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Policy Review of TVET in Lao PDR



Policy Review of TVET in
Lao PDR

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The TVET policy review series is directed by Borhene Chakroun, Chief, Section for Technical and Vocational Education and Training.

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Preface

UNESCO is implementing the Strategy for Technical and Vocational Education and Training (TVET) adopted in 2009 by the 181st session of its Executive Board (181 EX/Decision 8). The strategy focuses on action in three core areas: (i) provision of upstream policy advice and related capacity development; (ii) conceptual clarification of skills development and improvement of monitoring; and (iii) acting as a clearinghouse and informing the global TVET debate. Implementation of the strategy includes a range of programmes and initiatives relating to advocacy, policy support and capacity development.

UNESCO conducts TVET policy reviews as part of a dialogue with concerned governments to identify policy options and strategies for improving TVET policies and systems. The reviews employ an analytical framework developed by the TVET Section at UNESCO Headquarters. The reviews seek to enhance local capacity to undertake strategic TVET policy analysis and planning that is aligned with national socio-economic priorities.¹ UNESCO's work promotes policies based on the principles of inclusion and social cohesion, gender equality and sustainability.

Policy reviews are led by the TVET Section at UNESCO Headquarters (HQ), in close coordination with regional and field offices. In addition, the UNESCO-UNEVOC International Centre for Technical and Vocational Education and Training plays an important role in delivering capacity building and support.

This policy review is based on an agreement between the Government of Lao PDR and UNESCO to review national TVET policies. Preparatory work took place during the early months of 2011. It had the following key outcomes: (i) establishment of focal points in the Ministry of Education and Sports (MOES) and in the Ministry of Labour and Social Welfare (MOLSW); (ii) agreement on the analytical framework for the review and (iii) clarification of key steps starting from stocktaking mission, to policy dialogue and capacity building, validation and policy endorsement.

This report is based on findings from desk research and interviews during field missions undertaken by the UNESCO review team in July and September 2011. The team comprised a staff member from the field office in Vientiane (Ms. Sirikit Anuje), a representative from UNESCOHQ (Borhene Chakroun), a representative of UNESCO Bangkok (Youngsup Choi) and three external experts (Mr. Luis Guillermo Hakim, Ms. Siripan Choomnoom and Mr. Jean-Raymond Masson). The team would like to take this opportunity to express its sincere appreciation to all those who participated in the review process.

1 <http://unesdoc.unesco.org/images/0018/001874/187487e.pdf>

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Abbreviations

ADB:	Asian Development Bank
ASEAN:	Association of Southeast Asian Nations
ASEAN RQF:	Regional Qualifications Framework
BL:	Basic vocational programme
CEDEFOP:	European Centre for the Development of Vocational Education and Training
CLC:	Community Learning Centre
DGE:	Director General for Education
DSD:	Department of Skills Development, MOLSW
DTVE:	Department of Technical and Vocational Education
DVV:	Institut für Internationale Zusammenarbeit des Deutschen Volkshochschul-Verbandes
EA&P:	East Asia and Pacific
ECE:	Early Childhood Education
EFA:	Education for All
EMIS:	Education Management Information System
ESDF:	Education Sector Development Framework
ESDP:	Education Sector Development Plan
ESQAC:	Education Standards and Quality Assurance Centre
ESWG:	Education Sector Working group
ETF:	European Training Foundation
EUR:	Euro
FDI:	Foreign Direct Investment
GDP:	Gross Domestic Product
GE:	General Education
GIZ:	Deutsche Gesellschaft für Internationale Zusammenarbeit (German International Cooperation)
GL:	Combined theoretical and vocational programme
HAVO:	Hoger Algemeen Voortgezet Onderwijs
HBO:	Hoger Beroepsonderwijs
HE:	Higher Education
HRDME:	Human Resources Development for Market Economy
IAG:	Information, Advice and Guidance
ILO:	International Labour Organization
ISCO:	International Standard Classification of Occupations
ITE:	Institute of Technical Education
IVET:	Integrated Vocational Education and Training
JICA:	Japanese International Cooperation Agency
KfW:	Kreditanstalt fuer Wiederaufbau (German Development Bank)
KL:	Middle-management vocational programme
KOICA:	Korean International Cooperation Agency
LAK:	Lao Kip
Lao PDR:	Lao People's Democratic Republic
LMI:	Labour Market Information
LSE:	Lower Secondary Education
MBO:	Middelbaar Beroepsonderwijs
MOES:	Ministry of Education and Sports
MOF:	Ministry of Finance
MOLSW:	Ministry of Labour and Social Welfare
NBTS:	National Baseline Tracer Study
NFE:	Non-formal Education

NGO:	Non-Government Organization
NHRC:	National Human Resources Council
NQF:	National Qualifications Framework
NSDF:	National Skills Development Fund
NSEDP:	National Socio-Economic Development Plan
NSEP:	National Socio-Economic Plan
NTC:	National Training Council
NUOL:	National University of Laos
NVCSDC:	National Vocational Consulting and Skills Development
NVQF:	National Vocational Qualification Framework
OECD:	Organization for Economic Cooperation and Development
PESS:	Provincial Education and Sports Service
PHRC:	Provincial Human Resource Council
QA:	Quality Assurance
R&D:	Research and Development
RQF:	Regional Qualification Framework
SABER:	System Assessment and Benchmarking for Education Results
SD:	Skills Development
SEDP:	Socio-Economic Development Plan
SME:	Small and Medium Enterprise/s
SSO:	Social Security Office
STVET:	Strengthening TVET
TVE:	Technical and Vocational Education
TVED:	Department of Technical and Vocational Education (MOES)
TVET:	Technical and Vocational Education and Training
TVS:	Technical Vocational School
TWG:	Trades Working Groups
UNDP:	United Nations Development Programme
UNESCO:	United Nations Educational, Scientific and Cultural Organization
UNESCO-HQ:	Headquarters of United Nations Educational, Scientific and Cultural Organization
UNEVOC:	UNESCO International Centre for Technical and Vocational Education and Training
UNIDO:	United Nations Industrial Development Organization
USD:	United States Dollar
USE:	Upper Secondary Education
VE:	Vocational Education
VEDI:	Vocational Education Development Institute
VET:	Vocational Education and Training
VMBO:	Vorbereidend Middelbaar Beroepsonderwijs
VTP:	Vocational Training Project
VWO:	Vorbereidend wetenschappelijk onderwijs
WAU:	World Around Us

Executive Summary

Background and context

This is an executive summary of UNESCO's Technical and Vocational Education and Training (TVET) system policy review for Lao PDR. The report responds to an invitation from the Government of Lao PDR to UNESCO to conduct a review of the country's TVET system and to engage in a policy dialogue on its future development.

The report begins with an analysis of the Lao PDR socio-economic development model and the imperatives that arise for TVET. It goes on to focus on TVET policy development. Lao PDR's development model has important consequences for its education and training system. Over the last 20 years, Lao PDR has seen rapid economic growth based on the expansion of resource-based sectors, mainly mining and hydropower. However, the impact on employment generation has been rather modest. The economy of Lao PDR is still dominated by low-productivity rural economic activities, requiring, thus far, low levels of qualifications from the labour force.

To achieve the goal of 8 per cent annual GDP growth set by the 7th 5-year National Social and Economic Development Plan (NSED), (2011 - 2015), the country's sources of growth need to be diversified to non-resource-based industries. The Law on Promotion of Foreign Investment has identified priority sectors including agriculture, forestry, handicrafts, environmental protection, biodiversity, health care, infrastructure, manufacturing and tourism. A strategy to support these sectors with relevant policies in the formal, non-formal and informal TVET sectors is needed to ensure that skills shortages will not become a constraint for investment.

The skills base among the workforce in Lao PDR is low, due in large part to the low quality of education and high dropout rates at the level of basic education. Migration of skilled workers to neighbouring countries adds to the difficulties for Lao enterprises in finding such workers. Lao enterprises, in particular small, non-export oriented and domestic-owned firms, rarely provide training opportunities for staff. System-wide education reforms are necessary to provide a competent workforce for future inclusive and sustained socio-economic development.

This report is structured as follows: Part 1 provides a summary of key information about the population, economy and labour market system of Lao PDR. Parts 2 and 3 discuss the Lao education system and TVET system. Part 4 examines policy directions on the vocationalization of general secondary education and draws lessons from international experience. Part 5 draws together clear conclusions and provides specific recommendations.

This report notes that the Government has placed increased priority on TVET in recent years. This has included the production of several policy documents as well as a marked rise in budget allocation, combined with strong support from external donors. As a consequence, there have been several achievements. TVET system reform is set to continue in the areas of rehabilitation of 9+3 TVET programmes, changes of curricula towards competency-based curricula, implementation of a Quality Assurance (QA) system, the vocationalization of general secondary education, and other areas. However, several challenges were identified during the review process and policy recommendations are suggested below.

Policy Recommendations

1. Reform the TVET policy coordination system

Governance of the TVET system encompasses two dimensions: horizontal coordination between various ministries and social stakeholders, and vertical coordination between central and provincial government bodies.

Horizontal coordination: The Prime Minister's Decree on TVET and Skills Development (2010) clearly mandates cooperation among the key TVET ministries; the MOES and the MOLSW. The decree identifies synergies and complementarities between the ministries and provides the basis for stronger cooperation.

As a wider policy coordination mechanism, the National Training Council (NTC)² has been functional since 2002. It is comprised of 24 representatives from relevant ministries and is chaired by the Deputy Minister of Education. However the NTC lacks adequate resources and receives little attention from key stakeholders.

Vertical coordination: At present, there is no appropriate system to manage coordination of central-level and provincial-level TVET activities. Oversight of TVET institutions remains weak. For example, the central government does not have accurate information about the financial situation of TVET schools under the Provincial Education and Sports Service (PESS).

Moreover, despite several attempts to implement comprehensive reform, the scope of TVET development is still virtually entirely limited to the formal TVET system. Linkages between TVET and other skills development areas and other education sub-systems are weak.

Both horizontal and vertical coordination systems need to be strengthened and reinforced, either by redefining and strengthening existing mechanisms or through the setting up of new coordination arrangements.

2. Strengthen strategic alignment of TVET and industrial strategy and policies

The 7th NSEDP strategy recognizes that human resource development is vital for socio-economic development. While there is general consensus about the importance of TVET for socio-economic development, but this is not yet reflected in sectoral and provincial development plans. Greater alignment between TVET policy and these plans is needed.

3. Enhance labour and skills needs information systems

Evidence and measures to support and inform the design, implementation, assessment, monitoring and review of employment-oriented TVET policies are still insufficient. A regular Labour Force Survey (LFS) should be established by the MOLSW with the support of the International Labour Organization (ILO). Surveys to provide information on job vacancies and skills supplies should be undertaken regularly; these would then also support careers counselling and job placement activities by TVET institutions.

² The name of this body was due to change to the National Vocational Consulting and Labour Skill Development Council, according to the Prime Minister's Decree on TVET and Skills Development of 22 January 2010. However, since the old name continues to be used by key stakeholders, it is used throughout this report.

4. Establish Information, Advice and Guidance (IAG) and employment services

Information, Advice and Guidance services are needed to provide concrete information on job and learning opportunities to members of the public and students. In-school career counselling services should be introduced at lower secondary school, to support the development of TVET at the upper and post-secondary level. Job placement activities in TVET schools should be strengthened.

5. Enhance the engagement of employers

Despite efforts to strengthen the role of employers in the policy-making process, employers are still minimally engaged with TVET reforms undertaken so far.

As a first step to enhancing employer engagement, consideration should be given to encouraging employers to provide skills training while receiving business development support. Efforts should be made to expand the network of Trades Working Groups (TWGs), even in provinces that do not yet have well-developed industrial bases. Public TVET providers should take an active role in establishing provincial TWGs. TWG representatives with substantial industrial base and sufficient capacity, such as in the furniture and garment sectors, should be included in curriculum and qualification development.

6. Accelerate development of National Qualifications Framework

With the imminent establishment of an ASEAN Economic Community (AEC) by 2015, Lao PDR should scale up efforts in developing its national qualifications framework in order to harmonize with the Regional Qualifications Framework (RQF) being developed by the ASEAN member states. Increased policy inputs need to be added to the current efforts of the Vocational Education Development Institute (VEDI), with more emphasis on cooperation between the MOES and the MOLSW. However, it is necessary to maintain a balance between efforts around elaboration of key competencies and establishing the right conditions for quality training.

7. Enhance the role of private TVET providers

The role of private TVET providers should be articulated and included in TVET planning. For example, private providers should be included in the QA network. Areas in which private and public providers compete with or complement each other should be identified, in order to direct public providers towards more strategic, high demand areas which cannot be suitably serviced by private providers.

8. Diversify supply of TVET

To increase participation in TVET, diversification of delivery and more flexibility of access are required. Formal apprenticeship programmes could be considered as a measure to provide out-of-school youth with opportunities to acquire practical skills while earning an income. Since this would entail a large attitudinal shift among youth as well as employers, it should be attempted gradually, and should be developed alongside initiatives to promote workplace learning, such as internships. It will also be important to incorporate skills training components into Non-Formal Education (NFE) programmes. NFE institutions such as Community Learning Centres (CLCs) should be mobilized, in cooperation with concerned ministries and departments.

9. Enhance efforts to secure competent TVET teachers

Current efforts to increase the supply of competent TVET teachers, including the expansion of TVET teacher training capacity and the implementation of in-service training, should be scaled up. Concrete policy actions should be initiated to improve the working conditions, compensation levels and career development paths of TVET teachers. (These issues have been explored in previous studies, such as the study conducted by Deutsche Gesellschaft für Internationale Zusammenarbeit or German International Cooperation (GIZ) in 2011.) To complement such efforts, coordination between the VEDI and the National University of Laos (NUOL) Faculty of Engineering should be improved.

10. Strengthen institutional arrangements for effective implementation of TVET QA system

Quality management of TVET institutions and programmes is vital. The MOES has explicitly decided to adopt an incremental approach to improve the quality assurance of TVET institutions, starting with a self-assessment procedure. To achieve an effective QA system, close examination of the division of roles between the Education Standards and Quality Assurance Centre (ESQAC) and other organizations such as the VEDI needs to be carried out. The recently constructed regional QA network should be strengthened. Implementation of the QA guidelines should be an integral part of ongoing TVET performance monitoring and improvement.

11. Establish a sustainable and output-based financing system

Underfunding of the TVET system has resulted in out-dated technical equipment, inadequate teacher training and, in general, unsatisfactory quality of practical training. While the government has been increasing financial support, the expansion of public investment is not yet complemented by private investment from employers. This could be achieved through compulsory measures as well as through schemes to attract voluntary investments from employers and individuals. One compulsory measure, a payroll training levy on employers, is already stipulated in labour law but has yet to be implemented. Voluntary measures could include incentive schemes such as tax credits for employers' training investments.

There should be concurrent efforts to enhance the cost-efficiency of public funding to TVET institutions. This would also improve stakeholders' potential buy-in for mechanisms such as training levies. Performance-based and demand-oriented funding schemes will increase efficiency and provide incentives for concerned actors. At the same time, there should be consideration of how to minimize the risk of excluding disadvantaged people who are the primary targets of TVET (the so-called "cream-skimming effect").

12. Conduct further policy dialogue about effective expansion of vocational education at secondary level

The background to plans to expand vocational education at secondary level is clearly stated in the Education Sector Development Plan (ESDP) 2011-2015, which notes the limited supply of skilled workers as a result of a sharp decline in enrolments at the certificate level of vocational education. Thus the government is currently considering the introduction of a new educational stream into general secondary schools. This can be regarded as the introduction of pre- or semi-technical and vocational education, with a different objective from that of TVET.

While this stream has the potential to provide general students with opportunities to acquire basic practical skills, several issues need to be considered. These include the purpose of the approach, ways of achieving the purpose, and required changes in institutional settings and policy measures. Policy dialogues around these issues should be evidence-based and supported by a rigorous assessment of the possible contributions and constraints.

To support the policy discussion, at least two measures need to be urgently initiated. First, an analysis of available work opportunities should be conducted. Second, there should be analysis of the supply capacity, and examination of existing gaps in schools. This should be supported by detailed financial analyses with corresponding feasible targets and strategies. Following a thorough examination of these two measures, there should be concrete policy dialogue on specific issues raised in Part 4 of this review.

Part 1: Context

This section provides a summary of information about the population, economy and labour market system of Lao PDR.

1.1 The National Socio-Economic Context

1.1.1 Demographic trends

The population of Lao PDR is comprised of 49 main ethnic groups. The major ethnic groups are the Lao Lum, Lao Thai, Lao Thoeng and Lao Soung. The total population of Lao PDR grew by 50 per cent recently, from 4.2 million in 1990 to 6.4 million in 2010. Annual population growth has however decelerated from an average annual rate of 2.7 per cent (1990-1995) to a projected 1.8 per cent for the period 2010-2015. This is still higher than the projected population growth rate of 0.8 per cent for the East Asia and the Pacific (EA&P) region. The slow-down in population growth has occurred through a sustained reduction of total fertility ratio (births per woman) from 5.6 (1990-1995) to 3.2 (2010-2015), which is still higher than the EA&P region (1.8 births per woman projected for 2010-2015).³

Urbanization in Lao PDR grew from 15.4 to 33.2 per cent for the period 1990-2010. The average rate of urbanization for the EA&P region is estimated at 45.3 per cent.

The median age of the Lao PDR population increased from 17.9 to 20.6 years of age between 1990 and 2010, significantly lower than the average for the EA&P region, estimated at 32.2 in 2010. These two characteristics – an urbanization process in its initial stages and a very young population – will be key determinants in the evolution of Lao urban labour markets in the medium and long term.

1.1.2 Social indicators

The rapid pace of economic growth in the last 20 years has resulted in significant poverty reduction, from 39 per cent in 1998 to 27.6 per cent in 2008. About one-third of the population has gained access to improved water and sanitation services, and the proportion of the population with access to electricity rose from 16 per cent in 1995 to 71 per cent in 2010. Despite these areas of progress, several challenges remain. Lao PDR was ranked 138 out of 187 countries in the 2011 Human Development Index of the United Nations Development Programme (UNDP).

Considerable differences in poverty rates persist between different geographic areas and ethnic groups. For example, the poverty rate of the three non-Lao Thai groups is above 42 per cent while that of the Lao Thai group is about 25 per cent. The incidence of poverty in rural areas (32 per cent) is almost double that of urban areas (17 per cent). Villages that are distant from markets and lacking in basic infrastructure record an average poverty rate of 43 per cent, a fall of just 5 percentage points since 2002-2003.

Ethnic minorities and those living in the most remote rural areas, and the areas bordering Viet Nam and China, show a higher incidence of poverty than the rest of the country. Malnutrition remains a serious problem, and the prevalence of moderately or severely underweight and stunted children under five years of age was 37 and 40 per cent respectively in 2006. Infant mortality per 1,000 live births in 2007 was 48, twice the level of that of the East Asia and Pacific region.

3 UNDP. 2010. Human Development Report.

Rising inequality is also a challenge. The Gini coefficient for Lao PDR increased between 1997 and 2008 from 34.9 to 36.7. The increase in inequality, however, has been more than compensated for by economic growth, resulting in a net reduction of poverty. New infrastructure, particularly roads in rural areas, has helped to reduce poverty levels, but the benefits of economic growth have not reached everyone. For example, the recent expansion of the mining sector has made minimal impact on poverty reduction due to the relatively low demand for skilled labour. The sectors contributing largely to poverty reduction are agriculture and manufacturing, given the large concentration of poorer households working in those sectors.

1.1.3 Macroeconomic performance

As shown in Table 1, Lao PDR has shown comparably rapid economic growth, with 8.1 per cent average growth after 2006, as against neighbours Cambodia (6.7 per cent) and Viet Nam (7.0 per cent). Gross Domestic Product (GDP) growth rate reached 8 per cent in 2011. Reflecting such changes, in August 2011, the World Bank announced that Lao PDR had been upgraded from a Low-Income Country to a Lower Middle Income Country, based on the estimate of its Gross National Income (GNI) per capita of USD1,010. The World Bank suggested that the country can continue to achieve high GDP growth rates, with a doubling of the level of current income per capita in the next ten years. The key challenge is to enable economic diversification to reduce the reliance on capital-intensive projects that have little impact on employment.

Table 1: Key indicators of economic growth (unit: %, % points)

		Lao PDR	Cambodia	Viet Nam
Average GDP Growth rate	2000-2010	7.2	8	7.3
	2000-2005	6.3	9.3	7.5
	2006-2010	8.1	6.7	7.0
Size of external trades (% of GDP)	Export	36.3	54.1	77.5
	Import	40.9	59.5	87.8
Changes of size of external trades (% points)	Export	7.8	1.5	22.9
	Import	3.1	-1.7	30.9

Source: World Bank, World Development Indicators Database; average growth rates calculated by UNESCO Bangkok.

On the other hand, the economic importance of external trade is relatively low compared to other countries. The relative size of exports and imports in 2010 were respectively only 36.3 per cent and 40.9 per cent, while in Viet Nam these accounted for 77.5 per cent and 87.8 per cent, respectively. However, the relative size of exports and imports has increased by 7.8 percentage points and 3.1 percentage points.

Reflecting the rapid transformation of the Lao economy, the industrial structure has changed. The increased importance of the industry and service sectors is shown in Table 2. For example,

the share of agriculture in total value added was 33 per cent in 2010 which was less than that in 2000 by 18.2 per cent. However, it should be noted that the share of the manufacturing sector was quite low even in 2010 (7.6 per cent), only posting a 1.2 times increase since 2000 in the amount of value-added, compared to a 2.8 times increase in Cambodia and 2.7 times increase in Viet Nam.

This confirms that the recent growth is largely dependent on the non-manufacturing industries such as the hydropower and mining sectors.⁴

Table 2: Share of value added by economic sector (unit: %, % points)

		Lao PDR	Cambodia	Viet Nam
Share of value added (2010, % of GDP)	Agriculture	33.0	36.0	20.6
	Industry	30.2	23.3	41.1
	Manufacturing	7.6	15.6	19.7
	Services	36.8	40.7	38.3
Changes of share over 2000-2010	Agriculture	-18.2	-0.1	-2.7
	Industry	6.5	-0.2	3.0
	Manufacturing	-10.3	-2.0	-0.1
	Services	11.7	0.4	-0.3

Source: World Bank, World Development Indicators database; average changes calculated by UNESCO Bangkok.

In the manufacturing sector, garments exports were expected to grow by 20 per cent in 2011, driven mainly by the EU relaxation of conditions relating to raw materials sourcing and increased orders by key garment producers. The medium-term manufacturing outlook is strong, with an expected growth rate of around 8 per cent in the coming years due to a gradual global economic recovery and sustained international commodity prices in the mining sectors.

Exports are expected to grow rapidly in the medium-term driven mainly by resource-sector exports (electricity and copper). Export growth in 2010 amounted to 43 per cent and was expected to reach 30 per cent in 2011. Besides mining and electricity, export sectors include wood and wood products, agricultural products and garments. Foreign direct investment (FDI) has accelerated in recent years, but is largely concentrated in the power and mining sectors. Between 2003 and 2010, actual investments increased from USD110 million to almost USD 800 million, with hydropower and mining now accounting for some 80 per cent of inflows (World Bank, 2011). Gross FDI flows reached USD 1,103 million in 2011 and were projected to reach USD 1,300 million in 2012. The main foreign investors are from Thailand, China and Viet Nam, with France, Australia and Republic of Korea also registering significant investments.

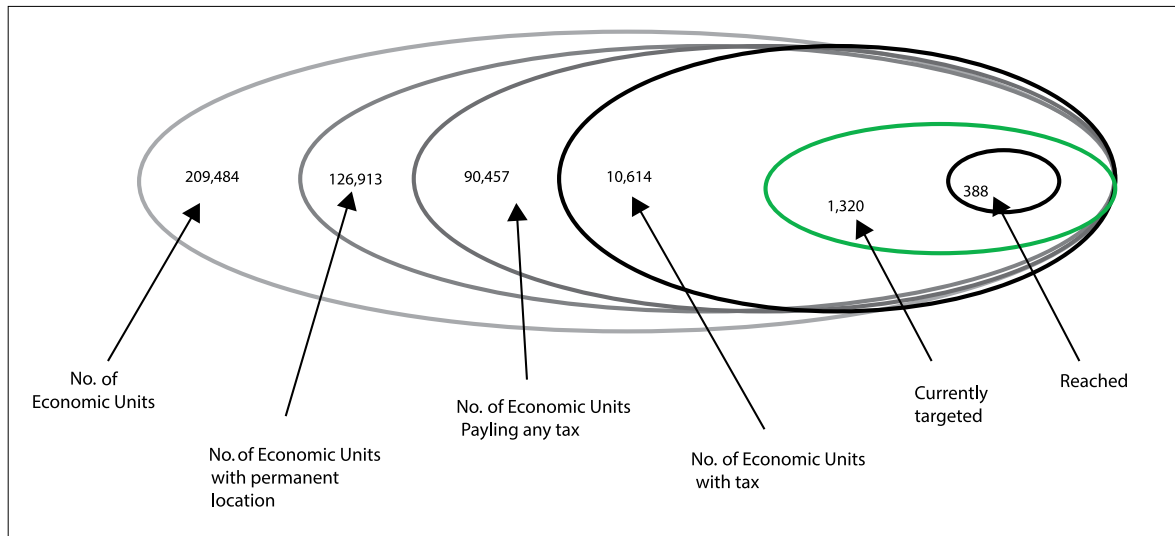
During the 1990s an active legislative programme laid the foundations for developing market-based rules and institutions to support private sector development. Today, agricultural production and most manufacturing production are in private hands, and State-Owned Enterprises (SOE) only account for around 1 per cent of employment. Nearly 97 per cent of manufacturing units are small (less than 10 employees). Of the medium and large units, around one-third are privately owned by Lao PDR citizens and just over half are joint ventures with foreigners. The remainders are owned by government.

According to the 2005 Lao Economic Census, there were about 210,000 economic units operating in the country, of which about 127,000 had a permanent location, and 90,000 were paying some form of taxes (Figure 1). Only 10,000 firms operated with a tax identification number. The Social Security Office (SSO) had targeted 1,328 firms from the latter group, of which it had only reached 388 firms.⁵

4 According to the World Bank, about one half of recent growth is attributed to the natural resources sector, followed by the services sector. As of 2011, there were a large number of investment proposals for hydropower (about 90 projects) and mining (more than 70 separate areas under exploration or being surveyed) in the pipeline.

5 "Enrolment of firms in social security in LAO PDR. Perspective from the private sector". World Bank 2010.

Figure 1: Number of economic units by type



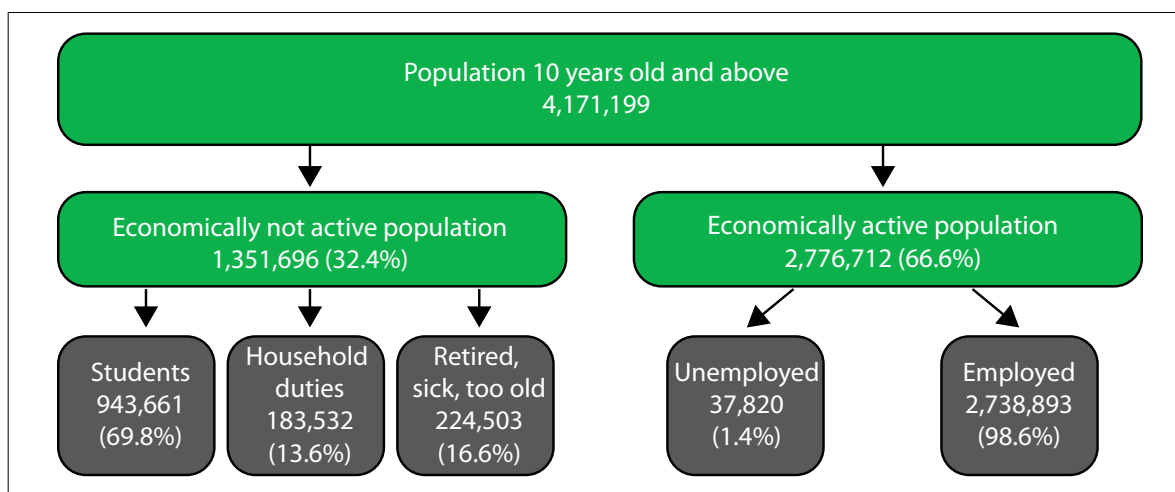
Source: Lao Economic Census, 2005.

1.2 The Labour Market

1.2.1 Key figures of the labour market

Data from the 2005 Population Census provides a view of the employment structure in Lao PDR. Among people aged 10 and above, around 67 per cent are in the labour market as employed or unemployed (see Figure 2).⁶

Figure 2: Classification of labour force



Source: Lao Statistics Bureau, Lao Population Census 2005.

About 88 per cent of total employment is concentrated under 'own account' workers and unpaid family workers, most of whom are based in rural areas (Table 3). Wage employment in the private sector represented less than 4.5 per cent of total employment while own account workers and

⁶ It should be noted that the method applied here uses the 'usual activity' approach which is different from that of Labour Force Surveys applying a 'current activity' approach.

unpaid family workers account for 42 per cent and 46 per cent of total employment respectively. This clearly shows that the labour market in Lao PDR continues to maintain strong features of a pre-industrialized society.

Another major challenge is the significant disparity in literacy rates by gender, province, urban/rural location, age group and ethnic group. According to the Population and Housing Census (2005), the literacy rate in urban areas is 89 per cent while in rural areas it is only 54 per cent. The literacy rate for the non-Lao-Tai ethnic groups is 49 per cent, with 33 per cent for females and 65 per cent for males, which is relatively low in comparison to the Lao-Tai ethnic groups, with 77 per cent for females and 90 per cent for males (UNESCO, 2008).

Table 3: Employment breakdown by type of employer

Code	Categories	Employed	Females (%)	Males (%)
01	Government Employee	138 388	31	69
02	Parastatal Employee	11 446	33	67
03	Private Employee	121 786	40	60
04	State Enterprise Employee	19 486	27	73
05	Employer	7 210	31	69
06	Own Account Worker	1 149 906	32	68
07	Unpaid family Worker	1 260 671	71	29
	Total	2 738 893	50	50

Source: Lao Population Census, 2005.

However, the situation has been slowly changing as the share of employment of the agriculture sector is decreasing and that of the industry and service sectors is increasing (Table 4). The share of labour in the agriculture and forestry sectors has slightly declined, from 78.5 per cent in 2005 to 75.1 per cent in 2010. Correspondingly, the employment share in the industrial and construction sectors rose from 4.8 per cent to 5.5 per cent and in the service sector from 16.7 per cent in 2005 to 19.5 per cent in 2010.

Table 4 : Share of employment by economic sector (unit: %)

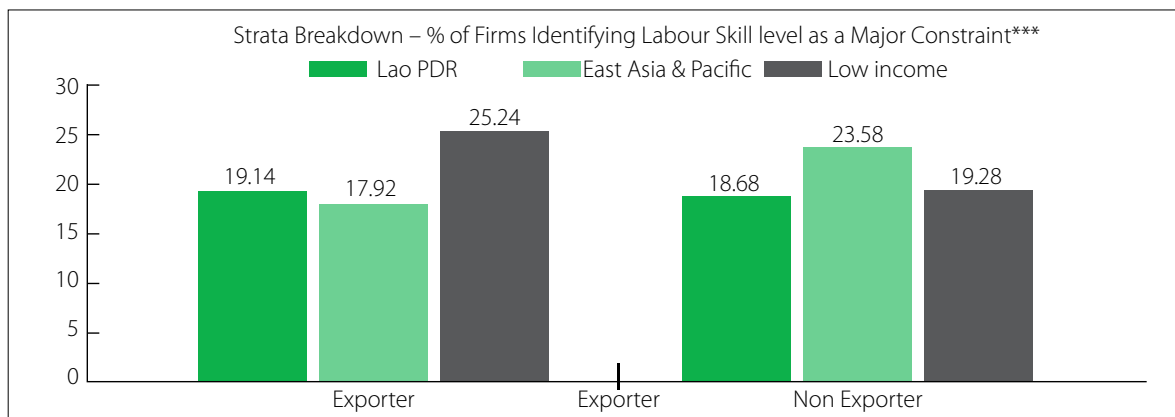
	2005	2010
Agriculture-forestry	78.5	75.1
Industry	4.8	5.5
Service	16.7	19.5

Source: Ministry of Planning and Investment, 7th NSEDP.

1.2.2 Challenges related to labour quality

According to the 2010 enterprise survey carried out by the World Bank, an insufficiently skilled labour force and low productivity are major constraints for firms. Interviews with companies in the garment sector have shown that though investment in training is high, labour retention is poor. The migration of skilled labour to Thailand was one reason cited by respondents. Skills deficits are also a problem in the services sector, where the lack of English language skills and the absence of tourism-related education are often cited as important constraints to the expansion of domestic ownership of firms. Perception of unskilled labour as a major constraint varies with firm size. Medium- and large-sized firms perceive more constraint than smaller enterprises (as shown in Figure 3). Unskilled labour is a greater constraint for Lao enterprises compared to other countries in the EA&P region.

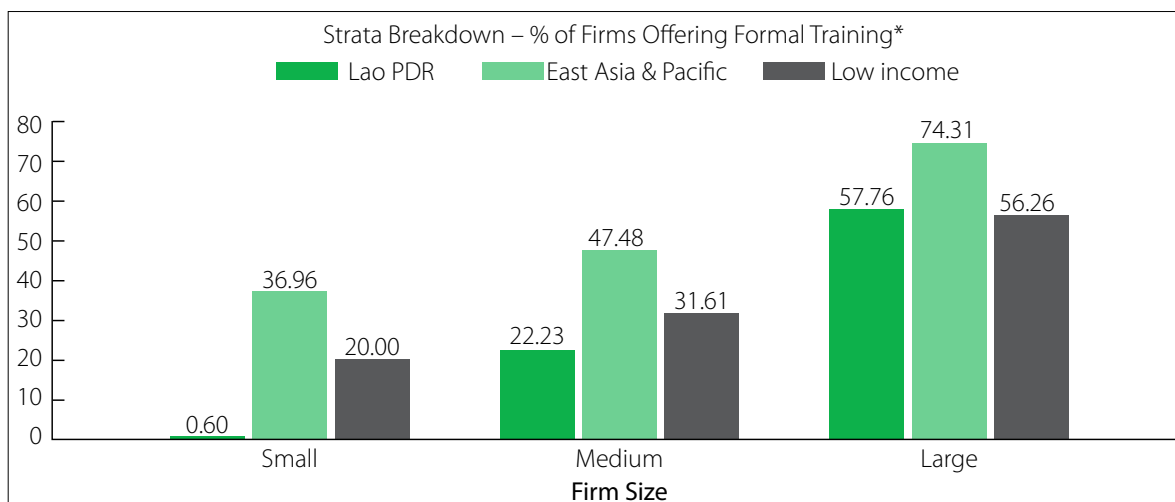
Figure 3: Share of firms identifying labour skill level as a major constraint



Source: World Bank, Enterprise Survey in Lao PDR 2009.

In terms of the number of firms offering formal training for staff, firm size is positively correlated with staff training. Among small and medium sized firms, the number of firms offering training to their staff is less than the number who perceive that an unskilled labour force is a problem (see Figure 4). This may suggest that small and medium size firms are aware of the constraints in labour skills, but do not or cannot offer training. Lao firms, irrespective of size, offer fewer opportunities for training than firms in other countries in the EA&P region. Exporting and non-exporting enterprises perceive the constraint of unskilled labour similarly.

Figure 4: Share of firms offering formal training



Source: World Bank, Enterprise Survey in Lao PDR 2009

A larger proportion of exporting firms offers in-service training compared to non-exporting firms. Lao exporting firms provide similar levels of staff training to those in the EA&P region. Small, non-exporting firms lag significantly behind their peers in both the EA&P region and in other low-income countries. This may be due to firms lacking know-how about staff training, or lacking capable training providers.

Foreign-owned enterprises are much more likely to regard labour as a key constraint. Such firms offer more training opportunities than domestic enterprises, but less than foreign-owned firms in the EA&P region. Foreign firms may be obtaining the required skilled labour by hiring foreign workers.

1.2.3 Migration

Migration is an important concern in Lao PDR, where citizens have relatively easy access to more prosperous neighbouring countries. According to the World Bank's migration stock data base, the most popular destination country of Lao migrant workers in the Asia-Pacific region is Thailand (see Table 5).

Table 5: Migration stock of Lao PDR by destination country (2010)

Destination country	Migration stock
United States	192,978
Thailand	77,443
France	47,466
Canada	16,845
Australia	11,352
Other South	9,531
Japan	2,603
Germany	1,608
Belgium	1,481
Cambodia	1,235

Source: World Bank Migration Stock Database

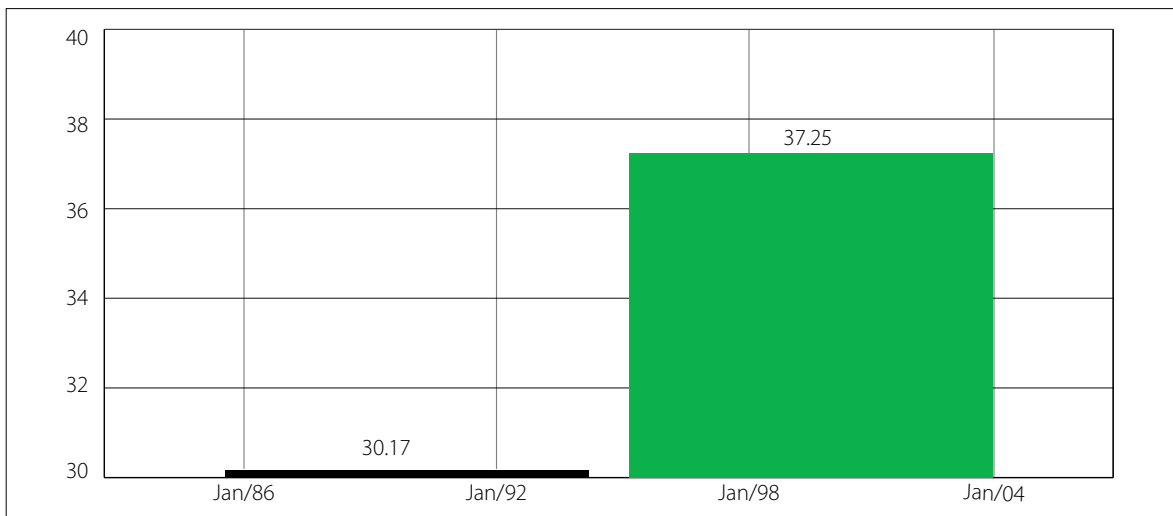
In 2009, the number of registered migrant workers in Thailand from Lao PDR was 93,429 and of this number the share of female workers was about 52.2 per cent. Male migrant workers were working in the agriculture (21.4 per cent), construction (16.0 per cent) and food sales (9.1 per cent) sectors while female workers were working in the household (31.2 per cent), food sales (14.2 per cent) and agriculture (11.5 per cent) sectors. Lao migrant workers were the third largest group of unskilled migrant workers in Thailand, following workers from Myanmar (352,748) and Cambodia (103,826) (International Organization for Migration (ILO), Thailand Migration report 2011).

Regarding the working conditions of Lao migrant in Thailand, it has been reported that most are employed as short-term temporary workers on a daily, weekly or monthly wage, with no job security. For example, according to the ILO (2008), nearly nine-out-of-ten (89 per cent) workers received 3,000 baht or less per month and did not have any written contract. Around four-out-of-five domestic workers (79 per cent) had no regular day off per month. The same was true for more than two-thirds of migrant respondents in agriculture (67 per cent).

Lao women are exposed to a more vulnerable situation. Although Lao women migrate with the objective of improving their financial situation, many manage to save little or nothing at all. While the main occupation of Lao female workers in Thailand is domestic work, this work has not been fully protected as a form of labour. Women are exposed to the threat of physical and sexual abuse and exploitation by traffickers, employment agents and employers. Some migrants suffer trauma and have mental health problems (Inthasone, 2007).

Another important migration issue is a continued brain drain or migration of educated youth. While it is difficult to find updated official data, one research paper suggests that the emigration rate of tertiary educated (per cent of total tertiary educated population) increased to 37.25 per cent in 2004 (see Figure 5). This may be accounted for by the fact that the Lao labour market does not provide enough jobs for highly educated workers.

Figure 5: Emigration rate of tertiary education in Lao PDR (unit: % of total tertiary educated population)



Source: www.tradingeconomics.com

The number of immigrants from other countries to Lao PDR is relatively small; around 19,000 in 2010. Top source countries are Viet Nam, China, Thailand, Cambodia and Myanmar (World Bank, 2011). (World Bank, Migration and Remittances Fact Book 2011).

1.3 Conclusion

Rapid economic growth based on the expansion of resource-based sectors, mainly mining and hydropower, has helped to alleviate poverty in the last 20 years. However, the impact on employment generation has been rather modest. Lao PDR's economy is still dominated by low-productivity rural economic activities, requiring low levels of qualifications from the labour force.

To achieve the goal of 8 per cent of annual GDP growth set by the 7th 5-year NSEDP (2011-2015), it will be necessary to diversify the sources of growth to non-resource based industries. To this end, there should be efforts to link the Government's vision of strategic sectors for growth and employment with specific TVET policies. For example, the Law on the Promotion of Foreign Investment has identified priority sectors including agriculture, forestry, handicrafts, environmental protection, biodiversity, health care, infrastructure, manufacturing and tourism. A strategy to support these sectors with relevant TVET training needs to be developed.

It has been repeatedly pointed out that the quality of the labour force is low due to the high rate of dropouts from basic education and the low quality of education. The continued migration of skilled workers to neighbouring countries is adding to the difficulty for Lao enterprises in finding suitable workers. At the same time, it was found that enterprises in Lao PDR are not active in providing training opportunities for staff. All these factors indicate the necessity to improve the entire education and training system, and more specifically, the TVET system (including formal TVET, non-formal and even informal skills training sub-systems) in order to provide the competent workforce required for sustained and accelerated socio-economic development.

Part 2:

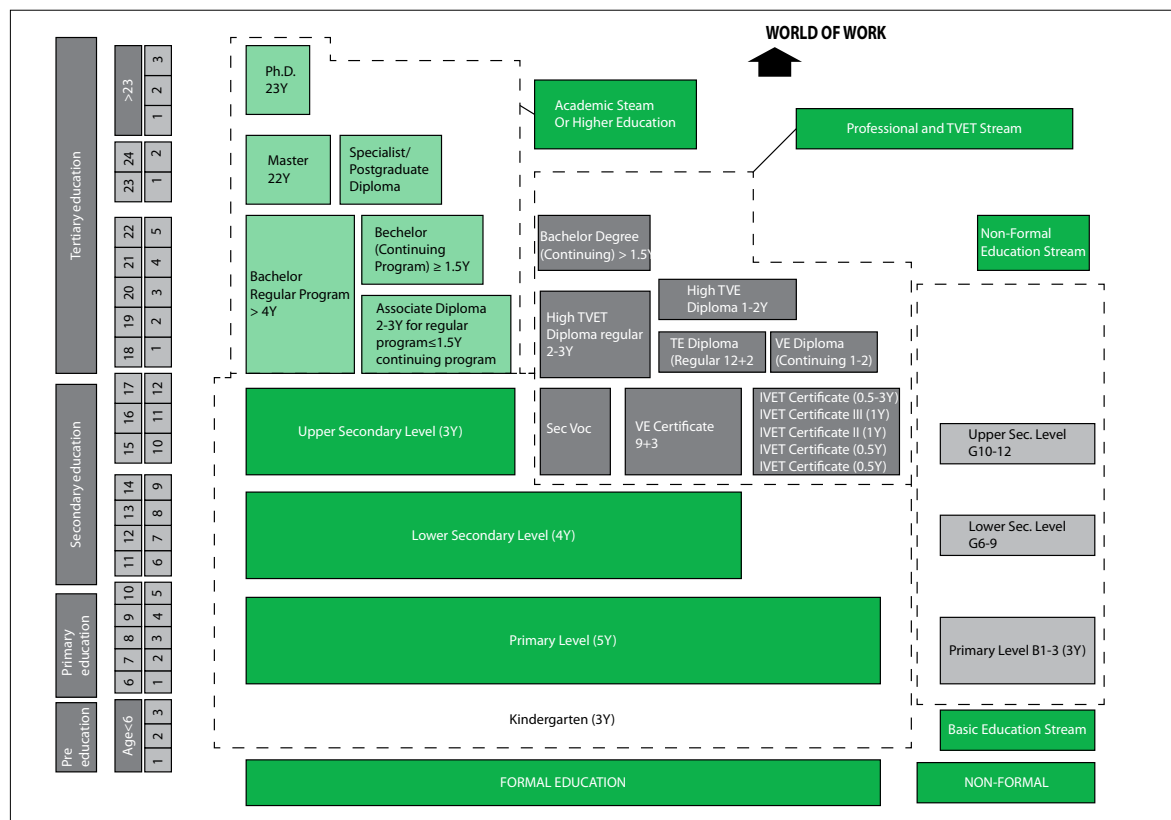
Education and Training System

This section introduces the overall architecture of the education and training system in Lao PDR and analyses major education policies as well as key features of education expenditures. The section then assesses the progress achieved and remaining challenges.

2.1 Structure of the education and training system

The Education Law of Lao PDR, promulgated on 17 July 2007, identifies four main components of the formal education system: Early Childhood Education (ECE), General Education (GE), Vocational Education (VE) and Higher Education (HE) (see Figure 6). The education system also includes non-formal education.

Figure 6: Diagram of the Lao PDR education system



Source: Vocational Education Development Institute (VEDI)

The key components of the formal education system are listed below:

- Early Childhood Education covers nurseries (from 3 months to 3 years old) and kindergartens (from 3 to 6 years old)
- General Education is divided into primary education (5 years from grade 1 to 5), lower secondary education (4 years from grade 6 to 9) and upper secondary education (3 years from grade 10 to 12).
- Higher Education (HE) has different levels including Undergraduate (3 years), Bachelor (4 years), Master (BA+2 years) and PhD (MA+3years).
- Vocational Education or Technical and Vocational Education and Training⁷ (TVET) is divided into three levels: primary or first level (at upper secondary level), middle level and high level (at post-secondary level). Thus TVET belongs partly to upper secondary education and partly to post-secondary education, which is formally part of higher education according to the definitions.

⁷ Although the Law refers only to Vocational Education (VE), more recent documents (the 2009 Education Sector Development Framework (ESDF) and the Prime Minister's Decree approving the ESDF) refer to Technical and Vocational Education and Training (TVET) with the same meaning as VE in the Law.

According to the law, the education system also includes Non-Formal Education (Article 9-11). The revised National Non-Formal Education Policy identified adult education as an approach to deliver non-formal education.

2.2 Major education policies

Since 2005, several policy efforts, strategies and plans have been initiated, including the National Growth and Poverty Eradication Strategy in 2006, the National Socio-Economic Development Plan 2006-2010, the National Education System Reform Strategy 2006-2015, and the Education for All (EFA) National Plan for Action 2003-2015. These strategies and plans were integrated into the Education Sector Development Framework (ESDF) (2009-2015) and agreed to by the Government and development partners. Expanding equitable access, improving quality and relevance, and strengthening planning and management capacities are the major areas of action

More recently, the 7th NSEDP (2011-2015) clearly emphasizes the importance of education development. It states the need to continue reforms in the national education system, uplift its quality, widen access to opportunities and develop education to be the core pillar of the society.

Based on the EFA goals and national education development 2011-2015, the government (through the MOES) and its development partners committed to increase their investment in adult literacy programmes, particularly in rural and remote areas that are facing difficulty in achieving EFA Goals 3 and 4. As a result, the government gives priority to districts that have not met the minimum criteria for NFE primary education completion in order to ensure that all districts will be able to achieve NFE primary education completion by the year 2014.

Some targets of the education sector related to TVET are as follows:

- Increase primary school enrolment to 98 per cent by 2015.
- Increase lower secondary education enrolment rate to 75 per cent by 2015.
- Increase upper secondary education enrolment rate to 43 per cent by 2015.
- Increase literacy rate in the age group 15-24 years to 99 per cent and in populations of age above 15 to 87 per cent by 2015.
- Build at least three technical schools in districts that have rapid economic growth.
- Increase technical student enrolment to at least 50,000, of which 50 per cent are women and 20 per cent are from remote areas and/or poor families.

2.3 Key features of education expenditure

Education expenditure represented 17 per cent of the national budget and 3.2 per cent of GDP in 2011. This indicates a relatively remarkable growth from 1 per cent of GDP in 1999 to 2.3 per cent of GDP in 2008. However, education funding still relies extensively on external funding from

international donors. For instance, international donors are contributing more than LAK 2,900,000 million (USD 378 million) for all sectors.⁸

Table 6 shows the actual breakdown of recurrent budget by selected education sectors. The data indicates that in 2008-2009, TVET received 3.5 per cent of the total recurrent budget, while primary and secondary education received 60 per cent and higher education 15.3 per cent. Table 6 also presents the funding priorities within the ESDF and the ESDP. Despite the difficulty of comparing the targets of these plans due to the differences in calculation methods and referenced data, it can be observed that both plans seek to increase the share of TVET. For instance, the ESDF (2009-2015) foresees a considerable increase of the share of TVET by 2015-2016⁹ from 3.9 per cent in 2010-2011 to 8.4 per cent in 2015-2016.

Table 6: Share of planned Government financing of selected sectors (unit: %)

	2008/09	ESDF		ESDP		
		2010/11	2015/16	2010/11	2014/15	whole period
Primary education	35.3	37.7	29.3	3.6	32.1	34.3
Secondary education	23.0	25.0	30.8	26.9	22.5	24.6
TVET	3.5	3.9	8.4	7.3	8.6	8.1
Higher Education	15.3	7.6	3.3	6.0	11.3	7.2
Non-Formal education	4.6	4.1	3.9	4.4	4.1	4.3
Teacher training	4.7	7.0	4.9	6.0	3.8	4.6

Note: not all sectors are included in the table. For a more detailed table, refer to Annex 2.

Sources: ESDF and ESDP

However, the ESDP clarifies that the national recurrent budget for education with 11 per cent allocated to the MOES will not be sufficient for the successful implementation of the sector plan. The funding gap is estimated at around 10 per cent of the budget. As mentioned earlier, international donors are contributing more than LAK 2,900,000 million (USD 378 million) for all sectors.¹⁰ The contribution by the Government is LAK 1,140,000 million (USD 148 million). There is a substantial shortfall of LAK 1,573,000 million (USD 205 million) in total. As a consequence and if the share of the national budget to the education sector remains at 11 per cent, the ESDP suggests that some projects will not be implemented in the period 2010-2015.

2.4 Progress achieved and remaining challenges

Lao PDR has made significant progress in the development of its education system in several aspects. Net enrolment rates in primary education reached 92.7 per cent in 2010, compared to 78.6 per cent in 2000. Lower-secondary enrolment rates have risen from 30 per cent in 1990 to 63 per cent in 2010. Upper-secondary enrolment rates have risen from 26 per cent to 37 per cent. 2,000 students per 100,000 people are now enrolled in higher education¹¹ which is beyond the

⁸ An additional LAK800,000 million is at present non-secured.

⁹ See Annex 2

¹⁰ A stated, an additional LAK800,000 million is at present non-secured.

¹¹ Source MOES; Education Quality Assurance Strategic Plan for 2011-2020; Vientiane, May 2010.

target established in the ESDF, resulting in overcrowding in universities (ESDP, p. 10). In addition, the literacy rate of people aged 15-40 increased from 76 per cent in 2004 to 84 per cent in 2009.

Efforts to improve the quality of education include the expansion of in-service training to teachers, a review of textbooks and the TVET and higher education curricula, the development of a Performance Assessment Framework and the establishment of the ESQAC, among others.

Despite significant progress, however, several challenges remain. The survival rate to Grade 5 was less than 70 per cent for males (66.9 per cent) and females (69.2 per cent) in 2010-2011. The enrolment rate in upper-secondary level was 33.4 per cent (male 36.4 per cent and female 30.0 per cent) in 2010-2011. Thus, large numbers of school-age individuals are currently out of school and have not acquired foundation skills in numeracy, reading and life skills.

There are widespread disparities in education access (UNESCO, 2011). Children from poor households, non-Lao-Thai ethnic groups, and rural areas display prominently different enrolment trends than those from non-poor households, Lao-Thai ethnic groups and urban areas. For example, drop-out rates reached 2.7 per cent in Vientiane and 18 per cent in Saravan province in primary education. Comparing with other countries in the region, as shown in Table 7 below, the country's performance in education in 2007-2008 was markedly below average across all education levels, particularly in repetition and drop-out rates in primary education and transition rates from primary to secondary education.

Table 7: Key indicators of education participation (unit: %)

	Lao PDR		Cambodia		Viet Nam		Malaysia		Republic of Korea
	1998/99	2007/08	1998/99	2007/08	1998/99	2007/08	1998/99	2007/08	2007/08
NER primary education	78	82	83	89		98	96	78	99
Repetition rates	21	17	25	11	1			21	0
Drop outs	46	33	51	46	8			46	2
Survival rates until grade 5	54	67	56	62	92		94	54	99
Transition rates primary to secondary		79		79	93		99		100
Enrolment lower secondary		53		56			93		99
Enrolment upper secondary		34		23			49		96
GER total secondary	32	44	17	40		65	68	32	97

Source: UNESCO, EFA Global Monitoring Report 2011

The quality of education also remains a problem due to factors such as inadequate infrastructure and facilities, a shortage of textbooks and teaching materials, insufficient instruction time, curriculum deficiency, a shortage of teachers and low quality of teachers. The low quality of education achievement is confirmed by a study conducted by ESQAC (2011) using a representative sample of 30 schools in two relatively remote districts in Bokeo province. The study examined curriculum-based learning outcomes in grade 3 mathematics, Lao language, and 'the world around us' (WAU), an integrated subject combining elements of social studies and science. The average score of the three tests was 42 points out of 100. For the mathematics test, over 78 per cent of pupils tested had scores of 50 points (out of 100) or lower. For the WAU, 54 per cent of

the pupils had scores of 50 points or lower. For the Lao language, 64 per cent of the pupils had scores of 50 points or lower, and 4.6 per cent of pupils had nil points in the Lao language. Reading comprehension was poor, with an average score of only 24 points.

Also, while the extension of formal education has resulted in the additional need for resources in terms of classrooms, teachers and teaching materials, the government is facing difficulty in meeting the increased demands. In some areas, the average class size in secondary education institutions reaches up to 50 (UNESCO, 2011). Also teachers' qualifications are not suitable for quality secondary education. In 2005-2006 almost half (46 per cent) of all secondary teachers did not meet the formal minimum qualification. More than one third (37 per cent) of all secondary teachers appeared to have no higher education levels than the level being undertaken by their students.

The situation is not better in Non-Formal Education (NFE) where personnel have very limited capacity and training. On average, there are two NFE personnel at district level, and most of them have had little chance to receive pre-service and in-service training. In addition, the honorarium is not enough to keep their living condition at the subsistence level. There is also a severe shortage of textbooks, teacher guides and teaching-learning materials. Community Learning Centres (CLCs) are not functioning well in general. Furthermore, due to the very limited budget allocated to NFE, supervision, monitoring, and evaluation of the NFE programmes is problematic (UNESCO, 2008).

2.5 Conclusion

The progress made by Lao PDR towards reaching universal primary education and the expansion of equitable access to education has been a remarkable achievement. However, as explained, several challenges still remain in fulfilling the goals of education as stipulated in the 7th NSEDP.

Firstly, access to education is still being hampered by several obstacles, including the limited physical infrastructure of education such as schools and textbooks as well as the economic dilemma of parents over whether to make their children work or to keep them in school. The situation is particularly serious for the poor and ethnic minorities living in rural and remote areas.

Second, education quality is a problem experienced at all levels and is impacted by several factors, including the insufficient number of qualified teachers. Poor quality restricts the expansion of participation in education as there is a failure to convince parents and students of the benefits of education.

While all these challenges are expected to be addressed through the implementation of various plans and strategies intended to reform the education system, the strategic importance of TVET reform needs to be highlighted. For instance, the reform of secondary TVET can provide opportunities for acquiring practical skills essential for obtaining suitable jobs and can thus attract more students to continue in school. Such reform will also address the over-expansion of the higher education sector which is causing concern due to the mismatch between the increased number of graduates and the limited job opportunities available.

Part 3:

The Technical and Vocational Education and Training System

This section introduces the characteristics of the technical and vocational education and training system in Lao PDR. In particular, it looks at TVET's legal framework, qualifications system, policy framework, system steering and institutional governance, delivery and performance. The section also examines the key building blocks of TVET. Finally, the section provides an analysis of TVET financing, access, participation, curriculum, pedagogy and quality.

3.1 Overview

3.1.1 Legal framework of TVET

TVET is clearly specified as one of the four sub-sectors of the education system in the revised version of the Education Law of Lao PDR promulgated in July 2007. More specific topics are covered by the Prime Minister's Decree on TVET and Skills Development (SD) which was approved on 22 January 2010. This Decree mandates cooperation between the MOLSW and the MOES on TVET, and describes the specific roles of the TVET and the skills development systems.

The main provisions of the decree are:

- The definition of clear boundaries and targets for TVET under the MOES and skills development under the MOLSW.
- Proposed procedures and regulatory framework for skills standards assessment with the purpose of promoting skills development and to provide incentives for workers to acquire skills standard certificates for salary negotiations with employers.
- A clear mandate given to a new council replacing the NTC,¹² with the purpose to improve coordination among public and private sectors. Establishment of Funds for TVET and Skills Development, including procedures and commitment of public and private sectors.
- Incentives and measures for quality assurance of TVET and Skills Development.

3.1.2 Qualification system of TVET

There are five certificates in upper-secondary TVET and five diplomas in post-secondary TVET.

At upper secondary level, the following certifications are offered:

- the Vocational Education (VE) Certificate can be obtained after completing 9+3 regular programmes by students graduated from lower secondary education
- IVET Certificate I after 6 months of continuous education
- IVET Certificate II after an additional 6 months of continuous education
- IVET Certificate III after an additional 1 year of continuous education
- IVET Certificate IV after additional 1 year of continuous education
- There are three diplomas at post-secondary level, and a Bachelor's degree: The Technical Education (TE) Diploma can be obtained after completing 12+2 regular programmes by students graduated from upper secondary education or with the VE Certificate
- The Vocational Education (VE) Diploma can be obtained after completing 1 to 2 years of continuous programme by students who already possess the IVET Certificate IV
- The High TVE Diploma can be obtained after completing 2 to 3 years of regular programme by students graduated from upper secondary education, or after completing 1 to 2 years by students who already possess the TVE Diploma either as a regular or continuing programme

¹² The new body is called the National Vocational Consulting and Labour Skill Development Council, but since most stakeholders still use the NTC name and initials, we use NTC in this document.

- The Bachelor Degree can be obtained in 1.5 years or more by students who already possess the High TVE Diploma, either in regular or continuing programmes.

A similar classification applies in the skills development centres under the MOLSW where Skill level 1 (6 months) corresponds to semi-skilled worker, Skill level 2 (+ 6 months) corresponds to skilled worker, Skill level 3 (+6 Months) corresponds to Tradesman, and Skill level 4 (+6 months) corresponds to Supervisor.

3.1.3 TVET delivery system

Based on the above legal frameworks and qualification system, TVET is being provided through various channels:

Public Secondary and post-secondary TVET programmes

- Under the MOES, there are 14 TVET institutions and 8 IVET schools. In 2008-2009, 59 per cent of the almost 18,000 students enrolled in MOES public TVET institutions were in high diploma programmes. Only 40 per cent of all TVET students were enrolled in diploma programmes. Less than 1 per cent were enrolled in certificate programmes.¹³
- MOES universities also provide formal accredited TVET programmes. In 2007-2008, 2,500 high diploma students graduated in forestry, engineering and agriculture at the NUOL in Vientiane. A total of 300 high diploma students graduated in agriculture, business and engineering at the University of Champasak.

Private provision

- Total student enrolment in private TVET institutions in 2008-2009 was approximately 22,000 across all programmes in 78 national private schools. These schools typically delivered TVET diploma-level courses in English learning, Information Technology (IT),, business, mechanics, food processing, automotive and electrical engineering.¹⁴

Non-formal provision

- Non-formal TVET is implemented under the supervision of the MOES in IVET schools and also in three centres in Vientiane, Luang Prabang and Champasak, as well as in 321 CLCs across the country. In 2008-2009, the three centres provided skills training courses of five days to three months for a total of 1,154 persons through short courses providing basic vocational skills in wood processing, construction, chicken, frog and fish raising, mushroom cultivation, cookery and beauty (ADB, 2010).
- The MOLSW runs four skills development centres offering short and long term training courses in IT, auto repair, carpentry, furniture, garment, electronics, electricity, hospitality and construction, mainly for school drop-outs and unskilled adults. In 2008-2009, a total of 2,660 enrolments were registered in short courses provided by skills development centres. Also, some centres like the Lao-Korean VT Centre were providing short fee-based courses in computing.

As summarized in Table 8, several line ministries are providing specific TVET programmes through institutions under their authority. These institutions aim to produce workers required for specific occupations and/or industries.

13 Source: Asian Development Bank (ADB) Lao PDR. 2010. *Preparing the Strengthening Technical Vocational Education and Training Project Final Sector Assessment Report*.

14 Source: ADB Lao PDR. 2010. *Preparing the Strengthening Technical Vocational Education and Training Project Final Sector Assessment Report*.

Table 8: TVET delivery system under other ministries and organizations

	TVET Institutions	Number of trainees	Content of courses	Assistance
Ministry of Public Health	University of Health Science and 12 Nursing schools	In 2008/09 13 master degrees, 52 specialists, 308 bachelor degrees, 227 higher diplomas, 90 diplomas, 638 nursing certificates		Luxemburg and World Bank in 3 nursing schools; ADB in 3 other schools; JICA for upgrading to bachelor degree
Ministry of Finance	3 training institutes	In 2008/09 4,500 trainees in certificate and diploma courses	Finance; banking, accounting	Viet Nam through MoU from 2004 to 2010
Ministry of Agriculture and Forestry	5 specialist training institutes	In 2009: 448 students graduated	Crop production, livestock, fisheries, forestry, irrigation	Swiss cooperation 2009-2012; Rockefeller Foundation for teacher development in 2008/09
Ministry of Information and Culture	5 training institutes			
Ministry of Justice	3 training institutes			
Bank of Lao	1 training institute			
Lao Women's Union	3 training centres	In 2008/09 440 trainees in non-formal courses	Cookery, garment, hairdressing, beauty,	
Lao Revolutionary Youth Federation	10 training centres	In 2008/09 900 trainees	Languages, beauty, tailoring, computing	
Community Learning Centress	321 centres across the country	1,608 trainees in 2008/09	Literacy, equivalency and short basic vocational skills	

Source: ADB 2010 and MOES, 2011.

As mentioned above, there are now two types of institutions in the formal system: TVET institutions and Integrated Vocational Education and Training (IVET) Schools.

- TVET institutions include technical, vocational or technical/vocational schools or colleges where the traditional divisions between vocational and technical or between school and college have been blurred. They offer up to three-year programmes for lower secondary school graduates and a variety of programmes at post-secondary level for upper-secondary school graduates. TVET institutions are administered by several governmental bodies (Ministry of Education and Sports, Ministry of Agriculture, Ministry of Finance, Ministry of Transportation and Ministry of Culture and Health).
- IVET schools deliver formal TVET and non-formal basic vocational training to different target groups, including adults. They are a new kind of TVET schools in rural areas, developed with the support of GIZ. So far, there are eight IVET schools under the MOES. According to the TVET Master Plan 2008-2015, the MOES is planning to further expand the network of IVET schools to cover all provinces (see below).
- The District Education Bureaus, under the MOES and the Department of Non-Formal Education, are responsible for non-formal education institutions in their own districts. Non-formal education programmes in Lao PDR target three groups: (a) children and young adults aged 6-14 who did not have an opportunity to attend primary school and are willing to follow literacy and continuing education courses, (b) adults aged 15-40 who are illiterate and are willing to follow eight literacy and continuing education courses, and (c) youth and adults aged 15-24 who do not have definite vocations and are willing to follow basic vocational training (UNESCO, 2008).

3.1.4 TVET performance

There is a remarkable increase in enrolment in TVET. However, at present, most TVET enrolment is at post-secondary level and there is limited enrolment at the secondary level. As can be seen in Table 9 below, certificate-level enrolments have decreased rapidly since the mid-2000s, down from 2,675 in 2005-06 to 26 in 2009-10. Enrolment in TVET as a whole increased significantly over the last decade, particularly in private institutions and at post-secondary level, reaching 53,800 in 2009-2010 (UNESCO 2011, p. 21).

Enrolment in MOES TVET institutions was 15,500 in 2001-2002 with 3,500 students in certificate courses. This rose to 25,000 in 2005-2006; however with only 2,500 in certificate courses. This was partly due to a new government policy, as well as the increasing interest of TVET schools to attract fee-paying students with a view to complementing the limited financial resources coming from the national budget.¹⁵

As of 2008-2009, 60 per cent of the 18,000 students in the institutions under the MOES were in high diploma programmes, with 57 per cent of all students enrolled in business programmes. Only 40 per cent of all students were enrolled in (middle) diploma programmes. Only 83 students were enrolled in mechanics, 113 in carpentry, 899 in construction, 1,179 in mining and 883 in hospitality. In total, these priority fields in the Master Plan represented only 4,000 students.

In addition, 78 private TVET institutions hosted 22,000 students, almost all of whom were enrolled in business, finance, marketing, English and IT.

Table 9: Enrolment in TVET and higher education

	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11
Master's degree	NA	NA	NA	387	736	1,296
Bachelor Total	30,574	37,903	37,480	53,780	64,759	68,935
Bachelor (public)	25,465	29,585	30,750	42,298	50,937	54,433
Bachelor (private)	5,109	8,318	6,730	11,482	13,822	14,502
High diplomas	19,073	25,903	40,314	46,022	36,492	40,134
High diplomas (public)	9,056	8,263	16,578	23,038	17,060	22,789
High diplomas (private)	10,017	17,640	23,736	22,984	19,432	17,345
Middle diplomas (public)	22,652	20,466	15,603	12,761	14,009	18,859
Middle diplomas (MOES)	NA	NA	NA	7,989	10,234	14,821
Middle diplomas (private)	4,020	1,698	501	371	457	NA
Certificate (public providers)	2,675	1,657	643	187	26	1,000 ¹⁶

Source: MOES (with some corrections by the authors).

Regarding transition to labour market and pathways from TVET to further learning, according to a recent tracer study for 1,752 TVET graduates with higher diplomas or diplomas by DVV (DVV, 2011), 68 per cent of graduates found employment after graduation, while 15 per cent were unemployed. A total of 17 per cent pursued further study. Results from the Lao-German school in Vientiane revealed that 85 per cent of graduates at certificate level (mainly in mechanical engineering, electricity, welding and car repair) gained employment after graduation. At first

¹⁵ This situation is the consequence of the analysis included in the ESDP which states that 'the Government is no longer able to afford the expense of vocational and technical education... Current levels of expenditure are not sufficient for schools to offer relevant of high quality training'. One of the recommendations and justifications included in the ESDP was to 'assess the feasibility of charging tuition at TVET schools... Moreover, the need to attract tuition paying students would provide additional incentive for TVET schools to ensure their curriculum is aligned with labour market needs.'

sight, these can be seen as encouraging data, but it should be noted that the majority (63 per cent) of employed graduates were working in state-owned institutions and 25 per cent in private companies. This situation 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.

3.2 Policy issues linked to the key building blocks of TVET

3.2.1 Strategies and plans of TVET

3.2.2.a Key features

The key strategic plans guiding current government initiatives in TVET include;

- the TVET Master Plan,
- the Education Sector Development Framework
- the Education Sector Development Plan (2011-2015).

In 2007, the Lao government issued the Master Plan for the Development of TVET for 2008–2015, building on the earlier TVET Strategy 2006-2020.

With assistance from the Luxembourg government, the Master Plan was developed by an inter-ministerial team in order to provide clear directions and performance indicators to concerned stakeholders. Both the Master Plan and the earlier TVET Strategy are underpinned by three key issues:

- Equitable access
- Quality and relevance
- Management and administration.

Within these key issues, the Master Plan identifies seven strategic areas: (i) Construction, renovation and expansion; (ii) Expand offer and approaches; (iii) Development and improvement of teachers and staff; (iv) Quality assurance; (v) Information system; (vi) Organizational structure; (vii) Formulation of policy and tools at macro level. These areas are further elucidated in 31 main outcomes or indicators and 130 activities, each with its own indicators, responsible organization, budget, and implementation plan.

A second strategic plan is the 7th 5-year Education Sector Development Plan (2011-2015) which emphasizes the following issues:

- Introduction of vocational stream in upper secondary schools
- Increased access by ethnic girls and women to TVET through a voucher system and dormitory accommodation
- Increased private sector involvement in TVET strategy and delivery
- Identification of national skill standards
- Social marketing campaign to improve the poor public perception of TVET

- Strengthen the TVET policy and regulatory framework so that funding for TVET is more demand-side based
- Greater flexibility in employment arrangements for TVET teachers
- Development of an information system to provide data on skill shortages and salary levels for TVET trained workers.

Targets for TVET were set for 2015:

- 40 per cent of TVET students receive scholarships from 2010
- New curriculum programmes meeting labour market demand
- A focus on four priority areas (construction, mechanical maintenance and repair, furniture-making, basic business skills)
- Minimum of 50,000 students by 2015 with 50 per cent female and 20 per cent from the poorest families
- Increased enrolment of students in different types of TVET schools and colleges including upper secondary vocational schools
- 300 new TVET graduate instructors and teachers per annum from 2012
- One TVET college in each province with pathways and articulation to advanced institutions
- Introduction of a voucher system to students, targeting girls and ethnic groups from poor families and provision of dormitory accommodation.

3.2.1.b Issues

1) Limited perspective of strategic plans

While several plans and strategies have been introduced, they lack a single coherent human resource development perspective and a comprehensive skills-building system. Recent key plans such as the ESDF and the ESDP only deal with aspects of formal TVET which are under the responsibility of the MOES. While the TVET Master Plan explicitly covers TVET policies and practices under other ministries, the cross-cutting issues of human resource development were not properly dealt with.

A comprehensive strategy aiming at producing a well-prepared workforce for the new socio-economic challenges of Lao PDR needs to be formulated from the perspective of lifelong learning. This strategy should incorporate different sub-sector strategies such as in formal TVET, non-formal skills training and general education, as well as cross-cutting policy measures such as career guidance, employer engagement and employment services which are all linked into a comprehensive skills-building system.

2) Limited implementation of proposed activities

While several strategies and policies have been developed, a number have not been concretely translated into action. Despite several ambitious targets specified in policy documents, a number of targets still seem to lack corresponding concrete action plans. For instance, although the target of expanding vocational education at the secondary level was included in the ESDF and the ESDP, a detailed action plan, including specific annual interim targets, has not been prepared. While a clear difficulty exists in elaborating action plans for every target given limited available resources, the absence of concrete action plans has the potential to undermine the credibility of government initiatives and to create challenges in obtaining the commitment of concerned stakeholders.

According to a monitoring report on the TVET Master Plan released by the MOESTVET Department in July 2010:

- Among the activities contained in the Master Plan, 10 activities were completed and many activities began to be implemented under the regular plan. Some of these activities do not receive external assistance (especially concerning administration mechanisms and regulations) while others depend on the support of different donors, such as upgrading the equipment of schools.
- However, 44 activities that should have started in 2008-2009 had been postponed, especially the ones that were expected to be implemented under the ADB project which is aiming at strengthening TVET¹⁶ (see section 3.2.9 for more information on ADB project).
- In general, the lack of budget, operational action plans and staff were the reasons for the postponement of activities and the limited implementation of others. Unfortunately, it was not possible to review the budget component due to the lack of available financial data for each activity.

These findings underline the challenge inherent in the fact that a number of prioritized activities cannot be properly implemented due to a shortage of resources. It may be worth designing a plan with improved feasibility and/or preparing a contingency plan in case of improper implementation.

3) Limited monitoring of actual implementation of activities

There has been some progress with regard to the establishment of an effective monitoring system, including the development of a school report format in 2010 covering each school's performance and plans. There is also an annual MOES TVET conference to examine the school-level progress of the Master Plan using this reporting format.¹⁷ However the policy implementation monitoring system needs to be further developed. For example, the annual conference does not include the TVET initiatives of other ministries. Likewise, minimal policy dialogue occurs during meetings of the NTC,¹⁸ which was expected to be the platform to thoroughly monitor Master Plan implementation (replacing the previous TVET Master Plan Monitoring Committee). It is difficult to keep proposed activities on track without a comprehensive analysis of the progress of implementation and without close policy dialogue among concerned stakeholders.

4) Weak linkage between TVET policy and industrial development policy

Industry policies are currently being formulated without a clear regard for securing the required workforce and without close policy coordination between concerned stakeholders. For example, in the 7th NSEDP, there are statements about the promotion of sectors such as agriculture, the processing industry, handicrafts and mining, and about the development of industrial/economic zones. While the importance of securing a competent workforce is properly acknowledged, no explicit measures are proposed to align or adjust TVET policy and programmes with these initiatives. Such weak linkage will constrain not only the development of the economy but also the contribution of TVET to socio-economic goals and priorities.

16 According to information received by the review team during its July mission, the above mentioned activities were delayed and were expected to start at the beginning of the scholar year 2010-2011 with the establishment of the Technical Assistance Team.

17 For more information about the annual conference, see Section 3.2.2.a.

18 See below 3.2.2.b on the limited role of the NTC.

3.2.2 Governance and management system of TVET

3.2.2.a Key features

Several ministries are involved in TVET provision. The establishment of an effective policy coordination and governance system has been a concern. Governance can be examined in two dimensions: horizontal coordination between different ministries and social stakeholders, and vertical coordination between central and provincial governments.

In terms of horizontal coordination, the Prime Minister's Decree on TVET and Skills Development clearly mandates cooperation among the key TVET ministries; the MOES and the MOLSW. This decree identifies synergies and complementarities between both ministries and provides the basis for stronger cooperation.

As a wider policy coordination mechanism, the National Training Council (NTC) has been functional since 2002. It is comprised of 24 representatives from relevant ministries and is chaired by the Deputy Minister of Education. The Deputy Minister of the MOLSW and the Chairperson of the Lao National Chamber of Commerce and Industry are joint Vice-Chairpersons.¹⁹ Three MOES staff are assigned to the NTC for the implementation of its activities. The NTC's responsibilities are in the areas of (i) the development and recommendations of TVET policy, (ii) coordination between public and private sectors in matters concerning skills training, (iii) the establishment, support and monitoring of Trade Working Groups (TWG)²⁰ for identifying occupational/skills areas with representatives of enterprise associations and the public sector, and (iv) determination and development of occupational standards. This coordination system was expected to play a critical role in the implementation of the TVET Master Plan.

Secondly, the formal TVET system is supervised by the Department of Technical and Vocational Education (TVED) under the MOES and the Provincial Education and Sports Service (PESS) under provincial governments. Each PESS is supervising TVET schools and other skills training institutions under its authority using both funds from central government (MOF) and the provincial government budget. This implies some possibility of managerial autonomy of the PESS in terms of concrete TVET policy design and implementation suitable for each province. Of course, any decision of the PESS should be aligned with nationwide policy targets and priorities. Close consultation with the central government is required in advance of policy decision-making in each province. Box 1 provides an example of PESS operations modalities in the province of Champasak.

19 Other members include the representatives of other ministries, national public organizations, vocational associations, state enterprises and experts on TVET and skills development.

20 Nine TWGs were set up under the NTC, hospitality, furniture, garment, handicraft, printing, automotive, construction, etc.

Box 1: Champasak PESS operations modalities

In 2011 the Champasak PESS had 62 staff in 11 departments (administration, inspection, teacher development, TVET, Non Formal Training, secondary education, pre-school, statistics, etc.). The TVET Department was only set up in 2010 and has three staff members. The responsibilities for this new department still have to be identified by the MOES. At present, the department seems to be busy with identifying all activities implemented by the different TVET institutions, including TVET schools under the PESS, non-formal training centres and private colleges.

A Provincial Council was set up three years ago in order for the PESS to involve representatives of the private sector in TVET. It is chaired by the Vice Director of the province and includes the PESS, the Director of the Champasak TVET College and employer's representatives. However the Provincial Council met only once a year and did not allocate any dedicated budget for studies or surveys. At present, it seems to act as a body for dialogue and exchange of information between partners. Further developments should come along with the implementation of the Master Plan and through ADB support. Currently, little coordination exists between the PESS and the Provincial Services of the MOLSW.

As a platform for information-sharing among TVET schools under central and provincial governments as well as concerned government officials, a TVET annual conference is organised. Participants include MOES and PESS officials, public TVET schools under the MOES and PESS, private TVET schools and representatives of the NTC. The conference is chaired by the Vice-Minister of MOES or Vice-Governors of provinces. Topics of discussion include the presentation of best practices, the previous year's performance reports and the sharing of annual plans for the following year by TVET schools, central and provincial governments. While regarded as an important event for sharing information and experiences, no actual decisions are made and any suggestions from participants are only noted as inputs to policy development.

3.2.2.b Issues of TVET governance and management system

1) Limited capacity of TVET in MOES

It is difficult to assess the capacity and performance of the TVET Department under the MOES. However, according to the assessment conducted by ADB, in preparation of the TVET strengthening project in 2010 (ADB 2010), understaffing has been an issue. Only 20 staff were appointed in January 2010, versus a theoretical (planned) staffing of 28. This was due to the long procedures involved in filling the positions. While this matter appeared to have been addressed to a certain degree as the review team was informed that a total 37 staff were later employed, it was found that many staff are distracted from their main work. They are instead involved in daily micro-management of a number of activities specified in the Master Plan or performing administrative work to support external donor projects. While it is necessary to perform such tasks, efforts must also be made to direct the energies of key government employees towards the more strategic aspects of TVET policy and implementation.

2) Limited coordination within MOES

Currently, TVET, general education, higher education and non-formal education departments are under the same ministry, the MOES. This should favour coordination in policy formulation and implementation. However, several issues of coordination still need to be addressed within the MOES, specifically the strategic alignment of and practical coordination among key departments. For example, it was found that policy dialogues between different departments have not been properly implemented on the issue of linkages between formal TVET and non-formal education, TVET and general education and TVET and higher education. This can be partly attributed to

the fact that many reform initiatives are run based on fragmented external support, while the coordination issue is not fully taken into account.

3) *Limited role of the NTC*

While the NTC is expected to have a strong role in policy coordination, the situation is far from the envisioned plan set up in 2002. The NTC meets only once a year. There are only two staff assigned to perform secretarial work. The topics of the meetings have generally been limited to the activities of the TWGs. At present, there are only two active TWGs (for the printing and furniture sectors) busy developing short training courses for in-service training of workers.

In addition, while employers are involved in the TWGs, it appears that their participation does not significantly affect the policy decision-making process.²¹

In sum, the NTC is not fully fulfilling its mandated role to oversee the implementation of key TVET and skills development strategies and policies, nor does it provide a platform for discussion for the main stakeholders, more particularly employers' organizations.

4) *Limited coordination between central government and PESS*

At present, it cannot be said that there is close policy coordination on TVET between the central government and the PESS. While, as mentioned earlier, the annual MOESTVET conference appears to be a platform for information sharing, it provides little opportunity to coordinate the policies of central and provincial governments. While the NTC is responsible for being the forum for policy coordination, representatives of provincial governments are not regularly participating in NTC meetings. This might not be viewed as a real concern since the main role of the PESS on TVET is to implement national policies rather than implementing its own provincial policies. However, considering the importance of contextualizing TVET programmes to the specific needs of local labour markets, national policies must be adapted locally and the policy capacity of PESS TVET staffs should be strengthened significantly.

5) *Ineffective use of school autonomy*

It is acknowledged that TVET institutions already enjoy wide financial autonomy in several respects. For example, TVET schools can use most of the funds generated through commercial activities (such as the renting of premises and the proceeds from selling products from workshops) without the strict control of the central government. TVET schools are also able to offer and adjust several fee-paying courses at different levels with the tacit permission of the government.

However, such autonomy does not necessarily improve the effectiveness of the TVET system if no adequate linkages with local employers are established and without the proper information system to monitor the results of such autonomy, particularly regarding the quality and relevance of TVET programmes. For instance, the Champasak Regional Chamber of Commerce stated that students in TVET schools learn only theory and are lacking the basic skills needed for sectors such as construction. Also, TVET schools have had a tendency to offer more fee-paying courses at diploma and higher levels, thereby attracting more students while exerting minimal efforts in addressing decreasing enrolments at the certificate level. Without suitable guidance and support from the government, school autonomy itself will not bring about beneficial results to national development.

²¹ During interviews conducted by the review team, the team received informal complaints from employers representatives that their concerns and inputs were not paid due attention by the government.

Efforts must be exerted to enhance the accountability of individual schools. In addition, measures must be taken to encourage dialogue between schools and local employers. By harmonizing the TVET programmes offered by schools with the needs of the local labour market, the benefits of autonomy will be fully achieved.

3.2.3 TVET financing and funding system

3.2.3.a Key features of funding to TVET

As outlined in Part 2 of this report, since 2009 TVET has received increased priority from the Government. This is evidenced in the ESDP which states that the current investment share for TVET, including national and external resources, is 15.3 per cent compared to 10.7 per cent in the ESDF. The document also underlines that this was achieved to the detriment of basic education and is creating challenges for meeting the EFA and MDG targets (ESDP, p. 12).

Additional evidence is given in the MOES Financial Report about the TVET budget managed at the central level, where sharp increases as well as substantial changes in the breakdown by category of expenditure can be seen (see Annex 4).²² Thus, considering budget in constant prices, there was a 32 per cent increase in 2009-2010 in comparison to 2008-2009 and again a 44 per cent increase in 2010. This translates in total to a 91 per cent increase in two years.

Allocations have been made in the ESDF (and confirmed in the ESDP) to non-formal education, amounting to 4 to 4.5 per cent of the planned education budget. This was a higher share than formal TVET in 2008 but is foreseen to remain stable once formal TVET receives more funding.

The government is providing financial assistance to TVET students through tuition fee exemption and living allowances. Assistance varies according to students' socio-economic situations and the fields and levels of study. For example, certificate-level TVET students attending certain manufacturing sector programmes will be 100 per cent exempted from tuition fees and also entitled to receive living allowances. Students attending diploma-level business courses need to pay the full cost of tuition and are not eligible for allowances. Financial assistance to students is being used as a leverage to attract students to TVET programmes of national priority and to promote inclusive education in TVET.

3.2.3.b Issues of TVET funding system

1) Lack of 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 (ADB 2010, p. 66). Only 10 per cent of revenues generated by individual schools needs to be reported. The remaining 90 per cent can be used at the discretion of the institution and is not reported. These resources are said to be quite substantial in some cases.

²² The calculation takes into account that 7 out of the 22 TVET institutions under the MOES are centrally managed.

The second reason may be the fact that the regular budget (including salaries and operating costs) for TVET schools managed by the provinces goes directly from the MOF to the PESS, and it is then allocated by the PESS to schools without central monitoring and aggregation of data.

This issue may also be exacerbated by the fact that ministries and provinces can mobilize external donors without consultation with the TVET Department in the MOES. This makes it difficult for the central government to have a clear picture about total financial inputs across the country. As part of the ESDF 2009-2015 (p. 43), the government recognized that financial arrangements and mechanisms had to be reviewed and revised in order to reduce resource disparities across provinces.

2) Absence of suitable design of block grants and unit-cost schemes

Another important issue is the objective of developing the use of block grants for school financing which was introduced in the ESDF and reaffirmed in the ESDP 2011-2015. Recently, the Department of Technical and Vocational Education (DTVE) has set out plans to apply unit-cost based block grants to TVET schools.

However, consideration must be given to the peculiarity of TVET when calculating unit costs and funding. Unlike general education, the actual unit cost of TVET programmes can vary greatly. For example, the unit cost of business administration will be much lower than that of mechanical engineering.

3) Financial assistance to students

Currently, the provision of financial assistance is regarded as an important means to attract students to TVET areas of national priority and to decrease the economic barriers to TVET access and participation. However, such measures will not be effective if the reasons for non-participation are not economic in nature. For example, there is some anecdotal evidence that professions in the cookery and mechanical fields, among others, are not well-received and have a devalued status.

Financial incentives such as vouchers can be a good initial solution aimed at promoting enrolment in TVET. But this will not succeed in the long term if the quality and relevance of TVET delivery do not improve substantially. For instance, providing scholarships is said to be less effective, particularly in Vientiane, in attracting more students to certificate courses. Scholarships have been successful in Luang Prabang, Huaphan, Champasak and other schools or colleges (See Annex 9 for details). This suggests that financial measures are more effective for students from rural communities. To attract students from urban areas, different measures need to be explored.

4) Delayed implementation of The National Skills Development Fund

According to Lao labour laws, firms should pay 1 per cent and workers 1.5 per cent of their wages to the National Skills Development Fund (NSDF) managed by the MOLSW. This was introduced in the TVET Master Plan in 2008 and has been confirmed as part of the 2010 Decree on TVET and skills development. However, it seems that little progress in setting up the NSDF has been made thus far. Discussions are ongoing at government level about the implementation of the measure. Employers' organizations, in particular Chambers of Commerce, have not been involved so far in discussions.

The introduction of a levy on payroll can be, among others, informed by international experience and regional benchmarks. Annex 5 provides a synthesis of advantages and limitations of such schemes. The key advantages of such schemes are related to stability and sustainability of resources, particularly in the context of unstable public budgets.

3.2.4 TVET qualifications and programmes

3.2.4.a Key features

TVET programmes are currently structured and designed according to the TVET qualification system described in Section 3.1. To secure equivalency between different academic and vocational qualifications, a comprehensive National Qualification Framework (NQF) is currently under development. A draft NQF proposed by the VEDI covers skills training, TVET and higher education, as shown in Table 10. Currently, it has eight proposed levels²³, Levels 1 to 4 are for certificate levels, Levels 5 and 6 for diploma and high diploma, Level 7 for bachelor degrees and Level 8 for higher degrees.

Table 10: Proposed National Qualifications Framework in Lao PDR

Qualifications Level	Higher Education (MOES)	TVET (MOES)	Skill Training (MOL)
8	Ph.D. Specialists Master's Degree Specialist 1 Graduate Diploma	-	-
7	Bachelors' Degree	Bachelors' Degree	
6	Associate Degree	Higher Diploma/High Technician	Foreman/supervisor/Skilled level 4
5		Diploma/ Technician	Trades man/Skilled level 3
4		Diploma/Certificate 4/ Skilled worker	Skilled Labour/Skilled level 2
3		Certificate 3/Semi-skills	Semi-Skilled/Skill Level1
2		Certificate 2/Practical-skills	Award
1		Certificate 1/Basic-skills	Award

At the same time, the VEDI is developing the National Vocational Qualification Framework (NVQF) with five levels, but this initiative has not yet been officially approved by the MOES. Also, skills standards have been developed through support from InWent/GIZ Germany. From 2008 to 2010, throughout more than 20 workshops, skills standards for seven occupations²⁴ and Training Packages based on these skills standards were developed.

Table 11: Lao PDR Mutual Recognition Framework

GMS	LAO PDR (Ministry of Labour and Social Welfare)
Certificate level 1	Certificate I
Certificate level 2	Certificate II
Certificate level 3	Certificate III
Certificate level 4	Certificate IV

²³ See section 3.1.2 for a discussion on the architecture of the TVET system

²⁴ Graphic Designer, Offset Operator, Finishing Operator, Repairing of printing machinery, Female Cloth Tailor, Brick Layer, Cabinet Maker.

The VEDI plays an important role in the development and management of the qualification framework and TVET curriculum development and management, while developing national curricula and reviewing the curricula submitted by TVET institutions and other training entities (including the skills training curricula of MOLSW).

All TVET curricula must be accredited by the MOES through the verification process of the VEDI. This is to ensure that all requirements such as qualifications and number of teachers are met, including available equipment, classrooms, etc.

At present, TVET curricula for certificates and diplomas contain two parts. A total of 80 per cent of the course content is determined nationally and 20 per cent may be adapted to local needs. This local part increases to 40 per cent for the Non-Formal Training Centres under the MOES. TVET curricula are comprised of theory and practical elements. Students in the formal TVET are provided with 2-3 months practical training during their two or three year programme. The main TVET curricula include business and accounting, agriculture and industrial programmes. TWGs in printing and furniture are participating in the elaboration of the national curricula as an active partner of the VEDI.

3.2.4.b Issues

1) Need to accelerate the shift towards competency-based curricula

Currently there are efforts to transform TVET curricula into competency-based curricula, through the cooperation of the VEDI, the ADB and other donors. This should be expedited, not only in areas receiving donor support but also in the areas which are not supported by aid agencies. Closer coordination between ministries responsible for TVET programmes will assist in making optimal use of financial resources from the government and external donors.

2) Institutional shortcomings in promoting practical training

While most TVET programmes include a significant practical training component, overall it was found that 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, especially in the workplace. For example, there is no official policy in place regulating work-based programmes such as apprenticeship or internship schemes.²⁵ Weaknesses in practical training are echoed in persistent complaints from industry regarding the lack of competence of TVET participants.²⁶

3) Unclear differentiation of TVET programmes at different levels

At present, the government is attempting to rehabilitate the certificate TVET (9+3) programme in an effort to expand the supply of the intermediate skills workforce. This is being pursued in TVET schools which run post-secondary programmes. 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. Programme contents should be analysed and compared to define relevant and detailed description of each level in terms of learning outcomes.

25 Some NGOs are running apprenticeship programmes as a part of non-formal training programmes, but there are no official apprenticeship programmes in Lao PDR.

26 As can be seen in section 3.1.4, at first sight the labour market performances of TVET graduates seems to be satisfactory, for example, with a 68 per cent employment rate (DVV, 2011). However, the majority (63 per cent) are working in state-owned institutions and 25 per cent in private companies.

4) *Limited adaptation of curriculum to provincial context*

As explained, individual schools are allowed to adjust up to 20 per cent of course hours to meet the needs of the local labour market. However, due to the lack of capacity of school staff, such adjustments have rarely been made. Instead, schools are simply increasing the course hours of national curriculum subjects. To address this situation, the VEDI is providing in-service training in curriculum development to teachers and local education staff. However, those who complete this training may still not have acquired the necessary capacity to introduce the appropriate adjustments. In addition, there are weak linkages between schools and local employers.

3.2.5 TVET teachers

3.2.5.a *Key features*

Teachers in public TVET schools have, in principle, the status of permanent employees and the decision to recruit them is made by the central government. The VEDI and the NUOL play a critical role in pre-service TVET teacher training. Until 2008, the Faculty of Engineering of the NUOL was providing the theory part of TVET teacher training at Bachelor level, whereas the VEDI was delivering the practical training of TVET teachers and trainers at Higher Diploma level. In 2008 the MOES decided to expand teacher training capacity to some selected TVET institutions. In total, 600 new teachers will be trained each year during the next five years and the MOES is ready to allocate appropriate resources based on a yearly plan and curricula submitted by schools.

Until now there has been limited coordination between the Faculty of Engineering of NUOL and other TVET institutions. Although the Faculty and the VEDI are in close proximity to each other in the university campus in Vientiane, no evidence of coordination was identified by the review team. In an effort to address this situation, a policy workshop was organized in September 2010 in cooperation with the MOES, NUOL and GIZ. Suggestions were made concerning a new model for TVET teacher training and regarding clarification of roles among the involved institutions.

In-service training of TVET teachers is quite widespread but appears to be implemented in a somewhat random and uncoordinated manner (ADB, 2010). During 2008-2009, 61 separate training or study programmes ranging from one day to one year were undertaken by TVET directors, officers and teachers, either in Lao PDR or abroad. The VEDI conducts in-service training for a total of 150 teachers (pedagogy and technical fields) each year.

3.2.5.b *Issues of TVET teachers*

1) *Low qualification of TVET teachers*

Teachers' qualification levels are very limited. In a summary of the entire teaching staff involved in TVET in the MOES, outlined in the 2007 Master Plan, two persons had a PhD, 29 a master's degree and 160 a bachelor's degree. A total of 793 teachers possessed a higher diploma qualification or lower. Many teaching staff were found to be lacking real working experience. The 2010 ADB assessment report (ADB 2010) confirmed this finding. It indicated that in 2009, only 20 per cent of the teachers were degree holders, 42 per cent were high diploma holders and 37 per cent were holders of a diploma or lower qualifications. Thus students enrolled in high diploma programmes are often being taught by teachers who have only the same level of qualification.

Teachers lack relevant pedagogical preparation. During the four-year bachelor's degree programme, students are only required to complete a four-week internship in a TVET school and four weeks working in a company. Combined with the limited relevance of the practical training

available in schools, this reinforces the theory-based orientation of the TVET system which undermines its labour market relevance and its attractiveness to students.

Teachers' training needs are important and a plan should be established to address their skills gaps. The VEDI has made proposals for increasing teachers' qualifications through dedicated training during vacations, but no clear evidence of progress on this has been seen. For instance, at present, more than 1,500 teachers from the MOES have yet to undergo pre-service training.

Moreover, the teacher training capacity of the NUOL and the VEDI has been assessed as not in accordance with the ambitious target of TVET expansion set by the government.²⁷

2) *Low salary of TVET teachers*

Attracting good quality teachers is at the core of policies aimed at increasing the quality of TVET. However, there is evidence that TVET teaching is not currently seen as an attractive profession. A tracer study carried out by GIZ in 2010 on the career development of TVET teaching graduates suggests that only 42 per cent of graduates are teaching at a vocational school (GIZ 2011). Interviewees highlighted that work conditions, wage structure and career opportunities were not attractive compared to other positions on the labour market where on average, salaries are about three times higher (about USD 200 per month in the private sector compared to around USD 80 for a teacher.)²⁸ Another study (Dewar Wilson and Khamboung Sacklokham 2009, p. 28) stated that teachers live on the poverty line. According to the study teacher salaries relative to GDP per capita are low compared to neighbouring countries. For example, secondary teachers' salaries are at 0.965 GDP per capita compared with 2.5 times GDP per capita for teachers in other countries in the region. Improvement of teachers' salaries, selection and recruitment remains a pressing policy issue. One option would be to conduct pre-recruitment procedures, with the objective of training only those applicants who are truly committed to the teaching profession. In addition, incentives for trainee teachers could be established.²⁹

The common practice in TVET colleges to enrol substantial numbers of fee-paying students means that teachers can double or even triple their salaries through extra teaching hours. This practice is understandable due to the low levels of basic salaries, but it also has dramatic implications, including 'preventing the recruitment of much-needed young talent and deteriorating the quality of teaching.' (GIZ 2011, p. 26).

Several stakeholders mentioned during the review that a decree on increasing teacher salaries by 60 per cent is due to be announced. Such increases should come as part of a wider policy approach concerning all issues linked to recruitment, career development and working conditions.

3) *Limited mobility of TVET teachers*

Upward career growth is not possible for teachers in schools where they are initially employed, so career development is rather static. It is possible for TVET institutions to hire teachers for a short period, but this happens very rarely. Even in non-formal centres almost all teachers are permanent staff, although some courses are organized only for a few weeks or months a year in their teaching field. Career progression is generally limited to a 1.5 per cent salary increase every two years over a span of 15 years (Dewar Wilson and Khamboung Sacklokham 2009, p. 28).

27 GIZ (2011) assessed in 2011 that up to 5,000 teachers and trainers needed to be trained and employed from 2010 to 2020, more than ten times the current capacity.

28 See section 3.6.2.

29 At present, a dedicated scholarship of LAK70,000 exists for some trainee teachers, but this cannot be considered as a real incentive as the amount is very low.

3.2.6 Quality assurance system

3.2.6.a Key features

With a view to improving quality in education to meet regional and international standards, and to building trust in education, a specific Strategic Plan for Education Quality Assurance for 2011-2020 was issued via a Prime Minister's Decree in 2010. Among the seven components of the Strategic Plan, six concern TVET, including examination, assessment, educational competitions and the national qualifications framework. The TVET programme specifies the development of quality standards for TVET institutions, the development of mechanisms for self-assessment, internal assessment and external assessment, the establishment of a QA unit in each institution, the organization of a team of assessors with TVET directors and TVET Department staff, and the establishment of a council for TVET institution quality accreditation with the support of the ESQAC.³⁰

ESQAC has a mandate to set up testing and evaluation of students and to develop standards and quality assurance procedures for all types and levels of education provision, including public and private TVET providers. Some of ESQAC's first achievements include the testing of students at the third grade level as well as the development of a manual for quality assurance for TVET schools.³¹ UNESCO provided support towards the development of this manual through the Cap-EFA Laos programme.

Since 1993, quality assurance criteria in adult education were developed in the following areas: curriculum, teaching/learning methodology and assessment of learning outcomes. As for adult literacy, there are existing quality criteria on curriculum, learning materials, facilitators' training, teaching/learning methodology and assessment of learning outcomes.

3.2.6.b Issues

At present, ESQAC activities are limited, due to staffing and resource constraints. During the field missions, the review team was unable to find evidence of a strong TVET quality assurance system of assessment and examinations, but received information that the new system would be established during 2011-2012. At present, each school is conducting assessments at the local level without the involvement of representatives from the labour market.

Enhancing quality assurance of assessments of learning outcomes should be a priority. For instance, the intention to develop new competency-based curriculum objectives and outcomes require new forms of assessment. 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. There is thus a need to clarify the mandate and responsibilities of ESQAC, particularly the new team of assessors and inspectors.

Finally, the development of the QA manual and its implementation will have little impact if there are no initiatives to actually address the gaps identified through the related evaluation process.

³⁰ See above section 2.2

³¹ See above section 2.3.2

3.2.7 Public-Private Partnership in TVET

3.2.7.a Key features

Currently, public-private partnership in TVET is being achieved through two modalities. One is the participation of employers in policy-making and implementation, mainly through the NTC and TWGs. The other modality involves the supply of TVET by private providers.

In relation to employer participation in policy-making and implementation, the Chair of the Chamber of Commerce and Industry is designated as the vice-chair of NTC. Also, the two TWGs for furniture and printing are led by employers. In January 2011, three new TWGs were established for priority skill areas including hotel and restaurant, construction and mining industry.

The number of private TVET providers has rapidly increased in recent years (57 new vocational training centres and 88 new colleges since 1995)³². Private providers need to be accredited by the MOES if they wish to award officially recognized TVET certificates and diplomas. The major fields of private TVET are clerical occupations and service sector-related areas such as English, business, finance, banking, IT, tourism, etc. The Department of Private Education issued the Strategy for Promoting Private Education in March 2011 as a national policy to encourage the active participation of private providers in almost every education sub-sector. Major initiatives proposed include the provision of land concessions for building training infrastructures, income tax reduction, and bank loans.

3.2.7.b Issues

1) Weak role of employers

Most employers in Lao PDR are small and medium-sized businesses. Except for in a few booming industries such as mining and hydropower, a large number of employers are still relying on recruiting unskilled workers. Thus, it cannot be said that there is currently a strong employer interest in skills development. Despite this limitation, there is much room for enhancing the role of employers in TVET. Private sector intervention will generally not happen without facilitation by another party, whether it be government, donors or NGOs. Employers are more likely to engage in skills development at any level, if the benefits of doing so are apparent, the business environment is favourable and there is minimal bureaucracy attached. Their engagement is most effective if it takes place early in the planning process.

At the national level, the participation of employer representatives in the NTC does not seem to be based on a thorough internal consultation process within employer organizations. This may contribute to the limited impact of their involvement. Systematic involvement of employer representatives is absent at the provincial level.

At the sectoral level, there are only a few TWGs. Their main focus has been the design and implementation of specific training programmes in certain geographic areas (e.g. Vientiane). They have had little impact on national policy issues such as curriculum development and qualification system design. Employer involvement in such issues appears to be as a result of individual invitation, implying no collective engagement. In short, there still exists a strong need to improve the role of employers. They should be encouraged to give priority to recruitment of skilled workers holding TVET qualifications and to cooperate with TVET institutions to accept students for internship.

32 According to the ADB (2010), there were around 500 private providers for every education sector.

2) *Limited role of private providers*

Although there has been a considerable expansion in the number of private providers, this does not necessarily bring about favourable results to the overall development of TVET. For example, private providers have been focussing on middle and high diplomas as well as bachelor's degrees in the fields of business administration, banking, IT and English. These fields are preferred by Lao youths but the programmes are of very low quality.³³ Saturation of provision in these areas will not contribute to addressing the skills mismatch that the Lao economy is currently facing.

The quality of private programmes suffers due to the lack of support from the government, a lack of well-trained and stable teaching staff, limited resources, and a limited cooperation with public institutions and private companies.

A comprehensive and active approach from the government is needed to strategically mobilize private providers towards the balanced development of the whole TVET system.

3.2.8 Skills needs information base for TVET

3.2.8.a Key features

The most recent National Census in 2005 provided only basic information about Lao citizens' current status of employment and level of education. The National Statistical Office and MOL conducted a National Survey for Labour Force and Child Labour in April 2011. The report, funded by the ILO, was officially published in January 2013

In the absence of consistent nationwide employment data, there have been ad hoc skills-needs surveys associated with specific donor projects. In 2005 GIZ supported the conduct of a National Training Needs Assessment Survey. It covered six main sectors: wholesale/retail, food processing, garments, industry and handcraft, agriculture and tourism. The ADB conducted a Labour Market Survey in 2010 as a part of a scoping study for a five-year STVET project. This survey covered potential sectors for growth and employment opportunities: mining and electricity/hydropower, garment, textiles, tourism/hospitality, agriculture, wood processing, furniture, handicrafts and manufacturing.

Several attempts have been made to assess the performance of TVET graduates through tracer studies. GIZ conducted National Baseline Tracer Studies (NBTS) in 2005, 2007, and 2009. These surveys covered almost 400 employers/enterprises from different sectors including utilities and transport, finance and insurance, public administration, manufacturing construction, agriculture and forestry, etc. A tracer study for graduates of the Lao-Korean Vocational Training Centre was carried out in 2009 by the Korean International Cooperation Agency (KOICA).

Recently the World Bank started a project focusing on skills needs and the supply capacity of TVET providers (Skills & Knowledge for Greater Growth and Competitiveness in Lao PDR under EAP-Education and Social Protection & Labour). This project is composed of three components: (i) skills assessment of workers and firms, (ii) institutional assessment of skills training institutions, and (iii) a tracer study of graduates employed in the labour market.

³³ These are also the areas that public providers have developed rapidly during recent years. Thus, private and public TVET systems seem to be in competition rather than in complementarity.

3.2.8.b Issues

Despite repeated emphasis on the importance of improving LMI as a basis for an effective TVET system as stated in Master Plan of TVET 2008-2015, several challenges remain.

First, most surveys were initiated by donors such as the GIZ, ADB, JICA, ILO, and KOICA. While all have been fairly useful in providing basic information about the current situation of TVET in the country, most have been implemented on an ad-hoc basis. At present, there is no regular Labour Force Survey. Information on the current employment situation is measured by the Population Census which only occurs once every 10 years. This has resulted in weak information regarding the labour market and hampered comparison and monitoring of labour market trends and developments.

Second, the government has played a limited role in the implementation of the surveys. In most cases the surveys were managed by either the donors themselves or by consulting firms commissioned for the purpose. In general, government agencies have displayed inadequate capacity to manage the survey process, due to insufficient human resources and limited expertise. In some cases, data collection was carried out by the VEDI and colleges.

Third, while the results of the surveys are expected to be reflected in future policy design and implementation, this does not occur on account of the irregular and inconsistent conduct of surveys.

3.2.9 Donors' support

3.2.9.a Major activities

Several bilateral and multilateral donors have been providing financial and technical support to TVET. According to the ADB (2010), bilateral projects that have been conducted or are currently underway include initiatives from Germany (EUR 10 million, Luxembourg (EUR 7.7 million), and Belgium (EUR 1.75 million). Some Asian countries have been supporting selected TVET schools, including Republic of Korea (TVET school in Borikhamsay and three IVET schools), Thailand (TVET school in Savannakhet), and Viet Nam (Vientiane-Hanoi Friendship Vocational School). In addition, multilateral projects led by international organizations have been completed (for instance, a UNIDO-UNDP project worth USD 5.6 million) or are currently ongoing, such as ADB's Strengthening TVET Project (USD 23 million) and the World Bank's skills study projects. The major projects are as follows:

1) GIZ

The Human Resource Development for Market Economy (HRDME) project contains a component on private sector development dedicated to SMEs and a Vocational Training Project (VTP) which covers support to rural development through six IVET schools built and refurbished in 2010 (with the support of the Development Bank KFW), three schools in 2011, and the refurbishment of the Lao-German school in Vientiane. This project allocated EUR10 million for the six IVET schools in 2010 and EUR5 million in 2011.

In addition, EUR2.25 million was earmarked for the following areas: technical assistance to the 6+3 schools and the process of integrating non-formal and formal VET under IVET schools; to public/private partnership via the provision of support to the NTC and to the TWGs, and to dual cooperative schools (Panhong in commercial agriculture, Champasak in tourism, and the Lao-

German school). A key dimension of the public-private partnership element includes direct cooperation between schools and companies in the development of internships.

GIZ is supporting Vocational Teacher Training by providing assistance to the Faculty of Engineering at the NUOL in Vientiane under the framework of a four-year project of EUR4 million, including the provision of a seconded expert. This project aims at defining and implementing quality standards in the training of TVET teachers in the context of a bachelor's degree. It also seeks to target teacher training on basic skills in the context of the non-formal training provided by IVET schools in rural areas, in cooperation with a DVV project.

2) ADB: Strengthening TVET

ADB's Strengthening TVET project is comprised of five parts, (1) improved quality of TVET, (2) increased and more equitable access to TVET, (3) strengthened management and governance of the TVET system, (4) strengthened management and governance of the TVET system and finally (5) effective project management and implementation.

- Under Part 1, the focus will be improvements in the quality of the formal TVET programme in the Priority Skill Areas³⁴ by: (a) developing national skill standards; (b) improving curriculum and TVET packages based on national skill standards; (c) enhancing teacher standards and strengthening TVET pre-service and in-service teacher training; (d) enhancing career counselling and vocational guidance; (e) initiating a social marketing campaign to promote TVET; and (f) upgrading equipment and facilities at public TVET institutions, VEDI, and the Polytechnic College.
- Under Part 2, the project shall increase access to formal TVET programmes at certificate and diploma levels for students from remote areas, including girls, by: (a) establishing a voucher programme, which consists of tuition fee assistance and stipend allowance; (b) constructing student-friendly dormitory facilities; and (c) supporting a review of TVET certificate entry qualifications as well as the development of new entry qualifications procedures.
- Under Part 3, the project shall increase private sector involvement in TVET strategy and delivery by: (a) strengthening the permanent office and increasing the private sector focus of the NTC; (b) establishing or strengthening TWG for the Priority Skill Areas; (c) establishing or strengthening advisory boards at public TVET institutions; (d) providing specialist training programmes to teachers and students through private firms; and (e) providing training programmes to students across a range of skill areas through privately-owned TVET institutions.
- Under Part 4, the project shall strengthen management and governance of the TVET sector by: (a) reviewing and strengthening the policy and regulatory framework for TVET, including increasing flexibility in employment arrangements for TVET teachers and introducing a unit cost funding system for TVET; (b) improving quality assurance in the project institutions; (c) developing an education management information system; (d) establishing a labour market information system; and (e) strengthening the capacity of the management of TVET and the project institutions.
- Part 5 relates to effective project management and implementation.

34 Car mechanics; carpenter; electrical engineering; basic commerce. The focus is on the certificate level.

3) World Bank

In September 2011 the World Bank began carrying out a research project focusing on skills needs and supply analysis.

- **Skills needs assessment:** This is composed of two parts; skills assessment of the working-age population and employer (demand side) assessment. In relation to skills assessment of the working-age population, it aims to collect information on individuals' cognitive, literacy and workplace skills, as well as their education, employment history (including wage history), general health and family structure. Employer (demand side) assessment will be conducted through face-to-face interviews with owners or top managers who can provide information about a firm and its personnel practices.
- **Institutional assessment:** This is to review the supply capacity of TVET institutions. It will be carried out through desk review and the implementation of a slim-version of the SABER (System Assessment and Benchmarking for Education Results) tool recently developed by the World Bank.
- **Tracer Study:** The tracer study will include a survey of 300-500 former students (1, 3, 5 years after graduation) and complement the ADB survey under preparation. The exercise will provide quantitative-structural data on employment and career, work characteristics and related competencies, and information on the professional orientation and experiences of NUOL graduates.

3.2.9.b Issues

At present, not all MOES TVET institutions seem to be covered by external aid. Therefore there is a risk of uneven and inequitable improvements. There is also a risk of creating 'islands of success' which are then difficult to scale up at a system level.

The report on the monitoring of the TVET Master Plan (MoE 2010) provides for the identification of different donors along the different activities and suggests there are possible overlaps in the fields of teacher training, the identification of training needs and tracer studies.

- **Teacher training:** The ADB and the German cooperation are both involved in policy developments concerning pre-service and in-service training of TVET teachers. ADB has committed to work with 11 schools and 4 skills areas. The German cooperation covers 6 different TVET institutions. This complementary work is also found at the central level where the ADB is cooperating with the VEDI and the German initiative with the NUOL.
- **Development of mechanisms for regular training analysis and the establishment of tracer studies:** Both the ADB and the GIZ are involved in work in this area, though there are as yet no clear statements on how the initiatives may operate.

Part 4:

Vocationalization of General Secondary Education

This section examines the policy directions regarding the vocationalization of general secondary education. It draws lessons from international experience to inform national discussion and puts forward some policy questions for further consideration.

4.1 Current approaches in expanding secondary vocational education

This policy option was originally mentioned in the TVET Strategy 2006-2020 and the TVET Master Plan, which states that the Department for General Education (DGE) will progressively integrate vocational subjects into the general education curriculum. It was reiterated in the ESDF 2009-2015 and in the ESDP 2011-2015. A target of 25 per cent of total upper secondary school enrolment in general vocational education was subsequently set (ESDP, p19).³⁵

As of 2011, the Master Plan aims to create a new vocational education stream in academic and TVET streams at the upper secondary level through the introduction of a vocational education curriculum. It is set to offer a combined curriculum of 60 per cent academic subjects and 40 per cent vocational subjects to upper secondary general school students. Upon graduation, students will receive a vocational certificate.

The vocationalization of general secondary education is expected to address twin challenges facing Lao PDR. On the one hand, there are continued demands for skilled workers for economic development. On the other hand, there are few TVET schools available to meet the demands. Considering the small number of TVET institutions and their limited geographical coverage,³⁶ it was decided to utilize the wider network of general secondary schools to provide vocational subjects.

As an initial step, in 2011, three public upper secondary general schools were chosen as pilot schools for this stream. One of these, a Lao-Viet Nam school in Vientiane, is currently offering vocational subjects related to finance to general students who were originally enrolled in the general education stream.

At least two important features of these pilot schools need to be considered. Firstly, the pilot schools are schools for gifted children, funded by the government of Viet Nam. These schools take in students who obtained the highest examination results in lower secondary school. The schools have good learning environments, including well-equipped IT facilities. This will facilitate the successful delivery of for example finance-related vocational subjects in the Lao-Viet Nam School in Vientiane. Yet it is difficult to expect that this model could be easily exported to other general schools which are under-resourced in terms of competent teachers and learning facilities and equipment.

Secondly, based on past experience, the majority of students from these schools go on to pursue university education. It is unlikely that the new stream will affect this pattern.

35 While the ESDF and the ESDP are seemingly sharing common targets, there are slight differences between these two documents. The targets concerning the 25 per cent enrolment in the upper secondary level as well as the number of model schools were specified in both. However, in the ESDP the focus was changed to the number of students while the target of number of model schools was dropped.

ESDF: By 2015, 25 per cent of total upper secondary enrolment in upper secondary vocational schools with 50 per cent female and a minimum of 20 per cent from the poorest families. 20 model upper secondary schools throughout the country by 2015.

ESDP: Have 25 per cent of gross enrolment of upper secondary education enrol in general vocational education with 50 per cent female and 20 per cent from the poorest families by 2015. Model upper secondary schools in every province throughout the country by 2015.

36 A total of 73 per cent of the Lao population lives in rural communities, and the number of dropouts is considerably higher in lower and upper secondary education in these areas. For example, in 2010, a cohort completion rate of lower secondary of 58 per cent was recorded in Vientiane but is only 20 per cent in Salavan province.

4.2 International perspectives

Once scaled up, vocationalization may bring about enormous impacts on the whole education system. For instance, the prospect of enrolling in vocational subjects may attract students who are not inclined to theory-based courses but who face difficulty accessing TVET schools near their homes. In these situations, enrolment at upper secondary general schools could be increased.

Likewise, if the approach is successful in providing gainful employment upon graduation, some graduates may opt to enter the labour market immediately instead of progressing to university.

As a first step in anticipating possible impacts, it is necessary to benchmark this stream using international standards and to examine similar cases from other countries.

The following classifications of secondary-level programmes will be useful in informing our understanding of this approach (OECD, 2010, p. 300):

- General education programmes: These are not designed explicitly to prepare participants for specific occupations or trades, or for entry to further vocational or technical education programmes (less than 25 per cent of programme content is vocational or technical).
- Pre-vocational or pre-technical education programmes: These are mainly designed to introduce participants to the world of work and to prepare them for entry into further vocational or technical education programmes. Successful completion of such programmes does not lead to a vocational or technical qualification that is directly relevant to the labour market (at least 25 per cent of programme content is vocational or technical).
- Vocational or technical education programmes: These prepare participants for direct entry into specific occupations without further training. Successful completion of such programmes leads to a vocational or technical qualification that is relevant to the labour market.

Based on this classification, the new vocational stream at first sight can be seen as similar to the pre-vocational/technical programme. This is because, first, the new stream does not provide vocational qualifications which are designed to meet the specific needs of the labour market. Moreover, as seen above, the current pilot programme is not presupposing the entrance of students to the labour market upon graduation. Therefore, despite some ambiguities, this new stream can be tentatively classified as a pre-technical or pre-vocational programme.

It might be useful to look at similar experiences of other countries. Table 12 summarizes the key features of pre-technical or pre-vocational programmes in selected countries (for more details of the specific models of each country, please refer to Annex 8). For example, pre-vocational education is a long-standing tradition in the Netherlands, and a similar approach to the Lao model can be found in Singapore and Malaysia (after 2012).

Table 12: Comparison of Pre-Vocational and Pre-Technical Education

	Netherlands	Singapore	Malaysia (Before 2012)	Malaysia (After 2012)
Programme Type	Pre-vocational	Pre-technical and pre-vocational	Pre-technical and semi-vocational	Pre-vocational
School Type	Separated schools (VMBO: Pre-Vocational Secondary School)	Separated schools (in Normal (technical) Course)	Integrated programme in the same school (in upper Secondary Academic Schools)	Separate programme in the same school (in lower Secondary Schools as Junior Vocational Education)
Entrance Age	12 years old	13 years	15 years old	12 years old
Duration of Education	4 years	4 years	2 years	3 years
Next Step	Upper-Secondary (MBO: Senior Secondary Vocational Education and Training)	Post-Secondary (Polytechnics, ITE)	Post-Secondary (Polytechnics, Community College)	Upper-secondary (i.e. certificate course of Vocational Colleges) * Vocational college: Certificate programme at upper secondary and Diploma programme at post-secondary level
Existence of Dedicated Secondary TVET	Yes but at different level (MBO after VMBO)	No (Pre-Vocational only) * Except vocational course in specialized schools not for national certificates	Yes at the same level (Dedicated TVET through Secondary Technical Schools with technical, vocational and skills stream)	Yes but at different level (Dedicated TVET at upper secondary certificate programme in Vocational Colleges)

Before delving into a detailed discussion on the vocationalization of general secondary education, it will be useful to first distinguish between pre-vocational and pre-technical programmes. Perhaps the main feature they share is that they do not target direct entrance to the labour market. However, each programme has a different focus. The pre-technical programme prepares students for advanced-level technical education. It can be difficult to clearly differentiate this programme from general education, at least in terms of its emphasis on its generic educational components and the level of educational achievement (even up to university or Masters level). The pre-vocational programme, on the other hand, seeks to prepare students for higher-level vocational education while also targeting students' direct transition to the labour market after graduation.

Thus, pre-technical education can sometimes be regarded as part of the general education stream while pre-vocational education should be regarded as a lower stage of the vocational education stream. This can be illustrated by the case of the Netherlands where pre-vocational education is provided through VMBO (Voorbereidend Middelbaar Beroepsonderwijs; literally, 'preparatory middle-level applied education') and pre-technical (which cannot be clearly differentiated from general education) through HAVO (after HAVO, students are now entitled to enter polytechnics, called Hoger beroepsonderwijs; literally, 'higher professional education'). Please refer to Annex 8 for further information.

Notable features of pre-vocational and pre-technical education can be found in the country cases in Table 12. In short, pre-vocational education at secondary is offered mainly at the lower secondary level and is directed at the continued education of students at the upper secondary level. Meanwhile, vocational education at the upper secondary level is explicitly designed for the purpose of preparing graduates for specific vocations (without of course excluding the possibility of continued education at the post-secondary level).

4.3 Elements for national debate

Plans to introduce a new vocational stream into general upper secondary education may potentially address some of the challenges faced by the TVET system. By offering diversified streams in upper secondary schools and making provision for horizontal and vertical permeability between general education and TVET, TVET schools may be made more attractive and participation may increase. It could also potentially reduce the number of drop-outs in upper secondary education.

However, there are also some concerns. A report prepared by Cambridge education with the MOES in 2009 noted that “the planned streaming will be difficult to implement since the existing upper secondary schools are not prepared to provide a quality vocational training, even in terms of basic vocational training. Significant investments will be needed in equipment and training materials for upper secondary schools if they are to be enabled to provide meaningful and attractive vocational streams.” (Reinsch and Ounnarath, 2009).

Thus, the actual implementation of this model is a real challenge. Many questions have to be addressed. The first concerns the purpose of this stream. That is, what would be the next step for students after graduation - further education or labour market entrance? Are students expected to continue their studies at a higher level of education in the same fields that they have been exposed to in this new stream? Or are students expected to enter the labour market immediately after graduation? At the moment, this issue is not clearly defined in the available policy documents nor confirmed through consultations conducted in field missions for this review.

Secondly, the position of the stream in the whole education system requires some reflection. If the stream is classified as a pre-technical or pre-vocational one, what kind of preparatory knowledge the stream is expected to provide learners? What would be the next step of technical education at universities, or vocational education at post-secondary TVET institutions? What is the relationship between pre-technical and pre-vocational curricula and post-secondary or tertiary curricula? Will there be a specific link or connection between the programmes?

Thirdly, the specific fields of this stream would vary according to their different objectives and institutional design. For example, if the purpose of the stream is to prepare students for the labour market through practical vocational training, then vocational programmes which can be easily taught in a limited number of subject hours will be selected. If the focus is on preparation for more advanced education, then the subjects in the curriculum should be more theory-oriented.

Fourthly, there are concerns about the practical conditions for introducing such an option in upper secondary schools that are already crowded, have poor facilities and lack competent teachers. It

thus makes sense to conduct the pilot testing in good schools that are already well-equipped in terms of teachers, equipment and facilities. However, pilot testing should also be conducted in a rural context, in schools where a number of lower secondary graduates currently do not continue to upper secondary education or where students in upper secondary education drop out before completing the courses. It is highly recommended that the pilot testing be implemented in a variety of schools, including upper secondary schools, and IVET schools, as suggested by Reinsch and Ounnarath (2009).

Part 5:

Conclusions, Recommendations and Points for Further Discussion

This section draws conclusions from earlier discussions and makes, when relevant, specific policy recommendations. The section also highlights some areas where it may be fruitful to have continuing policy discussions.

5.1 Overview

The Government has placed increased priority on TVET in recent years. This has included the production of several policy documents as well as a marked rise in budget allocation, combined with strong support from external donors. As a consequence, there have been several achievements. TVET system reform is set to continue in the areas of rehabilitation of 9+3 TVET programmes, changes of curricula towards competency-based curricula, implementation of a Quality Assurance (QA) system, the vocationalization of general secondary education, and other areas. However, several challenges were identified during the review process and policy recommendations are suggested below.

5.2 Policy Recommendations

1) *Reform the TVET policy coordination system*

Governance of the TVET system encompasses two dimensions: horizontal coordination between various ministries and social stakeholders, and vertical coordination between central and provincial government bodies.

Horizontal coordination: The Prime Minister's Decree on TVET and Skills Development (2010) clearly mandates cooperation among the key TVET ministries; the MOES and the MOLSW. The decree identifies synergies and complementarities between the ministries and provides the basis for stronger cooperation. As a wider policy coordination mechanism, the National Training Council (NTC)³⁷ has been functional since 2002. It is comprised of 24 representatives from relevant ministries and is chaired by the Deputy Minister of Education. However the NTC lacks adequate resources and receives little attention from key stakeholders.

Vertical coordination: At present, there is no appropriate system to manage coordination of central-level and provincial-level TVET activities. Oversight of TVET institutions remains weak. For example, the central government does not have accurate information about the financial situation of TVET schools under the Provincial Education and Sports Service (PESS).

Moreover, despite several attempts to implement comprehensive reform, the scope of TVET development is still virtually entirely limited to the formal TVET system. Linkages between TVET and other skills development areas and other education sub-systems are weak.

Both horizontal and vertical coordination systems need to be strengthened and reinforced, either by redefining and strengthening existing mechanisms or through the setting up of new coordination arrangements and bodies.

³⁷ The name of this body was due to change to the National Vocational Consulting and Labour Skill Development Council, according to the Prime Minister's Decree on TVET and Skills Development of 22 January 2010. However, since the old name continues to be used by key stakeholders, it is used throughout this report.

2) Strengthen strategic alignment of TVET and industrial strategy and policies

The 7th NSEDP strategy recognizes that human resource development is vital for socio-economic development. While there is general consensus about the importance of TVET for socio-economic development, but this is not yet reflected in sectoral and provincial development plans. Greater alignment between TVET policy and these plans is needed.

3) Enhance labour and skills needs information systems

Evidence and measures to support and inform the design, implementation, assessment, monitoring and review of employment-oriented TVET policies are still insufficient. A regular Labour Force Survey (LFS) should be established by the MOLSW with the support of the International Labour Organization (ILO). Surveys to provide information on job vacancies and skills supplies should be undertaken regularly; these would then also support careers counselling and job placement activities by TVET institutions.

4) Establish Information, Advice and Guidance (IAG) and employment services

Information, Advice and Guidance services are needed to provide concrete information on job and learning opportunities to members of the public and students. In-school career counselling services should be introduced at lower secondary school, to support the development of TVET at the upper and post-secondary level. Job placement activities in TVET schools should be strengthened.

5) Enhance the engagement of employers

Despite efforts to strengthen the role of employers in the policy-making process, employers are still minimally engaged with TVET reforms undertaken so far. As a first step to enhancing employer engagement, consideration should be given to encouraging employers to provide skills training while receiving business development support. Efforts should be made to expand the network of TWGs, even in provinces that do not yet have well-developed industrial bases. Public TVET providers should take an active role in establishing provincial TWGs. TWG representatives with substantial industrial base and sufficient capacity, such as in the furniture and garment sectors, should be included in curriculum and qualification development.

6) Accelerate development of National Qualifications Framework

With the imminent establishment of the AEC by 2015, Lao PDR should scale up efforts in developing its national qualifications framework in order to harmonize with the RQF being developed by the ASEAN member states. Increased policy inputs need to be added to the current efforts of the VEDI, with more emphasis on cooperation between the MOES and the MOLSW. However, it is necessary to maintain a balance between efforts around elaboration of key competencies and establishing the right conditions for quality training.

7) Enhance the role of private TVET providers

The role of private TVET providers should be articulated and included in TVET planning. For example, private providers should be included in the QA network. Areas in which private and public providers compete with or complement each other should be identified, in order to direct public providers towards more strategic, high demand areas which cannot be suitably serviced by private providers.

8) Diversify supply of TVET

To increase participation in TVET, diversification of delivery and more flexibility of access are required. Formal apprenticeship programmes could be considered as a measure to provide out-of-school youth with opportunities to acquire practical skills while earning an income. Since this would entail a large attitudinal shift among youth as well as employers, it should be attempted gradually, and should be developed alongside initiatives to promote workplace learning, such as internships. It will also be important to incorporate skills training components into NFE programmes. NFE institutions such as CLCs should be mobilized, in cooperation with concerned ministries and departments.

9) Enhance efforts to secure competent TVET teachers

Current efforts to increase the supply of competent TVET teachers, including the expansion of TVET teacher training capacity and the implementation of in-service training, should be scaled up. Concrete policy actions should be initiated to improve the working conditions, compensation levels and career development paths of TVET teachers. (These issues have been explored in previous studies, such as the study conducted by GIZ in 2011.) To complement such efforts, coordination between the VEDI and the NUOL Faculty of Engineering should be improved.

10) Strengthen institutional arrangements for effective implementation of TVET QA system

Quality management of TVET institutions and programmes is vital. The MOES has explicitly decided to adopt an incremental approach to improve the quality assurance of TVET institutions, starting with a self-assessment procedure. To achieve an effective QA system, close examination of the division of roles between the ESQAC and other organizations such as the VEDI needs to be carried out. The recently constructed regional QA network should be strengthened. Implementation of the QA guidelines should be an integral part of ongoing TVET performance monitoring and improvement.

11) Establish a sustainable and output-based financing system

Underfunding of the TVET system has resulted in out-dated technical equipment, inadequate teacher training and, in general, unsatisfactory quality of practical training. While the government has been increasing financial support, the expansion of public investment is not yet complemented by private investment from employers. This could be achieved through compulsory measures as well as through schemes to attract voluntary investments from employers and individuals. One compulsory measure, a payroll training levy on employers, is already stipulated in labour law but has yet to be implemented. Voluntary measures could include incentive schemes such as tax credits for employers' training investments.

There should be concurrent efforts to enhance the cost-efficiency of public funding to TVET institutions. This would also improve stakeholders' potential buy-in for mechanisms such as training levies. Performance-based and demand-oriented funding schemes will increase efficiency and provide incentives for concerned actors. At the same time, there should be consideration of how to minimize the risk of excluding disadvantaged people who are the primary targets of TVET (the so-called "cream-skimming effect").

12) Conduct further policy dialogue about effective expansion of vocational education at secondary level

The background to plans to expand vocational education at secondary level is clearly stated in the ESDP 2011-2015, which notes the limited supply of skilled workers as a result of a sharp decline in enrolments at the certificate level of vocational education. Thus the government is currently considering the introduction of a new educational stream into general secondary schools. This can be regarded as the introduction of pre- or semi-technical and vocational education, with a different objective from that of TVET.

While this stream has the potential to provide general students with opportunities to acquire basic practical skills, several issues need to be considered. These include the purpose of the approach, ways of achieving the purpose, and required changes in institutional settings and policy measures. Policy dialogues around these issues should be evidence-based and supported by a rigorous assessment of the possible contributions and constraints.

To support the policy discussion, at least two measures need to be urgently initiated. First, an analysis of available work opportunities should be conducted. Second, there should be analysis of the supply capacity, and examination of existing gaps in schools. This should be supported by detailed financial analyses with corresponding feasible targets and strategies. Following a thorough examination of these two measures, there should be concrete policy dialogue on specific issues raised in Part 4 of this review.

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Annexes

Annex 1: Lao PDR at a Glance

Poverty and social

	Lao PDR	East Asia & Pacific	Lower-middle-income
2011			
Population, mid-year (<i>millions</i>)	6.3	1,974	2,533
GNI per capita (<i>Atlas method, US\$</i>)	1,130	4,248	1,772
GNI (<i>Atlas method, US\$ billions</i>)	7.1	8,387	4,488
Average annual growth, 2005-11			
Population (%)	1.5	0.7	1.6
Labor force (%)	2.7	1.0	1.3
Most recent estimate (latest year available, 2005-11)			
Poverty (<i>% of population below national poverty line</i>)	28	..	..
Urban population (<i>% of total population</i>)	34	49	39
Life expectancy at birth (<i>years</i>)	67	72	66
Infant mortality (<i>per 1,000 live births</i>)	34	17	46
Child malnutrition (<i>% of children under 5</i>)	32	5	24
Access to an improved water source (<i>% of population</i>)	67	90	87
Literacy (<i>% of population age 15+</i>)	73	94	71
Gross primary enrollment (<i>% of school-age population</i>)	126	111	104
Male	130	110	106
Female	122	112	102

Key economic ratios and long-term trends

	1991	2001	2010	2011	
GDP (<i>US\$ billions</i>)	1.0	1.8	7.2	8.3	
Gross capital formation/GDP	..	14.1	24.3	27.4	
Exports of goods and services/GDP	13.0	28.5	35.5	37.7	
Gross domestic savings/GDP	..	4.8	22.0	21.2	
Gross national savings/GDP	..	5.7	18.9	17.3	
Current account balance/GDP	-10.7	-8.3	-5.4	-10.1	
Interest payments/GDP	0.3	0.6	1.1	0.9	
Total debt/GDP	182.0	141.7	78.7	74.2	
Total debt service/exports	6.2	8.7	11.4	8.6	
Present value of debt/GDP	..	..	..	52.9
Present value of debt/exports	..	..	..	133.8
	1991-01	2011-11	2010	2011	2011-15
(average annual growth)					
GDP	6.4	7.4	8.5	8.0	..
GDP per capita	4.0	5.8	7.0	6.5	..
Exports of goods and services	..	9.6	24.9	14.5	..

Structure of the economy

	1991	2001	2010	2011
(% of GDP)				
Agriculture	58.2	44.0	32.7	30.8
Industry	16.8	17.1	31.8	34.7
Manufacturing	12.5	6.2	7.5	7.6
Services	25.0	38.9	35.5	34.5
Household final consumption expenditure	..	88.5	68.6	69.0
General gov't final consumption expenditure	..	6.8	9.5	9.8
Imports of goods and services	25.2	37.8	37.9	43.9
(average annual growth)	1991-01	2001-11	2010	2011
Agriculture	5.1	3.5	2.8	0.5
Industry	10.6	13.4	19.4	16.6
Manufacturing	10.8	10.2	3.7	10.4
Services	6.7	7.5	5.6	7.4
Household final consumption expenditure	..	4.5	9.1	8.7
General gov't final consumption expenditure	..	12.5	-4.2	11.8
Gross capital formation	..	14.4	-12.8	21.9
Imports of goods and services	..	8.2	2.6	25.1

Prices and government finance

	1991	2001	2010	2011
Domestic prices (% change)				
Consumer prices	13.2	7.8	6.0	7.6
Implicit GDP deflator	13.0	8.9	10.0	4.4
Government finance (% of GDP, includes current grants)				
Current revenue	..	16.1	19.3	21.0
Current budget balance	..	8.7	9.1	10.4
Overall surplus/deficit	-6.1	-4.7	-4.2	-2.8

Trade

	1991	2001	2010	2011
(US\$ millions)				
Total exports (fob)	97	362	2,149	2,644
Electricity	..	106	256	447
Mining	..	7	1,212	1,355
Manufactures	..	5	108	113
Total imports (cif)	215	650	2,573	3,472
Food	..	90	289	354
Fuel and energy	..	94	449	641
Capital goods	..	227	1,150	1,639
Export price index (2000=100)	..	98	304	327
Import price index (2000=100)	..	96	107	126
Terms of trade (2000=100)	..	102	283	261

Balance of payments

	1991	2001	2010	2011
(US\$ millions)				
Exports of goods and services	133	500	2,522	3,127
Imports of goods and services	253	663	2,722	3,642
Resource balance	-120	-163	-170	-515
Net income	-1	-68	-468	-628
Net current transfers	..	85	249	302
Current account balance	-111	-147	-389	-841
Financing items (net)	143	140	293	892
Changes in net reserves	-32	7	96	-51
Memo:				
Reserves including gold (US\$ millions)	..	134	730	679
Conversion rate (DEC, local/US\$)	702.1	8,878.0	8,258.8	8,058.4

External debt and resource flows

	1991	2001	2010	2011
(US\$ millions)				
Total debt outstanding and disbursed	1,871	2,506	5,655	6,158
IBRD	0	0	0	0
IDA	147	415	655	639
Total debt service	8	44	305	281
IBRD	0	0	0	0
IDA	1	7	20	22
Composition of net resource flows				
Official grants	54	92	281	..
Official creditors	101	67	26	-76
Private creditors	0	0	-14	515
Foreign direct investment (net inflows)	7	24	279	450
Portfolio equity (net inflows)	1	0	54	0
World Bank program				
Commitments	85	42	0	0
Disbursements	15	31	3	2
Principal repayments	0	4	15	17
Net flows	15	27	-13	-15
Interest payments	1	3	5	5
Net transfers	14	24	-18	-20

Note: 2011 data are preliminary estimates.

This table was produced from the Development Economics LDB database.

Source: World Bank

Annex 2: Total Education Sector Government Financing by Education Sector in the ESDF

	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16
Total recurrent expenditure (Kip Billion, Fixed Prices)		903	1,066	1,233	1,331	1,428	1,528	1,658
TVET expenditure (Kip Million, Fixed Prices)		32,076	41,661	54,027	67,942	84,305	103,334	139,402
Recurrent shares in %	100	100	100	100	100	100	100	100
Early Childhood	3.7	4.0	4.4	4.6	4.6	4.6	4.6	4.5
Primary	35.3	40.8	37.7	33.4	33.1	32.1	30.9	29.3
Lower Secondary	13.2	13.9	16.2	16.7	17.9	19.2	20.6	21.7
Upper Secondary	9.8	8.7	8.8	8.8	8.8	9.0	9.1	9.1
Total Secondary	23.0	22.6	25.0	25.5	25.7	28.2	29.7	30.8
TVET	3.5	3.6	3.9	4.4	5.1	5.9	6.8	8.4
Teacher training	4.7	4.2	7.0	6.5	6.1	5.7	5.3	4.9
Higher Education	15.3	10.6	7.6	6.1	5.2	4.3	3.6	3.3
Non-Formal Education	4.6	4.3	4.1	3.8	3.8	3.9	3.9	3.9
Inclusive	0	0	0	5.8	5.4	5.1	4.8	4.5
Total management	10.0	10.0	10.3	9.9	10.1	10.3	10.5	10.5

Source: ESDF 2009-2015

Annex 3: Education Sector Financing Plan 2011-2015

	2010/11	2011/12	2012/13	2013/14	2014/15	Total 5 years
Total recurrent expenditure (Kip Billion, Fixed Prices)	1,046	1,192	1,266	1,343	1,506	6,351
TVET expenditure (Kip Million, Fixed Prices)	75,511	88,664	102,105	115,838	129,863	511,981
Recurrent shares in %	100	100	100	100	100	100
Early Childhood	4.0	4.1	4.3	4.5	4.5	4.3
Primary	36.9	34.4	34.3	34.3	32.1	34.3
Secondary	26.9	25.3	24.7	24.3	22.5	24.6
TVET	7.3	7.5	8.1	8.6	8.6	8.1
Teacher training	6.0	4.8	4.4	4.2	3.8	4.6
Higher Education	6.0	5.7	5.8	5.9	11.3	7.2
Non-Formal Education	4.4	4.2	4.3	4.3	4.1	4.3
Inclusive	0	6.0	5.7	5.4	4.9	4.6
Total management	10.0	10.2	10.5	10.7	10.4	10.4

Source: ESDP 2010-2014

Annex 4: Central TVET MOES Budget approval by Ministry of Finance

(This concerns the 7 TVET institutions directly under the MOES. There are a total of 22 TVET institutions in the country.)

Million Kips	2008-2009	%	2009-2010	%	2010-2011	%
Salaries	5,644.94	51.7	6,561.67	43.1	7,367.48	31.8
Subsidies	3,038.95	27.8	5,605.52	36.8	7,866.36	33.9
Operating cost	2,002.58	18.3	2,402.21	15.7	6,617.12	28.5
Programme activities	174.49	1.6	262.10	1.7	758.72	3.3
New assets	51.00	0.4	381.69	2.5	580.07	2.5
Total in current prices	10,910.96		15,213.19		23,189.74	
Total in constant prices	10,910.96		14,452		20,870	

Source: MOES Finance Department

Annex 5: Advantages and Limitations of Levy Systems

Advantages	Limitations
Earmarked payroll levies can be viewed as 'benefit taxation', i.e. those that benefit (employers and workers) pay for the training.	Earmarked taxation does not conform well with the principles of sound public finance and weakens attempts to unify the national tax system.
Levy systems can augment substantially the resource base for training.	Payroll levies raise the cost of labour to the employer, possibly discouraging employment.
Increased training resources, in turn, can substantially increase the incidence of training.	Employers may shift the incidence of the levy on to workers in the form of lowered wages; in this case, workers and the employers bear the burden of the tax.
Levies can provide a steady and protected source of funding for training, particularly in the context of unstable public budgets.	Insecurity of income: under fiscal pressure, government may divert levy proceeds into general public tax revenues for non-training uses.
Levy-grant systems can encourage firms to intensify their training efforts, increase training capacity and raise training quality.	Unequal access: many firms, particularly small ones, do not benefit from the scheme; this breeds resentment, opposition and compromises the status of training levies as 'benefit taxation'.
Training levies collected from formal sector employers can serve as a vehicle for cross subsidization, e.g. for smaller employers and especially for firms in the informal sector.	Inefficiency: payroll levies may constitute an over-sheltered source of funding, leading to unspent surpluses, inefficiencies and top-heavy bureaucracies.
Funds with tri-partite management can forge cooperation among the social partners and facilitate formulation of appropriate training policies.	Red tape may erect high barriers for firms to access funds.
Funds can influence the quality of training through accreditation procedures and helping to stimulate a competitive training market.	
Levy-financed funds can also help correct imbalances in training access by pooling funds –e.g. for training disadvantaged segments of society, the unemployed, or those in the informal sector. This redistribution can be termed cross subsidization'.	
Establishment of a separate training fund account can facilitate transparency and minimize distrust between employers and the public sector.	

Source: Guillermo, H (2011) Adapted from Ziderman 2003, Johanson 2009

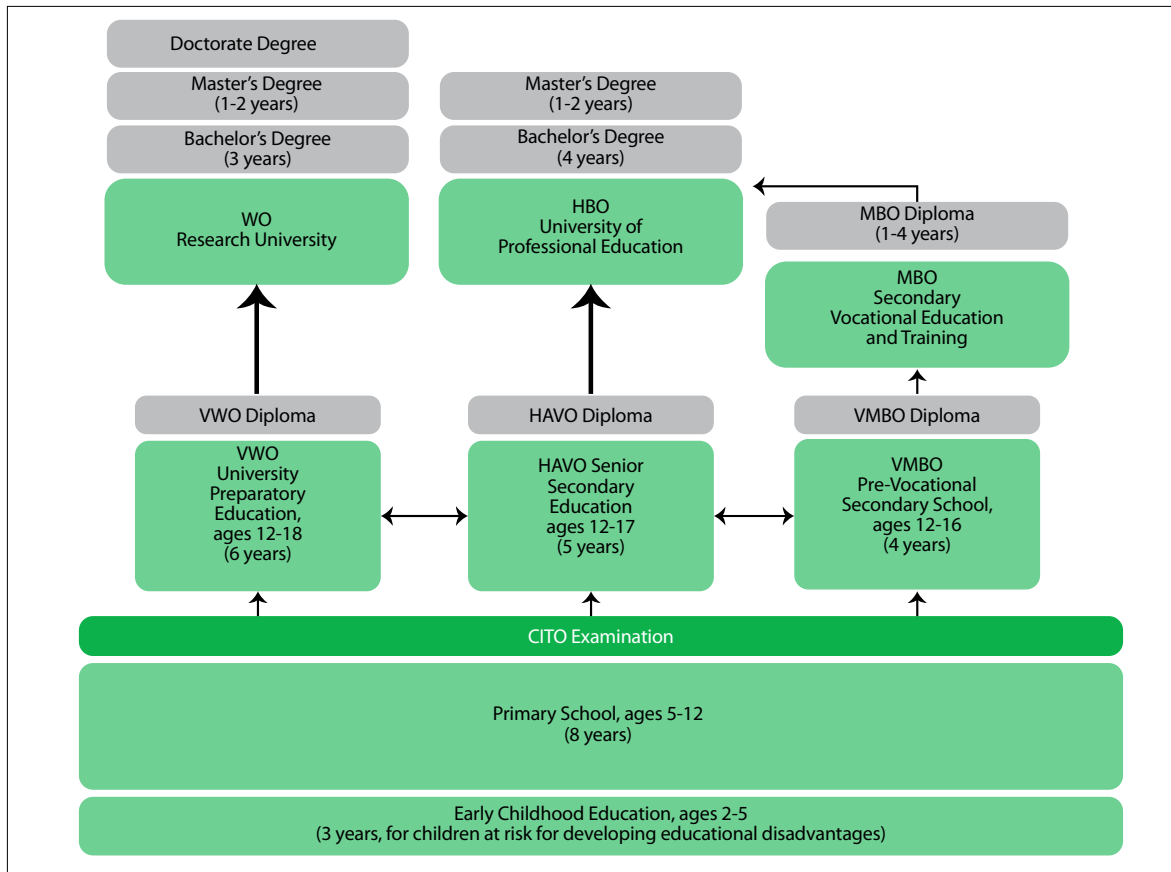
Annex 6: International Experiences of Vocationalization of Secondary Education

The Netherlands

In the Netherlands, students take a national examination at the end of primary school (age 12) and decide on their secondary school. Secondary schools are categorized as general, academic or vocational track, but the majority of education experience in the first two years of lower secondary school is common. Among the three tracks, two of them are academic; Hoger Algemeen Voortgezet Onderwijs (HAVO) (literally “higher general continued education”) and Voorbereidend wetenschappelijk onderwijs (VWO) (literally: “pre-university secondary education”). HAVO is a five-year, general secondary programme leading to an upper secondary certificate and higher professional education. HAVO is intended as preparation for higher professional education (HBO). VWO is a six-year academic programme, leading to a certificate and university. It is intended to prepare students for university education.

Voorbereidend Middelbaar Beroepsonderwijs, VMBO (literally, “preparatory middle-level vocational education”) is a four-year vocational track leading to a VMBO Diploma and higher vocational education. VMBO is intended as preparation for vocational education (MBO). Vocational education focuses on preparing pupils for future employment. The national vocational education bodies are responsible for developing a clear qualification structure setting out the knowledge, skills and attitude required by employers. In VMBO, students must choose one of four sectors: engineering and technology, economics, agriculture, and care and welfare. VMBO is divided into four learning pathways: 1) the basic vocational programme (BL), 2) the middle-management vocational programme (KL), 3) the combined theoretical and vocational programme (GL), 4) the theoretical programme (TL). After completing VMBO (age 16), students are supposed to transfer to vocational education Middelbaar Beroepsonderwijs (MBO) (literally, “middle-level applied education”). Those who have completed the theoretical programme can also choose to transfer to HAVO. HAVO is intended as preparation for Hoger Beroepsonderwijs (HBO) higher professional education.

The Structure of The Netherlands' Educational System

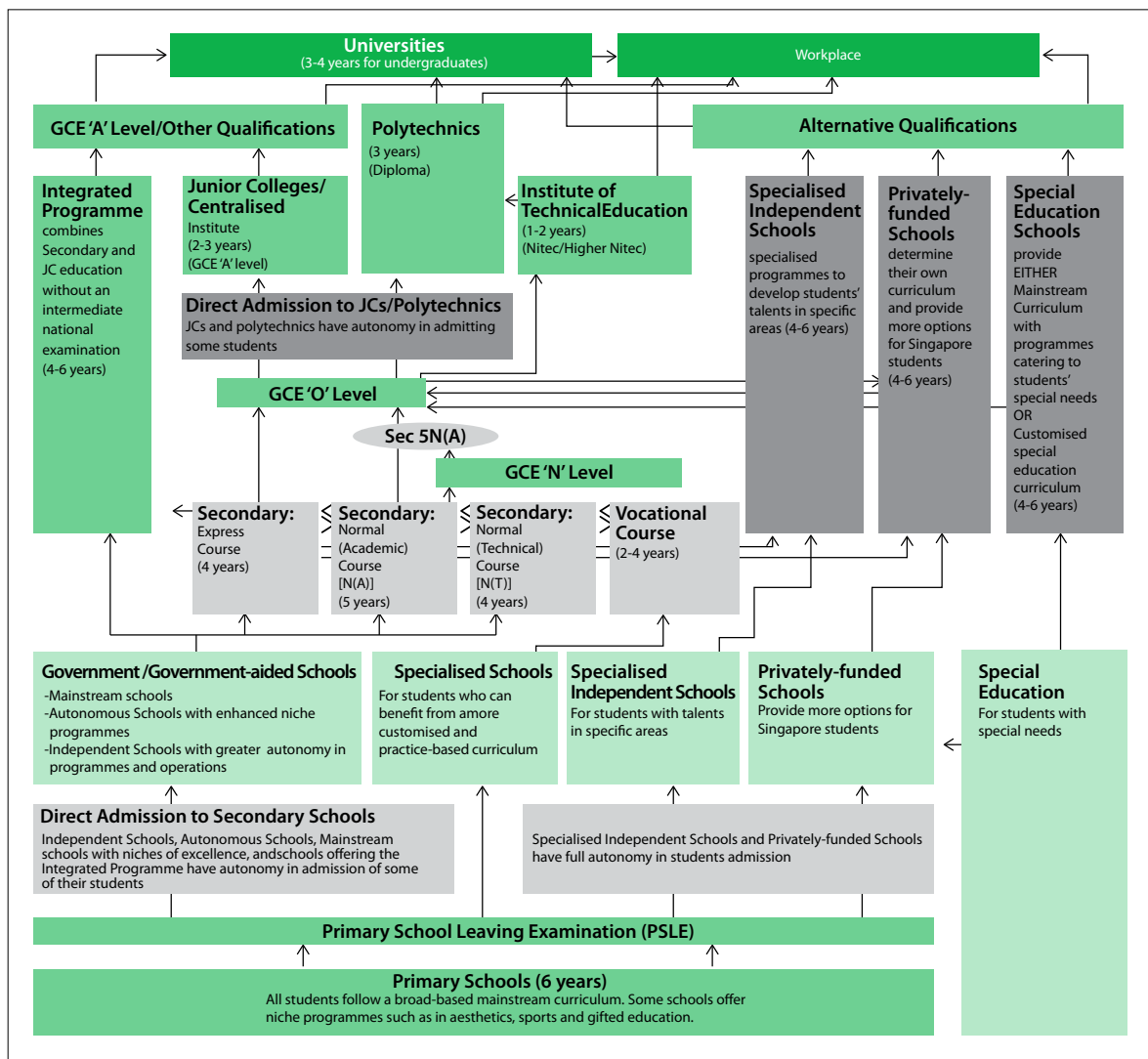


Singapore

Secondary education places students in the Special, Express (including the integrated programme in selected schools), the Normal (academic) or the Normal (technical) course, according to how they perform at the Primary School Leaving Examination (PSLE). The different curricular emphases are designed to match pupils' learning abilities and interests. In the Normal (academic) course, students are offered 6-8 subjects in the GCE 'N' Level examination. They have, as compulsory subjects, English, Mother Tongue and Mathematics and Humanities and a Science subject for upper secondary.

The Normal (technical) course is a four-year course that prepares students with a more applied curriculum, so students are offered 5-7 subjects in the GCE 'N' Level examination. This curriculum prepares students for a technical-vocational education at the Institute of Technical Education. Students will sit for the GCE 'N' Level Examination at the end of the fourth year and progress to the NITEC course at the ITE, which can lead to a Higher NITEC qualification and eventually a place in a polytechnic if they do well. In the Normal (technical) course, the curriculum is geared towards strengthening students' proficiency in English and Mathematics. Students take English Language, Mathematics, Basic Mother Tongue and Computer Applications as compulsory subjects. After secondary education, students pursue post-secondary education, either at polytechnics or at an Institute of Technical Education (ITE). Polytechnics provide three-year courses for students who wish to pursue applied and practice-oriented training. Students have the necessary GCE 'O' Level qualifications. ITEs provides one- or two- year technical or vocational courses for students with

GCE 'O' or 'N' level certificates. Students who do well will be able to proceed to the polytechnics for diploma programmes. Qualified candidates may also subsequently progress to the universities.

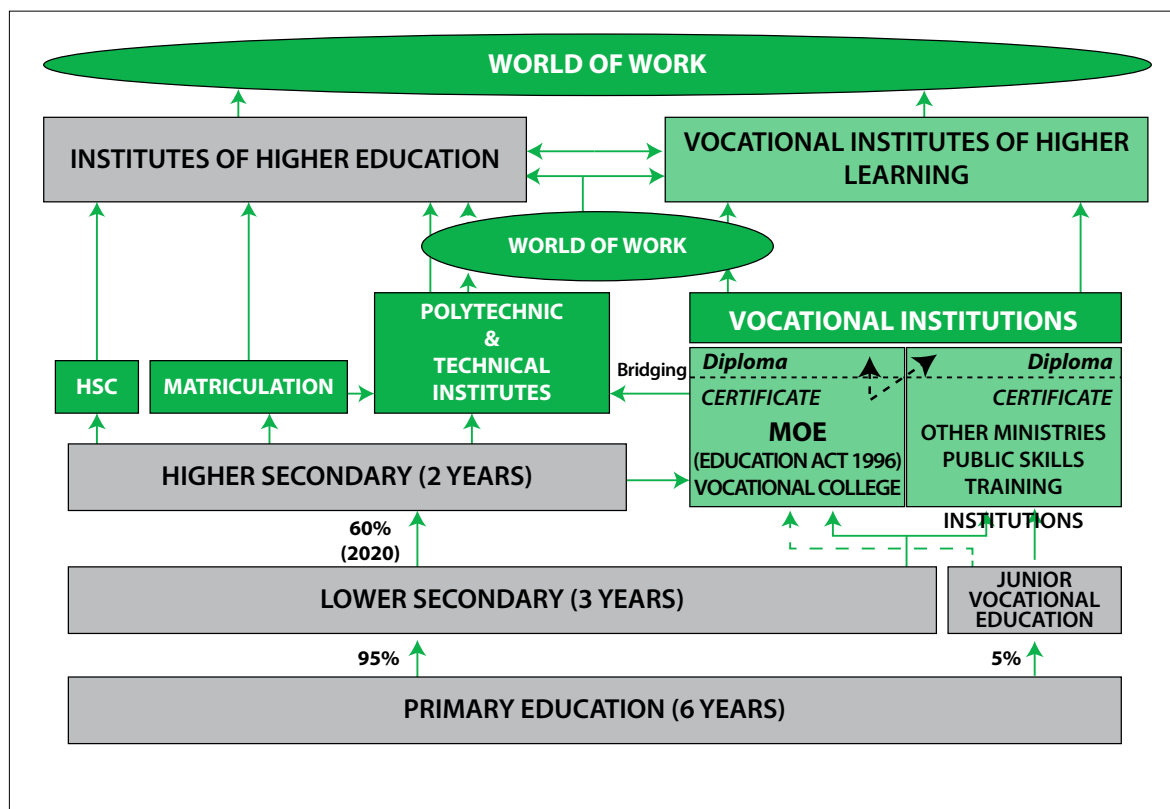


Malaysia (before the reform)

In Malaysia, technical and vocational education (TVE) begins at the upper secondary level (age 15). Up to 2011, dedicated TVE programmes were provided through Secondary Technical/Vocational schools (STS). STS under the MOES offered three streams such as technical, vocational and skills streams to students who had been streamed into TVE based on the results of the Lower Secondary Assessment (PMR) at their graduation from lower secondary school.

At the same time, there have been elective subjects on technical and vocational subjects in Secondary Academic Schools (SASs). These elective programmes are mainly for medium and lower academic achievers among those streamed into general upper secondary schools. While the primary aim is to provide the students with practical training in skills for employment, components of general education such as languages, mathematics, science and Islamic/moral education are also included to ensure that future advancement in the form of further education and training is possible.

The difference between the STS programme and elective programmes in SAS is that while STS is clearly emphasising the entrance to the labour market after graduation, the purpose of elective programmes is a bit ambiguous. That is, while some of the vocational elective programmes like catering and food processing can be seen as directly related to the labour market, the number of class hours of these vocational subjects is limited; 10 periods per week for elective subjects compared to 20 periods per week in the STS programme. Thus, despite the preparing students for a specific vocation, these elective subject programmes need to be considered as partly pre-vocational and partly vocational education.



Malaysia (after reform)

In 2011, the Malaysian Ministry of Education issued a plan on the reform of the TVET system in Malaysia titled Transformation of Technical and Vocational Education Plan. The focus of reform is as follows:

Creation of Vocational Colleges (VCs): By 2020, 274 VCs (182 public VCs under the Ministry of Education) with 324,300 enrolment, 40.54 per cent of total upper secondary students (in 2012, 78 vocational schools, 45,620 enrolments, 5.35 per cent upper secondary). Current STSs under MOES and vocational institutions under other ministries for upper secondary TVET will be transformed into Vocational Colleges which provide two kinds of TVET programmes, certificate programmes at upper secondary and diploma at post-secondary. Students of VCs do not need to take a graduation exam at the last year of upper secondary to get upper secondary certificates and will also be exempted from an entrance exam to enrol in post-secondary programmes.

Creation of Junior Vocational Education (JVE): At lower secondary level, 5 per cent of total enrolments by 2020. This is for youths leaving the education system with only primary certificates, offering chances of acquiring practical skills for living. This programme will be provided in the same school premises for general lower secondary students. At the same time, the current elective

subject programme on vocational subjects in upper secondary SAS will be no longer continued. This decision reflects the limitation of current SAS elective subject programmes in providing practical skills to students who are expected to enter the labour market after graduation, and the need for consideration of early school-leavers after primary school.

In short, the current approach is clearly targeting the expansion of dedicated TVET through combined VC programmes for upper and post-secondary, while abolishing upper secondary pre- or semi-vocational programmes which have not been effective in TVET provision.

Annex 7: Statistics of students enrolled all over the country in certificate courses, in school year 2010-2011 batch 1+2

Name of school/colleges	Basic level (9+3)					
	Plan	Actual	In quota plan	Tuition fee paid	Gap	Over/ exceed plan
VEDI						
Polytechnic College	0	0	0	0	0	0
Pakpasak Technical College	180	8	8	0	172	0
Dongkhamxang Agricultural Technical School	0	0	0	0	0	0
Lao-German Technical School	100	14	14	0	86	0
Vientiane Province Technical School	225	20	20	0	205	0
Savannakhet Technical Vocational School	140	23	23	20	117	0
Chapasak Technical College	195	65	65	0	130	0
Luang Prabang Technical College	175	270	270	94	0	95
Khammouan Technical College	160	3	3	0	157	0
Bolikhambay Technical College	80	12	12	0	68	0
Bokeo Technical College	120	39	39	0	81	0
Attapeu Technical School	210	25	25	0	185	0
Phongsaly IVET School	175	48	48	0	127	0
Luang Namtha IVET School	110	62	62	8	48	0
Huaphan IVET School	30	136	136	0	0	106
Xiengkhouang IVET School	260	56	56	5	204	0
Sayaboury IVET School	90	52	52	0	38	0
Oudomxay IVET School	145	20	20	0	125	0
Vientiane - Hanoi Friendship Technical School	120	24	24	0	96	0
Xekong IVET School	95	40	40	3	55	0
Saravane IVET School	280	48	48	-	232	-
Total	2 890	965	965	130	2 126	201

Source: MOES

The success of universal primary education in developing countries over the last decade has translated into huge systemic pressure to expand both general and technical and vocational secondary education. Moreover, skills are increasingly seen as critical to sustainable development, labour market inclusion and economic growth making Technical and Vocational Education and Training (TVET) one of the four priority areas in UNESCO's education programme.

UNESCO conducts TVET policy reviews as part of a dialogue with concerned governments to support their actions towards developing relevant policies for improving the relevance of TVET systems to the labour market and individual needs. This policy review responds to an invitation from the Lao PDR Government to UNESCO to conduct a review of the country's TVET system and to engage in a policy dialogue on its future development.

Lao PDR's development model has important implications for its education and training system. Over the last 20 years, there has been rapid economic growth based on the expansion of resource-based sectors, mainly mining and hydropower. However, the impact on employment generation and the demand for skills has been rather modest. The economy of Lao PDR is still dominated by low-productivity via rural economic activities, thus far requiring low skill levels from its labour force.

These factors collectively demonstrate a necessity for system-wide education reform including formal, non-formal and informal TVET in order to provide a competent workforce for the inclusive and sustained socio-economic development of Lao PDR.

This policy review identifies policy options and strategies for enhancing TVET relevance, efficiency and effectiveness. It is also intended to contribute to learning and participatory processes among stakeholders to stimulate dynamic and evidence-based policymaking.