

**Lao People's Democratic Republic**  
**Peace Independence Democracy Unity Prosperity**

**Ministry of Education**



**Ministry of Education**

**MASTER PLAN**  
**Development of TVET**  
**from 2008 until 2015**

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## LIST OF ABBREVIATIONS

ASEAN	Association of South East Asian Nations
BAFIS	Berufliche Ausbildung fuer den informellen Sektor = Vocational training for the informal sector)
DCT	Dual Cooperative Training
DED	Deutscher Entwicklungsdienst (German Development Service)
DGE	Department of General Education
DNFE	Department of Non-Formal Education
DSDE	Department of Skills Development and Employment
DTVE	Department of Technical and Vocational Education
ESDF	Education Sector Development Framework
GOL	Government of Lao PDR
GTZ	Deutsche Gesellschaft fuer Technische Zusammenarbeit (German Development Agency)
ILO	International Labour Organisation
IVET	Integrated Vocational Education and Training
KAB	Knowing About Business
LNCCI	Lao National Chamber of Commerce and Industry
LPRYU	Lao People's Revolutionary Youth Union
LWU	Lao Women Union
MAF	Ministry of Agriculture and Forestry
MLSW	Ministry of Labour and Social Welfare
MOE	Ministry of Education
NGO	Non-government Organization
NGPES	National Growth and Poverty Eradication Strategy
NSEDP	National Socio-Economic Development Plan
NTC	National Training Council
NTC-PO	National Training Council Permanent Office
PDR	People's Democratic Republic
SEAMEO	South East Asian Ministries' of Education Organisation
SME	Small and Medium Enterprises
TVET	Technical and Vocational Education and Training
TWG	Trade Working Group
US	United States
VEDC	Vocational Education Development Centre

## APPENDICES

- Activities Log Frame 2006-2015
- The Method of Realization of the TVET Master Plan
- Results of the Workshops Implemented to Review the Master Plan
- List of Persons Interviewed
- List of Documents and Sources Consulted

## **Executive Summary**

In June 2007 the Strategic Plan for the Development of Technical and Vocational Education and Training from 2006 to 2020 (TVET- Strategy) was approved by the Prime Minister. A Master Plan was needed in order to identify and plan all activities, as well as to determine a budget to carry out various initiatives.

An inter-ministerial team was set up and designed the following document with the assistance of the Luxembourg Government cooperation. Both the TVET-Strategy and the Master Plan are based on three key concepts which are used as guidelines for the development of the Education Sector Development Framework:

- Equitable Access
- Quality and Relevance
- Management and Administration

Within these key issues, seven strategic projects have been identified

1. The construction, upgrading and expansion of the TVET institutions;
2. The expansion of the TVET offer and approaches;
3. The qualifications, training and professional development of TVET teachers and other staff;
4. The quality assurance of TVET;
5. The development of TVET information resources;
6. The improvement of the organizational structure of The TVET sector;
7. The formulation of policy and tools at the macro-level for the development of TVET.

All these projects are detailed in 130 activities, each with its own indicators, responsible organization, budget, and implementation plan. They cover key components of the future TVET system, such as the need to reform curricula, the defining of a qualification system, the enlargement of the scope of TVET, the necessity to adjust supply and demand, the importance of developing teacher qualifications, the collaboration needed among the different ministries involved in TVET.

The full cost of the Master Plan from 2008 to 2015 is US\$ 172.42 m with the main part to be spent for the improvement of schools. This budget for 2008-2015 includes US\$ 156.75 m to be spent on the Master Plan investment and follow up, as well as US\$ 15.67 m for the recurrent costs (salaries, basic equipment, and staff development).

Even if the Government of Lao PDR is able to increase its financial resources as a result of continuous economic development, donors from various organizations and countries will be needed to help supporting these ambitious projects. This financial input, the coordination among different ministries and departments, and the long term follow up and management of this plan will be the key success factors.

# 1 INTRODUCTION

## 1.1 The Goal of the Master Plan

This Master Plan for Technical and Vocational Education and Training (TVET) has been developed in order to implement the TVET Strategy. It will contribute to accelerate socio-economic development of the Lao PDR and will help to achieve the goals of the government to reduce poverty and help the country to emerge from the group of the least developed countries by the year of 2020.

Based on the decree “Pertaining to the Approval and Announcement of the Implementation of the Strategic Plan on the Development of Technical and Vocational Education and Training from 2006 -2020”, approved by the Prime Minister on 3<sup>rd</sup> of May, 2007 the Ministry of Education (MOE) was assigned the responsible organization for the overall implementation of the strategic plan.

The new Education Law of 2007 defines the components of TVET and links with the education system.

In 2008, the MOE consulted with the ministries concerned on the sharing of responsibilities and the revision of the decree for the development of the technical and vocational education and training no. 209 in order to meet the requirement of the present situation.

At present, the MOE is undertaking the education reform under an Education Sector Development Framework (ESDF) composed of three programmes which are officially named:

1. Equitable Access Program
2. Quality and Relevance Programme
3. Management and Administration Programme

The purpose of the Master Plan is to provide clear directions and performance indicators for the managers, administrators, directors, and staff of the training providers. It will also clearly indicate the responsibilities of the line ministries concerned and other organizations to ensure collaboration with all stakeholders and consistent approach from each of the partners.

The over all costs are a critical issue as Lao PDR is still dependent on foreign assistance. Funding support from foreign countries (Germany, Luxembourg, Thailand, and Vietnam) has already been agreed for some activities listed in the Master Plan while the remaining ones still need some additional support. However, it is expected that the Government of Lao PDR and other local and foreign stakeholders including private sector organizations will increasingly be able to support TVET development.

The Master Plan describes seven projects of the TVET Strategy:

1. The construction, upgrading and expansion of the TVET Institutions;
2. The expansion of the TVET offer and approaches;

3. The qualifications, training and professional development of TVET teachers and other staff;
4. The quality assurance of TVET;
5. The development of TVET information resources;
6. The improvement of the organizational structure of the TVET sector;
7. The formulation of policy and tools at the macro-level for the development of TVET.

## **1.2 The structure of the Master Plan**

Some guiding principles were used to formulate the structure of the Master Plan:

- The Master Plan follows the Eighth Party Resolution and National Socio-Economic Development Plan (NSED) 2010-2015-2020 and should provide short term, middle term and long term objectives.
- The initial phase should cover the operational plan until 2010 but should plan the evaluation and the first adjustments and implementation plans of pilot projects for new development activities. Information should be widely disseminated to support the development of new long term international cooperation strategies following the present support from Belgium, Germany, and Luxembourg.
- As far as possible, information should be provided for budgets, performance indicators and other activities. Details should be given for the initial phase (2006-2010) as well as for the second phase (2011-2015). Only major goals and directions are mentioned for the last phase (2016-2020) as there are too many variables and uncertainties depending on the socio-economic development.
- All projects and most activities described in the Master Plan are consistent with the officially endorsed TVET-Strategy with some adjustments and additions to the activities in order to realize the intentions of the strategy and to meet the real situation for the socio-economic development.
- This Master Plan should be formulated by a team appointed by the MOE and composed of representatives from the Department of Higher, Technical and Vocational Education, Department of Non-Formal Education (DNFE), Department of Skills Development and Employment (DSDE), Permanent Office of the National Training Council (NTC-PO) and the Vocational Education Development Center (VEDC). Consultations should be held with various training providers and organizations through meetings and workshops.
- As this Master Plan cover the whole TVET sector, some of the planned activities should be under the responsibility of other organizations outside the Department of Higher, Technical and Vocational Education such as the VEDC, the DNFE, the DSDE, and Department of General Education (DGE).

## **2 ISSUES TO BE ADDRESSED**

### **2.1 Scope of the technical and vocational education and training**

The scope of technical and vocational education and training covers the skills level, basic vocational training and higher vocational training. Following the TVET strategy, different types of training programmes managed by the MOE of Lao PDR:

- short courses (less than 6 months);

- courses for skilled workers (6 months to 3 years);
- certificate level courses (2-3 years);
- diploma courses (2-3 years) at middle and higher level.

The training programs may be full time, part-time or may include some work experience components (dual courses). TVET institutions will be encouraged to provide courses for different target groups including new labor market entrants (school leavers), existing workers, young people, older adults and disadvantaged groups.

Because the needs of technical and vocational education at the lower and the middle levels are still high, technical and vocational education and training institutions will be expanded to all provinces. There will be at least one TVET institute in each province” and in addition to these other “Centers of Excellence” will be developed for various specialist areas such as hospitality, automotive engineering, garment manufacturing and agriculture

To ensure the optimum use of resources (both equipment and personnel), the concept of Integrated Vocational Education and Training (IVET) will be implemented in a step by step process. Using this approach, the various institutions will have more flexibility to propose a range of courses for different types of students. Courses can include short remedial courses for those with a low level of basic education, long courses and training programs with work experience components.

## **2.2 Integration of demand side in skills development and promotion of TVET**

Considering the labor force of Lao PDR as a whole, only a small percentage of the population have skills and qualifications above the most basic level. Many lack even basic skills. Of those people with skills training, more and more are in areas where there is relatively little demand, and there is a significant need for skilled people in other areas.

Education and training institutions have been responding to a social demand for training in business, computing, and English language as well as for higher level courses that can give access to bachelor degree level.

However, there has been little incentive for students to enter training in areas where there is high demand in the labor market, such as mechanical engineering, construction, mining, hospitality, quality assurance, and production planning management.

At the present time, there are skills gaps in many employment sectors and at the same time there is an over supply in other sectors. This appears to be due to the fact that education and training institutions have been responding to a social demand of training in business, computing, and English language as well as for higher level courses that can give access to a Bachelor Degree level.

But skills training needs are in areas such as mechanical engineering, construction, mining, hospitality, quality assurance and production planning management. TVET



institutions of MOE will be encouraged to place greater emphasis on these skills shortage areas in preference to the general business training programs.

The Master Plan includes a review of the process of assessing training needs (including drawing advice on the Trades Working Groups, TWG), career guidance, promotion and counseling for would-be trainees and new approaches to training that will improve the relevance of training and the supply of skilled workers to meet the need so f the developing economy and society.

Promotion of TVET is a critical issue. Lao PDR is facing a problem shared by many countries. The 'social demand' and preference for university degrees and general business topics instead of practical technical studies. A strong marketing and promotion plan at the national and provincial level is needed, along with realistic incentives for parents, students, and training institutions.

### **2.3 National Qualification or Certification Framework**

At the present time, there is a wide range of formal, non formal and informal curricula, certificates and diplomas available from many institutions and organizations. Some are for short courses varying from one week to one year. Others are for skills development courses with testing in the Ministry of Labour and Social Welfare (MLSW), Dual Cooperative Training (DCT) and other vocational and technical courses. Employers, training institutions, students, and parents do not have any reliable way of assessing the value of any given certificate for instance their value in terms of personal ability to do the job or proceed to further levels of education.

A National Qualification or Certification Framework can help to make the system "readable" for all stakeholders and bring consistency, comparability and quality. By setting up clearly defined 'levels' against which training course, tests and their certificates can be measured, they provide coherence and, if they are inclusive, can address some negative perceptions about vocational/technical qualifications by showing their equivalence or link to more academic qualifications.

A National Qualification or Certification Framework is an initial stage to ensure the quality of the training, upgrade the qualification closely to regional and international standards and prepare for the international integration. Developing such a framework can be a time-consuming and complex process. However, there is a wealth of information available to help simplify the process, and this is also an area with good potential for country-to-country assistance.

Finally, the National Qualification or Certification system in Lao PDR should be based on the reality of the Lao context especially in terms of budget, human resources available and responsibilities among ministries concerned. Once it is in place, it can be used for formal courses, competency assessments, validation of experience or *Recognition of Prior Learning* for those with existing workplace experience.

Possible information and sources of advice include:

- The Association of South East Asian Nations (ASEAN) skills recognition development: An agreement has recently been discussed on a system of four

certificate levels and two diploma levels based on competency based standards. Several countries were involved in the initial discussions: Laos PDR, Cambodia, Vietnam, and Thailand. However, this has yet to be formally endorsed.

- The European experience can give valuable information on different kinds of Qualification or Certification systems adapted to each TVET approach and how they have been integrated (European Qualification Framework).
- The International Labour Organization (ILO) in Geneva has also recently produced a publication which provides guidance to the development of qualification frameworks covering policy and practical implementation issues.<sup>1</sup>

## **2.4 Curriculum method and content**

A Curriculum or course should be based on the needs of Industry and/or the community. For the past years, professional disciplines have been developed. They include basic information on professional standards. This approach could be developed by deeper occupational analysis using formal processes such as the 'Developing a Curriculum' (DACUM) approach which is already used. However, the necessary duration to implement this method and analytical work required could be significantly reduced if standards developed by other international organizations are used.

### **2.4.1 Competency Standards**

Competency standards are directly linked to kind of National Qualification or Certification system selected. Lao PDR can fully develop its own standards. However, it will be much more cost effective to use standards developed in other countries and to adjust these to match the need of Lao trade sectors. ILO has already developed Regional Model Competency Standards for a number of industries including Manufacturing, Tourism and Hospitality. Additional competency sets are also planned for Construction, Agriculture and a number of other areas. Regional cooperation is developing and sets of competency standards developed by other countries could be available for Lao PDR.

Lao TWG could review and adjust these standards then develop the suitable curriculum needed for their workers. Then competency standards can also be used to design teaching, learning and assessment materials.

### **2.4.2 Student-Centered Learning**

For many years, rote learning and "teacher centered" approaches have been applied in many countries in Asia as has been described in recent reports of the World Bank. However, the modern world need people who are able to quickly integrate new concepts and technologies and it is important to move away from these traditional approaches. Training within institutions needs to become more "student centered". This means that the focus will be on student rather than teacher activity and students will have more choice in the directions their learning takes. Analytical thinking and problem solving abilities will be developed.

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<sup>1</sup> Ron Tuck: *An Introductory Guide to National Qualification Frameworks: Conceptual and Practical Issues for Policy Makers*, Skills and Employability Department, International Labour Office (ILO), Geneva 2007

### 2.4.3 Practical experience and knowledge

From a recent survey on the situation of TVET, the directors of 18 schools considered that equipment and building are the most important needs.<sup>2</sup> perceived by as the most important need<sup>2</sup>. Development in this area is essential, but practical experience of the trainees and students will also be gained through better linkages with companies including internships. German cooperation is supporting an important project to promote the DCT concept in Lao PDR. Several institutions are implementing this system with adjustments to the context of local companies which are mostly small and medium enterprises (SME).

### 2.4.4 Access and Equity

Specific approaches will be implemented to cater for training disadvantaged groups and people with lower level of basic education such as youth, low-skilled people, people with disabilities, ethnic minority groups and the socially excluded. The IVET-concept of schools will support access through different means and support the 'Education for All' policy. The DNFE could help for this issue, which will take into account their experience gained from the Lao-German BAFIS-Project (Berufliche Ausbildung fuer den informellen Sektor = Vocational Training for the Informal Sector).

## **2.5 Teacher development**

While good equipment, buildings and teaching aids are important the critical elements of any skills development program are the teachers.

It is recognized that salaries are low and teachers might teach longer than they should (30 to 40 hours a week). Ratio students/teacher varies a lot depending on the curriculum. However solutions will be sought to ensure that teachers are competent and remain motivated, these will include professional development and improved career path.

Many TVET Teachers and staff have a comparatively low level of education. In 2007, within the whole staff involved in TVET in the MOE<sup>3</sup>, 2 persons have a PhD, 29 have master degrees, 160 a bachelor degree while 793 a level of higher diploma or lower. Most of the teachers are young; many of them just finished their studies and go to teach. Many lack real working experience. Consequently, their upgrading of education level will be a priority in order to ensure the quality improvement.

The Master Plan includes a number of strategies for training and development in the following areas:

- Pre-service training for new teachers through short courses focusing on teaching skills, technical skills and competency based training and assessment;
- A project to develop studies at the levels of bachelor, master then PhD in technical education;
- In-service training through systematic short courses training plans and upgrading of levels;
- Opportunities for teachers to gain experience at work;

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<sup>2</sup> Source: Final report public technical vocational schools under the MOE, November 2007, VEDC

<sup>3</sup> in the institutes as well as in the Ministry of Education, TVE Department

- Upgrading and strengthening of the VEDC as this centre will be the main organization involved in these staff development activities.
- Attracting personnel from companies in specific fields to come to help teaching special subjects (examples: hospitality, wood processing)
- Employing part-time teachers from companies
- Setting up standards for teachers that will eventually be based on skills standards following the precondition submitted in the World Bank report on teacher reform.<sup>4</sup>

## **2.6 Cross cutting issues**

Some cross cutting issues will have to be tackled such as:

- Poverty Reduction Programs. They will include short courses to support those in the informal economy. International experience could be reviewed like the Training for Rural Economic Empowerment (TREE) Program of the ILO which is designed to build on existing job-creating programs of the government and non-government organizations (NGO), make those programs more effective, and fill in gaps where programs are weak or do not exist.
- Empowerment of women through cooperation with the organizations like Lao Women's Union (LWU) and Lao Young People Revolutionary Union (LYPRU). Special programs will be provided to assist women to establish small businesses and to enter the workforce.
- Good Governance thanks to the review of management system at the central and local levels including the implementation of a quality system.
- Respect for the environment by the integration of new courses on this subject in many curricula;
- Participative dialogue with the beneficiaries thanks to a strong development of regional TVET committees, Regional Training Councils (RTC) and new TWG;
- Self employment by the integration of a special ILO course "Knowing About Business" (KAB) in all curricula thanks to the cooperation of a specialized institution such as Lao-India Entrepreneurship Development Center (LIEDC).
- Sustainability of project activities/interventions through a strong emphasis on capacity building of the staff and teachers.

## **2.7 Labour market information**

To be most effective TVET should be based on accurate information about the needs of the labor market. But a problem related to human resource development planning in Lao PDR is the lack of information on the needs of the labor market. Information is usually collected analyzed available and published in various documents either from the government or from donors' projects. However, coordination, coherence and reliability of the information are still lacking.

One priority in this Master Plan is to analyze needs of all social and economic sectors for the human resource development in order to plan the expansion of the TVET

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<sup>4</sup> The World Bank (2008), Teaching in Lao PDR

network. The MLSW will be responsible for this issue in close cooperation with the MOE and other line ministries concerned.

MLSW will be responsible for this issue in close cooperation with MOE and other concerned ministries.

National labour market analysis will be needed to support national strategies and plans. It can be realized through different ways: Specific surveys (on request), annual labour market reviews, local skills needs analysis and permanent sector based observatories in close cooperation with the professional associations. They should be either provincial or sector based approach.

The Master Plan includes the creation of professional disciplines and curricula based on local labour market assessment through collaboration among different sectors, departments, trade working groups at the local level. Schools can be partly responsible for the implementation of these local surveys. The VEDC will be in charge of the design of these new professional disciplines and curricula.

### **3 LINK WITH OTHER SECTORAL DEVELOPMENTS (STRATEGIES, PLANS AND DECREES)**

The TVET Master Plan defines activities involving other departments and components of Education and a high level of cooperation is needed to ensure the Master Plan activities are incorporated into the priorities of the different organizations:

- The DGE will progressively integrate vocational subjects in the general education curriculum.
- The DNFE currently plans (2007-2020 Master Plan) to develop basic vocational skills in many centers based on the previous German funded BAFIS project. Targets of NFE are to train 10,000 people within 2010 then 20,000 people within 2015 in ten professional disciplines. As teachers and trainers will need to be trained on these basic practical skills; cooperation with VEDC and DTVE is essential.
- The Ministry of Agriculture and Forestry (MAF) Master Plan focuses on strengthening the four existing Agricultural Schools through improvement of curriculum, competency based training and production facilities. It is essential that this training will be consistent with the competency based approach outlined under this Master Plan.
- The National Training Council (NTC) is adjusting its roles and activities to ensure greater effectiveness.
- The MLSW is finalizing its Master Plan for 2007-2020. It includes important components to link to the TVET Master Plan: Strategies on training and assessment for skills standards, labour market information and the use of the training fund. Coordination between both ministries and the National Training Council is essential since duplication is to be avoided.
- The MOE should finalize within 2008 an ESDF for 2008-2018 covering all sectors of education including TVET which includes 2 strategies concerning TVET:

- Expand TVET according to the needs of the labor market in the formal and informal economy;
- Expand TVET capacity in order to enroll lower secondary graduates intending to go to technical and vocational education and training.

When other ministries prepares and regularly review their master plans, they should include a human resources development component with precise information on needs of occupations. This information should be sent to the MOE for consolidation.

## **4 THE PRESENT SITUATION OF SUPPLY AND DEMAND**

### **4.1 The rapidly changing Lao socio-economic context <sup>5</sup>**

For the last 10 years, Lao PDR has been experiencing fundamental changes especially after Lao PDR became a member of ASEAN in 1997. Over the five-year period 2001-2005, Gross Domestic Product (GDP) grew at the high rate of 6.24 percent per year, whilst GDP per capita rose to reach US\$491<sup>6</sup>. An increase of over 84 percent compared to 1996. But Official Development Assistance (ODA) resources still plays a central role in the Lao economy, contributing over 60 percent of the total cost of the Public Investment Programme (PIP), and over 70 percent of total public expenditure in the socio-cultural sectors, including education and health. The International Monetary Fund (IMF) has predicted a continuing high ongoing annual growth rate of 6-7 percent<sup>7</sup> in real GDP between 2006 and 2010. External trade is expected to grow at an average of over 10 percent annually.

The Government's Sixth Five-Year Development Plan (2006-2010) places special emphasis on increasing international trade, and particularly exports, in line with the National Growth and Poverty Eradication Strategy (NGPES). Around 74 percent of Lao exports consist of garments, wood, tourism and electricity, with this proportion set to increase rapidly over the next few years. The NSEDP 2007-2008 mentions an increase of exports in 2006-2007 of 57% higher than the year before especially due to the increase of minerals.

### **4.2 An urgent need for skills**

It is estimated that over 82 percent of the Lao people live in rural and remote areas<sup>8</sup> and that some 80 percent are employed in agriculture, either directly or indirectly, with an estimated 60 percent of farms still producing mainly for subsistence and not for the market<sup>9</sup>.

In recent years, there have been large increases in direct employment in exports and in small-scale retail trade due to increased imports. Overall, to ensure a growth rate of 7-8%, during the period 2006-2010, employment must be created on average for 130,000 people per year.

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<sup>5</sup> Chapter 1.1 and 1.12 integrates parts of the report of "An Analysis of the Capacity of the Education System to Meet the Employment Needs of a Lao Modern Economy", CRC-LBC, 2008

<sup>6</sup> Source: CPI (Committee for Planning and Investment).

<sup>7</sup> Which is just below the target of 7.5 % set by the Eighth Lao People's Revolutionary Party Congress

<sup>8</sup> 77 % are classified as rural and ethnically diverse.

<sup>9</sup> Source: MAF (Ministry of Agriculture and Forestry), 2005.

Inadequate planning, management and monitoring of labor development in various sectors persist.<sup>10</sup> However, a recent report<sup>11</sup>, estimated that the critical shortage of the expertise required for development, will pose one of the most serious constraints on economic development in the Lao PDR and that strengthening human resource capacity will represent one of the country's major challenges over the foreseeable future in order to reach the goal of the NGPES to elevate the country from a 'least developed country' by the year 2020.

From the Lao Expenditure and Consumption Survey in 2002-2003, only 14% of the population had completed the lower education level.

A national Training Needs Analysis<sup>12</sup> carried out in 2005 found that nearly 70,000 additional human resources personnel, skilled at different levels, would be required by the manufacturing industry sector by 2010. However, this did not consider the needs of the government, service or agricultural sectors. The report concluded that there would be a significant shortage of training places to provide the necessary skills at this level, particularly for technician workers.

As there is no precise labor market information available on needs of occupations and skills, it is only possible to predict the needs based on the evolution of the economic sectors.

The 8<sup>th</sup> Resolution of the Party and the NESDP 2006-2010 give the key sectors that will push forward Lao economy:

- Agriculture, forestry, aquatic products with 13% of growth per annum counting for 27-28% of total exports; the kind of skills needed can be to produce chemical, biological fertilizer, analyze and try plant seeds.
- Raw materials, energy, minerals with 44.6% of the exports in 2010 and especially for electricity-minerals. Exports should increase 18-20% per year; technicians will be needed in gypsum plates, granites, glass, iron, aluminum, and copper.
- Wood industry with 7-9% per year export growth taking into account the fact that the forest in 2020 should cover 70% of the Lao surface; food processing will develop.
- Huge programs for construction and infrastructure needing skills in block and bricks laying, tiling for roof, ceiling, floor, but also design, building, and property water management.
- Tourism expected to increase 11-12% per year as all provinces are encouraged to put it forward with skills in service, hospitality, home stay, restaurant as well as handicraft production needing skills in pattern for bamboo, rattan, ceramics, weaving, gold and silver smith.
- Industrial process will involve skills in productivity improvement, quality, production planning, installation services and maintenance, repairing of machines (heavy, middle, light, production machines).
- Car and motorcycles sector with skills in areas of electricity and electronics, forming, painting.

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<sup>10</sup> Source: The National Socio-Economic Development Plan 2007-2008

<sup>11</sup> United Nations Common Country Assessment (CCA) for Lao PDR, 2006.

<sup>12</sup> GTZ Lao-German HRDME Programme (2005)

### **4.3 The TVET providers**

#### **4.3.1 General situation of the TVET providers**

There is a very wide range of skill learning opportunities offered by different institutions which eventually can be split in two parts:

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

Based on a survey by the DTVE in 2007, there were 50 registered education curricula in 27 areas covering 4 main fields (agriculture, business, industry, and handicraft). 47 public and private institutions and more than 50 training centers provide short courses. 15 departments, 10 ministries and 2 mass organizations are involved in vocational education and training.

Most of TVET is implemented by institutions under the Ministry of Education but many other institutions provides training: schools under provincial departments of education, schools under other ministries, training centers under MLSW, the LPRYU, the LWU, Community Learning Centers (CLC), private sector schools, company training centers, NGOs, and on-the-job training, including a wide variety of short courses and workshops, not forgetting training courses taking place in other countries.

If all these training providers are not based on an overall needs analysis, they will not contribute to a balanced development of skills of students. This will result in an oversupply in terms of subjects as well as inadequacies to the local needs.

Within the DTVE we find the following institutions:

- vocational schools recruiting school leavers from lower secondary schools to prepare them to become skilled worker. The duration of study is 3 years.
- technical schools recruiting school leavers from lower secondary schools to prepare them to become technician. The duration of study is 2-3 years
- integrated vocational schools delivering formal vocational training and basic vocational training to the non-formal target groups.

The Education Statistics Technology and Information Centre (ESITC) of MOE estimate the enrollment in TVET institutions was 15,500 students in 2001/2002 and 25,000 in 2005/2006. But for the lowest level the total is decreasing (vocational: 3,500 in 2001/2002 and 2,600 in 2005/2006). Institutions from other ministries (Agriculture and Forestry, Information and Culture\*, Health, and Finance) provided TVET for a total of 7,200 students in 2005/2006. Other ministries such as Ministry of Industries and Commerce (MIC), the MLSW, and the Ministry of Transport, Roads and Communications (MRC) also provide training.



There is no precise projection of future numbers but, based on the likely changes to the population (presently very young), around 65,000 to 80,000 students can be expected to need training in 2015. The system should be able to cope with this increase.

These figures show the variety of training and education providers as well as the strong trend towards students seeking higher diploma level courses often so that they can then obtain bachelor degree. MOE will face three important challenges:

- to continue attracting students at the lower level,
- to answer to the needs at the higher level,
- to organize the coordination among all these providers.

In order to structure and guarantee efficiency, a quality system will be developed. It is one of the 7 strategic projects to be implemented and covers the analysis and setting up of a system of recognition and accreditations of training institutions and curricula.

This project to develop a quality system will take advantage of the present situation on curriculum accreditation as many institutions from other ministries (MOAF, MLSW, and Health) contact MOE and especially VEDC to gain assistance for curriculum design and accreditation. By providing these services, the MOE can strengthen this role in this area in future.

ISO standards for example can help in increasing the recognition of the quality of training by industry especially those involved in the international market.

#### 4.3.2 Specific situation of the TVET schools under the MOE

A recent survey made in 2007<sup>13</sup> provides interesting characteristics on the present situation of 18 TVET schools and colleges running under the MOE:

- There are already an important number of 58 professional disciplines: 33 different areas of studies taught in 4 possible levels, as each area can be taught at different levels, then there are 58 different curricula available.
- 10% of the students come from the quota system and 60% from the national examination system. But the schools tend to allocate places for more private fees students.
- The majority of the students chose accounting studies. Construction which is the most offered curriculum by institutions is only ranked 10th according to number of students enrolled.
- Most of the schools focus their development towards higher diploma. (80% of the students are at the higher diploma level)
- The government budget share vary from 30% to 98% of the total budget of the school, the other resources comes from fees of the students and other contributions.
- Most of the schools already offer short courses for income generation in addition to their regular curriculum but not many times per year (average is one time per year for a duration of 9 days)

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<sup>13</sup> Source: Final report public technical vocational schools under the MOE, November 2007, VEDC

This information illustrates the inadequacy of the current provision, the mismatch between the supply and demand and also the risk to have more and more schools willing to satisfy the potential target especially private funding students without taking in account the needs of companies. It also shows that the schools have already experience in developing income generation activities such as training and production which be supported under the Master Plan.

## 5 THE FINANCING OF TVET DEVELOPMENT

### 5.1 The budget for TVET reform and development

The financing and investment in TVET is expensive and requires an adequate policy, contributions from public and private sector including domestic and foreign assistance. The estimated budget refers to the needs of agencies concerned with TVET and the plan of operation up to the year 2010 and from 2010 to 2015. The plan of operation from 2016 to 2020 could not be planned due to lack of any accurate growths forecasts because of uncertain trends for the economy in that period.

The budget needed for the period 2009-2015:

- The budget for investment and development as described in a log frame and covering 130 activities. This budget includes an important part supported by organizations of the MOE directly implementing technical and vocational education: DTVE, VEDC, NTC. It also includes a budget that will be under the responsibility of other organizations such as the MLSW and the National University of Laos (NUOL).
- The recurrent budget covering regular operating costs such as salaries and scholarships.

These two budgets can be added together and by subtracting the budget already supported by donors the total budget requirements can be established. The main part of the Master Plan budget concerns the renovation and improvement of schools and colleges (Strategic Project 1) 795 million Kip. The contribution from donors will be requested (see chapters 5.3, 5.4) The budget planning for the development of TVET is described in the following table:

<b>Budget Item</b>	<b>Million (US\$)</b>	<b>Million (Kip)</b>
Total budget needed for implementation at the Master Plan until 2015	156,75	1.410.733
Recurrent budget (salary, basic, equipment)	15,67	141.073
Total	172.42	1,551,806
Budget already supported by donors in the Master Plan	-24.7	-222,300
<b>Total budget still needed for the implementation of the activities until 2005</b>	<b>147.72</b>	<b>1.329.506</b>

## **5.2 The expected increasing financial resources of the Lao PDR government and other training providers including companies**

### 5.2.1 The regular government TVET budget

The GOL allocates a regular budget for TVET. However, because there is a need to improve the quality of the training, method of budget allocation should be changed to base calculations on the unit cost per student.

Referring to the study of Department of Finance, the recurrent budget provided for TVET by the MOE in 2006-7 was 14,159 million Kip. Based on an estimate of an annual increase of 10% the total recurrent budget from 2006 to 2015 will need to be approximately 162,538 million Kip.

### 5.2.2 The consequence of the economic development on the financial capacities of companies

As mentioned above, they are positive trends showing the increase of financial possibilities of Lao PDR thanks to economic development.

Companies will be able to support directly the cost of training and staff development. There are already examples of how they are more and more involved in paying for training and development:

- Missions of foreign specialists coming to provide “in-house training” in Lao companies
- Workers sent to local private or public training institutions and even abroad.
- Scholarships and equipment to schools and government institutions

Other projects might be set up in the future like the ones found in neighboring countries: Support of a complete workshop in a school, creation and management of an internal training centers.

### 5.2.3 The legal framework to promote training in companies

Lao PDR has decided to implement training fund as stated in the Labour Law, promulgated in 2006.:

- Companies will pay 1% of salaries or wages and workers 1.5% to a National Skills Development Fund in the MLSW. However, in June 2008 there was no mechanism for the implementation of this strategy and there was a need to establish a task force to formulate measures for its implementation.
- a training fund is being discussed for SME has been included in the SME-decree.
- in June 2008 MOE is not involved in this work on financing incitation for companies. In order to have a system covering the overall scope of TVET from all providers, MOE should participate to the system as it could help financing specific training schemes like apprenticeship for the private sector.

### 5.2.4 The support coming through cooperation with other ministries

Various ministries and organizations are involved in some activities of this Master Plan such as the development of curriculum, professional and vocational standards, national qualifications, teacher training etc. The budget for those activities should come from the MOE and other organizations through collaborative project proposals.

MLSW, MAF, MIC, Ministry of Health, Lao National Tourism Authority (LNTA), Lao National Chamber of Commerce and Industry (LNCCI) could be partners to propose staff development projects, but this will need team work and proactive actions.

#### 5.2.5 Loans for TVET development

TVET development is expensive. Many neighboring countries such as Thailand, Vietnam, Cambodia, and Sri Lanka have been able to get loans at a low interest rate to international finance institutions such as Asian Development Bank in order to renovate their systems. This approach has the advantage of providing funds and technical assistance to implement specific activities such as building, equipment, training, qualifications systems. However, investments of this kind do not easily generate revenues which can be used to repay loans, and as with any external funding source, there is a risk that local resource streams will not be developed to replace the external funds and many of the gains made are lost when the project ends.

### 5.3 Possible foreign and international assistance for TVET

The budget resources of GOL have not been sufficient to support the development of TVET although donor participation from various countries helped considerably. Within the last 13 years there were 36 major projects and activities under the DTVE for a total amount of 13 million US\$.

For the near future, Lao PDR will continue to need foreign and international assistance for its TVET. Donors will request:

- A clear definition of priorities among all the activities to be implemented;
- A good cooperation among ministries concerned by the TVET projects;
- The integration of the TVET component into the ESDF.
- Coordination and alignment among partners for TVET development.

### 5.4 Present situation of some donors concerning TVET

Already several countries and organizations expressed interest in this sector, if several of them develop projects, coordination should ensure a good mapping of the support from donors in coherence with the Master Plan:

- Until now, *Germany* has been the main supporter of TVET. There are presently 2 important on going projects for the development of a labour market oriented and integrated TVET with duration until 2011-2012. One is a technical assistance project providing consultancy for regulatory framework, public-private cooperation, IVET, and capacity development for TVET staff, and supplementary equipment. The budget from is EUR 6 m by Deutsche Gesellschaft fuer Technische Zusammenarbiel (GTZ) and EUR 6 m by Deutscher Entwicklungsdienst (DED) for providing experts for IVET-schools and business organizations. The other one is a financial cooperation project for the construction of buildings and procurement equipment for IVET-schools in six provinces in the northern part of Lao PDR. Kreditanstalt fuer Wiederaufbau (KfW, German Development Bank) provides a grant EUR 8.5 m, which is 80% of the total project budget, 20% is borne by the provinces concerned. Germany

has expressed interest to continue development cooperation in TVET until 2015.

- *Luxembourg* has been supporting TVET for several years, especially in the development of the TVET institute in Khammouane Province for 3.3 m. EUR. This country is interested in continuing development support for this sector. There could be important projects in fields like hospitality-tourism, banking/financing system or more general issues like curriculum development or strengthening institutes.
- *UNIDO-UNDP* is more and more involved in the development of Lao PDR. For the period of 2004-2008, projects amounted for 5.6 m US\$ to support industrial development. A budget increase is planned to support training and education projects in the following areas:
  - o increase of productivity and standards for example with short courses for workers,
  - o development of entrepreneurship,
  - o assistance to expansion of industrial zone in Savannakhet, Vientiane,
  - o training in specific sectors: Garment, wood processing, agro processing,
  - o skills development for SME.
- For the last 15 years, there were 103 *experts and volunteers* who have assisted TVET institutions for durations of minimum one year with the support of organizations and government from Japan, Germany, Korea, India, Australia, Belgium, China, European Union, England, Singapore, and Luxembourg. Presently 13 positions are on discussion or on going. It is expected that this assistance will continue within the next years, MOE can help to make it more focused and linked to the national strategies.
- At the ASEAN level *SEAMEO-VOCTECH* (Regional Centre for Vocational and Technical Education and Training) organizes each year two or three sessions of a few days training.
- The *Francophonie* supports partnerships between the French speaking countries in Southeast Asia (Lao PDR, Vietnam, Cambodia) on teacher training, TVET administration, curriculum standards for a total amount of 100,000 EUR in 2008.
- *Australia* is significantly increasing their support for Lao PDR (30 m AUD in 2007-8) especially in education. TVET is traditionally an important issue of Australian cooperation in Asia. Then there will be possibilities of assistance that can be either “sector based” or focusing on general issues like qualifications.
- *KOICA* will increase significantly his support for Lao PDR, US\$ 6.25 m in 2007 and US\$ 10.26 m in 2008. Education is one of their 4 priorities. A survey on the Laotian needs in 2008 will help to define the priorities for actions of the next years. A loan is possible.
- *European Union* (EU) presently does not focus its activity on TVET but there will be a review of priorities in 2009. The ESDF will give the direction. EU also provides budget allocation to the government to decide its priorities.
- *Asian Development Bank* (ADB) concentrates presently more on basic education but at the complexion of the ESDF, the bank is willing to analyze needs in a broader view. The skills development is a key component to assist the present growth in Laos and Asia. At present the ADB has a strategy to support human resource development by providing support to the technical and vocational education as well as to higher education.

- *Thailand* is willing to increase its support for TVET: A program “Sister Schools” is developing with 9 Thai schools to assist Lao school in various fields. Projects to upgrade Thai teachers in nearby Thai universities are also discussed.
- *Swiss Cooperation* supports skills development project mainly in the agriculture sector. This country supported the development of the Master Plan of five training institutes of the MAF.
- *World Bank* is currently implementing the 2005-2010 plans on early childhood and basic education. The new plan for 2010-2015 will be prepared in 2009. It is very likely that other components of education will be supported. Moreover, the Bank support many projects linked to economic development: dams, constructions, roads. Then the support of TVET is possible in the future.
- *UNESCO* has defined a National Education Strategy for 2008-2013 to support Lao PDR. This is presently being reviewed. It is likely that TVET will be one of the sectors supported more at the policy level.
- *French government* is focusing on other issues and has no short term plan to assist TVET.
- *JICA* is presently supports and will support for the next 2-3 years agriculture, health and basic education. They could be interested by TVET projects case by case and if it is linked to industrial investment.
- *ILO* has also provided ongoing technical advice mainly on competency standards, TVET policies and financing and the role of the industry. It is expected that this support will continue in the future.

## **6 THE IMPLEMENTATION STRATEGY**

### **6.1 Lessons learnt and recommendations from the international experience for TVET master plans and strategies<sup>14</sup>**

Countries such as Lao PDR cannot afford to have duplication of effort with many different government agencies providing different forms of vocational education and training. One strong coordination body is needed. NTC can eventually have this role. This must be supported by all agencies currently providing vocational education and training so that there is a consistent message provided to employers, parents and to students.

Quality standards and system are essential, if an agreement on one structure of qualification is possible, there can be many providers but they should not be competing for the same groups of students and should not be duplicating competency development, course development or providing competing courses to the same groups of students.

International experience in a few areas may be of particular relevance to Lao PDR at this time: the link between national economic development strategies and human resource development; the need to involve the private sector; and improved coherence and coordination of national policies and implementation approaches.

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<sup>14</sup> A contribution of ILO Bangkok, 2008

On the link between national economic development strategies and human resource development ILO has observed that many countries have explicitly included a human resource development strategy as part of their national social-economic development plans. Countries such as Singapore and Malaysia explicitly see human resources as a key element in their economic development. This approach ensures that the human resources (skills, numbers, and locations) needed to realize economic goals are available. If this is not done, there may be significant barriers to achieving economic goals. Most importantly, conflicts between educational and economic objectives can be explored and addressed.

This is most evident in the case of technical and vocational education and training. These training streams are relatively much more expensive in terms of equipment and supplies, and the occupations and education stream are often considered 'second choice' by students and their families. Consequently, almost all economies find declining enrolment and underinvestment in this area, provoking a downward spiral where fewer and fewer people enroll in training which is less and less relevant, thus robbing the economy of a key resource. In many countries, this gap is made up through the importation of skilled labour from other countries, on a permanent (in the case of countries like Australia and New Zealand) or temporary (as in Lao PDR and other countries in the Greater Mekong Region, GMS) basis.

TVET master plans must be developed in a context that looks at both supply and demand issues. Simply building additional training centers will not address the critical issues of adequate numbers and relevant skills. International experience shows that greater involvement with and alignment to the needs of employers and enterprises is critical to the success of a TVET strategy. Companies must be fully involved in defining needs (both for number of workers, and their competencies), and, it is increasingly recognized, actively involved in delivering training and assessing the competencies. This is the most effective way to address both the question of relevance of training and the high cost of training in technical areas: rather than attempting to build institutions that fully matches employers' realities, schools more effectively focus on core and generic skills, and work with industry on more specialist, real workplace skills. Such a partnership ensures that students are trained in the actual materials and methods in use.

Another important and sometimes overlooked element is the promotion of skilled trades and occupations to young people and to the parents and educators that influence them. As economies develop and more young people are able to stay in and complete schooling, the existing bias towards academic track education becomes increasingly pronounced, with the potential for many negative consequences including a high graduate unemployment rate (as noted in a recent ILO and UNESCO work). Conversely, there is significant and growing need for skilled and technical workers as a critical element in economic development. In addition, skilled and technical occupations offer a good route to successful entrepreneurship and self employment. Government, social partners and industry have a mutual interest in promoting these occupations to young people and their parents, in order to assure a supply of human resources for developing employment.

The role of the private sector is also critical. As noted above, ensuring that training is relevant to company needs depends very much on the degree to which employers and trades groups are involved in:

- defining needs,
- shaping competencies and qualifications
- informing curriculum, and
- offering opportunities for hands on training in real work setting.

A range of options exists for promoting greater involvement, ranging from financing systems (as in Malaysia, Thailand and Singapore); trades committees and associations with delegated responsibility for defining standards (same countries), to advisory and policy bodies (such as the National Training Board in Cambodia).

Finally, countries have taken a range of approaches to improving coordination of policy and implementation. In South Africa, much of the policy and management authority is delegated to industry councils, who are also responsible for disbursing public and private funds to training institutions and other providers. Singapore has created a separate implementation authority, the Workforce Development Agency, to manage specific tasks assigned from a range of Ministries and departments. Cambodia has assigned lead responsibility for vocational training to a Ministry of Labour and Vocational Training, with coordination assured through common high level leadership of the National Training Board and the Accreditation Council of Cambodia (which oversees academic stream education). The major lesson is that while there is no single 'right answer', the inherent challenges of coordination between systems designed for 'education for all' versus 'training for the labour market' must be acknowledged and addressed, with continual review to ensure the response chosen continues to be effective.

## **6.2 Conditions to succeed or how to limit the risks**

In order to implement successfully the activities of the Master Plan and reduce potential risks, there should be the following guidelines:

- The MOE is responsible of the implementation of this Master Plan in collaboration with all sectors concerned.
- Key activities involving several ministries must be clearly defined with a description about the extent of responsibilities for each partner:
  - o *NTC* will be in charge of the national list of professional standards, qualification system analysis, and regional training council.
  - o *DTVE* is responsible for the development of TVET institutions (policy, implementations), the standards of these institutions and general performance monitoring, promotion of TVET.
  - o *DNFE* can be responsible for the development of short courses for disadvantaged and low educated groups and basic vocational education courses.
  - o *VEDC* is responsible for expertise on competency and curriculum standards and development, training of staff and assessors, research on TVET, information system.



- *MLSW* will be responsible for the development of the financing system of skills development fund, labor market analysis and follow up, skills testing and validation of experience, job counseling. For each of these subjects, committees could be set up under the responsibility of *MLSW*.
- *Other ministries (MLSW, Health)* can deliver vocational education and training curriculum with the assistance of *VEDC* for designing these curricula and submission for accreditation.
- Activities are precisely defined and feasible in terms of outputs, time frame, budget constraint and available manpower to take care of them.
- Local short term consultants are hired for the implementation of projects within fix duration in order to make up for the lack of human resources in *MOE*.
- The actions are linked to the economic and social priorities as well as national and local needs analysis.
- There can be implementation of projects using a sector approach (examples: hospitality, financing, agriculture, garment, wood) or general topic approach (curriculum development, qualification system) but with real applications through pilot projects then dissemination if pilot projects are successful.
- The budget tends to come from various sources: government, private sector, foreign donors and international organizations, individuals when possible. Based on the Lao economic evolution, the part of the Lao government, provinces and companies should increase to develop autonomy and sustainability as well as to reduce the uncertainty of foreign support.
- A strong marketing and promotion plan is implementing to promote vocational education and training especially for skills which are not so popular but highly requested by companies.

In conclusion, the Master Plan is ambitious and covers many activities. His success will depend on a close follow up by the partners involved and regular review of success and difficulties.

### **6.3 Management of the Master Plan**

This Master Plan needs a strong follow-up and regular assessment in order to ensure a successful implementation. A Master Plan Committee will be set up under the leadership of the Vice Minister of Education for TVET with the following responsibilities:

- review regularly the past activities
- plan the future activities with clear responsibilities of each department (see topic responsible organization in the matrix)
- identify and follow-up the possible sources of financing
- adjust the activities based on the evolution of the context
- make an assessment in 2010 and 2015 in order to adjust the plan for the following five years

This operating committee should meet not less than one time every two months in order to implement the important number of activities scheduled. The members of the Master Plan Committee should include representatives of the *DTVE*, *DNFE*, Department of Planning and International Cooperation (*DPIC*), and *MLSW*.

## **7 MASTER PLAN 2006-2010**

A precise log frame table is including in the annex with the activities, indicators, impact on strategy, planning, organization in charge and expected budget, It covers the period 2006-2015 as many activities included in the period 2006-2010 will continue during the period 2011-2015.

### **7.1 Equitable access program**

#### Strategic Project 1: Construction, Renovation and Expansion of TVET

- Outcome 1.1: Schools and colleges in the Northern region improved, upgraded and strengthened
- Outcome 1.2: Schools and colleges in the Central region improved, upgraded and strengthened
- Outcome 1.3: Schools and colleges in the Southern improved, upgraded and strengthened
- Outcome 1.4: IVET schools improved
- Outcome 1.5: Access to skills development and vocational training expanded thanks to cooperation with other organizations

#### Strategic Project 2: Expand TVET Offer and Approaches

- Outcome 2.1: Training needs and employment demand determined
- Outcome 2.2: Existing curricula adjusted and new curricula developed according to economic and social demand, with particular regard to SME
- Outcome 2.3: New supplementary contents integrated into school programs and new learning approaches introduced
- Outcome 2.4: IVET-Concept implemented in vocational schools
- Outcome 2.5: Public-private cooperation in TVET strengthened and expanded
- Outcome 2.6: The vocational and agricultural subjects in the lower and upper education available.
- Outcome 2.7: The mechanisms for vocational guidance, counseling and promotion ready and implemented

### **7.2 Improvement of quality and relevance programme**

#### Strategic Project 3: Develop and Improve the TVET Teachers and Staff

- Outcome 3.1: A plan for training and upgrading of TVET teachers and staff established
- Outcome 3.2: Institutions for pre- and in-service training of TVET-Teachers developed
- Outcome 3.3: Improve existing and implement new programs of pre- and in-service training for TVET-teachers and staff
- Outcome 3.4: Regional and international cooperation to develop TVET- teacher training in Laos PDR

#### Strategic Project 4: Set up the Quality Assurance System of the TVET

- Outcome 4.1: Standards for TVET teachers and staff developed and implemented

- Outcome 4.2: Standards for TVET institutions developed and implemented
- Outcome 4.3: National Qualification Framework developed
- Outcome 4.4: National occupational standards developed
- Outcome 4.5: Mechanism to assess skills and validate experience defined and implemented
- Outcome 4.6: Mechanism for accreditation of curriculum reviewed, adjusted and implemented

Strategic Project 5: Develop the Information System of TVET

- Outcome 5.1: Information system for data collection, reporting and diffusion in MOE and with other ministries set up and implemented
- Outcome 5.2: Capacities for TVET research and studies developed

### **7.3 Improvement of the management and administration programme**

Strategic Project 6: Improve the Organizational Structure of TVET

- Outcome 6.1: TVET administration mechanism at meso level, particularly the departments and division responsible for TVET improved and set up
- Outcome 6.2: TVET administration mechanism at micro level improved and set up

Strategic Project 7: Formulate the Policy and Tools at the Macro Level for the Development of TVET

- Outcome 7.1: PM-decree for TVET development in Lao PDR and actions plan up to 2010, 2011-2015 and 2016-2020 defined and approved
- Outcome 7.2: Implementation of TVET Master Plan is assured
- Outcome 7.3: Incentive measures for promoting and supporting talents, women, disadvantaged, disabled and ethnics students from rural and remote areas, performing staff formulated and approved
- Outcome 7.3: Incentive measures for promoting and supporting employers/ enterprises both public and from private sector or communities are formulated and approved
- Outcome 7.4: Legal frame work, rules and regulation for administering TVET institutions, regulation for income generating (production, service, training fees etc.) to suit the real requirement formulated and approved
- Outcome 7.5: Legal framework for TVET budget allocation from state budget, development funds, income of the TVET institutions formulated and approved.

## **8 ACTION PLAN 2011-2015**

Many activities planned in 2006-2010 will continue within the period 2011-2015. For the period 2011-2020, the guidelines of activities given in the TVET strategy are listed below. The activities that are not mentioned in the period 2006-2010 have been included in the log frame in the annex.

## **8.1 Equitable Access Program**

### **8.1.1 Project: Construction, Renovation and Expansion of TVET institutions**

*Activities:*

- Strengthen the Technical-Vocational Schools\Vocational Training Centers.
- Upgrade Technical-Vocational Schools to the level of Technical College.
- Expand vocational disciplines which will have a potential for the economy such as: electricity hydro power, electro-mechanic, auto-mechanic, welding and plumbing, exploitation-survey -mining processing, tourism, land and properties management, nature and environment protection, trade, communication-transport, technology of communication, handicraft, industry processing, cross-border service and etc.
- Establish the technical-vocational school/vocational training center in some districts with good economic performance at least increased to 3 institutions.

### **8.1.2 Project: Marketing and Promotion of TVET**

*Activities:*

- Mobilize, encourage and promote the community, the civil society and entrepreneur to contribute to the development of TVET.
- Promote society and enterprises for the contribution to TVET development.
- Strengthening the National Training Council to act as coordination body in the collaboration between public and private sector in order to continue to develop the Lao manpower.

## **8.2 Quality and Relevance Programme**

### **8.2.1 Project: Improvement of TVET Modes of Delivery**

*Activities:*

- Improve the different forms of training for formal-non-formal training, dual training, integrated training, informal training, distance learning and e-learning.
- Improve the curricula of different disciplines and levels in order to meet the socio-economic situation and the needs of domestic labour market.
- Introduce vocational subjects into the curricula at the lower and upper secondary education in the province.
- Implement the vocational guidance at the lower and upper secondary school and to provide career counseling for the preparation of employment.
- Introduce the technology of communication subject, the know how on the entrepreneurship concept and protection of environment into the curricula.
- Develop the teacher's manual, the teaching and learning media and the equipment to serve the different forms of training.

### **8.2.2 Project: Teacher Qualification and Staff Development**

*Activities:*

- Monitor and evaluate of the qualification and training of TVET teachers at higher diploma and at the bachelor degree.

- Expansion of the vocational teachers institutions at the regional level in order to meet the real needs of all technical-vocational Schools and vocational training centers.
- Establish a collaboration network at the regional and international level for the academic exchange and teacher qualification at the master's and doctoral degree.

#### 8.2.3 Project: Quality Assurance in TVET

##### *Activities:*

- Improve the standards of TVET teachers and staffs.
- Improve the standards of TVET institutions.
- Improve and develop standards of TVET; organize the competency standards and skills testing and the validation of prior learning or the past experiences.

#### 8.2.4 Project: Development of TVET Information System

##### *Activities:*

- Improve TVET information system; plan the data base structure to be relevant to the information system of the Ministry of Education or the Ministry of Labour and Social Welfare.
- Study/analyze the training needs and the necessity in improving and upgrading the quality of TVET in order to meet the real needs of labour market as well as the socio-economic development in each period.
- Improve the system of annual TVET report.
- Improve the tracer study of TVET graduates.

### **8.3 Administration and Management Programme**

#### 8.3.1 Project: Improve the Organizational Structure of TVET

##### *Activities:*

- Strengthening TVET administration and management agencies on national, provincial and local level.
- Upgrading the Vocational Education Development Center to be the Institute for Vocational Education.
- Upgrading the vocational administrators in the field of administration and management.

#### 8.3.2 Project: Formulate Macro-level Policy and Management Tools

##### *Activities:*

- Implement and improve the regulations concerning the incentives for the teachers.
- Improve the regulations concerning the expenditures and investment in TVET.

## **9 DIRECTION OF THE MASTER PLAN 2016-2020**

### **9.1 Principles**

At this stage, forecasting the activities and budget for the period of 2016-2020 is not realistic. There are two main uncertainties:

- Internal factors: The Master Plan 2006-2015 is ambitious, its success will highly depend on the available financial resources and the local human resources available for implementation, some activities might have to be extended to the period 2016-2020.
- External factors: Globalization means that changes in the world can have direct effects on each individual country. There are very important financial, environmental, political uncertainties for the next 10 years.

The Master Plan will need a regular follow up and the review in 2015 will enable to finalize the detailed activities and budget at this time but the 3 main parts should stay the same.

### **9.2 Equitable Access Program**

In order to bring Lao PDR out of the group of least developed countries, the TVET schools and colleges will need a continuing development in quantity and quality

- Existing institutions will be upgraded and renovated if it has not been finished during the period 2006-2015. New ones will be created especially in remote areas in cooperation with the MLSW and the DNFE.
- The workforce will be important as Lao population is presently young then continuing training will be needed. They will need to upgrade their skills and develop new ones especially for industrial and IT development and following the *Lifelong Learning* concept predominant in many countries.
- Curriculum development will continue with many different forms of learning. Flexibility will be the key word. There will be a need to follow closely the evolution of the demand at the local level to assist the forecasted industrial economic development.
- Promotion and guidance will be always needed as even in many developed countries, students prefer going to general education instead of the vocational path and many sectors lack of technicians and skilled workers.
- The focus will continue on women and disadvantaged target groups so they can have a significant share of training and development.
- The IVET concept will be disseminated and allow different target groups to enter training for different durations and objectives but with the possibilities to link to a national curriculum.

### **9.3 Improvement of Quality**

The period 2016-2020 should be the time that TVET in Lao PDR reach the international standards in terms of quality.

- Staff and teachers are the key components for the success of TVET. They will also need to follow the lifelong learning concept.
- New methods, the use of IT for teaching, the cooperation with the private sector in many forms will change the role of the teacher to become more facilitator than only lecturer.
- Short course for in service training will be needed but upgrading at the level of Bachelor, Master and PhD will have to continue in Vientiane and in universities in the provinces.
- Research in TVET will be strengthened to find the suitable tools and method for the Lao context. The international cooperation will help this human resources development through special programs with other schools, colleges and universities in South East Asia as well as with other countries. It will be the time to implement long term partnerships among institutions with exchanges of teachers and, eventually, students.
- The national qualification system will assist to guarantee the quality of the curriculum as well as the providers if it has been developed in a simple way adapted to the Lao context of budget and personnel.
- Validation of experience and skills testing can become key tools for the workers development as most of the Lao workforce does not have any qualifications. During the phase 2006-2015, this system must be built in a way that the partners (individuals, companies and institutions) have trust in his reliability and quality, it will really give a chance for professional and career developments.
- The number of private providers is going to increase at a very high rate in the next 10 years. Implementation of standards for curriculum, institutions and teachers/trainers will be much needed.
- All ministries, associations will have to be involved in human resources development in order to provide precise information on the needs of occupations and skills at the provincial, national sector levels based on regular analysis and on request surveys.

#### **9.4 Continuing Improvement of the Management and Administration**

Within 2006-2015, it is expected that major changes will be decided and implemented in administration and management of TVET. But rules and regulations have to adapt constantly especially in a developing country. Then for the period 2016-2020, several priorities might appear:

- Decentralization will have to be reinforced because Vientiane is likely to attract many workforce, new rules and regulations will be needed to promote local training and development for work in the provinces.
- The regular review of the Master Plan will allow adapting to the economic changes.
- Following the forecast of growth, it is expected that the private sector will develop and will need more people. If TVET institutions and organizations want to develop at the international level, they will need to attract qualified people or young graduates with potential. Salary, career path, working conditions will have to be reviewed regularly to increase motivation to become directors, experts, teachers, administrative officers.

- For the next years, various donors will continue to support TVET but, in the long term, this support might be reduced. Then one key issue of the period 2010-2020 will be to set up a sustainable mechanism to finance most of TVET activities. A cooperation with various partners especially MLSW, professional associations, LNCCI will be a key success factor to implement the suitable financing system.



















































N	Activities	Indicators and expected outputs	Budget: million US\$	Impact/ strategy	Resp. orga.	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Budget: million Kip
Outcome 7.5: Legal frame work, rules and regulations for administering TVET institutions, regulation for income generating (production, service, training fees etc.) to suit the real requirement formulated and approved																
7.5.1	Formulate regulations on the administration and management of the TVET institutions	Lao/international experience reviewed, regulations for institutes (management, governance, flexibility, effectiveness, efficiency, orientations, effects, outputs, process) proposed	0.0046 m US\$	1	Resp.: DTVE Part.: schools											41
7.5.2	Improve regulations to control the budget and income generation of the TVET institutions	Lao/international experience on the management of the budget and income generated reviewed mechanism proposed and reviewed, regulations passed	0.0046 m US\$	2	Resp.: DTVE Part.: schools											41
Outcome 7.6: Legal framework for TVET budget allocation from state budget, development funds, income of the TVET institutions formulated and approved																
7.6.1	Review the present situation of financing of TVET	Lao/international experience on the TVET financing reviewed, mechanism proposed and reviewed	0.0046 m US\$	1												41
7.6.2	Formulate the regulation for unit cost of students in TVET institutions	Lao/international experience on the unit cost per student reviewed, mechanism proposed and reviewed, regulations passed	0.0046 m US\$	2	Resp: DTVE Part.: schools, DF Moe											41
7.6.3	Anlyse the possibility to establish a training fund or use the training fund of MLSW for some schemes of training in TVET	Lao/international experience reviewed, Training fund of MLSW and SME analysed and discussed, mechanism for implementation defined, proposal for implementation defined	0.0046 m US\$	3	Resp: DSDE Part.: NTCPO, DTVE, DF MoE											41

	million US\$	million Kip
<b>Total</b>	156,75	1,410,733
10% administration costs	15,67	141,073
<b>total</b>	<b>172,42</b>	<b>1,551,806</b>
existing funding	24,7	222,300
<b>needed funding</b>	<b>147,72</b>	<b>1,329,506</b>