organization. Retrieved from [https://www.ilo.org/shinyapps/bulkexplorer32/?lang=en&segment=indicator&id=EAP\\_2WAP\\_SEX\\_AGE\\_RT\\_A](https://www.ilo.org/shinyapps/bulkexplorer32/?lang=en&segment=indicator&id=EAP_2WAP_SEX_AGE_RT_A) (July 8, 2021)

ILO. (2021b). *Unemployment rate*. International Labour Organization. Retrieved from [https://www.ilo.org/shinyapps/bulkexplorer20/?lang=en&segment=indicator&id=SDG\\_0852\\_SEX\\_AGE\\_RT\\_A](https://www.ilo.org/shinyapps/bulkexplorer20/?lang=en&segment=indicator&id=SDG_0852_SEX_AGE_RT_A) (July 8, 2021)

ITUC CSI IGB. (2008). *2008: Annual Survey of violations of trade union rights*. Retrieved from <https://web.archive.org/web/20081224213941/http://survey08.ituc-csi.org/survey.php?IDContinent=3&IDCountry=LAO&Lang=EN>

- Kudrzycki, B., Günther, I., & Lefoll, E. (2020). *Youth Labor Market Index for Low Income Countries*. Zurich: KOF Swiss Economic Institute, ETH Zurich: LELAM Working Papers No. 13.
- KWPF. (2015). *Lao PDR*. Korea-World Bank Partnership Facility. Retrieved from <https://documents1.worldbank.org/curated/en/915761508750676210/pdf/120587-WP-P150980-PUBLIC-Lao-PDR-summary.pdf> (July 19, 2021)
- Lao PDR. (2000). *Law on Education*. Lao People's Democratic Republic Peace Independence Democracy Unity Prosperity. Retrieved from [http://wbfiles.worldbank.org/documents/hdn/ed/saber/supporting\\_doc/EAP/Teachers/Lao%20PDR/Education%20law%2011-2005.pdf](http://wbfiles.worldbank.org/documents/hdn/ed/saber/supporting_doc/EAP/Teachers/Lao%20PDR/Education%20law%2011-2005.pdf) (July 13, 2021)
- Lao PDR. (2007). *Labour Law*. Lao People's Democratic Republic Peace Independence Democracy Unity Prosperity. Retrieved from [https://www.vientianetimes.org.la/Laws%20in%20English/20.%20Law%20on%20Labour%20\(2006\)%20Eng.pdf#:~:text=The%20internal%20regulations%20of%20a%20labour%20unit%20must,and%20posted%20openly%20so%20that%20everybody%20is%20informed.](https://www.vientianetimes.org.la/Laws%20in%20English/20.%20Law%20on%20Labour%20(2006)%20Eng.pdf#:~:text=The%20internal%20regulations%20of%20a%20labour%20unit%20must,and%20posted%20openly%20so%20that%20everybody%20is%20informed.) (July 13, 2021)
- Lao PDR. (2007a). *Law on Education (as amended)*. Lao People's Democratic Republic Peace Independence Democracy Unity Prosperity. Retrieved from [https://www.wto.org/english/thewto\\_e/acc\\_e/lao\\_e/WTACCLAO31\\_LEG\\_3.pdf](https://www.wto.org/english/thewto_e/acc_e/lao_e/WTACCLAO31_LEG_3.pdf) (July 13, 2021)
- Lao PDR. (2007b). *Law on lao trade unions*. Lao People's Democratic Republic Peace Independence Democracy Unity Prosperity. Retrieved from [https://asean.org/wp-content/uploads/2016/06/L1\\_LAW-on-Lao-Trade-Unions-2007.pdf](https://asean.org/wp-content/uploads/2016/06/L1_LAW-on-Lao-Trade-Unions-2007.pdf) (July 13, 2021)
- Lao PDR. (2013). *Labor Law (Amended)*. Lao People's Democratic Republic Peace Independence Democracy Unity Prosperity. Retrieved from <https://www.ilo.org/dyn/natlex/docs/MONOGRAPH/96369/113864/F1488869173/LAO96369> (August 2, 2021)
- Lao PDR. (2013a). *Law on Technical and Vocational Education and Training*. Lao People's Democratic Republic Peace Independence Democracy Unity Prosperity. Retrieved from <http://www.laoservicesportal.gov.la/index.php?r=site%2Fdisplaylegal&id=247#a1> (July 26, 2021)
- Lloyds Bank. (2021). *Laos: Economic Outline*. Retrieved from <https://www.lloydsbanktrade.com/en/market-potential/laos/economy> (June 30, 2021)

- Mackinnon, A., & Theppasoulithone, P. (2014). Educational Reform in Laos: A Case Study. *International Journal of Educational Studies*, 19-34.
- Manivanh, S. (2005). *Early Childhood Care and Education in Lao PDR*. Retrieved from <http://www.iccwtnispcanarc.org/upload/pdf/4865727881Early%20Childhood%20Care%20and%20Education%20in%20Lao%20PDR%20%20%20.pdf>
- Ministry of Education. (2007). *Strategic Plan for the Development of Technical and Vocational Education and Training from 2006 to 2020*. Retrieved from [https://planipolis.iiep.unesco.org/sites/default/files/ressources/lao\\_pdr\\_tvete\\_strategic\\_plan\\_2006-2020.pdf](https://planipolis.iiep.unesco.org/sites/default/files/ressources/lao_pdr_tvete_strategic_plan_2006-2020.pdf) (10 August, 2021)
- Ministry of Education and Sports. (2015). *Education and sports sector development plan (2016-2020)*.
- Ministry of Education and Sports. (2015a). *Student Learning Outcomes in Primary Education in Lao PDR*. Retrieved from <https://www.unicef.org/laos/media/331/file/UNICEF%20Lao%20PDR.pdf>
- Ministry of Education. (n.d.). *Master Plan Development of TVET from 2008 until 2015*. Retrieved from [https://planipolis.iiep.unesco.org/sites/default/files/ressources/lao\\_pdr\\_tvete\\_master\\_plan\\_2008-2015.pdf](https://planipolis.iiep.unesco.org/sites/default/files/ressources/lao_pdr_tvete_master_plan_2008-2015.pdf)
- Noonan, R. (2020). *Education in the Lao People's Democratic Republic*. Springer Nature Singapore Pte Ltd.
- OECD. (2015). *OECD Employment Outlook 2015*. Paris: OECD Publishing. Retrieved from [http://dx.doi.org/10.1787/empl\\_outlook-2015-en](http://dx.doi.org/10.1787/empl_outlook-2015-en).
- OECD. (2016). *OECD Annual National Accounts. Gross Domestic Product (GDP)*. Retrieved from <https://stats.oecd.org/index.aspx?queryid=60702> (July 26, 2016).
- OECD. (2016a). *OECD iLibrary*. Retrieved from Education at a Glance 2016 - Indicator A1 To what level have adults studied?: [http://www.oecd-ilibrary.org/education/education-at-a-glance-2016\\_eag-2016-en](http://www.oecd-ilibrary.org/education/education-at-a-glance-2016_eag-2016-en) (July 19, 2021)
- OECD. (2021). *Economic Outlook for Southeast Asia, China, and India 2021*. Organisation for Economic Co-operation and Development. doi:<https://doi.org/10.1787/711629f8-en>
- OECD. (2021a). *Employment by educational level*. Organisation for Economic Co-operation and Development. Retrieved from <https://data.oecd.org/emp/employment-by-education-level.htm#indicator-chart> (July 2, 2021)

- OECD. (2021b). *LFS by sex and age - indicators*. Organisation for Economic Co-operation and Development. Retrieved from [https://stats.oecd.org/Index.aspx?DataSetCode=LFS\\_SEXAGE\\_I\\_R#](https://stats.oecd.org/Index.aspx?DataSetCode=LFS_SEXAGE_I_R#) (July 2, 2021).
- OECD. (2021c). *Unemployment rates by education level*. Organisation for Economic Co-operation and Development. doi:<https://data.oecd.org/unemp/unemployment-rates-by-education-level.htm>
- Radio Free Asia. (2021). *Rural Poverty Drives Child Labor in Laos Despite State Laws Prohibiting The Practice*. Retrieved from <https://www.rfa.org/english/news/laos/child-labor-06022021165734.html> (July 5, 2021)
- Rageth, L., & Renold, U. (2019). *The Linkage between the Education and Employment Systems: Ideal Types of Vocational Education and Training Programs*. Journal of Education Policy. doi:10.1080/02680939.2019.1605541
- Ratih, C., Sumbogo, B., Octanary, D., Tiharapitra, A., & Priyadi, P. (2019). *Executive Summary of Feasibility Study*. Retrieved from [https://www.seamolec.org/files/researchreport/Feasibility\\_Study.pdf](https://www.seamolec.org/files/researchreport/Feasibility_Study.pdf) (August 16, 2021)
- Renold, U., Bolli, T., Caves, K., Rageth, L., Agarwal, V., & Pusterla, F. (2015). *Feasibility Study for a Curriculum Comparison in Vocational Education and Training*. Zurich: KOF Studies. Retrieved from <https://doi.org/10.3929/ethz-a-010713492>
- Renold, U., Bolli, T., Egg, M. E., & Pusterla, F. (2014). *On the Multiple Dimensions of Youth Labour Markets - A Guide to the KOF Youth Labour Market Index*. Zurich: KOF Swiss Economic Institute. Retrieved from <https://doi.org/10.3929/ethz-a-010699115>
- Save the Children. (n.d.). *A Quality Education for All. A history of the Lao PDR Inclusive Education Project 1993-2009*. Retrieved from [https://www.eenet.org.uk/resources/docs/A\\_Quality\\_Education\\_For\\_All\\_LaoPDR.pdf](https://www.eenet.org.uk/resources/docs/A_Quality_Education_For_All_LaoPDR.pdf) (July 20, 2021)
- SEA-VET. (2013). *Law on Technical and Vocational Education and Training (TVET)*. Retrieved from <https://sea-vet.net/resources/231-law-on-technical-and-vocational-education-and-training-tvet> (29 July, 2021)
- Sengthong, N. (2008). *Lao People's Democratic Republic Country Report*. Retrieved from [https://uil.unesco.org/fileadmin/multimedia/uil/confintea/pdf/National\\_Reports/Asia%20-%20Pacific/Laos.pdf](https://uil.unesco.org/fileadmin/multimedia/uil/confintea/pdf/National_Reports/Asia%20-%20Pacific/Laos.pdf)
- Soysouvanh, B., Khammounty, B., Virivong, S., Phoumvilay, P., Elsholz, U., & Bohlmann, T. (2013). *Developing standards of vocational teacher at bachelor level in Lao PDR*.

- St George, E. (2020). *Higher education quality and autonomy - a case study of Lao PDR*. doi:<https://doi.org/10.1007/s10734-019-00435-y>
- Stuart-Fox, M. (2006). The political culture of corruption in the Lao PDR. *Asian Studies Review*, 30, 59-75.
- The Diplomat. (2018). *The truth about the new laos minimum wage hike*. Retrieved from <https://thediplomat.com/2018/04/the-truth-about-the-new-laos-minimum-wage-hike/> (June 30, 2021)
- The Economist. (2020). *Democracy Index 2020: In sickness and in health?* Retrieved from <https://www.eiu.com/n/campaigns/democracy-index-2020/>
- Transparency International. (2020). *Corruption Perceptions Index*. Berlin: Transparency International. Retrieved from <https://www.transparency.org/en/cpi/2020/index/lao>
- UNESCO. (2011). *ISCED Mappings*. Retrieved from <http://uis.unesco.org/en/isced-mappings> (July 8, 2021)
- UNESCO. (2011a). *World Inequality Database on Education*. Retrieved from <https://www.education-inequalities.org/> (July 14, 2021)
- UNESCO. (2013). *Policy Review of TVET in Lao PDR*. Retrieved from <https://www.inclusive-education-in-action.org/resources/policy-review-tvet-lao-pdr> (July 23, 2021)
- UNESCO. (2013/14). *Teaching and learning: Achieving quality for all*. Retrieved from [https://unesdoc.unesco.org/in/documentViewer.xhtml?v=2.1.196&id=p::usmarcdef\\_0000225660&file=/in/rest/annotationSVC/DownloadWatermarkedAttachment/attach\\_import\\_2b1516f2-c6df-4518-9c96-28656c767fa1%3F\\_%3D225660eng.pdf&locale=en&multi=true&ark=/ark:/48223/p](https://unesdoc.unesco.org/in/documentViewer.xhtml?v=2.1.196&id=p::usmarcdef_0000225660&file=/in/rest/annotationSVC/DownloadWatermarkedAttachment/attach_import_2b1516f2-c6df-4518-9c96-28656c767fa1%3F_%3D225660eng.pdf&locale=en&multi=true&ark=/ark:/48223/p)
- UNESCO. (2019). *Gross enrolment ratio by level of education*. Retrieved from <http://data.uis.unesco.org/?queryid=142> (August 23, 2021)
- UNESCO. (2019a). *National Monitoring: Percentage of female teachers by teaching level of education*. Retrieved from <http://data.uis.unesco.org/> (July 15, 2021)
- UNESCO. (2020). *UNESCO Institute for Statistics*. Retrieved from UNESCO UIS: Education; Participation; Enrolment Ratios: <http://data.uis.unesco.org/?queryid=142#>
- UNESCO. (2021). *National Monitoring: Distribution of enrolment by programme orientation*. Retrieved from <http://data.uis.unesco.org/> (July 28, 2021)
- UNESCO UIS. (2021a). *Gross enrolment ratio*. Retrieved from <http://uis.unesco.org/en/glossary-term/gross-enrolment-ratio> (July 9, 2021)



- UNESCO-UNEVOC. (2021, July 26). *Lao People's Democratic Republic*. Retrieved from <https://unevoc.unesco.org/home/Dynamic+TVET+Country+Profiles/country=LAO> (July 26, 2021)
- UNEVOC, UNESCO. (2020). *TVET Country Profile Lao P.D.R.* Retrieved from [https://unevoc.unesco.org/pub/lao\\_tvete\\_country\\_profile.pdf](https://unevoc.unesco.org/pub/lao_tvete_country_profile.pdf) (July 19, 2021)
- UNEVOC, UNESCO. (n.d.). *TVET Country Profiles*. Retrieved from <https://unevoc.unesco.org/home/Dynamic+TVET+Country+Profiles/country=LAO> (August 26, 2021)
- UNICEF. (2019). *The Situation of Childer and Woman - Lao People's Democratic Republic*.
- UNICEF. (2020). *Investing more in education to boost the economy, graduate from least developed country and mitigate covid-19 impact*. Retrieved from <https://www.unicef.org/laos/reports/investing-more-education> (July 9, 2021)
- UNICEF. (2021). *Lao People's Democratic Republic: Education*. Retrieved from <https://www.unicef.org/laos/education> (July 5, 2021).
- University of Oxford. (2019, 05 22). *Oxford Poverty & Human Development Initiative* . Retrieved from Multideimensional-Poverty-Index: <https://ophi.org.uk/multidimensional-poverty-index/mpi-country-briefings/>
- Urban LEDS. (2018). *Country profile for Lao PDR*. Urban low emission development strategies. Retrieved from [https://urban-leds.org/wp-content/uploads/2019/03/Urban-LEDS\\_II\\_Country\\_Profile\\_Lao\\_PDR.pdf](https://urban-leds.org/wp-content/uploads/2019/03/Urban-LEDS_II_Country_Profile_Lao_PDR.pdf) (July 7, 2021)
- Vilaysone, L. (2016). *Technical and Vocational Education and Training (TVET) and the Naitonal Economic Development of Lao PDR*. Retrieved from [https://dcollection.ewha.ac.kr/public\\_resource/pdf/000000120251\\_20210726205135.pdf](https://dcollection.ewha.ac.kr/public_resource/pdf/000000120251_20210726205135.pdf)
- WEF. (2019). *The Global Competitiveness Report 2019*. Geneva: World Economic Forum.
- World Bank. (2013). *Lao People's Democratic Republic - Skills & Knowledge for Greater Growth and COmpetitiveness in Lao Pdr*. Retrieved from <https://documents1.worldbank.org/curated/en/659981468045564160/pdf/ACS65930WP0P12550200Box382165B00OUO090.pdf> (July 27, 2021)
- World Bank. (2015). *Education Statistics - All Indicators*. Retrieved from <https://databank.worldbank.org/source/education-statistics-%5e-all-indicators> (July 16, 2021)

- World Bank. (2019). *Worldwide Governance Indicators*. Washington: World Bank. Retrieved from <http://info.worldbank.org/governance/wgi/Home/Reports>
- World Bank. (2019a). *Worldwide Governance Indicators*. Retrieved from <https://info.worldbank.org/governance/wgi/> (July 13, 2020)
- World Bank. (2020). *Doing Business 2020*. Retrieved from <https://www.doingbusiness.org/en/data/exploreeconomies/lao-pdr> (June 30, 2021)
- World Bank. (2021). *The World Bank in Lao PDR*. Retrieved from <https://www.worldbank.org/en/country/lao/overview> (June 29, 2021)
- World Bank. (2021a). *Education Statistics*. Retrieved from <https://databank.worldbank.org/source/education-statistics-%5e-all-indicators#> (June 30, 2021)
- World Bank. (2021b). *World Development Indicators*. Retrieved from <https://databank.worldbank.org/source/world-development-indicators> (June 29, 2021).
- World Bank. (2021c). *Education Statistics - All indicators*. Retrieved from <https://databank.worldbank.org/source/education-statistics-%5e-all-indicators#> (July 12, 2021)
- World Bank. (2021d). *Metadata Glossary*. Retrieved from <https://databank.worldbank.org/metadataglossary/gender-statistics/series/SI.POV.GINI> (July 20, 2021)
- World Bank. (2021e). *Education Statistics - All Indicators*. Retrieved from <https://databank.worldbank.org/source/education-statistics-%5e-all-indicators> (July 21, 2021)
- Worldbank. (2010). *Education Statistics - All indicators*. Retrieved from <https://databank.worldbank.org/source/education-statistics-%5e-all-indicators#> (July 21, 2021)

## Appendix I: Overview of the VPET system

VET pathway enrolment share out of all upper secondary (%) (2019)	2.1 (UNESCO, 2021)%
Program enrolment share out of all VET pathway (%)	n/a
Number of curricula/qualifications (only TVET schools and colleges under MOES, 2007)	58 different curricula available (Ministry of Education)
∅ Share of time spent in workplace (vs. classroom)	TVET curricula are comprised of theory and practical elements, whereas the practical training has a duration of 2-3 months during the two- or three-year programme (UNESCO, 2013)
Work contract (Yes/No)	n/a
∅ Share of vocation-specific content (vs. general) in classroom education	n/a
Classroom/workplace sequencing (Alternating, Sequentially)	n/a
Frequency of workplace learning (Annually, Semi-annually, quarterly, monthly, weekly)	n/a
Program duration (Years)	6 months to 3 years depending on the programme (Noonan, 2020, S. 115)
Involved Actors	The two main ministries responsible for TVET in Lao PDR are the MOES and the MOLSW.
Reform Years	2007: Revision of the education law, which defined TVET within the education system.
Reforms Summary	With the revision of the labour law TVET was established as one of the four education sub-sectors.

(Ministry of Education; UNESCO, 2021; UNESCO, 2013; Noonan, 2020; Lao PDR, 2007a)

ETH Zürich  
Chair of Education Systems  
STB J 20.2  
Stampfenbachstrasse 21  
8092 Zürich

[www.ces.ethz.ch](http://www.ces.ethz.ch)

**Publisher:** Chair of Education Systems CES  
**Layout:** ETH Zürich  
**Photos:** Photo by Jeremy Bishop on Unsplash

© ETH Zürich, September 2022