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UNIDO INTEGRATED PROGRAMME FOR LAO PDR

A COMPREHENSIVE FRAMEWORK
TO FOSTER ECONOMIC INITIATIVE
IN LAO PDR

**Lao PDR:
Medium-term Strategy and Action Plan
for Industrial Development**

Final Report

Executing Agency: UNIDO
Government Counterpart Agency: Ministry of Industry and Handicrafts

Vientiane, 31 May 2003

FOREWORD

The present document summarizes the conclusions and recommendations made by a team of UNIDO consultants under an integrated programme for industrial development in Lao PDR entitled "A Comprehensive Framework to Foster Economic Initiative in Lao PDR".

The programme has been funded by generous contributions by the governments of Belgium, France, Luxembourg and the Republic of Korea, in addition to funds provided from UNIDO's regular budget.

The main counterpart on behalf of the Government was the Ministry of Industry and Handicrafts. The programme has been carried out under the guidance of a cross-ministerial Advisory Committee chaired by H.E. Mr. Somboune Rajasombath, Vice Minister for Industry and Handicrafts, with Mr. Chaturong Nakhavith, Director General, Department of Industry, Ministry of Industry and Handicrafts, as Vice Chairman. Other members were Souvanpheng Boupphanouvong, Mikael Brenning, Bounnam Jounlabouthdy, Lathsamy Keomany, Viravanh Khamtan, Liber Libouapao, Santiphap Phomvihanh, Khamphone Rasachack, Sisalieo Savengsieksa, Khoun Suthammakoth and Senekham Vongvorath.

Mr. Senekham Vongvorath, Director, Centre for Industrial Research and Development, performed the function of National Programme Director.

The programme has been supported by a team of seven UNIDO staff members, including Juergen Hierold (wood processing), Evert Kok (food and construction materials industry), John Moll (garment industry), Philippe Scholtès (policy and institutional support, team leader), Ricardo Seidl da Fonseca (investment promotion, technology management), Naoto Suzuki (handicrafts) and Tezer Ulusay de Groot (SMEs).

The field work was carried out during the period January 2002 – April 2003 by a team of international consultants consisting of Carlos Aguirre (technology management), Mikael Brenning (Senior Technical Advisor), Alejandro Vera Casso (investment promotion), Bruno de Cazelet (legal matters), Valerie Chevtchenko (construction materials industry), Marcel Crul (innovations), Johan Diehl (innovations), Peter Haddock (wood processing), Phisit Juyong (garment industry), Tom Kelleher (industrial estates), Roy King (wood processing), Vicky Lederman (textile handicrafts), Tatu Ollikainen (wood processing), Jean Raux (food industry), Fumio Shimizu (wood handicraft), Masaaki Shiraishi (handicrafts), Ole Steen-Olsen (hydropower contracts), Keith Stuart-Smith (textile and garment industry) and Nilgun Tas (SMEs).

The work of the international consultants was supported by a team of national experts consisting of Praseuth Banchongphakdy (FDI promotion), One-Sy Boutsivongsakd (textile and garment industry), Somneuk Davading (trade policy), Sengxay Phousinghoa (SMEs, food industry), Rassanikone Nanong (textile handicrafts), Phimmaha Panyanouvong (construction materials industry) and Thongleua Southavilay (wood processing, wood handicrafts and technology management).

A draft version of the present report was presented and discussed on the occasion of a National Workshop organized on 14 May 2003. The workshop was chaired by H.E. Mr. Onneua Phommachanh, Minister for Industry and Handicrafts.

In addition to his opening and closing remarks, H.E. Mr Onneua also delivered, on behalf of Vice Prime-Minister for Economic Affairs H.E. Dr. Thongloun Sisoulith, a keynote address on "Industrialization and Modernization in Lao PDR". The workshop was attended by three ministers (Industry and Handicrafts, Commerce and Justice), three vice-ministers (Industry and Handicrafts, Agriculture and Forestry, Committee for Planning and Cooperation), four vice-governors (rank of vice-ministers), five ambassadors (Australia, China, France, Japan and Singapore), three Representatives of international organizations (ADB, IMF and UNDP) as well as other high-ranking representatives of the Government, the donor community and the industry itself.

Shortly after the National Workshop, the Government released its draft "Lao PDR's National Poverty Eradication Programme (NPEP)". The NPEP, in agreement with the Bretton Woods organizations, will replace the standard Bretton Woods Poverty Reduction Strategy Paper. The final version of NPEP will be presented to the donor community at the annual Roundtable Meeting in September 2003 and will subsequently be adopted by the National Assembly. Therefore, the NPEP will be a highly authoritative document guiding the cooperation between the Government and the donor community for several years to come.

The UNIDO proposed strategy and action plan as well as the National Workshop feature prominently in the NPEP. In addition to substantive matters, NPEP states "The Strategy and Action Plan for Industrial Development, ready in draft form, will become the subject of a policy dialogue meeting, in the context of the Government's roundtable process, with all stakeholders involved. After this, it will be finalized by the Government as a medium-term strategy cum action plan for industrial development". With reference to the National Workshop, NPEP continues "The announced dialogue meeting on the industrial action plan contains a series of proposals regarding the improvement of the regulatory framework, which will serve as a priority reference in this reform area".

On behalf of UNIDO and the team of consultants, we wish to express our appreciation to the Government of Lao PDR for its strong and dedicated support during the implementation of the programme. Thanks are also due to a large number of representatives of the industry and the donor community who have provided valuable advice and contributions during the course of the programme.

We hope that the present proposed medium-term strategy and action plan for industrial development will contribute to strong sustainable growth in Lao PDR and achievement of the Government's objective to eradicate poverty in Lao PDR.

Mikael Brenning
Senior Technical Advisor

Table of Contents

FOREWORD.....	i
ABBREVIATIONS AND ACRONYMS	v
ABSTRACT	vii
EXECUTIVE SUMMARY	ix-xvii
1 INTRODUCTION.....	1
1.1 Background.....	1
1.2 Objectives and scope	2
1.3 Outline of the report	2
2 THE MANUFACTURING SECTOR.....	2
2.1 The manufacturing sector in the overall economy	2
2.2 Size and sectoral composition of the manufacturing sector.....	3
2.3 Number, size and employment of firms	4
2.4 Spatial distribution of firms.....	4
2.5 Ownership structure.....	5
2.6 Labour costs	5
2.7 External trade	6
2.8 Technological level.....	8
2.9 Productivity and competitiveness.....	9
2.10 Firm specific strengths and weaknesses	10
3 OVERARCHING GOVERNMENT INDUSTRIAL STRATEGY AND POLICIES	11
3.1 Government's approach to industrial planning.....	11
3.2 Key elements of current industrial policies.....	14
4 THE BUSINESS ENVIRONMENT	17
4.1 Legal framework	17
4.2 Business registration and licensing	18
4.3 Trade policies.....	20
4.4 Investment policies.....	22
4.5 Access to finance	25
4.6 Corporate and personal income taxation	26
4.7 Education and training	28
4.8 Information.....	29
4.9 National innovation system.....	29
4.10 Industrial land.....	30
4.11 Environmental issues	31
4.12 Institutional infrastructure	32
4.13 Physical constraints to industrial development	34
5 MANUFACTURING SUB-SECTORAL ISSUES	35
5.1 Wood processing industry.....	35
5.2 Garment industry	37
5.3 Food industry	40

5.4	Construction materials industry	41
5.5	Handicrafts	43
5.6	Other manufacturing sub-sectors	45
6	PROPOSAL FOR A MEDIUM-TERM STRATEGY AND ACTION PLAN FOR INDUSTRIAL DEVELOPMENT	46
6.1	Comparative advantage and opportunities	46
6.2	Objectives.....	48
6.3	Main thrust of a medium-term industrial development strategy	49
6.4	Main policies and specific action	50
6.5	Implementation modalities	56
7	PROJECTS AND TECHNICAL ASSISTANCE PROPOSALS FOR IMPLEMENTATION OF THE ACTION PLAN	56
ANNEX	Summary sheets of projects and technical assistance proposals	61

List of Tables

Table 1	Real GDP Growth 1992-2001 and Shares of Nominal GDP by Industrial Origin 1992 and 2001	3
Table 2	Sectoral Composition of the Manufacturing Sector in 1999	3
Table 3	Number of Manufacturing Establishments, and Employment, According to Size of Establishment in 1999	4
Table 4	Employment, Output and Value Added in the Manufacturing Sector in 1999 According to Ownership.....	5
Table 5	Manufacturing Wage Costs in Lao PDR and Selected Other Countries in 2002 or Latest Year	6
Table 6	Exports from Lao PDR according to Major Product Groups and Major Countries/Regions of Destination in 2000	6
Table 7	Imports to Lao PDR according to Major Product Groups and Major Countries/Regions of Origin in 2000.....	7
Table 8	Openness Index for Lao PDR and Selected Other ASEAN Member Countries in 2000	8
Table 9	Relative Shares of Manufacturing at Different Technological Levels in Lao PDR and Selected Other Countries.....	9
Table 10	Labour Costs, Gross Output and Value Added per Employee in Lao PDR and Selected Countries in 1999.....	10
Table 11	Key Characteristics of a Centrally Planned Economy (CPE) and an Advanced Market Economy (AME), including the Positioning of Lao PDR on a CPE-AME Scale	13
Table 12	Summary of Main Policies and Specific Action of the Medium-term Strategy and Action Plan for Industrial Development	51

Abbreviations and Acronyms

ACT	Agreement on Clothing and Textiles
ADB	Asian Development Bank
AFTA	ASEAN Free Trade Area
AIA	ASEAN Investment Area
AICO	ASEAN Industrial Cooperation Scheme
AISP	ASEAN Integration System of Preferences
ASEAN	Association of South-East Asian Nations
BOL	Bank of Lao PDR
CCCA	Coordinating Committee on the Implementation of the CEPT Scheme for AFTA
CCI	Chamber of Commerce
CEPT	Common Effective Preferential Tariffs
CIF	Cost, insurance, freight
CIRD	Centre for Industrial Research and Development
CLMV	Cambodia, Lao PDR, Myanmar, Vietnam
CMT	Cut, Measure, Trim
CP	Cleaner Production
CPC	Committee for Planning and Cooperation
DDFI	Department for Promotion and Management of Domestic and Foreign Investment of CPC
DRC	Domestic Resource Cost
ERP	Effective Rate of Protection
EU	European Union
FDD	Food and Drug Department
FDI	Foreign Direct Investment
FDQCC	Food and Drug Quality Control Centre
FTSC	Forestry Training and Service Centre
GATT	General Agreement on Trade and Tariffs
GDP	Gross Domestic Product
GEL	General Exception List
GMS	Greater Mekong Sub-region
GOL	Government of Lao PDR
GSP	General System of Preferences
HACCP	Hazard Analysis and Critical Control Point
HS	Harmonized Commodity Description and Coding System
ICT	Information and Communication Technology
IL	Inclusion List
ILO	International Labour Organization
IP	Integrated Programme
IRRI	International Rice Research Institute
ITPO	Investment and Technology Promotion Office
JICA	Japan International Cooperation Agency
kWh	kilo Watt hour
LDC	Least Development Country
LEDO	Local Enterprise Development Organization
LHG	Lao Handicraft Group
LNCCI	Lao National Chamber of Commerce and Industry
LUS	Lesser Used Species
LWU	Lao Women's Union
LYU	Lao Youth Union
MAF	Ministry of Agriculture and Forestry

MDG	Millenium Development Goal
MFA	Multi-Fibre Arrangement
MFN	Most Favoured Nation
MIH	Ministry of Industry and Handicrafts
MOC	Ministry of Commerce
MOE	Ministry of Education
MOF	Ministry of Finance
MOJ	Ministry of Justice
MOL	Ministry of Labour and Social Welfare
MUS\$	Million US dollars
NAFES	National Agriculture and Fisheries Extension Services
NAFRI	National Agriculture and Forestry Research Institute
NGO	Non Governmental Organization
NIS	National Innovation System
NPCS	National Productivity and Competitiveness System
NTM	Non-Tariff Measure
NTR	Normal Trade Relations
NUOL	National University of Laos
NWFP	Non Wood Forest Products
ODA	Official Development Assistance
PDR	People's Democratic Republic
PWICC	Primary Wood Processing Service Centre
QR	Quantitative Restrictions
RCA	Revealed Comparative Advantage
RMFC	Rural and Micro Finance Committee
SCPCG	Steering Committee for Production of Commercial Goods
SME	Small and Medium-sized Enterprise
SMEDA	SME Development Agency
SMEDAC	SME Development Advisory Council
SMQT	Standards, Metrology, Quality and Testing
SOE	State Owned Enterprise
SSMAC	System for Standards, Metrology, Accreditation and Certification
STEA	Science and Technology Environment Agency
SWPSC	Secondary Wood Processing Service Centre
SXIA	Savannakhet-Xeno Investment Authority
TA	Technical Assistance
TFP	Total Factor Productivity
UK	United Kingdom
UNCOMTRADE	United Nations COMTRADE data base
UNIDO	United Nation Industrial Development Organization
USA	United States of America
WTO	World Trade Organization

CURRENCY EQUIVALENTS

(as of early April 2003)

US\$ 1.00 = Kip 10,685

ABSTRACT

The present report concludes that, although nominal wage costs in Lao PDR are amongst the lowest in the region, and in the world, labour productivity has to be improved to transform this comparative advantage into a competitive advantage on domestic and export markets.

Although the Constitution envisages an economic system for Lao PDR based on market mechanisms, a review of the Government's overall approach to industrial planning concludes that it still contains most features of a typically centrally planned economy. The current focus on import substitution, which has little future, needs to be shifted towards a stronger focus on export orientation with significantly larger potential. The "import-export equilibration plan" needs to be replaced by other means to address fundamental problems related to the country's trade deficit.

The most important aspects of the business environment are the legal framework and judiciary system; business registration and licensing; trade policies; investment policies; the banking sector; taxation; vocational training; information dissemination; infrastructure; and, institutional support. The report concludes that there are weaknesses in all these areas, but it is within the Government's power to remedy these weaknesses by decisive and concerted cross-ministerial action.

The Medium-term Strategy and Action Plan for Industrial Development consists of 99 recommendations for specific action. The strategy has five main thrusts, viz. (i) good governance; (ii) creation of an enabling business environment, in particular for SMEs; (iii) support for productivity and competitiveness improvements; (iv) improving access to finance; and, (v) increased international trade integration. 59 project and technical assistance proposals are made in support of implementation.

A major problem is that the Government is not very well geared to actually implement the Action Plan. Although the Ministry of Industry and Handicrafts has an overall mandate to promote industrial development, it lacks the legal instruments to effectively pursue this mandate. On the other hand, other ministries and Government agencies, which administer the relevant legal instruments, have other mandates and are not primarily concerned with promotion of industrial development.

To improve the Government's implementing capability, two organizational measures are proposed. The first one is to merge the Ministry of Industry and Handicrafts (MIH) and the Ministry of Commerce (MOC) into one single Ministry of Trade and Industry, while hydropower, electricity and mining would be covered by a separate Ministry of Natural Resources. The second proposal is to form a joint MIH/MOC Secretariat to serve the Steering Committee for Production of Commercial Goods (SCPCG) chaired by the Vice Prime Minister for Economic Affairs.

For implementation of the proposed Strategy and Action Plan for Industrial Development, an appropriate first step would be to submit it to the SCPCG for its deliberations, prioritization of activities and endorsement. Following such an endorsement, a Prime Minister's Instruction, or equivalent, needs to be issued to ensure actual implementation of the Strategy and Action Plan by all concerned ministries and other Government agencies. In the meantime, the pending Prime Minister's Decree on promotion of SMEs needs to be promulgated without delay.

* * *

EXECUTIVE SUMMARY

1. Introduction

The present report forms part of a broader UNIDO integrated technical assistance programme to foster strong and sustainable industrial development in Lao PDR through improved policy formulation and implementation, and by strengthening productive capabilities in the manufacturing sector.

The Medium-term Strategy and Action Plan for Industrial Development (the Action Plan) is based on Party resolutions as well as Government socio-economic plans and its broad programme for "industrialization and modernization".

While the Government's programme for "industrialization and modernization" covers a broad range of sectors of the economy and provides the overall guidelines, the present Action Plan covers the manufacturing sector only and is more detailed and action oriented in its approach.

2. Main features of the manufacturing sector

The manufacturing sector accounts for 17.9% of the GDP of Lao PDR and provides employment in the formal sector to almost 100,000 people, equivalent to about 4% of the total labour force. Major manufacturing sub-sectors are food and beverages, garments, and wood processing.

Over the last decade, the manufacturing sector has been growing faster than the overall economy, viz. at an average annual rate of 9.4%, while the economy as a whole has been growing at an average annual rate of 5.6%.

Out of total Lao exports of about US\$ 350 million in 2001, the manufacturing sector accounts for two thirds, while exports of electricity accounts for most of the balance. Major export products are wood and wood products, garments and coffee.

Although nominal wage costs are amongst the lowest in the region and in the world, very low labour productivity and simple technologies hamper the exploitation of this comparative advantage so that products manufactured in Lao PDR can compete with foreign products on domestic and export markets.

3. Government's overall approach to industrial planning

The Government is committed to transform the economy from a centrally planned economy towards an economic system based on market mechanisms adjusted by the State. Significant progress has been made to this end, but when it comes to the manufacturing sector, the Government is still applying most of the concepts and approaches typical of a centrally planned economy.

The Government's increasing focus on the importance of the private sector, in particular small and medium-sized enterprises (SMEs), is commendable. It needs, however, more strongly emphasize the importance of export orientation and move away from import substitution by various means of protection, a policy that most countries in the world, often after having experienced costly mistakes, have

abandoned. The present study has also clearly revealed that there is little scope for import substitution, while there are promising opportunities for increased exports.

A major problem is that the Government isn't very well geared to actually implement coherent strategies and policies to promote industrial development and international trade in manufactured goods. Although the Ministry of Industry and Handicrafts has an overall mandate to promote industrial development, it lacks the legal instruments to pursue this mandate. On the other hand, other ministries and Government agencies that administer the relevant legal instruments, by which industrial development could be promoted, have other mandates and are not primarily concerned with industrial development.

4. The business environment

Legal framework and the judiciary. It is well known that a "fluid" legal framework and a weak judiciary clearly hamper industrial development. Success in the Government's efforts to improve the "rule of law" is fundamental for sustained industrial development, but is unfortunately a very slow process. The publication and wide dissemination of a National Gazette with laws, decrees, instructions, circulars, etc. would yield benefits in the short-term perspective.

Business registration and licensing. Despite gradual improvements, business registration and licensing procedures are still cumbersome and discretionary. Further improvements need to be based on an attitude of "promotion and facilitation" towards registration and licensing matters rather than "control and micro-management".

The trade regime. Lao PDR has made significant progress towards trade liberalization and is pursuing its WTO and AFTA agendas in accordance with plans. However, some recent "slippages" (the introduction of a differentiated turnover tax that discriminates against imports) and the existence of extensive quantitative restrictions on imports and other non-tariff measures may raise some concerns in the international community regarding future sustained adherence to liberalization commitments.

Formally, import duties are moderate for a developing country with an import-weighted average tariff of 14.7%. In reality, however, import duties are on average only 3% due to widespread, but non-transparent, import duty exemptions. Only 20% of the import duties are actually collected. Furthermore, non-recorded cross-border trade that, by definition, doesn't carry any import duties is rampant.

In order to pursue a coherent trade policy coordinated with, and not negated by, other tax and non-tax measures, there is a need for a cross-ministerial Trade Policy and Taxation Committee.

Furthermore, the fact that Lao PDR (together with a couple of other countries in the world only) hasn't got normal trade relations (NTR) with USA is damaging to Lao exports.

Investment policies. Despite recent improvements in the implementing regulations, the laws on domestic and foreign investment themselves need to be amended and harmonized with each other.

Incentives provided for investments are much decided on a case by case basis and consist mainly of import duty reductions and profit tax reductions or exemptions. The latter types of incentives are costly and "blunt" instruments and often not effective. The incentive system needs to be made more "automatic" and designed so as to target specific objectives such as exports, employment creation and skills development. Incentives should be discussed in an ASEAN context to avoid a regional "price war".

Access to finance. Access to finance, in particular term lending, is a major problem for the industry. The banking sector in Lao PDR is in a weak position to serve the manufacturing sector. Four major institutions holding two thirds of the banking assets and almost 80% of total deposits are insolvent.

Difficulties in enforcement of the Bankruptcy Law and the Secured Transaction Law through the court system as well as the lack of a system for centralized registration of mortgages hamper banks' willingness to provide credits to the industry, even when collateral is available.

An overall financial sector reform programme is ongoing and should yield some positive results over time. As part of this programme, the Government may also study the viability of new instruments such as a credit guarantee scheme, an export credit guarantee scheme, leasing, venture capital funds, etc.

Taxation. Taxation is considered as a major problem by industry representatives. Part of the problem is imbedded in the system, e.g. foreign enterprises paying 20% profit tax, while domestic enterprises pay up to 35%. The main problem is, however, the discretionary way in which the Tax Law is applied, whereby the actual tax to be paid is frequently subject to negotiations with an individual tax officer. These problems are being addressed under the ongoing tax reform programme.

Vocational training. To find semi-skilled and skilled labour is a particular problem to the industry that forces enterprises to carry out most of the training of workers themselves. Vocational and technical training institutes suffer from inadequate recurrent budgets, lack of training materials and equipment, under-qualified teachers and curricula that are not geared towards the needs of the industry.

Access to information. Access to information is another problem. Firstly, the Government needs to apply the concept of "management by information" and pay increasing attention to the dissemination of information. Secondly, the Government needs to strongly promote information and communication technologies (ICT) to avoid that Lao PDR becomes a victim of the "digital divide" (being left behind when the rest of the world is reaping enormous benefits from the development of ICT).

Physical infrastructure. Access to land is not really a problem, but the Government may promote the development of serviced industrial land to assist, in particular, SMEs. Away from the major industrial concentration areas, the lack of all-weather roads, inadequate road maintenance and lack of, or unreliable, access to electricity hamper industrial development.

5. Manufacturing sub-sectoral issues

In Chapter 5 of the report, a separate review is made of four manufacturing sub-sectors that together account for about 80% of total output and employment in the

formal manufacturing sector, viz. (i) the wood processing industry; (ii) the garment industry; (iii) the food industry; and (iv) the construction materials industry.

A separate section is devoted to handicrafts, accounting for a significant share of the production of small enterprises and of the informal manufacturing sector. A final section provides comments on some other manufacturing sub-sectors.

6. Comparative advantage and opportunities

Comparative advantage. Comparative advantage is a necessary precondition for industrial development, but needs to be exploited by various means to translate into international competitiveness.

The strategy and action plan is based on recognition of the following comparative advantages of Lao PDR:

- (i) reasonable availability of unskilled labour;
- (ii) low nominal wages;
- (iii) traditional handicrafts skills;
- (iv) availability of land for forestation and pasture;
- (v) availability of forests;
- (vi) availability of electricity at low to moderate cost; and,
- (vii) closeness to large regional markets.

Opportunities. As to future export potential in 5-10 years' time, *given* adequate Government policies *and* private sector initiatives, areas that may offer opportunities in the future are indicated below. Values are of course just broad indications of magnitudes.

- primary processed coffee	US\$ 50 – 100 million
- beef meat	US\$ 40 - 50 million
- "niche" food products	US\$ 10 - 25 million
- beer	US\$ 10 - 20 million
- high value added secondary wood products	US\$ 100 – 150 million
- garments with high labour content	US\$ 200 – 250 million
- woolen and silk carpets	US\$ 15 - 30 million
- electronic components	US\$ 5 - 10 million
- other light manufacturing	US\$ 10 - 20 million
- handicrafts	US\$ 10 - 20 million
Total above, annual exports:	US\$ 450 – 675 million

The above indicated export potential is equivalent to a doubling or tripling of Lao PDR's current exports of manufactured goods.

However, if appropriate Government policies are *not* implemented and private sector initiatives are *not* forthcoming (and the garment industry and wood processing industry collapse), current exports may very well decline by half from the current level of about US\$ 225 million annual exports of the above-mentioned goods.

7. Main thrust of a strategy and action plan for industrial development

The main thrust of the Action Plan consists of five core elements, viz.

- (i) good governance;
- (ii) creation of an enabling business environment, in particular for SMEs;
- (iii) support for productivity and competitiveness improvements;
- (iv) improving access to finance; and,
- (v) increased international trade integration.

8. Main policies, measures and specific action

The Action Plan includes in a matrix 99 specific recommendations regarding main policies and specific action to be taken by the Government. Each recommendation is categorized according to importance and priority (medium, high or top) and the cost associated with the implementation of each particular recommendation (low, medium or high).

8.1. Cross-cutting issues according to 5 major thrusts of the medium-term industrial development strategy

8.1.1 Good governance

- (i) Review and revise MIH's current industrial strategy document to become more market economy oriented;
- (ii) Review and revise MIH mission, functions, organization, procedures, staffing and staff requirements, budget and training needs;
- (iii) Study of singling out hydropower, electricity and mining from MIH into a separate Ministry of Natural Resources;
- (iv) Study of merging MIH and MOC into a new Ministry of Trade and Industry or establishing a joint MIH/MOC secretariat servicing the Steering Committee for Production of Commercial Goods;
- (v) Establish Public-Private SME Development Advisory Council (SMEDAC);
- (vi) Establishment of an SME unit linked to MIH as the secretariat of SMEDAC to promote and coordinate support for SMEs;
- (vii) Strengthening of LNCCI and local chambers of commerce and industry;
- (viii) Prioritize and carry out amendments of Business Law, Tax Law, Manufacturing Industry Law and the Laws on domestic and foreign investment;
- (ix) Prepare legal framework for establishment of business organizations;
- (x) Establish a centralized register of companies at MOC;
- (xi) Revigorize the initiative to publish a National Gazette with all legal documents;
- (xii) Continued public service reform and efforts to raise salaries of Government officials; and,
- (xiii) Raise manufacturing statistics to international standards.

8.1.2. Creation of an enabling business environment, in particular for SMEs

- (i) Promulgation of the PM's Decree on Support for Development of SMEs;
- (ii) Establishment of an SME Development Fund;
- (iii) Further simplification of business registration and licensing procedures;

- (iv) Revise business incentives to become transparent, factor cost or performance related, and “automatic”; reduce exemptions;
- (v) Continued tax reform to make tax administration more efficient and thereby more fair and transparent;
- (vi) Harmonize taxation of foreign and domestic enterprises;
- (vii) Dissemination of laws, decrees, regulations, etc. through provincial Governments and LNCCI;
- (viii) Promulgate a decree on development of industrial land;
- (ix) Assistance to the establishment of local SME development organizations;
- (x) Introduce entrepreneurship courses at NUOL;
- (xi) Programme to promote awareness of importance of SMEs; and,
- (xii) Development of roads, electricity and other infrastructure.

8.1.3. Support for productivity/competitiveness improvements

- (i) Increased budget allocation for primary and secondary education;
- (ii) Revise curricula of vocational training institutes to become more targeted towards the actual needs of the industrial sector;
- (iii) Promotion of FDI to encourage technology acquisition;
- (iv) Formulation of policy for strengthening of the “National Innovation System”;
- (v) Establishment of a National Productivity and Competitiveness System, including standardization, metrology, accreditation and certification, and a National Productivity Organization;
- (vi) ICT infrastructure development to provide broad-based and low cost access to Internet;
- (vii) Introduce a double deduction scheme for training costs for tax calculation purpose;
- (viii) Introduce an accelerated depreciation scheme for technology upgrading for tax calculation purpose;
- (ix) Assistance to Local Enterprise Development Organizations to implement quality and productivity improvement programmes;
- (x) Strengthening of LNCCI and its sectoral Groups to provide support for its members ;
- (xi) Strengthen capacity for quality and competitiveness improvement programmes, technology information provision and promotion of standards and quality;
- (xii) Measures to promote product innovation; and,
- (xiii) Promotion of cleaner production (CP) technologies.

8.1.4. Improving access to finance

- (i) Pursue banking reform;
- (ii) Amend the Secured Transaction Law;
- (iii) Establish a central register for mortgages;
- (iv) Study of regulations on existing financial instruments;
- (v) Study of regulations on new financial instruments such as credit guarantee fund, venture capital fund, etc.;
- (vi) Develop and implement “good practices” and guidelines for rural micro-credit schemes; and,
- (vii) Strengthening of accounting profession.

8.1.5 Increased international trade integration

- (i) Replace current import substitution focus with a focus on export orientation complemented by efficient import substitution;
- (ii) Establish a Trade Policy and Taxation Committee for coordinated and consistent policy formulation/implementation;
- (iii) Accelerate process to accede to WTO and proactively amend requisite laws and regulations;
- (iv) Pursue commitments under CEPT/AFTA without "slippage";
- (v) Coordinate WTO/AFTA/MFN and avoid "trade diversion";
- (vi) Make tariff regime transparent and reduce exemptions;
- (vii) Transfer selected tariff lines to CEPT IL to enable exports;
- (viii) Strengthen capacities related to standards, metrology, testing and quality for improved market access and trade facilitation;
- (ix) Promote agro-based industries for Savannakhet-Xeno Special Economic Zone;
- (x) Improve the production of external trade statistics;
- (xi) Establish an Export Promotion Fund; and,
- (xii) Strengthen capabilities of Trade Promotion Centre.

8.2 Manufacturing sub-sector specific issues

8.2.1 Wood-processing industry

- (i) Strategic focus on secondary, high value added secondary wood processing increasingly based on forest plantations;
- (ii) Relax temporarily and restrictively ban on foreign investment in secondary wood processing based on natural forests;
- (iii) Improve and extend the system of competitive bidding for log quota allocations;
- (iv) Establish a Forestry Training and Service Centre (FTSC);
- (v) Establish a Primary Wood Industry Consultancy Centre (PWICC);
- (vi) Establish a Secondary Wood Processing Service Centre (SWPSC);
- (vii) Support to the Wood Exporters Group under LNCCI;
- (viii) Transfer remaining tariff lines for secondary wood products to the AFTA/CEPT Inclusion List;
- (ix) Promote wood waste minimization and utilization; and,
- (x) Promote industrial processing of bamboo and rattan.

8.2.2 Garment industry

- (i) Achieve NTR with USA before the end of 2004;
- (ii) Conclude implementable transit trade agreement with Thailand;
- (iii) Further improve and streamline customs procedures;
- (iv) Amend Labour Law to achieve equal working conditions as in neighbouring countries;
- (v) Provide support for collective export promotion;
- (vi) Provide support for a "crash programme", including in particular training for employees in the garment industry;
- (vii) Establish a separate garment industry training and support centre in close cooperation with the industry itself;
- (viii) Exempt domestic second-tier sub-contractors for exports from the 3% turnover tax; and,

- (ix) Promote opportunity studies specific new investments through DDFI.

8.2.3 Food industry

- (i) Establish ASEAN aligned agricultural commodity standards;
- (ii) Promote appropriate post-harvest technologies;
- (iii) Improve hygiene, food safety and quality standards for processed food;
- (iv) Strengthen university education related to food industry;
- (v) Transfer products with export potential (e.g. beer, meat) to AFTA/CEPT Inclusion List;
- (vi) Promulgate legislation on “geographical indication of origin”;
- (vii) Encourage the establishment of a Food Processors Group under LNCCI; and,
- (viii) Promote opportunity studies and specific investments through DDFI.

8.2.4 Construction materials industry

- (i) Refrain from promotion of less than economically sized cement plants by distorting protectionistic measures;
- (ii) Revise procurement practices so as to allow domestic private manufacturers a fairer chance to compete with SOEs and foreign firms;
- (iii) Adopt norms and standards for selected building materials;
- (iv) Adopt quality control systems for domestic and imported building materials;
- (v) Further exploration and r&d regarding raw material resources suitable for production of building materials; and,
- (vi) Promote opportunity studies and specific investments through DDFI.

8.2.5. Handicrafts

- (i) Include handicrafts as a “priority industry” in the Law on Domestic Investment;
- (ii) Prepare master plan for development of the handicraft sector;
- (iii) Study of international markets for large scale production of handicrafts and Lao PDR’s possibilities to tap into these markets;
- (iv) Initiate programme for improved competitiveness;
- (v) Implement pilot projects to “cluster” handicraft producers for joint raw material supply, training, exports, etc.;
- (vi) Study introduction of an accreditation system for “living” preservation and promotion of traditional crafts; and,
- (vii) Study of existing support institutions and the feasibility to merge these into a National Handicrafts Centre.

9. Implementation modalities

The problem regarding implementation is imbedded in the fact that actions proposed in the Action Plan fall within the responsibility of many different ministries and Government agencies, viz. MIH, MOC, MOF, MAF, MOL, STEA, CPC, DDFI and Bank of Lao PDR, to mention the ministries/agencies mainly concerned.

Consequently, the implementation of the Action Plan needs the involvement of *all* economic ministries as well as other ministries and Government agencies.

Furthermore, all these actors need to carry out implementation in their respective fields in a coordinated manner.

As pointed out earlier, although MIH has an overall mandate to promote industrial development, it only has the legal mandate to act itself upon very few of the actions proposed in the Action Plan. The MIH, of course, hasn't got the authority to "instruct" other ministries and agencies what to do, or not to do.

Other ministries and agencies than MIH, on the other hand, have the legal base to take action in various relevant fields, but such action is unlikely to be forthcoming as their main mandates and focus are on other issues than industrial development.

An appropriate implementation strategy may include as a first step to bring the proposed Action Plan to the "Steering Committee for Production of Commercial Goods", chaired by the Vice Prime Minister for Economic Affairs and including all economic line ministers as members, for its deliberations. Following such deliberations and an endorsement by this committee, a Prime Minister's Decree, Order or Instruction may be issued to ensure actual implementation of the Action Plan by the concerned ministries and other Government agencies.

To strengthen the coordination between industry and trade policy formulation and implementation, the Government may also consider merging MIH and MOC into one single ministry, viz. a Ministry of Trade and Industry. Such an organizational solution is seen in many, if not most, market economies.

Associated with such a solution would be to single out hydropower, electricity, geology and mining into a separate Ministry of Natural Resources. These latter fields are so important and involve such large investments that they may justify a separate ministry. If combined with manufacturing and handicrafts, there is a risk that manufacturing and handicrafts are not given due attention, but instead are overshadowed by the interests in huge hydropower development.

As a short-term measure, to improve coordination between MIH and MOC, the Government may also consider to have a joint MIH/MOC secretariat to provide services for the Steering Committee for Production of Commercial Goods.

10. Support for Implementation of the Action Plan

To assist the Government in the implementation of the Action Plan, 59 possible projects and technical assistance proposal concepts are identified in the last chapter of the report. Some of these projects are of such importance that they should preferably be included in the Government's Public Investment Programme, while other projects are best suited to be implemented by the private sector. Most of the proposals, however, refer to technical assistance concepts, which may be considered by the donor community for funding. Each project and technical assistance proposal is elaborated upon in a one-page standardized sheet included as an Annex.

* * *

1 INTRODUCTION

1.1 Background

The present report forms part of a broader integrated programme for industrial development in Lao PDR entitled "A Comprehensive Framework to Foster Economic Initiative in Lao PDR" with the objective to promote sustainable manufacturing production in Lao PDR as a way to alleviate the country's trade deficit¹. It is meant to deliver a Medium-Term Strategy and Action Plan for Industrial Development featuring not only a strategy to do so, but also an indication of where commensurate resources can be raised through an appropriate combination of public and private, as well as domestic and foreign, investment.

The programme is being executed by the United Nations Industrial Development Organization (UNIDO) with the Ministry of Industry and Handicrafts (MIH) as the main counterpart agency of the Government of Lao PDR (in the rest of this document referred to "the Government" only).

Given its broad coverage, the integrated programme is implemented in close cooperation with several other ministries and Government agencies too as well as with representatives of the industry sector itself. Cooperation between MIH and these other institutions was formalized by the establishment of an Advisory Committee with broad cross-sectoral participation.

The programme is funded by financial contributions from the governments of Belgium, France, Luxembourg and the Republic of Korea, in addition to funds provided from UNIDO's regular budget.

The programme started in January 2002. The first phase of the programme, with the exception of few activities, is scheduled to come to a conclusion by the end of May 2003. The first phase has included a team of seven UNIDO Secretariat staff, missions to Lao PDR by 19 international consultants and contributions by 7 national consultants. During the first phase, 18 workshops were organized with a total of 722 participants. Two training courses for the garment industry were organized. Furthermore, 8 study tours abroad were organized for 20 Lao participants.

During the course of the first phase, the following reports have been prepared:

- (i) Composition and Evolution of Lao PDR's External Trade;
- (ii) Report on Food Processing Sector in Lao PDR;
- (iii) Product Innovation in the Food Processing and Packaging Sector in Lao PDR;
- (iv) Construction Materials Industry in Lao PDR;
- (v) Product Innovation in the Construction Materials Industry in Lao PDR;
- (vi) Strategy for Development of the Wood Processing Industry;
- (vii) Artisan Craft Development;
- (viii) The Textile and Garment Industry in Lao PDR;

¹ It is a widely held view in Lao PDR that a trade deficit always is something bad. However, if the trade deficit to a large extent originates from imports of investment goods and the trade deficit is funded by foreign direct investment, in particular for future exports, a trade deficit needs not necessarily be a matter of particular concern (on the contrary, this may be an indication of a positive economic development in the country). On the other hand, if the trade deficit has its origin in significant imports of consumption goods and is funded by loans from abroad, or by the donor community, the trade deficit may certainly be a matter of concern. However, in this case, the trade deficit is an indication of more fundamental problems such as too high levels of consumption and too low savings and investment ratios. Consequently, an analysis of the trade deficit needs to take into account also the composition of the capital account and other macroeconomic parameters to be meaningful.

- (ix) Prospects for Further Integration of Lao PDR's Manufacturing Sector into ASEAN;
- (x) Technical Report on the Industrial Land Development Programme;
- (xi) Technology Needs Assessment in Lao PDR;
- (xii) International Experience of Promotion of SMEs;
- (xiii) Small and Medium-sized Enterprise Development Framework; and,
- (xiv) Proposal for Promotional Tools for Promotion of Foreign Direct Investment.

In addition to the above-mentioned reports, short technical notes on various topics have also been prepared.

1.2 Objectives and scope

The objective of the present report is to consolidate all major findings during the course of implementation of the integrated programme into one document in the form of a proposal to the Government for a medium-term (3-5 years) strategy and action plan for industrial development in Lao PDR.

"Industry" in this document refers, unless otherwise specified, to manufacturing only and consequently doesn't include sectors such as mining, construction and electricity, which are sometimes included in the definition of "industry".

1.3 Outline of the report

In Chapters 2, a primarily descriptive review of the manufacturing sector in Lao PDR is presented, including an identification of firm specific strengths and weaknesses. Chapter 3 provides a broad outline of the Government's overarching strategy and policies for industrial development. Chapter 4 contains a description and analysis of the business environment in its broadest sense. In Chapter 5, issues related to some selected specific manufacturing sub-sectors are analyzed. Against the background of Chapters 1-5, a proposal for a medium-term strategy and action plan for industrial development in Lao PDR is presented in Chapter 6, including proposed modalities for its implementation. In the concluding Chapter 7, a number of possible projects and technical assistance proposals in support of the implementation of the proposed action plan is set forth.

2 THE MANUFACTURING SECTOR

The present chapter provides some highlights of the manufacturing sector in terms of basic descriptive statistics and also provides some benchmark statistics to put the Lao manufacturing sector in an international perspective.

2.1 The manufacturing sector in the overall economy

The importance of the manufacturing sector in the overall economy, as well as the change between 1992 and 2001, is illustrated in Table 1.

Table 1 Real GDP Growth 1992-2001 and Shares of Nominal GDP by Industrial Origin 1992 and 2001

Sector	Average Annual Growth 1992-2001 (%)	Sector Share of GDP (%)	
		1992	2001
Agriculture	4.3	61.9	51.3
Industry 1/	9.4	17.8	23.6
- whereof manufacturing	9.4	13.4	17.9
Services	6.2	20.4	25.0
Whole economy (GDP)	5.8	100.0	100.0

Source: National Statistical Centre, UNIDO research team calculations.

Footnote: 1/ Includes mining, quarrying, manufacturing, construction, electricity, gas and water.

In the period 1992-2001 GDP growth averaged an annual 5.8%. In the same period, agriculture grew by an average annual 4.3%, manufacturing by 9.4% and services by 6.2%. Consequently, the share of the agricultural sector in GDP between 1992 and 2001 went down from 61.9% to 51.3%, while during the same period the share of the manufacturing sector increased from 13.4% to 17.9%. Current revisions of the national accounts, however, indicate that there may be an overestimation of the manufacturing sector's share of GDP.

In terms of employment, out of a total labour force of about 2.4 million persons in 2002, manufacturing (in the formal sector) accounts for close to 100,000 persons, or approximately 4%. The agricultural sector alone accounts for about 85% of total employment.

2.2 Size and sectoral composition of the manufacturing sector

The sectoral composition of the manufacturing sector in terms of gross output and value added is indicated in Table 2. These statistics refer to establishments with 10 or more employees, which account for 85% of output, 76% of value added and 54% of employment in the formal manufacturing sector.

**Table 2 Sectoral Composition of the Manufacturing Sector in 1999
(establishments with 10 or more employees)**

Manufacturing Sub-sector	Share of Manufacturing Sector:		Value Added as Share of Gross Output (%)
	Gross Output (%)	Value Added (%)	
Food and beverages	13	29	68
Tobacco products	4	10	75
Garments	31	25	24
Wood and wood products	32	10	9
Chemical and chemical products	2	2	40
Cement, bricks and ceramic products	3	7	62
Fabricated metal products	2	3	3
Motor vehicles	4	4	33
Other products	9	10	34
Total	100	100	30

Source: MIH/UNIDO Survey of Industrial Establishments in 1999, adjusted by UNIDO research team for underestimation of number of garment factories and sawmills.

Footnote: Value added is the difference between sales (gross output) and purchased goods and services (intermediate consumption) and thus refers to compensation to employees, financial costs and profits.

Garments and wood/wood products are the leading manufacturing sub-sectors in terms of gross output, while food/beverages and garments are the leading manufacturing sub-sectors in terms of value added. However, there is strong evidence that transfer pricing is extensively practiced in the wood/wood products sub-sector with the consequence that both gross output and value added are underestimated in the above statistics.

2.3 Number, size and employment of firms

The number and size of firms as well as employment according to size of firms are indicated in Table 3.

Table 3 Number of Manufacturing Establishments, and Employment, According to Size of Establishment in 1999

Category	Size of Establishment ^{1/}			Total
	Small	Medium	Large	
Number of establishments	21,759	372	149	22,280
D:o percentage (%)	97.7	1.7	0.6	100.0
Number of employees	42,725	9,466	41,714	93,905
D:o percentage (%)	45.5	10.1	44.4	100.0

Source: MIH/UNIDO Survey of (i) Industrial Establishments and (ii) Small Manufacturing Establishments in 1999, adjusted by UNIDO research team for underestimation of number of garment factories and sawmills.

Footnote: ^{1/} Small establishments 1-9 employees, medium-sized establishments 10-99 employees and large establishments 100 and more employees.

Out of the medium-sized and large establishments, the garments industry and the wood processing industry account for about 20,000 employees each, together accounting for about 80% of the employment in medium-sized and large enterprises, while the construction materials industry employs about 3,000 people and the food industry about 2,000 people. About 55% of the employees are women and 45% men.

Among small establishments, 76% of establishments and 66% of employment is accounted for by rice mills (where 2/3 of the labour force consists of men and 1/3 of women). The remainder of small establishments are mainly engaged in textile weaving (3,000 employees), furniture making (3,000 persons), brick making (1,850 employees) and wood processing (1,300 employees) with about equal shares of employment for women and men, respectively.

What is striking in the statistics is the very small share of medium-sized enterprises, both in terms of number and employment. This is a strong indication that there are a number of barriers in place that hinder small enterprises from developing and growing in size. Such barriers are identified in later chapters and sections of the present report.

2.4 Spatial distribution of firms

Manufacturing enterprises in Vientiane municipality alone account for 55% of total manufacturing output in Lao PDR. Second largest area of concentration of manufacturing is Khammouan province with 15% of total manufacturing output,

followed by Savannakhet province (9%), Vientiane province (8%) and Champasak province (6%). Thus, Vientiane municipality and the four mentioned provinces together account for 93% of total manufacturing output in Lao PDR.

The northern region, consisting of seven provinces, only accounts for 2.5% of total manufacturing output, despite the fact that 34% of all manufacturing units are located there accounting for 22% of total manufacturing employment². This is a reflection of the concentration of very small units and the production of typically low value goods such as handicrafts in the northern region.

2.5 Ownership structure

The ownership structure in the manufacturing sector is pictured in Table 4.

Table 4 Employment, Output and Value Added in the Manufacturing Sector in 1999 According to Ownership (establishments with 10 or more employees)

Ownership Category	Share (%) of Manufacturing:		
	Employment	Output	Value Added
State (central and local)	9	10	20
Private (domestic)	40	35	23
Foreign, incl. joint ventures	51	55	57
All categories	100	100	100

Source: MIH/UNIDO Survey of Industrial Establishments in 1999, adjusted by UNIDO research team for underestimation of number of garment factories and sawmills.

As can be seen from Table 4, State-owned enterprises in the manufacturing sector is modest (in terms of employment small) and is concentrated to a few large enterprises manufacturing mainly tobacco, cement and pharmaceuticals. In the ownership category "foreign, including joint ventures", there are two major joint ventures with State participation manufacturing beer, water and soft drinks. In other manufacturing sub-sectors, and amongst small enterprises, State ownership is negligible.

2.6 Labour costs

According to the previously quoted MIH/UNIDO survey in 1999, average monthly cost per employee (wages/salaries, including social costs and allowances) amounted to about Kip 240,000 (about US\$ 32) for medium-sized and large establishments and was about 25% lower in small firms. For methodological reasons, e.g. part time workers being reported as full time workers, these statistics may somewhat underestimate the real cost of labour.

During the field surveys carried out under the present integrated programme, firms were asked about labour costs and, based on answers from the firms, the UNIDO research team estimates the monthly labour costs in Lao PDR in 2002 in the manufacturing sector as indicated in Table 5. Labour costs in neighbouring countries have been included in the table for comparative purpose. When making comparisons it should, however, be borne in mind that wages differ across manufacturing sub-sectors as well as across regions of a country.

² MIH statistics, 2001

As can be seen in this table, labour costs in terms of monthly costs per employee and month are slightly lower in Lao PDR in comparison with Vietnam and Cambodia and significantly lower than in Thailand and Yunnan province, China. They are also comparatively low in a global perspective (see Section 2.9). However, as will be elaborated in Section 2.9, if the comparative advantage of low monthly wages is to be translated into a competitive advantage, labour productivity has to be taken into consideration too.

Table 5 Manufacturing Wage Costs in Lao PDR and Selected Other Countries in 2002 or Latest Year

(in US\$ per month and employee)

Kind of Labour ^{1/}	Countries				
	Lao PDR	Vietnam	Cambodia	Thailand	China ^{2/}
Unskilled	30-40	30-55	35-45	n.a.	n.a.
Semi-skilled	45-60	45-70	50-60	n.a.	n.a.
Skilled	70-80	130-200	80-100	n.a.	n.a.
Average	45	55	50	136	109

Sources: UNIDO research team estimates based on UNIDO-Lao PDR Integrated Programme field studies 2002, information from UNIDO offices in the region and various other sources. Thailand: National Statistical Office "Labour Force Survey" (refers to average monthly wages in the manufacturing sector in 2000). China: National Bureau of Statistics of China "China Statistical Yearbook 2002" (refers to average nominal wages in manufacturing in 2001)

Footnotes: ^{1/} Costs refer to labour employed in production. Unskilled workers have typically less than one year's vocational or on-the-job training, semi-skilled workers have typically 1-4 years' training, and those classified as skilled workers are typically supervisors for at least 30-50 workers, or equivalent. ^{2/} Yunnan Province

2.7 External trade

Exports. The value of exports according to major product groups (electricity not included) and main countries/regions of destination is summarized in Table 6.

Table 6 Exports from Lao PDR according to Major Product Groups and Major Countries/Regions of Destination in 2000

(in millions of US\$ and percent)

Product Group	Export Value		Share of Exports according to Country/Region of Destination (%)					
	MUS\$	%	ASEAN	EU	USA	Japan	Others	Total
Coffee	19	8	11	54	0	0	35	100
Wood/wood prod's	80	33	76	2	0	14	8	100
Garments	121	50	0	88	8	0	4	100
Other products	23	9	60	14	2	2	22	100
Total	243	100	32	49	4	5	10	100

Source: UNCOMTRADE "mirror statistics" and UNIDO research team calculations.

Footnote: Electricity, in 2000 exported at a value of US\$ 112 million, not included. Vietnam not included, as Vietnam doesn't report to UNCOMTRADE. Exports to Vietnam, exclusive of re-exports of parts for motorbikes, amounted to US\$ 43 million in 2000 according to official Vietnamese statistics.

As can be seen in Table 6, Lao exports are highly concentrated to three product groups only, viz. coffee, wood and wood products, and garments, which together account for 91% of Lao exports. Two product groups alone, viz. wood and wood products, and garments, account for 83% of exports and exports of these product groups face formidable challenges by the introduction of a ban on exports of logs in late 2001 and the phasing out of the Multi Fibre Arrangement by the end of 2004.

Two regions of destination alone, viz. ASEAN and EU, account for 81% of total exports. Out of total exports to ASEAN, Thailand alone receives 97%.

In a background document for the present report³, an analysis at disaggregated level revealed that 61% of export revenue earnings refer to products for which Lao manufacturers have succeeded to increase their global market shares in the period 1995-1999. On the other hand, the same study demonstrated that 51% of Lao exports refer to such products for which world demand was stagnant or declining in the same period.

Imports. The value of imports according to major product groups (electricity not included) and main countries/regions of origin is summarized in Table 7.

Table 7 Imports to Lao PDR according to Major Product Groups and Major Countries/Regions of Origin in 2000

(in millions of US\$ and percent)

Product Group	Value of Imports		Share of Imports according to Country/Region of Origin (%)					Total
	MUS\$	%	ASEAN	EU	China	Japan	Others	
Food	35	6	89	6	1	0	4	100
Beverages, tobacco	41	7	92	4	4	0	0	100
Fuel/lubricants 1/	123	22	89	0	0	0	11	100
Chemicals	45	7	72	5	3	2	18	100
Manufactured goods	107	17	82	5	8	1	4	100
Road vehicles	102	17	82	2	4	10	2	100
Machinery	110	18	58	16	14	7	5	100
Other products	49	6	72	4	6	3	15	100
Total	612	100	78	5	6	4	7	100

Source: UNCOMTRADE "mirror statistics" and UNIDO research team calculations.

Footnote: 1/ Shares according to countries/regions of origin refer to 1999, as 2000 statistics contained a misclassification error regarding fuel and lubricants. Electricity not included. Vietnam not included, as Vietnam doesn't report to UNCOMTRADE. Imports from Vietnam, exclusive of re-exports, based on Vietnamese official statistics, are estimated at US\$ 20-40 million.

Lao imports are fairly diversified over a broad range of goods, but the fact that consumption goods account for as much as 40% of total imports (higher than other countries at comparative levels of development), with only 60% of imports for investment goods and intermediate inputs for manufacturing, is not consistent with a strong economic growth scenario⁴. This import structure suggests that consumption levels are too high and savings levels too low, which implies that without donor funded investments, economic growth would stagnate or even become negative.

³ UNIDO-Lao IP: Brenning, M., Davading, S. and Dissmann, B. "Composition and Evolution of Lao PDR's External Trade", Vientiane, November 2002.

⁴ UNIDO-Lao IP: *ibid.*

ASEAN is dominating as a region of origin for imports accounting for 78% of total imports. Within ASEAN, Thailand alone accounts for 93% of imports and Singapore for most of the remainder. During the 1990s, Thailand has become the dominating country of origin for Lao imports, while EU, Japan and China have lost market shares.

Openness Index. A country's total external trade (exports+imports) as a percentage of GDP is often referred to as an "openness index" and can be compared with the openness index of other countries. The index indicates to which extent a country has opened up its trade and succeeded to integrate into regional and global trade networks. In Table 8, the openness indices for eight countries of ASEAN, for which the relevant statistics are available in the World Bank World Development Report 2002, are provided. As can be seen from this table, Lao PDR ranks second from the bottom on this scale of openness index amongst ASEAN countries, which indicates that Lao PDR still is a comparatively closed country. However, considering Lao PDR's extensive informal trade, by some sources estimated at 20-30% of the officially recorded trade, the openness index is in reality higher.

Table 8 Openness Index for Lao PDR and Selected Other ASEAN Member Countries in 2000

Country	Exports+Imports Billion US\$	GDP Billion US\$	Openness Index ^{1/}
Cambodia	1.3	3.2	40
Lao PDR	0.9	1.7	50
Indonesia	95.6	153.3	62
Vietnam	29.5	31.3	94
Philippines	74.6	75.2	99
Thailand	131.0	121.9	107
Malaysia	180.4	89.3	202
Singapore	272.6	92.3	295
Total/average	785.9	568.2	138

Source: UNIDO research team calculations based on data from the World Bank "World Development Report 2002".

Footnote: ^{1/} Openness index = (Exports+Imports)/GDPx100.

A country that specializes in the manufacture of goods that it can successfully export, and import other goods, will have both large exports and imports, which result in large trade in relation to its GDP, and consequently a high openness index. Table 8 indicates that amongst ASEAN countries, the higher the openness index, the better off is the country. In an international perspective, however, ASEAN scores quite high on the openness index scale. The two largest economies in the world (USA and Japan) with large domestic markets only have openness indices around 20, while the economies following in size (Germany, UK, France and Italy) have openness indices around 40-50. Smaller countries with high GDP per capita, such as the Nordic countries and Switzerland, however, score higher, around 60-70.

2.8 Technological level

To assess and compare the technological capabilities of production in different countries, manufacturing industries can be classified into three categories, viz. high-tech, medium-tech and low-tech. The relative shares in percentage of these categories of industries are shown in Table 9 for Lao PDR (1999) and selected other countries (1997 or latest available year).

Table 9 Relative Shares of Manufacturing at Different Technological Levels in Lao PDR and Selected Other Countries

Country	High-tech (%)	Medium-tech (%)	Low-tech (%)	Total (%)
Sri Lanka	8	17	75	100
Nepal	9	17	74	100
Lao PDR	11	15	74	100
Indonesia	18	37	45	100
Pakistan	29	17	54	100
Poland	34	29	37	100
Thailand	38	24	38	100
India	40	30	30	100
Mexico	43	29	28	100
Malaysia	50	30	20	100
Republic of Korea	52	29	19	100
Taiwan	52	31	17	100
Singapore	71	19	10	100

Sources: UNIDO Industrial Statistics, 2001; MIH/UNIDO Survey of Industrial Establishments in Lao PDR in 1999.

Footnote: *High-tech* industries include pharmaceuticals, chemicals, office and computing equipment, consumer electronics (and parts), communication equipment, motor vehicles and other transport equipment (and parts), and machinery. *Medium-tech* industries, including rubber and plastic products, cement, petroleum refinery products, basic metals and simple fabricated metal products. *Low-tech* industries such as food, beverages, tobacco, textiles, garments, footwear, wood products, furniture and paper and printing. Statistics for Lao PDR refer to 1999, for other countries 1997 or latest available year.

As can be seen from the above comparative statistics, Lao PDR together with Nepal and Sri Lanka constitute a separate group characterized by a very small share of higher technology industries, whereas low-tech industries are dominating. It should, however, be pointed out that the classification system is a bit arbitrary as, for example, the manufacture of consumer electronics consists of both high-tech operations such as the manufacture of certain components as well as low-tech final assembly of consumer electronics.

2.9 Productivity and competitiveness

There are a number of measures by which a country's international competitiveness can be assessed. These include simple cross-country comparisons regarding costs of production such as raw materials, wages, interest rates, electricity, industrial services, communications, transportation costs to nearest international port, etc. There are also more complex measures such as the domestic resource cost (DRC), effective rate of protection (ERP), revealed comparative advantage (RCA), total factor productivity (TFP) and partial productivity measures such as labour productivity and capital productivity. Each and one have its own merits and demerits.

The above mentioned measures require reliable data and statistics, preferably with fairly long time series to permit analysis of developments over time. As data and statistics are limited in quantity and quality in Lao PDR, in particular regarding international trade, the statistics and analysis below refer to labour costs, gross output and value added as presented in Table 10.

Table 10 Labour Costs, Gross Output and Value Added per Employee in Lao PDR and Selected Countries in 1999
(in thousands of current US\$)

Country	Labour Costs (LC), Gross Output (GO) and Value Added (VA) per Employee (in thousands of US\$ per year)			Labour Cost/ Gross Output (%) ^{1/}
	LC	GO	VA	
Lao PDR	0.4	5.0	1.9	7.6
Nepal	0.4	5.2	2.1	7.4
Sri Lanka	0.8	9.3	4.1	8.4
Indonesia	0.9	14.7	5.8	6.2
India	1.3	23.1	4.3	5.8
Pakistan	2.1	34.3	10.5	6.0
Thailand	2.4	36.1	8.2	6.7
Philippines	3.0	43.1	17.7	6.9
Poland	4.0	34.1	10.4	11.7
Malaysia	4.8	72.8	19.1	6.6
Mexico	7.4	114.3	44.1	6.5

Source: UNIDO International Yearbook of Industrial Statistics 2001 and previous years; MIH/UNIDO Survey of Industrial Establishments in Lao PDR in 1999.

Footnotes: Nepal, Philippines, Pakistan and Sri Lanka refer to 1997, other countries 1999. The scope of the manufacturing censuses or surveys varies from country to country as follows: Mexico, all registered establishments; Pakistan and Sri Lanka, all establishments employing at least 5 persons; Thailand, Philippines, Nepal and Lao PDR, all establishments employing at least 10 persons; Indonesia and India, all establishments employing at least 20 persons; Poland, all establishments employing at least 50 persons; and, Bangladesh, not known. ^{1/} May not always equal LC/GO as previous columns contain rounded off values.

Manufacturing value added, or gross output, per employee is a partial measure of productivity, viz. labor productivity. It is a simple measure and allows for international comparisons. However, this crude labour productivity measure doesn't reflect the efficiency of labour only, but also incorporates the impact of the capital stock per worker (to what extent the workers have machines and equipment to work with) as well as technology/management factors. This has to be taken into consideration when making cross-country comparisons.

Despite the above reservations, what stands out in the case of Lao PDR, is that despite very low nominal labour costs per year in Lao PDR, value added and output per employee are at the very bottom amongst the countries in the table above. Low wages and salaries don't automatically translate into international competitiveness. The comparative advantage of low wages and salaries have to be combined with reasonable labour productivity as well as appropriate technologies, given the relative factor costs, to result in international competitiveness. Training of staff and upgrading of technology are key issues for Lao manufacturers in order to exploit the comparative advantage of low wages and salaries, thereby increasing total productivity and improving competitiveness. The good learning skills of Lao people, as revealed by in-depth studies of a large number of enterprises in the present study, do suggest, however, that there is a great potential for further exploitation of the comparative advantage that low wages and salaries represent.

2.10 Firm specific strengths and weaknesses

It is of course difficult to generalize on a manufacturing sector-wide basis what the firm specific strengths and weaknesses of the industry itself are. Strengths and weaknesses differ from company to company, across manufacturing sub-sectors,

across sizes of firms and whether firms are owned and operated by foreigners or by Lao investors/managers, to mention some of the relevant variables.

Some studies being the base for the present report have benchmarked Lao firms with international standards according to very detailed sub-sector specific criteria, viz. for the wood processing and the garment industry. Although the generalizations below therefore disguise a lot of sub-sector and firm specific differences, they still may serve the purpose to focus attention to areas, which need specific attention.

Strengths

- (i) Lao owners/managements with good entrepreneurial talents;
- (ii) Lao owners able to draw upon contacts (relatives and friends) abroad;
- (iii) capabilities of Lao owners/managers to draw upon contacts with relatives and friends to build up a stable core management team in SMEs;
- (iv) capabilities to draw upon contacts within the Government administration at both central and provincial levels;
- (v) foreign capable owners/managements;
- (vi) learning capabilities of labour; and,
- (vii) traditional skills like weaving.

Weaknesses

- (i) marketing capabilities, in particular for export marketing;
- (ii) product development capabilities;
- (iii) product design and engineering;
- (iv) production management capabilities;
- (v) quality control and quality assurance;
- (vi) lack of finance, and as a consequence obsolete technologies, inadequate resources spent on training and marketing, and problems associated with insufficient working capital;
- (vii) working force with little factory experience and low working discipline;
- (viii) inadequate maintenance and bad "housekeeping"; and,
- (ix) inadequate social, health and safety conditions.

3 OVERARCHING GOVERNMENT INDUSTRIAL STRATEGY AND POLICIES

The present chapter contains a review of the Government's overall approach to industrial planning as well as some basic, cross-cutting strategies and policies.

3.1 Government's approach to industrial planning

A series of documents outline the Government's strategies and policies in respect of industrial development in Lao PDR. These include the Constitution; the Political Report and Resolutions from the 7th Congress of the Lao Revolutionary Party; the Government's 2020 Vision with eight national socio-economic priority programmes; the Government's Strategy for Socio-economic Development until 2020 and 2010 and the 5th Five-year Socio-economic Development Plan 2001-2005; Party and Government documents on "industrialization and modernization"; and, the Ministry

of Industry and Handicraft (MIH) Strategy for Development of the Industry and Handicrafts Sectors until 2020 and 2010 and Development Plan 2001-2005.

By the Constitution, Lao PDR recognizes and protects all forms of ownership, viz. state, collective and private ownership, both domestic and foreign. All economic sectors are equal before the law. It is also committed to pursuing the mechanism of a market economy, with adjustment by the State.

Despite the Constitution's subscription to pursuing the mechanisms of a market economy, the current approach to industrial planning still has most of the features of the approach in a typical centrally planned economy, rather than those of a market economy.

Table 11 on the next page provides some key characteristics of a "typical" centrally planned economy (which has many similarities with many less developed market economies) and a more developed or advanced market economy. The table also provides a score with an assessment where Lao PDR is currently positioned on a centrally planned economy versus a more advanced market economy scale.

The classification in Table 11 is not made with the ambition to be a "scientific" dichotomization between a centrally planned economy and an advanced market economy. There are of course a lot of variations of the above "typical" economies. Furthermore, several features as classified as typical of a centrally planned economy are many times as much features of an economic system that is at a very early stage of development. Despite these reservations, it is, however, believed that the above classification scheme captures some of the essence of the differences between a centrally planned economy system and a market economy system.

However, whether attributable to the previous system of central planning in Lao PDR or attributable to the fact that Lao PDR is at a very early stage of development, the message conveyed in Table 11 is that the current features of the economic system in Lao PDR is far from what is typical for a well-functioning market economy. This could of course be explained by the fact that Lao PDR is in fact at an early stage of development. What should be a concern, however, is that the thinking of broad circles in the Government administration actually is to have a preference for the features that are classified as typical for a centrally planned economy. The full implications of the market economy concept are not widely understood and the concept is far from generally embraced. To improve the understanding of the market economy concept and to have this concept more broadly embraced are prerequisites if Lao PDR is to continue to move in the direction towards a well-functioning market economy.

Table 11 Key Characteristics of a Centrally Planned Economy (CPE) and an Advanced Market Economy (AME), including the Positioning of Lao PDR on a CPE-AME Scale

Issue	Centrally Planned Economy	Advanced Market Economy	Lao PDR 1/
Prices	Decided centrally; price controls	Firms and the market decide prices based on supply and demand	7
Production volumes	Decided centrally; controls	Firms and the market decide	5
Exchange rate; interest rates	Decided centrally	Market based	7
Wages	Decided centrally	Market based	10
Ownership of firms	State-owned dominating	Private ownership dominating	8
Trade policy	Self reliance; import substitution; isolation; focus on production and domestic trade	Regional and global integration; export orientation; international interdependence; focus on markets and international trade	4
Planning instruments	5-year plans; growth objectives; production plans and targeted sector priorities; general/non-actionable policies	No 5-year plans; growth projections; industrial development strategies; specific and actionable policies	2
Focus of planning	What to achieve, but little focus on what to do to achieve targets	What to do to achieve best possible outcome (whether targeted or not)	2
Government interventions	Extensive interventions; controls and micro-management of firms	Limited, but well-designed, interventions; monitoring (for planning purpose); no micro-management	3
Information	Not disseminated	Widely disseminated	2
Competition	Focus on protection of domestic firms; favourable treatment of state-owned enterprises	Focus on ensuring a fair competition between foreign and domestic firms as well as independent of ownership	5
Institutional issues	Industrial planning considered a Ministry of Industry business; Separate Ministry of Industry, sometimes separate ministries for heavy and light industries	Industrial planning considered a joint, cross-cutting, intra-ministerial business in close cooperation with the business sector itself; Ministry of Industry often merged with Ministry of Trade into a Ministry of Industry and Trade	3
Legal framework and regulations	Governance by decrees; unclear and not transparent regulations allowing for discretionary interpretation	Governance by law; clear and transparent regulations allowing for consistent interpretation and application	4
Manufacturing statistics	Net Material Product-emphasis on physical quantities/output	Emphasis on value added requiring strict accounting standards	5
Business registration	Several layers of registrations and licensing with a need for approvals by different authorities	Simple registration without need for any approval, except for limited, clearly defined, activities	3
Support to industries	Direct technical assistance by Government agencies	Policy support; technical assistance by industry associations and private sector service providers	3
Attitudes towards private business	Private sector consisting of "crooks"	Private sector considered a partner in development	5
Industrial restructuring	Aiming at conserving an existing industrial structure	Encouraging industrial restructuring to channel resources into fields with strong competitiveness	5
Typical questions raised by Government officials	What are the "winning" industries of the future, and how should we promote them?	What policies should we adopt to promote industrialization in general? What assistance can we provide to help entrepreneurs to decide, themselves, intelligently on future "winning" industries?	2
Simple average			4.3

Footnotes: 1/ On a scale 1-10, a low value indicates typical features of a centrally planned economy, while a high value indicates typical features of an advanced market economy.

3.2 Key elements of current industrial policies

In this section, some key elements of the Government's industrial policies, as explicitly stated in various policy documents, are reviewed, viz. (i) promotion of small and medium-sized enterprises; (ii) focus on import substitution; and (iii) targeting of industries and specific products.

Promotion of small and medium-sized enterprises

In all strategy and policy documents mentioned at the outset of this chapter, the importance of small and medium sized enterprises (SMEs) is recognized, in some documents with a complementary specific concern in respect of family businesses.

"The Industrial and Handicraft Development Strategy from the Present to 2020, 2010 and the Development Plan for 2001-2005" by MIH recommends SME development measures for implementation by the Government as follows:

- (i) Establishment of laws and regulations to manage and facilitate small and medium size industries;
- (ii) Establishment of agencies and institutions to provide services to investors through provision of training, advisory services, information, assistance in conducting product research and development, and transfer of technology;
- (iii) Provision of development funds for private investors;
- (iv) Acceleration of human resource development through training of workers and managers of SMEs; and,
- (v) Incorporation of entrepreneurship and business management training into vocational education.

Ministry of Industry and Handicrafts, on behalf of the Government, has led and managed a highly consultative process to formulate a "Framework on Support for the Development of SMEs in Lao PDR" over the last 12 months, with assistance from UNIDO. The product, draft "Government Decree on Support for the Development of SMEs", represents the consolidated recommendations of the business sector, central and provincial Government institutions, mass organizations, academia and the international partners of Lao PDR. The draft decree identifies as priority areas:

- (i) Creating an enabling regulatory and administrative environment for SMEs;
- (ii) Enhancing competitiveness of SMEs;
- (iii) Expanding domestic and international markets for SMEs;
- (iv) Improving access to financing by SMEs;
- (v) Encouraging and creating favorable conditions for the establishment of business organizations; and,
- (vi) Encouraging entrepreneurial attitudes and characteristics within the society.

Upon its promulgation, this Decree will be the first high-level document underlining Government's support for SMEs and the private sector in general.

The draft Government Decree proposes the establishment of a national and provincial SME support infrastructure. SME Development Advisory Council (SMEDAC), to be chaired by the Vice Prime Minister responsible for Economic Affairs, is planned as a national consultation platform consisting of private and public sector representatives. Its main function will be to provide advice to the Prime Minister on SME development issues, informing the Government on the needs of SMEs and reporting to the Government on the effects of government policy on SMEs.

At the national level, the draft Government Decree foresees the establishment of a semi-autonomous SME support coordination unit (an SME Development Agency/Organization) attached to Ministry of Industry and Handicrafts. The envisaged policy coordination unit will act as the secretariat of the SMEDAC. Its main functions will be to coordinate, guide and monitor the formulation and implementation of Government support measures for the SME sector. The draft Decree leaves the responsibility for facilitation and delivery of local level support initiatives and SME services to public-private partnerships between local Governments and local stakeholders. A supporting role envisaged for the national SME Development Agency/Organization is the facilitation of joint learning processes among local SME support entities/partnerships through enabling of information and experience sharing.

Focus on import substitution policies

In a 10 and 20 years' perspective, the Government's socio-economic strategy has a clear focus on export orientation. In the short and medium term perspective, up to 5 years, the focus is, however, on "domestic production of consumer goods" (import substitution) and only as an apparently secondary direction, export orientation. The underlying strategy appears to be to first encourage import substitution and later on export orientation.

The MIH strategy has a much stronger focus on import substitution than other documents. It also outlines strong protective measures in support of import substitution, such as increased tariff barriers on goods being produced in the country, quantitative restrictions on imports of goods competing with domestic production, preferential tax treatment for domestic manufacturers⁵, and preferential Government procurement of domestically produced goods. These measures are in conflict with, and counterproductive to, the Government's trade liberalization commitments under AFTA.

A major conclusion from the manufacturing sub-sectoral reviews carried out under the present programme is that the scope for import substitution in Lao PDR is limited, while a much larger potential lies in further exports. This just supports already well documented experience from the entire world that an import substitution led industrialization, in particular for small countries, isn't an efficient or viable strategy to achieve desired goals regarding industrial and economic growth, employment creation, income generation and poverty alleviation. Import substitution strategies have been abandoned in more or less all countries in the world since long.

An import substitution policy is particularly damaging when it is supported by trade restricting barriers. A less than optimally sized plant for production of cement or steel, or refinery of white sugar, may provide employment for maybe 300-400 persons, but the output may very well be 20-40% more expensive than the same products if imported from larger sized and more efficient foreign producers without trade barriers. Protecting such production by high import duties or quantitative import restrictions would mean that people in general would be paying a higher price for these products and many poor people would not be able to afford these products. Also, potential industries that use these products as inputs in their production would not be forthcoming, as their costs would become higher than those of foreign

⁵ In October 2002, the National Assembly approved amendments in the Tax Law introducing turnover tax rates, which differ between domestically produced and imported goods, requiring that imported goods be subject to 2-10 percentage points higher turnover tax than domestically manufactured goods. This is equivalent to raising import duties from a protection point of view. At the same time the Government is *lowering* import duties by about the same rates under the CEPT scheme, resulting in the Government pursuing seemingly contradictory policies neutralizing each other.

competitors. Infrastructure and other construction projects would also become more expensive. The negative effects diffuse on a broad scale to the rest of the economy and to large portions of the population. Such damaging effects can't be justified by the fact that a few hundred persons get employed and the firm earns money behind protective trade barriers.

Furthermore, if the Government continues to pursue an import substitution policy supported by protective trade barriers, it makes the transition for enterprises to the low tariff AFTA trade regime more difficult. New enterprises may be established under a protective regime, but as the Government lives up to its commitments under AFTA, these enterprises will soon find themselves confronted with much stiffer competition and may very well collapse. Existing enterprises will also suffer in the longer term, as they will not be operating in an environment with a gradual decrease in import duties over an extended period of time, allowing them a period of learning and allowing them to gradually improve their performance and competitiveness.

A more appropriate strategy is to focus on export orientation as the first priority and having *efficient* import substitution as a complementary strategy. "Efficient" import substitution refers to such import substitution that is financially and economically viable *without* distorting and costly protection. With such a definition, the present study has found import substitution of products such as white sugar and cement as currently not being viable in Lao PDR.

It is, therefore, recommended that the Government accelerate its strategy and policy agenda and adopt already now the targets and strategies outlined for the periods until 2010 and 2020, viz. a clear export oriented strategy with "efficient" import substitution as a complementary orientation.

Targeting of industries and specific products

The Government's socio-economic strategy and 5-year development plan, as well as the MIH industrial development strategy and 5-year development plan, identify manufacturing sub-sectors and specific products, which appear to have a promising future and should therefore be targeted for promotion. This approach is often seen in less developed countries and in centrally planned economies, but not so often in more developed market economies.

In many centrally planned developing countries, a frequently asked question is what the future promising manufacturing sub-sectors, product groups or individual products ("sunrise" industries, future "winners", etc.) of the country are, with the underlying assumption that these industries should be promoted by targeted incentives by the governments. This issue, however, encompasses a lot of dangers.

First, international experience from "picking winners" is overwhelmingly negative, or mixed at best. Notable exceptions are Japan, Korea and Singapore, which however had governments that were strong, had well-paid and competent staff, had financial resources to consistently pursue targeted industrial policies and had close working relations with the private sector. Even these governments during periods went wrong, but had the capability to adjust their policies. Most other international experience is quite negative. Furthermore, many of the interventions used by Japan, Korea and Singapore would no longer be permitted under WTO regulations.

Second, even if it were possible to rank manufacturing sub-sectors, product groups and individual products in terms of likely future success or failure, it is difficult to use the information for design of incentives. The likely failures *should* not be supported and the likely obvious successes *need* not be supported. In the "middle range", the

issue is to find those manufacturing sub-sectors, product groups and individual products which are likely successes, *given* that some incentives over a limited period of time are provided. Such “infant industry” support could be justified from the point of view of strict economic theory. However, the great risk is that errors are made in the identification of areas for incentives. In practice too, the intended limited period for support has most of the time been extended, and the intended temporary incentive has become permanent with inefficiencies in the economies and extensive rent seeking as a consequence.

Third, international experience strongly suggests that functional incentives are more appropriate than sub-sector or product specific incentives and more efficient in achieving government objectives. Thus, functional incentives linked to e.g. employment creation, upgrading of skills, upgrading of technology, export performance, etc., are more efficient than general tax incentives for the production of specific goods (Section 4.4 refers).

Fourth, identifying future business opportunities is not a core competence of neither government officials, nor consultants. This is an area where the private sector entrepreneurs themselves have an edge competence. The Government should focus on putting an enabling business environment in place, while leaving it to the enterprises themselves to decide what products should be manufactured.

4 THE BUSINESS ENVIRONMENT

In the present chapter, more specific policies impacting on industrial development are reviewed. The fundamental importance of appropriate macro-economic policies for industrial development as well as for the entire economy is well recognized. However, macro-economic policies are considered to be beyond the scope of the medium-term strategy and action plan for industrial development and are therefore not covered in the present report.

4.1 Legal framework

Since the adoption of the New Economic Mechanism (NEM) in 1986, Lao PDR has promulgated a large number of laws and other legal instruments in line with the “governance by law” principle. Some of the most important laws for the business community are the following:

- (i) The Business Law (1994);
- (ii) The Customs Law (1994);
- (iii) The Law on Promotion and Management of Foreign Investment (1994);
- (iv) The Bankruptcy Law (1994);
- (v) The Secured Transaction Law (1994);
- (vi) The Tax Law (1995);
- (vii) The Law on Promotion of Domestic Investment (1995);
- (viii) The Land Law (1996);
- (ix) The Law on Forestry (1996);
- (x) The Contract Law;
- (xi) The Road Transportation Law (1997);
- (xii) The Law on Property (1997);
- (xiii) The Manufacturing Industry Law (1999);
- (xiv) The Labour Law (1999); and,
- (xv) The Environmental Protection Law (1999).

There are also a number of amendments of the above mentioned laws since their promulgation. Under each one of these laws, there are numerous implementing regulations in the form of Prime Ministerial Decrees, Orders and Instructions as well as in the form of Ministerial Decisions, Instructions and Circulars. Implementing regulations have often been promulgated with a significant delay, which has led to situations when it has been difficult to apply a law, or the law has been interpreted inconsistently and in a discretionary way. The Manufacturing Industry Law is a point in case, where implementing regulations have not yet been issued four years after the promulgation of the law (regulations from 1992, not based on a law, are therefore considered to be in force, at least partly). Another point in case is the Law on Foreign Investment promulgated in 1994, but not having any implementing regulations until 2001.

In addition to laws and their implementing regulations, there are also Prime Minister's Decrees, not based on laws, which govern areas that are important for the business community and industrial development, viz. regarding intellectual property, trade marks, exports and imports, procurement, price controls, construction activities, special economic zones, etc. Furthermore, provincial governments issue Orders, Instructions and Circulars at their own discretion.

There has been significant progress in developing laws and other legal instruments, but this is a time-consuming and long-term undertaking hampered by the limited number of well-educated and experienced lawmakers. Unfortunately, until much further progress on the legal agenda has been achieved, the business community will suffer from various deficiencies in the legal framework, inconsistent application of laws and discretionary interpretation of legal instruments, both by Government officials and the judiciary. The situation is further aggravated by the fact that there is no national Gazette in which legal documents are published. The "fluid" legal framework hampers, in particular, foreign investment, but is also a problem to domestic entrepreneurs, especially entrepreneurs outside Vientiane, who have limited knowledge of existing legislation. To establish a central register of all legal instruments should be a high priority.

In the remainder of this document, under appropriate headings, a number of critical legal issues that need high priority consideration will be pointed out.

4.2 Business registration and licensing

The Business Law (No.03/NA) dated August 13, 1994, and its implementing regulations (Decree No. 31/PM) determine how businesses are going to be registered. Procedures for business registration are unclear, complicated, time consuming and allow for unnecessary discretion by the concerned competent agencies. For instance, procedures require consultations with the relevant branch level administrators prior to a decision to issue a registration certificate. Ministry of Commerce has recently simplified some of its requirements. Prospective entrepreneurs can directly apply to concerned authorities for branch level approvals, obtain the appropriate papers and upon presenting them to the Ministry of Commerce, obtain a registration certificate in a relatively short time.

However, the new procedures still involve branch level approvals and "ask and give" situations at that level. Among the required documents are a feasibility study and professional certificates of the owner and future staff of the business. These requirements place both the administrators and entrepreneurs in a difficult situation: administrators may at times be burdened with challenging technicalities of a line of business where they do not have sufficient information for and/or knowledge of, and the entrepreneurs are burdened with the costs of preparation of these documents.

Consultations reveal that on the average business registration may take up to 45-60 days in Lao PDR in comparison to about 7 days in Vietnam. Business registration needs to be streamlined. The process should basically be one of giving and taking information on where a new business is to be established and by whom. Issuing a list of activities "not allowed - a negative list" for investments by private investors may easily eliminate the need for consultations with sectoral administrators.

Consultations with business owners reveal that the Business Law in general, and legal company types available to entrepreneurs, are not easily understood or even known by many small business persons, especially outside the Vientiane Municipality. There are about 67,000 tax-registered businesses in Lao PDR. There are only 1,700 (~2.5% of the total) limited liability and public companies (only a few in this latter category), and the rest are sole-traders. In most countries, small businesses prefer to register as limited liability companies and, as they grow, they may choose the public company form. These forms of business allow for more professional type of enterprise management resulting in better relations with financial partners of the business, including commercial banks. Complicated registration procedures and lack of information and awareness on available legal types of companies seem to prevent entrepreneurs from selecting these options in Lao PDR.

In most countries the business registry is an information tool used by administrators, policy makers and entrepreneurs. Policymakers use centralized business registries in monitoring the way the business sector develops over time. Entrepreneurs, on the other hand, tap into business registers to identify potential business partners, new markets and products. Although the Business Law mentions an Enterprise Registry, a business registry that consolidates all enterprise information on an on-going basis and that is open to the public does not exist in Lao PDR. As such, policymakers and potential and existing businesses are deprived of a strategic information tool.

Upon registration, businesses need to obtain operating licenses from sectoral administrators in Lao PDR. Manufacturing businesses have to obtain a factory license and there are additional licensing procedures, for example, for food processing, construction businesses, wood processing and professional services.

The Ministerial Decree No. 103/MIH issued in 1992 regulates the licensing procedures for manufacturing industries. Accordingly, operations using less than 5HP of installed machinery or having less than 10 employees do not have to obtain a factory-operating license. However, it is understood that possibility of licensing small manufacturers is being tested on a pilot basis in the Champasak province.

The Manufacturing Industry Law was promulgated in April 1999, but the implementing regulations are still pending. Therefore, implementing regulations from 1992 are in effect and these require manufacturers to obtain an establishment license and an operating license. Upon getting the establishment license, the investor can start construction of business premises. When the factory is completed, an inspection team is constituted for a site visit. Upon successful completion of all inspections, the factory is provided the operating license.

The objective of regulations in the manufacturing sector should be to ensure health and safety of those working in the premises and to prevent negative environmental impacts. The 1999 Manufacturing Industry Law contains a number of unclear requirements such as: approvals for transfer of machinery to other sites, need to obtain approval for changing the number of machines used or for expanding factory buildings, requirement to use mainly domestic raw materials, inspections of the technical standards of machinery and equipment used, and fines associated with violations in these areas. Taking the example of a machine used, according to the Law, the inspectors would be entitled to issue a warning, a fine, and even a

temporary suspension notice, if they are not able to find the exact machine listed in the equipment list provided at the time the factory establishment license was issued. These types of requirements do not take into account the pace of change of technologies and the way business people operate. Regulations should ensure the development of a fair business environment where safety of consumers and workers are guaranteed. In addition, the criteria for approving or rejecting an application for a license should be explicitly spelled out.

The objective of the manufacturing industry law is to ensure work safety and environment protection. The MIH conducts regular inspections (twice a year) in the factories to check compliance with work safety and environment protection. Work safety standards are limited to those in Decree 103 on factories and are very unclear. MIH is working on a regulation on "standard and requirements for factory operations". Existing environmental impact standards with which factories have to comply are sketchy and may allow room for both non-compliance and discretion.

4.3 Trade policies

Lao PDR has pursued, and is continuing to pursue, a gradual liberalization of its external trade. For example, the tariff structure has been simplified and the highest tariff rate is now 40%; tariff rates higher than 40% have been replaced by excise duties; state trading monopolies have been largely abolished; and previous requirements regarding licensing for individual shipments have been replaced by licensing based on annual export and import plans. These plans form the base for, and are approved, based on a "national import-export equilibration plan" with a view to limit the country's trade deficit. This system allows for much discretionary and not market based decision-making. To address the issue regarding the trade deficit, it would be desirable to rely more on reducing the rampant exemptions regarding import duties (see below) and address the underlying problem of too high levels of consumption and too low levels of investment.

The current level of import duty rates, for a developing country, could be classified as moderate. The median tariff is 5%; the simple average tariff is 9.5%; and the import-weighted average tariff is 14.7%⁶. Domestic and foreign enterprises producing for exports can import raw materials exempted entirely from import duties and pay only 1% import duty on imported equipment. Similar exemptions are also granted for many enterprises producing for import substitution or other types of promoted industries. Imports for donor funded projects are also exempt from import duties.

Exemptions from import duties are applied so frequently and extensively that despite the fact that the import-weighted average tariff amounts to 14.7%, actually collected import duties as a percentage of the total value of imports amounts to 3.0% only (2000). In light of the fact that export duties are applied restrictively (mainly for wood, wood products and live animals), the tariff regime can be classified as quite liberal. It would be desirable, however, that the system be made more transparent and automatic instead of being subject mainly to project specific and discretionary granting of exemptions. Customs statistics reveal that only 21% of import duties payable according to the regular tariff schedule are actually paid⁷. It is likely too that the present system results in unnecessary losses of revenues for the Government.

⁶ IMF "Lao PDR: Selected Issues and Statistical Appendix", IMF Country Report No. 02/61, March 2002.

⁷ Customs Department, October-December 2000. Regarding excise tax and turnover tax levied on imported goods only 12% and 34%, respectively, of the payable amounts are actually paid.

Lao PDR applied for accession to WTO in 2001 and has now reached the stage where it is in the process to reply to a large number of questions raised by WTO member countries. Accession to WTO is fundamental to the future integration of Lao PDR into international trading networks if it is to be protected by the rule-based WTO provisions. This is particularly important for the garment industry given the phasing out of Multi Fibre Arrangement (MFA) and entering into force of the WTO based Agreement on Textiles and Clothing (ACT) as of 1 January 2005. The exact timing of Lao PDR's accession to WTO is much dependent on the Government keeping up the momentum of the accession process by promptly replying to questions from WTO and by proactively carrying out requisite amendments of laws and regulations.

Lao PDR also acceded to ASEAN in 1997 and has consequently committed itself to tariff reductions according to conditions under the Common External Preferential Tariff (CEPT) scheme under the ASEAN Free Trade Area (AFTA) agreement. Overall, Lao PDR is fulfilling its commitments under ASEAN and AFTA and is keeping up with the pace of the other countries of CLMV. Lao PDR is even progressing faster than other CLMV countries with respect to the lowering of tariffs on the CEPT Inclusion List to the tariff band 0-5%. The Government may, however, wish to consider to transfer certain tariff lines in the Sensitive List, the General Exemption List and the Temporary Exclusion List to the Inclusion List and lower the tariff rates to a maximum of 20%, thereby enabling Lao exporters to enjoy preferential duty rates by other ASEAN countries provided for under AFTA/CEPT, which may open up significant export potentials. Such products include beer, other alcoholic beverages, various kinds of meat and some secondary wood products.

So far the commitments under ASEAN and AFTA have been the "easy" ones. The tariff reductions under the CEPT scheme haven't had any significant negative impact on Lao PDR Government's revenue collection, nor has competition for the industry stiffened, as most tariff reductions refer to products that are currently either not imported, or imported in small volumes only, or are not manufactured in Lao PDR.

The real test on Lao PDR's commitment will come in the years ahead, when tariff lines are included in the CEPT Inclusion List and tariff rates are reduced, which impact on revenues and competition. A particular challenge is when quantitative restrictions (QRs) and other non-tariff measures (NTMs) will have to be removed. Despite the fact that import duty rates are maintained at moderate levels, QRs and NTMs constitute major restrictions, actual or potential, on external trade. QRs are currently applied on products that account for 45% of imports (fuel and lubricants, construction steel, cement, rice, motor vehicles, electricity, minerals, tobacco and timber products). Furthermore, there are a number of NTMs that are in place that would have to be reviewed in the AFTA (and WTO) context, viz. licensing requirements for certain goods (e.g. pharmaceuticals and fertilizers), enterprise-specific restrictions (e.g. motorbikes), differentiated turnover tax rates discriminating against imports (broad categories of products), other para-tariff measures (excise taxes), and excessive pre-shipment inspection charges (applied for most goods, 1-6% of FOB value). There are likely other NTMs too and the Government is currently in the process of preparing an inventory of all NTMs as agreed to by all ASEAN member countries at the CCCA meeting in April 2002.

A certain "slippage" has however been observed when it comes to living up to the commitments under AFTA/CEPT. In October 2002, with the intention to protect domestic industries, the National Assembly adopted amendments in the Tax Law that introduced differentiated turnover tax rates to be paid for imported goods and locally produced goods, respectively (up to 10 percentage points higher turnover tax rates for imported goods). This is, from a competition point of view, equal to raising import duties to protect domestic manufacturers. Thus, by one policy (reducing import duties under the AFTA/CEPT scheme) Lao PDR is *reducing* the protection of domestic

industries, and by another policy Lao PDR is *increasing* the protection of domestic industries. The practice to have different turnover tax rates for imported and locally produced goods is considered as an NTM under GATT, Article III, and is likely to have to be phased out under the AFTA regime too.

One of the major risks associated with the further integration into ASEAN consists of allowing the tariff differential between the CEPT tariff rates and the MFN tariff rates vis-à-vis the rest of the world to grow. This would result in trade diversion, viz. that Lao PDR would source some of its imports from less efficient and more expensive suppliers within ASEAN as compared to suppliers outside ASEAN. There is a need to have a concerted approach to ASEAN and the rest of the world, both regarding tariffs and other conditions for trade and investment. This requires coordinated action in respect of issues related to AFTA/CEPT, WTO, MFN tariff rates, excise duties, turnover taxes and incentives in terms of import duty exemptions granted under the foreign and domestic investment laws. Currently these issues are dealt with by different ministries and committees, or by special units (e.g. the National AFTA Unit), in a fragmented way.

The establishment of a high level Trade Policy and Taxation Committee chaired by the Ministry of Finance may be considered to ensure consistent policy formulation and implementation. The establishment of such a committee would not only help in pursuing consistent trade policies, but could also be a useful coordinating instrument for the Government's ongoing tax reform programme.

4.4 Investment policies

Significant investments in the manufacturing sector in the 1990s until the start of the Asian financial crises in 1997 resulted in a robust growth of the manufacturing sector in the magnitude of close to 10% annually over the last decade. Investments since 1997 have, however, almost dried up, and current levels of investment are likely not adequate to even maintain current levels of manufacturing output.

Except for a US\$ 37 million Lao-Chinese state cement factory investment in 2000-2001, approved FDI in the manufacturing sector has averaged around US\$ 12 million annually⁸ since 1997, accounting for about 25% of the value of all approved FDI proposals. Comparing total FDI approvals for all sectors (except hydropower) with actual FDI inflows for all sectors (except hydropower) 1997 – 2001 suggests that the implementation rate of approved FDI proposals is in the range of 30-40%. If this ratio holds true for the manufacturing sector too, actual inflows of FDI for the manufacturing sector have been in the size order of an annual US\$ 4-5 million only since 1997 (the above-mentioned cement factory not included).

The Department for Promotion and Management of Domestic and Foreign Investment (DDFI) under the Committee for Planning and Cooperation (CPC) approves and monitors domestic investment too under the Domestic Investment Law. It has, however, not been possible to receive accurate statistics on domestic private sector investment in the manufacturing sector. Anecdotal evidence suggests, however, that such investment has been stagnant too until the last year when approvals of domestic investment in the manufacturing sector has picked up.

Just to maintain the current level of manufacturing output in the formal sector of about US\$ 250 million per year would probably require annual investments in the size order of US\$ 25 million. The challenge to the Government is therefore to take measures so as to significantly raise the investment levels. Such measures include

⁸ ASEAN Secretariat FDI Database.

the whole array of activities covered by the present medium-term strategy and action plan for industrial development.

In this section, issues related more specifically to investment incentives are discussed. It needs, however, to be borne in mind that specific business incentives are only one of many factors that impact on the decision where to invest. Many studies that have been carried out to identify the most important factors for a decision on investment location reveal that business incentives rank only after factors such as political stability, appropriate macro-economic policies, a transparent legal framework, well developed infrastructure, a large domestic market, availability of skilled labour and in some cases a suitable natural resource endowment. In some cases, however, after the investor is satisfied with the previously mentioned conditions, generous incentives may contribute to the decision where to locate a factory.

Business incentives for investors in Lao PDR are spelled out in the Foreign Investment Law (1994) and the Domestic Investment Law (1995), including subordinate regulations⁹. Although the implementing regulations have improved the application of the laws, it would be appropriate by now to amend the laws themselves in light of experience gained over the last 8-9 years. Of particular importance is to:

- (i) harmonize the two laws and possibly merge them into one single law;
- (ii) rescind a number of unnecessary articles, or at least simplify them considerably; and,
- (iii) include as many provisions as possible in the laws themselves and leave a minimum of issues to be regulated by subordinate regulations or left for discretionary application.

Key incentives for foreign investors include that they only have to pay 20% profit tax and are allowed to import equipment, means of production and spare parts at 1% import duty only (but they should pay turnover tax, unless exempted, something which is often overlooked by Customs officials). Imports of raw materials for exports are exempted from import duties and turnover tax. Personal income tax rate is at a flat 10% rate. Article 18 of the Foreign Investment Law allows for granting of other special privileges and benefits and is frequently used, although this article states that it should only be applied in "highly exceptional cases".

The Domestic Investment Law provides provisions that domestic investors can get access to equally or more generous incentives than foreign investors for "promoted industries" and projects involving "large capital" and "advanced technology". Domestic manufacturers, when not being granted special privileges, are, however, at a disadvantage vis-à-vis foreign investors, as they have to pay 35% profit tax. Very few enterprises, however, pay this profit tax rate in reality.

Summing up, the *de facto* application of the foreign and domestic investment laws is that "everything is negotiable" and, from that point of view, the investment incentive regime is quite competitive in a regional context. This was also one of the conclusions of an in-depth study of the foreign investment incentives in Lao PDR

⁹ Decree of the Prime Minister No. 46/PM Regarding the Implementation of the Law on Promotion and Management of Foreign Investment in Lao PDR, 23 March 2001, and Decision No. 013/CPC by the Chairman of the Committee for Investment, Foreign Cooperation and Domestic Investment, 27 February 2002.

carried out in 1998¹⁰. Recommendations made in the previously mentioned study have to some extent been implemented, but a number of recommendations are still valid and need to be implemented.

In respect of investment incentives, the following issues are the major ones to be considered:

- (i) Except for the incentives to maintain low or no import duties for manufacturers (an appropriate incentive), the incentives consist mainly of profit tax reductions and exemptions (which are rather “blunt”, untargeted and inefficient instruments¹¹) or other incentives that distort or reduce competition (less appropriate). Incentives should not distort competition, to the extent possible be designed so as to achieve specific objectives (exports, employment creation, skills development, technology upgrading, etc.) and can sometimes be designed based on performance criteria. A cost/benefit analysis of each incentive needs to be carried out so as to allocate funds, or revenues foregone, in the most cost efficient manner and to avoid “unnecessary” revenue losses;
- (ii) Incentives should be made as “automatic” as possible so as to provide a transparent investment incentives system, simple and quick to administer, and allowing for a minimum of discretionary application;
- (iii) The development of a new coherent investment incentives system should be carried out in conjunction with amendments of the investment laws, as a coordinated task under the leadership of DDFI involving concerned line ministries, and in concert with ongoing tax and trade policy reform; and,
- (iv) Investment incentives should be discussed in the ASEAN context with a view to avoid a fierce “price war” in the region regarding generosity of incentives that all ASEAN countries would lose from.

The Government has realized that amendments regarding incentives are needed. To that end, a Presidential Decree has been drafted and received much consensus (allegedly only one outstanding article on incentives for tourism has to be finalized). By this decree conditions for domestic and foreign investors will be harmonized. Import duties for equipment, means of production and spare parts will be reduced from 1% to zero. Furthermore, incentives will become more automatic. These amendments appear suitable.

However, incentives are still supposed to rely heavily on profit tax exemptions and reduced profit tax rates for up to seven years, which, as mentioned before, are fairly “blunt” instruments. Incentives to reduce actual costs or encourage desired performance, as recommended above, have not been introduced.

Furthermore, profit tax benefits are proposed to be based on the size of investment (more incentives the larger the investment, which would discriminate against small and medium-sized investment that the Government claims it wishes to promote); area of location of factory (locations in remote areas being given more generous profit tax benefits, an incentive that is unlikely to result in any incremental investment, just loss of revenues to the Government; an investor doesn't locate in a remote area because of a profit tax benefit but because of, for example, closeness and access to raw materials with or without profit tax incentives); and type of

¹⁰ The Services Group, Inc., Michael I. Kennedy & Associates and The Adam Smith Institute “Foreign Investment Capacity Enhancement”, ADB TA 2831-Lao, September 1998.

¹¹ Under bilateral tax agreements, a profit tax reduction for a foreign investor in Lao PDR would have the effect of raising the profit for the parent company abroad, and the net effect would just be that tax authorities in a foreign country would collect the profit tax that Lao PDR tax authorities would have abstained from.

activity in terms of ISIC classification (less appropriate than cost factor or performance based criteria).

4.5 Access to finance

The banking sector in Lao PDR is in a weak position to serve the manufacturing sector. It is small, with total assets at the end of 2000 amounting to slightly more than US\$ 400 million, or about one fourth of GDP. Four major institutions, holding two-thirds of the banking assets and almost 80% of total deposits, are insolvent: non-performing loans account for 60% of loans on average¹². Much of the term lending is directed towards state-owned enterprises. The institutional and legal framework is weak and much training of bank staff is required.

The access of manufacturing enterprises, in particular small and medium-sized enterprises, to bank financing is hampered by the difficulties in the enforcement of the Bankruptcy Law and the Secured Transaction Law through the court system. Courts are unwilling to dissolve personal residences pledged as collateral to banks with a view to protection of the family life of the debtors. This practice discourages the banks from lending to small and medium-sized borrowers who usually haven't got access to other tangible assets.

On the matter of insufficient collateral, Lao PDR could study new instruments such as a credit guarantee scheme. Under such a scheme, the risk associated with the loan is shared between three parties, viz. the borrower, the bank and the Government. The borrower pays a fee, say 2-3% on top of the interest, and in a well functioning credit guarantee scheme these fees should cover most or all of the defaults. However, a guarantee fund would have to be provided as a buffer.

A system for centralized registration of mortgages does not exist. This means that banks can't know whether a specific collateral has been used already for some other loan by the potential borrower. A centralized, computerized system at the national level for mortgages, pledges, leases and other secured transaction devices, easily accessible to banks and the public, could improve bank's willingness to provide credits to enterprises.

Enacting explicit regulation to enable pledging and mortgaging of future acquired property as collateral, permitting pledges and mortgages to secure both present and future obligations, and providing banks and other secured creditors with clear power to enforce pledges and mortgages, by repossession and sale, are other measures whereby banks could be encourage to provide long-term financing.

Clear regulations for creation, transfer and termination of negotiable instruments and commercial paper such as checks, bills of exchange and promissory notes would provide additional financial instruments for financing. Increasing the confidence of the public in the banks with deposit insurance systems and laws would further strengthen the banking system and improve enterprises' access to financing.

Outreach of banks in Laos is limited. There are only few bank branches reaching out to districts and villages. Lao PDR has not allowed foreign banks operating in the country to extend services outside the Vientiane Municipality. It is understood that Bank of Lao is currently considering whether to allow foreign banks to open branches in provinces outside the Vientiane Municipality. Measures to extend the outreach of banks in the country would help in particular SMEs.

¹² ADB/World Bank "The Banking and Financial Sector of Lao PDR", Financial Sector Note (Third Draft), September 2001.

There are a large number of micro finance schemes operating in Laos. Usually such schemes are associated with social goals that are considered more important than financial concerns. In a large number of micro finance schemes, financial sustainability issues have been pushed aside or down the line, resulting in inappropriate expectations on the side of the borrowers, eroding habits in saving and resulting in dissipation of the resources of these schemes. Rural micro finance can be an important instrument in monetization of savings, which would then be linked up with formal financial institutions and improve the availability of loans to SMEs.

As such, Lao PDR should establish the principles under which micro finance schemes have to function. These principles are well known and established in the world and have been successfully used. The Rural and Micro Finance Committee (RMFC) under the Bank of Lao chairmanship is currently promoting best practices regarding the setting up and operation of micro finance schemes in rural areas, which is a commendable initiative with great potential benefits for micro-businesses in rural areas.

4.6 Corporate and personal income taxation

Corporate and personal income taxation differs between foreign and domestic enterprises, and also differs for domestic enterprises depending on volume of business and whether formal accounts are maintained or not.

Wholly foreign owned manufacturing enterprises under the Foreign Investment Law pay a tax of 20% calculated on the profit of the enterprise (profit tax) or 0.25%¹³ of gross revenues (minimum tax), whichever produces the highest tax return. Tax reductions and holidays can be negotiated and are frequently applied. Joint ventures have to negotiate the profit tax rate with DDFI. Dividends are subject to 10% tax. The personal income tax rate for foreign personnel is levied at a flat 10% rate, although salaries paid to partners in partnerships are treated as profit/dividend for tax calculation purpose. Since the minimum tax rate was reduced to 0.25%, these rates are reasonable in an international context.

Domestic enterprises in the form of limited liability or public companies (only 2.5% of all domestic enterprises) as well as sole traders with annual turnover of more than Kip 100 million (required to maintain accounts) pay a tax of 35% calculated on the profit of the enterprise (profit tax) or 0.25% of the gross revenues (minimum tax), whichever produces the highest tax return. Under the Law on Domestic Investment, however, tax reductions and holidays can be negotiated and are often applied. The fact that the profit tax rates for domestic and foreign enterprises differ distorts competition and puts domestic investors at a disadvantage vis-à-vis foreign. The profit tax rate for domestic enterprises needs to be reviewed.

Small businesses with annual turnover less than Kip 100 million are required to keep only simple accounts and pay a lump-sum tax (combining turnover and profit taxes, in some provinces also including the personal income tax) based on the level of their turnover. Different rates apply to production, construction and transportation (1-7%), trading (2-8%) and service (3-9%), respectively. In practice, businesses inform the tax officials that they do not keep any records and a tax negotiation ensues to decide the probable annual turnover of the business. This negotiation process is much criticized by business owners. However, it also gives them the chance to underreport their revenues and settle on a lower rate of tax than justified. Tax negotiations also offer tax officials with rent seeking opportunities. Just by

¹³ The National Assembly, in October 2002, adopted an amendment of the Tax Law, whereby the minimum tax rate was reduced from 1.0% to 0.25% for both foreign and domestic manufacturing enterprises.

observation, it is easily evident that a significant number of larger businesses hide in the ranks of the smaller lump-sum taxpayers and this is a cause for unfair competition. This is, however, recognized by the Government and is being dealt with.

Recently, a self-assessment system of tax returns has been partially introduced, mainly for medium-sized and large taxpayers. In the beginning of the year, the tax department (in some provinces a committee and not an individual) and the enterprise enter into an agreement and the enterprise is then supposed to make monthly payments of the tax due. This has simplified the system and taxpayers submit their taxes directly to the Treasury, without the need to meet on a regular basis with a tax official.

Annual tax registration renewal is still required for most SMEs and is perceived as a tool for monitoring compliance by tax authorities. This requirement opens up the way for negotiations with tax officials and possible informal settlements. The tax authority has introduced taxpayer IDs for large and medium-sized taxpayers and computerization of systems are underway. Large taxpayers now have to get their tax registration renewed only every three years and manufacturing enterprises only every second year. Introduction of similar monitoring tools for small taxpayers, and the functioning of a national register, could reduce the problems with respect to unfair competition due to non-compliance.

Two particular requirements related to corporate taxation need to be reviewed.

The first one is that expenses for travel and entertainment can only be treated as deductible costs up to 0.2% of turnover. Although special regulations may be appropriate regarding entertainment, the limitation regarding travel costs penalizes legitimate marketing activities, in particular. Such legitimate costs for most enterprises could easily amount to much higher amounts than 0.2% of turnover. To encourage marketing activities is much more important than catching some cases of abuse of the corporate travel budget for personal travel.

The second requirement is for foreign enterprises to allocate 5% of their profits each year to various reserve funds "to ensure that enterprises continuously improve their efficiency". This requirement seems to be based on the perception that foreign enterprises would be reluctant to improve their efficiency, which of course is wrong. Furthermore, most enterprises would anyway be spending more funds than the equivalent of 5% of the profit on efficiency improving measures. The effect of this requirement is just to raise the costs for enterprises to carry out efficiency improving measures and therefore penalizes such activities, while instead they should be encouraged (e.g. by double deduction of training costs for tax calculation purpose).

Personal income tax rates for Lao citizens from employment or self-employment follow a progressive scale ending up with marginal tax rates of 40% for employment and 45% for self-employment already at incomes of Kip 5 million (about US\$ 500) per month. Although the construction of the progressive scale may be considered "fair" from the point of view of "ability to pay tax" in Lao PDR, the absolute level where the top margin rate starts to become effective is at a very low level in an international comparison and puts a potential domestic small investor at a disadvantage compared with foreign investors in terms of possibilities of accumulating funds for investments. It would be appropriate to study the possibilities of a system for sole-traders to build up non-taxed funds for investment purposes to overcome this problem.

4.7 Education and training

High levels of literacy and basic education are prerequisites in the long term for the supply of labour to match the demands of a growing manufacturing sector. Despite the fact that primary and secondary enrolment rates are low, and the illiteracy rate high, these are no constraints in terms of basically educated labour supply to meet the modest demand for unskilled labour (in absolute numbers) by even a strongly growing manufacturing sector. If the manufacturing sector would grow by 10% annually, it would have a demand of about 10,000-12,000 at least basically educated labourers per year in the next five years, which would equal about 12-15% of the number of new entrants into the labour force over the next five years.

There is also an existing and future demand for semi-skilled and skilled labourers, which would have to be provided by technical and vocational schools in combination with training by the enterprises themselves. There are technical and vocational schools in Vientiane Municipality and seven other provinces with an annual intake of about 10,000 students, whereof one third are females. In addition, there are 215 village-based community learning centres, which, however, are much dependent on donor assistance.

In general, vocational and technical training institutes suffer from inadequate recurrent budgets to carry out training, lack of training materials and equipment, as well as under-qualified teachers. The difficulties experienced by enterprises to find semi-skilled and skilled workers also indicate that these institutes are not adequately providing the particular skills demanded by the manufacturing sector. One point in case is that the garment industry needs workers trained in industrial sewing, while the existing training institutes mainly provide training for household type of tailoring. Another example is the needs by the secondary wood processing industry that are not adequately met by the technical and vocational training institutes. Therefore, the enterprises themselves have to carry out the requisite training to produce semi-skilled and skilled workers. On the other hand, enterprises report that Lao workers have good learning skills.

In 1998, the Government promulgated a Vocational Education Decree. According to this decree, businesses are required to pay a 1% training levy on their annual turnover into a Vocational Education Fund. This training levy has not yet been implemented. However, in April 2002, the National Training Council under this decree was established under the chairmanship of the Minister for Education. Two vice chairpersons were appointed from the Ministry of Labor and the LNCCI, respectively.

At the tertiary educational level, there is an annual intake of 17,000 students to 11 faculties at the National University of Laos (NUOL) and about 4,000 students to seven privately owned colleges. This system is expected to produce the core of the future staff at managerial levels in the manufacturing industry, but currently a lot of the managerial positions in medium-sized and large enterprises are held by foreigners.

There is also a need for general business and entrepreneurship training of managers and owners of existing and future SMEs. Such training is virtually non-existent outside Vientiane Municipality. Within Vientiane, Lao-Japan Training Center, with participation of a large number of NUOL instructors, has started offering regular courses, but other providers do not exist or cannot enter the market due to price distortions that development partner assisted programs introduce into the market. An initiative to provide entrepreneurship training to start-ups and business skills training for existing SMEs was jointly sponsored by the MIH and GTZ from 1994-1999, but couldn't be sustained after the support ceased.

4.8 Information

Within Government spheres there is a wide-spread culture of keeping information confidential and not sharing and disseminating information. This culture needs to be changed and be replaced by application of the concept "management by information". The core of that concept, applied by governments and enterprises alike, is that you can have people and enterprises make better, more well-informed and faster decisions, at more decentralized levels, if they are provided with adequate information.

One of the institutional shortcomings experienced at central and provincial levels is related to the dissemination of legal, regulatory and administrative decisions to those who are affected by them, viz. the business community at large. As mentioned before in this report, for central level decisions, a regularly published and widely disseminated Official Gazette is a necessity. The rules of the game can only be applied fairly and equally if all concerned are aware of them. Presently, one of the reasons why coordination and cooperation between Ministries is facing difficulties is due to the lack of access of professional staff to all relevant decisions issued by their own and other ministries. The situation with respect to provincial and lower level authorities is similar. The business community is at a definite disadvantage as it is further down the line.

Initially, information dissemination can be made by traditional paper copies through the Government administration at central, provincial and district level as well as through channels such as the LNCCI and its sub-sector groups. As Internet develops in Lao PDR, information can be made available even more efficiently on Government and ministries' websites, where entrepreneurs can even download registration forms and other information.

Further to nurturing a culture of information sharing and dissemination, another priority of the Government should be to develop an information and communication technology (ICT) infrastructure. Internet is dramatically changing the world. Vast information of commercial and technical nature is available through Internet. Communications between businesses are increasingly made by e-mail. The ICT has an inherent risk, however, in creating a "digital divide" leaving the poor, the small enterprises and the least developed countries in the world with inadequate access to Internet behind and not being able to share in the benefits of ICT. By creating the appropriate legal, technical and commercial ICT infrastructure making cheap access to Internet widely available in Lao PDR, the negative aspects of the "digital divide" may be avoided. The Government should focus on the ICT infrastructure, while the private sector itself will deal with the final end of the ICT link (personal computers in enterprises, Internet cafés, etc.). It also lies within the Government's responsibility to enter education on ICT into the curricula in schools.

4.9 National innovation system

A national innovation system (NIS) is sometimes defined as "the network of public and private institutions whose activities and interactions initiate, import, modify, and diffuse new and traditional technologies, adapted to the requirements of greater competitiveness in the economy and society". A NIS is often much focused on issues related to improving the knowledge-base in a country with an emphasis on issues such as technical knowledge, technology management, science and technology, research and development, standards and quality, ICT, etc., although innovations can also refer to product or market innovations.

In Lao PDR there is not yet a well developed NIS, but in addition to the industry itself there are some institutions already in place such as the NUOL, STEA, NAFRI, CIRDC and a number of technical laboratories, although they can hardly be said to cooperate and coordinate so as to constitute a coherent NIS.

The Government is aware of the importance of developing a NIS and has recently prepared a "National Plan for Development of Science and Technology" (NPDST) with long term strategies until 2010 and 2020 and specific action to be taken until 2005. The implementation of the plan would need US\$ 5.6 million until 2005 and an additional US\$ 14.6 million until 2020. The plan envisages a number of priorities and policies to be established, the establishment of r&d centres, development of an ITC network and the preparation of laws and regulations referring to intellectual property, standards, metrology, r&d, etc. The Government has also established a National Science Council to promote and coordinate the progress of this plan.

A background document for the present report¹⁴ has put forward a number of recommendations to support the Government's long-term efforts to develop a NIS. These include, *inter alia*, the preparation of a policy for strengthening of the NIS; the establishment of a national productivity and competitiveness system; the establishment of a system for standardization, metrology, accreditation and certification; and some specific capacity strengthening activities.

Despite the Government's long-term efforts, in a medium-term perspective, most industrial technology upgrading and productivity/competitiveness improvements are likely to come from industry itself, and they will be based on acquisition and adoption of already available technologies, not r&d based or based on domestic inventions. A priority of the Government in the medium-term should therefore be to promote and facilitate the acquisition and adoption of existing technologies from abroad by industry itself. This would include, *inter alia*, the promotion of FDI; development of ICT infrastructure; adoption of basic legal instruments; the introduction of a double deduction scheme for costs associated with technology upgrading (or an accelerated depreciation scheme); and, organization of seminars, workshops, fairs involving international organizations and foreign enterprises to promote technology transfer.

At the level of specific product innovation, in two background documents¹⁵ for the present report, a number of recommendations have been put forward including, *inter alia*, initial training on product innovation; institutional strengthening; demonstration projects; and, export promotion by cluster development.

4.10 Industrial land

Given the modest levels of manufacturing investment, currently and in the medium-term perspective, the availability of land for location of manufacturing activities is currently not considered a constraint to industrial development. In a longer term perspective, however, the availability of industrial land with access to infrastructure and utilities (water, electricity, roads, etc.) as well as a broad range of business support services can offer great economic and environmental benefits to investors and the concerned authorities (there are considerable economies of scale in the provision of infrastructure services). At a more fundamental level, land titling is a prerequisite for any use of land and should be given highest priority.

¹⁴ UNIDO-Lao IP: Aguirre, C. "Technology Needs Assessment in the Lao PDR", 25 January 2003.

¹⁵ UNIDO-Lao IP: Crul, M. "Product Innovation in the Food Processing and Packaging Sector in Lao PDR", November 2002, and Diehl, J.C. "Product Innovation in the Construction Materials Sector in Lao PDR", November 2002.

The Government, through DDFI, is currently promoting the development of the Savanna-Xeno Special Economic Zone in Savannakhet province. Also, MIH for some years has been spending some limited funds on developing industrial land in six provinces. These funds are, however, so limited that they can only allow for some marginal investments in development of industrial land. Furthermore, the funds are spread over thousands of hectares of land, most of which with not very attractive locations, while a focus on maybe a hundred hectares in attractive locations would be more appropriate (one hundred hectares distributed over one or more industrial estates could host enterprises employing 30.000-60,000 persons according to international experience).

Further progress on development of industrial estates would most likely require the involvement of foreign investors. The overriding motive for foreign investors to get involved in the development and management of industrial estates would be that there is a demand by private investors for land in such industrial estates. That demand, in turn, depends entirely on the development of an "enabling business environment". That requires for the Government to focus on the policy issues outlined in other sections of this document. The provision of whatever tax incentives can't change that fundamental commercial consideration.

There are certainly justifications for the development of serviced industrial land in Lao PDR. There doesn't seem, however, to be any particular justifications to accord any specific incentives to export oriented enterprises located on such industrial land with geographical boundaries, classified as export processing zones or free trade zones. Whatever incentives are deemed appropriate for export oriented enterprises can be provided on a broad basis and independent of the location of such enterprises.

4.11 Environmental issues

The Government is committed to minimize any negative impacts on the environment caused by industrial development. To this effect, in April 1999 the Environmental Protection Law was promulgated. Based on this law, STEA prepared an environmental strategy and regulations on environmental assessment that were covered by a Prime Minister's Implementing Order issued in February 2002. MIH has drafted implementing regulations for environmental assessment of industrial projects, including in particular industrial waste water discharge and standards.

The legal framework and regulations provide for environmental impact assessments of new industrial projects. However, although Lao PDR currently hosts only a few of the typically heavy polluting industries (cement plants, pulp and paper mills, textile dyeing, chemicals, basic metals, etc.), there are anyway a large number of typically modestly polluting industries in Lao PDR where there is significant scope for reduction in environmental pollution. MIH has identified a number of such sectors, including textile production, cottage paper industry and tree fibre processing, food processing, abattoirs, salt processing, blacksmiths, pottery, ceramics, etc.

In its endeavours to reduce industrial environmental pollution, MIH is giving high priority to the application of cleaner production (CP) technologies. This approach has its focus on reducing resource consumption and waste as well as generation of pollution at the source. Thereby, environmentally more benign and cleaner production methods are introduced which at the same time improve the productivity and competitiveness of the enterprises by the use of more efficient and cost-effective technologies. Continued support for these efforts to raise awareness of CP technologies and to promote their application is highly recommendable.

4.12 Institutional infrastructure

Institutions supporting the manufacturing sector can be broadly classified into three categories, viz.

- (i) administrative and regulatory institutions;
- (ii) service institutions; and,
- (iii) business representative organizations.

Administrative and regulatory institutions consist of Government ministries and agencies at central level as well as provincial governments, district authorities and village authorities at decentralized levels. At central level, the main relevant ministries and agencies in terms of responsibility for the administration of the most important laws and decrees for industrial development are the following:

Ministry/agency	Laws, etc., within main responsibility
Prime Minister's Office	Land Law
Prime Minister's Office/STEA	Environmental Protection Law, decrees on intellectual property and trademarks
CPC	Law on Foreign Investment, Law on Domestic Investment
Bank of Lao PDR	Laws and decrees on central banking and commercial banks, Secured Transaction Law
Ministry of Finance	Budget Law, Tax Law, Customs Law, Law on Property, Decree on procurement of goods and services
Ministry of Justice	Contract Law
Ministry of Commerce	Business Law, Bankruptcy Law, decrees on international trade, domestic trade and price controls
Ministry of Industry and Handicrafts	Manufacturing Industry Law ¹⁶ , one article of the Land Law dealing with industrial land
Ministry of Agriculture and Forestry	Law on Forestry
Ministry of Labour and Social Welfare	Labour Law
Ministry of Communications, Post, Transportation and Construction	Road Transportation Law, Construction Law

In terms of legal and regulatory framework impacting on industrial development, the Ministry of Industry and Handicrafts has a marginal influence only. The laws and regulations that really matter to manufacturing industries and the business community are in fact primarily administered by other ministries. This is one of the main reasons why MIH has difficulties in actually implementing industrial strategies and policies in terms of concrete action.

Furthermore, the fact that most laws and decrees that are important to the manufacturing sector are administered by line ministries focused on other issues than industry has as a consequence that industrial development concerns are not being given due attention. In redefining the functions of MIH to become more in line with the needs of a market economy, the advocacy role of MIH in pursuing the

¹⁶ MIH is also responsible for the Electricity Law and the Mining Law, but these laws are primarily related to development of electricity and mining, and not to manufacturing.

industrial development agenda needs to be emphasized. A mechanism to perform this function exists in the Steering Committee for Production of Commercial Goods, chaired by the Vice Prime Minister in charge of economic affairs and having all economic ministers as members. This committee, however, has the Trade Promotion Centre of the Ministry of Commerce (MOC) as its secretariat, which makes the committee's links to be stronger with MOC than MIH. To strengthen the links with MIH (that has its main mandate related precisely to "production of commercial goods"), it may be considered to have a joint MOC/MIH secretariat servicing the committee. This solution may also have the effect of better coordinated action between MOC and MIH on various industry and trade policy related issues. Independent of location of the secretariat, the MIH utilization of this mechanism needs to be extended.

In centrally planned economies, with manufacturing enterprises predominantly owned by the State, ministries of industry have had a strong mandate in actually being responsible for managing these enterprises. However, as such centrally planned economies privatize the state-owned enterprises, or give them a more autonomous status, in line with market economy principles, the traditional role of such ministries cease to be relevant and the role of such ministries have to be redefined.

A crucial matter in this context is that they have to become more focused on, *inter alia*, policy related issues. As industry policies and trade policies are strongly interlinked in a market economy, many, if not most, countries based on market economy principles have actually merged their ministry of industry with their ministry of (international) trade into a ministry of trade and industry, while often creating a separate ministry for natural resources (electricity and mining). In the case of Lao PDR, it is recommended that the role of the Ministry of Industry and Handicrafts, in terms of its functions in respect of the manufacturing industry, be reviewed. Such a review needs to include *inter alia* MIH's mission statement, strategies and policies, working procedures, staff requirements in terms of education, and a training programme.

Service institutions are those that offer necessary financial and non-financial services such as banks; credit guarantee funds; savings and loan organizations; micro finance institutions; insurance companies; freight forwarders; vocational and technical schools; universities; research institutes; local SME and enterprise development organizations; private training institutes; management and marketing consulting companies; technical consulting companies in engineering and industrial design; law firms; accounting and auditing service providers; trade fair and exhibition companies; information service providers, including libraries, internet service providers and market research companies; advertising agencies; printing establishments; courier and transportation service providers; telecommunication services companies, etc. As is well known, these kinds of institutions have only developed to a limited extent in Lao PDR. Furthermore, their outreach beyond Vientiane Municipality is extremely limited.

A way forward in eliminating bottlenecks resulting from underdeveloped markets in services for SMEs in localities may be to establish local business organizations and/or local enterprise development institutions which should be managed and sponsored in public-private partnerships between local authorities, the business community, local banks, and other interested stakeholders. Such local initiatives would need to be financed, at least partially, through Government sponsored funds, for instance, for business management development, vocational training and export promotion. Introduction of partial subsidies for business development services geared to SME needs and demands for some years would also facilitate the development of private

provision of business development services through private training and consulting companies.

Business representative organizations, finally, are institutions such as chambers of commerce and industry; business clubs; sector based business organizations; youth and women entrepreneur groups, clubs and organizations (at both central and provincial levels). The Lao National Chamber of Commerce and Industry (LNCCI) and its 18 sectoral groups constitute a good start on the development of business representative organizations. Some of the groups are carrying out commendable work, but further development is hampered by extremely limited financial and human resources. Furthermore, the preparation of a legal framework conducive to the establishment and operation of "business people helping business people" organizations would be supportive for the development of industry self-assistance programmes.

4.13 Physical constraints to industrial development

In the preceding sections, a number of constraints related to legal, policy and institutional fields have been identified. There are, however, also a number of other, primarily physical, constraints to industrial development. As they are so well known, and often well covered in other in-depth studies, they are only mentioned below, but not further elaborated upon.

Small domestic market. The small market in terms of purchasing power has as a consequence that few products can be produced for the domestic market only. Many products need to be produced in large quantities in order to reap the benefits of economies of scale and being able to compete with imported goods.

Inadequate availability of semi-skilled and skilled labour. Most labour is recruited as unskilled labour that has to be trained by the enterprises themselves, which results in higher training costs in comparison to a situation where semi-skilled or skilled labour would be abundantly available in the market. If assuming three months requisite training and an average duration of employment of three years, the extra cost may add up to 10% of the wages paid.

Inadequate labour discipline. Workers are not used to a factory environment and they often leave their jobs when required in family agricultural activities, which results in high labour turnover and reduces the productivity of the labour force.

A landlocked country. The biggest disadvantage of being landlocked and located fairly far away from international ports lies in the comparatively high transportation costs when exporting to overseas markets. Exactly how big this disadvantage is has been elaborated upon in a study presented in a workshop in Vientiane in January 2003¹⁷. For example, for a garment factory located in Vientiane as compared with a garment factory located close to Bangkok, the CIF price of equivalent garments when exported to Europe is 3-6% higher (depending on the value of the goods).

Physical infrastructure. In areas along the border to Thailand roads are available and don't constitute a constraint to industrial development. In most of the rest of the country, however, there is a lack of all-weather roads, or lack of maintenance of such roads, which hampers transportation of e.g. agricultural products to factories in these border areas as well as up-country. The lack of supply of electricity in certain

¹⁷ ESCAP "Transit Transport Issues of Landlocked and Transit Developing Countries: Case Study of Lao PDR, Thailand and Vietnam (draft)", 15-16 January 2003.

parts of the country is of course a severe constraint to the establishment of mechanized industries.

5 MANUFACTURING SUB-SECTORAL ISSUES

In this chapter a separate review is made of four manufacturing sub-sectors which together account for 79% of total output, 71% of total value added and 80% of employment in the formal manufacturing sector employing at least 10 persons in 1999. The four sub-sectors are (i) wood processing industry; (ii) garment industry; (iii) food industry; and (iv) construction materials industry. In addition, a separate section is devoted to handicrafts, accounting for a significant share of the production of small enterprises (less than ten employees) and of the informal manufacturing sector. A final section provides comments on some other manufacturing sub-sectors.

The coverage in each sector is highly concentrated and just provides information and analysis in respect of key issues and main recommendations to the Government.

5.1 Wood processing industry

Key issues

Although background reports have covered the whole value addition chain forestry-logging-primary wood processing- secondary wood processing, the present Section has its focus on secondary wood processing, where most value added from a given wood input can accrue to Lao PDR.

The importance of the wood processing industry is indicated by the fact that it accounts for 32% of the gross output of the manufacturing sector in Lao PDR, 35% of exports of manufactured goods from Lao PDR and employs some 22,000 persons.

Lao timber is mainly exported in the form of logs or different kinds of primary wood processing products, viz. sawmill products, with additional minor quantities further processed into strip parquet flooring, furniture and various other secondary wood processing products. Since 1999 exports of logs (with a few exceptions) has, in principle, been banned, but weak law enforcement as well as rampant illegal logging and exports have eroded that ban. Furthermore, a very large share of sawmill products is exported as huge balks, often referred to as "square logs", with very little value added. Since August 2002, however, the Government has also banned the exports of sawn wood. More or less all of the exported wood, mainly to Thailand and Vietnam, are undergoing further value addition in these countries and is then exported to overseas countries.

Officially recorded exports of wood products amount to the size order of US\$ 80 million annually, whereof less than US\$ 5 million are secondary wood processing products. In addition, significant quantities of timber are illegally logged and exported. Between 5% and 10% of the sawmill products are sold on the domestic market, often low quality sawn wood, not kiln-dried, and therefore less suitable for the production of many secondary wood processing industry products.

The challenge to the Government is how to promote the production and exports of secondary wood products in parallel with pursuing other objectives related to forestry such as sustainable management of forests, ensuring that benefits from the forests accrue to the rural poor, and biodiversity conservation. This broader

perspective is being maintained in the Government's ongoing work to prepare a Forestry Strategy 2020. A key policy in this context is that the wood processing industry increasingly should be based mainly on plantation forests as its resource base, a policy that is supported by the present study.

There is a broad range of higher value added secondary wood processing products that could be manufactured in Lao PDR and exported, given a more conducive policy environment for such exports. These are included in HS Chapter 44, tariff lines 44.10-21 and HS Chapter 94, tariff lines 94.01 and 94.03. They include, *inter alia*, such diverse products as particle board, fiberboard, plywood, veneered panels, laminated wood, densified wood, wooden frames for pictures, etc., packing cases, boxes, crates, pallets, tools, tool bodies and handles, broom and brush bodies, boot and shoe lasts, windows frames, door and door frames, parquet panels, other joinery and carpentry products, tableware and kitchenware, caskets and cases, numerous types of handicrafts work, cloth hangers, tooth picks, chop sticks and other products, and furniture and parts thereof of wood, bamboo and rattan for offices, kitchen, bedrooms, livingrooms and gardens. Altogether, these products represent a huge regional and global market, which Lao PDR has hardly at all tapped into.

A fundamental problem is that the existing wood processing industry itself has very little interest at all to enter into secondary wood processing, as most enterprises are directly or indirectly owned or controlled by primarily Thai and Vietnamese enterprises that are mainly interested in operating sawmills in Lao PDR as a source of cheap raw materials for their secondary wood processing in their home countries. The Government's recent measure to ban exports of sawn wood, if strictly enforced, will put pressure on these enterprises to consider relocating their secondary wood processing to Lao PDR. However, as the Government in 2001 also introduced a ban on foreign investment in secondary wood processing based on natural forests, and plantation forests until now are scarce, the strict enforcement of both these regulations would mean a seizure of most of the wood processing industry in Lao PDR. It is, therefore, proposed that the Government consider relaxing the complete ban on foreign investment in secondary wood processing based on natural forests allowing the industry to adjust in two (overlapping) stages. The first stage is to restructure from almost exclusively primary wood processing to increasingly include also secondary wood processing. The second stage is to restructure from using natural forests as the resource base to using timber from forest plantations as the main resource base.

Another major issue is the current discretionary and distorting log quota allocation system which results in unfair allocation of quotas, which in turn means great uncertainty to individual enterprises that therefore hesitate to make investments in secondary wood processing facilities. The Government has tried, on a pilot basis, to apply a system based on competitive bidding, but the initial application of the system was not satisfactory. If improving on the system and pursuing it on a large and transparent scale, fair competition would be fostered resulting in the survival of the most competitive firms and the closure of less competitive firms. This would support the much desired reduction in overcapacity in the industry.

Another major problem confronting the existing wood processing industry is its weakness in terms of management, marketing, technology, design capability and skills levels of the labour to restructure from primary wood processing to secondary wood processing. If a restructuring is to take place, the Government would need to support the industry's own efforts. It is also advisable to keep a window open for new, innovative and serious enterprises in the secondary wood processing sector to enter the market (restrictive policies should, however, be maintained regarding new entry into the primary wood processing sector). Such enterprises may introduce new technologies, new products and new export markets.

The trade regime for secondary wood products can be improved. High import duties levied on secondary wood products by other ASEAN member countries is an impediment to exports. However, by transferring remaining secondary wood products on the AFTA/CEPT Temporary Exclusion List to the Inclusion List (and reduce tariff rates to a maximum of 20%), Lao exporters would immediately enjoy the preferential duty rates provided for under AFTA/CEPT. Also, if Lao PDR would achieve Normal Trade Relations (NTR) with USA, the world's largest market for furniture and components would become open to Lao exporters.

Summary of recommendations

Major action to be considered by the Government include:

- (i) strategic focus on promoting the secondary wood processing industry within the framework of sustainable forestry management and other objectives regarding forestry under the forthcoming Forestry Strategy 2020;
- (ii) gradually, and as the resource base allows, shifting the resource base for wood processing away from natural forests towards forest plantations;
- (iii) relaxing temporarily and restrictively the ban on foreign investment in *secondary* wood processing based on natural forests;
- (iv) improve and extend the system of competitive bidding for log quota allocations;
- (v) establishment of a Forestry Training and Service Centre (FTSC);
- (vi) establishment of a Primary Wood Industry Consultancy Centre (PWICC);
- (vii) establishment of a Secondary Wood Processing Service Centre (SWPSC);
- (viii) support to the Wood Exporters Group under LNCCI;
- (ix) introduce a double deduction scheme for training costs and an accelerated depreciation scheme for tax calculation purpose for secondary wood processing;
- (x) transfer remaining products from the Temporary Exclusion List to the Inclusion List and reduce tariff rates to 20% under the AFTA/CEPT scheme to enable exporters to enjoy preferential duty rates when exporting to other ASEAN countries;
- (xi) promotion of wood waste minimization and utilization as well as energy recovery in the wood processing industry; and,
- (xii) promotion of industrial processing of bamboo and rattan.

Garment industry

Key issues

Global and regional conditions regarding markets and competition to be faced by the Lao textile and garment industry in the future are currently being shaped as a consequence mainly of facing out of the Multi-Fibre Arrangement by 31 December 2004.

Limiting quotas on total exports of garments to WTO member countries will be abolished with the consequence that significant garment production capacity is currently being scrapped in medium- and high-cost countries, or relocated to low cost countries. Another consequence is that exports of garments from low-cost producing countries to medium- and high-cost countries will increase strongly, from an estimated US\$ 200 billion in 2000 to US\$ 350 billion in 2005. This is an enormous opportunity for low cost, typically developing countries, including LAO PDR. A major feature of this huge global market is, however, the requirement on reliability and shortened lead times between the placing of an order and delivery.

At the same time, however, export quota allocations for individual developing countries will be abolished too. Such country-wise quotas were a major reason why garment factories were established in the first place in Lao PDR. When Thai garment manufacturers had filled the Thai quotas for different countries, they started manufacturing in Lao PDR, although production there was less efficient. In the future, however, the abolishment of country-wise quotas will result in free competition. This means that the most efficient manufacturers and the most efficient countries in the developing world will become "winners", while the others will become "losers".

An appropriate strategy for Lao PDR in the above outlined global context is based on its comparative advantage of lower costs of labour as compared to most of its existing and potential competitors. Low wages, however, are not a sufficient condition to be competitive. This comparative advantage has to be translated into a competitive advantage by high productivity leading to lowered costs per produced unit. Lao PDR also has to take measures so as to overcome its current weaknesses in marketing.

In respect of the requirement for shortened lead times, countries having all requisite raw materials and production stages within its borders will have an advantage over those countries which only host one or a few stages in the entire supply chain and have to engage substantively in imports and export of intermediates. Therefore, the requirement for shortened lead times will pressure for increased forward and backward integration in garments producing countries or facilitation of trade between countries in a region. In the case of Lao PDR, there is certain scope for both forward and backward linkages, but there are limitations too in this respect due to required large capital investments and economies of scale in production. When complete covering of the supply chain can't be made inside Lao PDR, suppliers and customers of intermediate goods, in e.g. Thailand, are geographically sufficiently close, but governments in Thailand and Lao PDR have to completely eliminate the costs and time delay disadvantages of crossing the country borders.

In light of the above outlined scenario of global developments and major elements of a strategy for survival and development of the Lao textile and garments industry in this context, specific business opportunities as indicated below may be feasible in Lao PDR.

Focus on products with high labour contents. Examples of products with high labour contents are "complex" outfits such as multi-layered ski jackets; hand-knitted garments, especially for babies; flat bed knitted products such as sweaters, pullovers and the like; and, fashion garments requiring labour intensive operations such as washing, embroidery, printing and attaching various accessories. A special case is carpets from silk or wool that are only produced on a miniscule scale in Lao PDR. The development in Nepal may be studied, where in 10-15 years time a carpet industry, based on imported high quality wool from New Zealand, was built up from virtually nothing to employing 60,000 people and generating annual exports of US\$ 100 million. Lao PDR has similar preconditions to those that Nepal had 15 years ago.

Backward integration. Lao PDR imports all of its fabrics for garments production except for denim used for the production of jeans. Woven fabrics production is hardly viable due to large investments and required large scale of operation. What may be considered though is a woven fabric process house that would carry out the dyeing and finishing of imported woven fabrics of some major standard qualities. Also to be considered is to build up capacity in circular knitted fabric processing as investments for such production is significantly less than for a woven fabrics processing plant. Both the above proposals could contribute to shorter lead times for Lao garments manufacturers.

Forward integration. There is a continued great demand internationally for garments that are washed as finished garments and/or dyed and/or printed with international designs. This is a special processing sub-sector of the industry that has not been exploited in Lao PDR, but one for which Lao PDR is well suited in terms of low labour costs. An enterprise active in this field would carry out commission processing of garments for the industry. The operations would add value to the products and would shorten lead times for fashion goods. Based on the potential advantages of clustering of firms around a core business, the possibilities of manufacturing accessories, trimmings, labels, poly bags, printed cartoons, etc., may also be explored, both for the Lao market and possibly to supply niche items to the garments industries in Thailand and Vietnam too.

Over the last 3-5 years, exports of garments have remained stagnant around US\$ 100 million per year. Unless immediate and decisive action is taken by the Government of Lao PDR and the industry itself, there is a great risk that the industry will collapse in a few years time endangering the employment of 22,000 people and a significant part of Lao exports. Most of the garments production in Lao PDR is carried out by companies with 100% foreign ownership, mainly Thai, or with a dominating foreign ownership share. Those enterprises will probably adjust more or less successfully, depending on formulation and implementation of appropriate Government policies. The 100% Lao owned enterprises are, however, facing formidable challenges.

Key actions to be implemented by the industry itself include overall improvements regarding management, marketing, production, skills upgrading, etc., with a view to improve productivity and exploit the advantages of availability of low cost labour. For 100% Lao enterprises, currently mainly producing on a CMT (cut, measure and trim) and sub-contracting basis for enterprises or agents in Thailand and Hong Kong, which is likely to dramatically be reduced in the future, a challenge is to establish direct contact with major overseas buyers. Establishing a promotional and sales company in Bangkok, on a collective basis, may be considered with or without support by the Government.

Summary of recommendations

Major action to be considered by the Government include:

- (i) keeping up maximum momentum to accede to WTO;
- (ii) achieving NTR with USA before the end of 2004;
- (iii) concluding an implementable transit trade agreement with Thailand;
- (iv) further improving and streamlining bureaucratic procedures for trade;
- (v) review and amendment of the Labour Law in respect of working hours for young persons, female night work and maximum overtime to maintain conditions equal to neighbouring countries, still in line with ILO Conventions;
- (vi) providing support to the industry for collective export promotion;
- (vii) providing support for a "crash programme", including in particular training for the garment industry;
- (viii) in cooperation with the industry itself and donors establishing a garment industry vocational training institute;
- (ix) leveling the profit tax between foreign and domestic enterprises;
- (x) exempting domestic second tier sub-contractors for exports from the 3% turnover tax; and,
- (xi) promoting specific new investments through DDFI.

5.3 Food industry

Key issues

About US\$ 30 million worth of processed food (excluding rice) is imported annually to Lao PDR, mainly from Thailand. Main products are monosodium glutamate, sugar, condensed milk and seasoning sauces. Another about US\$ 40 million worth of beverages and tobacco are also imported annually, whereof two thirds from Singapore and one third from Thailand. Annual exports of processed food amount to about US\$ 20 million, whereof 75% consists of primary processed coffee. In addition, there are significant unrecorded trade in both directions, primarily with neighbouring Thailand and Vietnam, by some sources estimated to amount to 20-30% of the officially recorded trade.

The comparatively small domestic Lao market is a constraint to import substitution regarding many food products, as they require large-scale production to be financially viable, viz. monosodium glutamate and condensed milk. For new or increased exports, limited supply of agricultural raw materials constitutes a constraint. Despite these constraints, there appears to be some scope for both import substitution and exports, which is outlined below.

Rice. Exports of standard glutinous rice in bulk are hardly viable. However, there may be scope for exports of high-end "boutique" varieties of rice, which combine the glutinous character with specific aromatic flavour. As for some other Lao products too, establishing a legislation on "geographical indication of origin", which is a prerequisite to have a product registered under WTO's rules regarding "geographical indication of origin" would provide strong marketing support.

Animal feed. May be viable and could both substitute for imports from Thailand and be exported to China and Vietnam. As for many other products too, support could be provided by the Government by promulgating legislation on contract farming; creating awareness of grain quality and safety issues; and spreading knowledge about post-harvest techniques.

Vegetable oil. Limited quantities of crude oil is currently produced in Lao PDR (only low-yielding pressure extraction) based on locally grown groundnuts and soybeans, which are exported to Thailand and then re-imported after further refining in Thailand. As the investment in solvent extraction and further refining require fairly large investments and production to be viable, the Lao market is not sufficiently large to justify such a plant. However, China and Vietnam offer potential export markets, which may justify an economically sized plant. There is also some imports of refined palm oil from Malaysia in bulk that is bottled in Lao PDR, but the domestic market (6,000 tonnes per year) is currently too small for an economically sized plant (15,000 tonnes per year) to refine imported crude palm oil. If refined palm oil can be exported to China and Vietnam, the preconditions may be present for a viable palm oil refining project. Finally, the feasibility of a rice bran oil plant may be studied.

Sugar. Domestic consumption of white and brown sugar amounts to about 30,000 – 40,000 tonnes per year. An internationally optimal designed sugar refinery should have a capacity of close to 100,000 tonnes of output per year. Without considerable support by the Government (subsidies or quantitative restrictions on imports), a sugar refinery is unlikely to be viable in Lao PDR. If the Government provides subsidies, it is a probably not affordable cash contribution to most likely a foreign investor, which wouldn't be justified by the small incomes generated to sugarcane growing farmers. It would be better to provide such cash instead directly to farmers in the form of extension services and the like. If the Government introduces quantitative restrictions (which by 2008 will not be allowed under AFTA regulations),

this results in higher prices for consumers as well as for potential food industries (soft drinks, biscuits, bakery products, etc.) which will suffer from higher raw material costs than competing foreign suppliers. The disastrous experience of Vietnam in trying to pursue a sugar refinery industry against market economy principles should be a warning to Lao PDR.

Coffee. Some 20,000 tonnes of primary processed coffee (drying of cherries, hulling and grading) is currently exported per year from Lao PDR. Secondary processing (roasting, mixing, etc.) is most likely not viable. However, appropriately packaged and skillfully marketed niche brands may very well be viable internationally, in particular in Europe. The marketing should be based on WTO recognition of "geographical indication of origin".

Fruit and vegetable. Exports of processed fruits and vegetables (canned bamboo shoots and mangoes, baby corn, rambutan in syrup, etc.) already exist on a limited scale and whatever further increase of such niche products on niche markets, most likely EU where Lao PDR enjoys preferential GSP treatment, will mainly depend on skillful marketing.

Meat (from beef). There is a huge and growing demand for meat in China, Vietnam and Thailand with geographically reachable urban markets. These countries are experiencing increasing scarcity of land, while Lao PDR, especially in the south, has large areas of land, which is not cultivated or covered by forests, but suitable as pasture. To realize this potential, the Government needs to improve the veterinary legislation and veterinary services; facilitate access to land for pasture; disseminate improved forage species and cultivation techniques; implement breeding projects based on local herds; improve the Food Law; and actively promote and monitor modern slaughtering and meat processing facilities.

Summary of recommendations

To realize the above outlined potential further integration of Lao PDR into ASEAN (and the rest of the world) in terms of production and trade, the Government needs to take action on some legal and institutionally crosscutting issues, viz.

- (i) establish ASEAN aligned agricultural commodity standards;
- (ii) promote appropriate post-harvest technologies;
- (iii) improve hygiene, food safety and quality standards for processed food;
- (iv) strengthen university education related to food industry;
- (v) transfer products with export potential (e.g. beer, meat) to the Inclusion List under AFTA/CEPT;
- (vi) promulgate legislation on "geographical indication of origin";
- (vii) encourage the private sector to establish a Food Processors Group under the Lao PDR Chamber of Commerce and Industry; and,
- (viii) promote opportunity studies and specific investments through DDFI.

5.4 Construction materials industry

Key issues

Officially recorded consumption of construction materials in Lao PDR in 2001 amounted to US\$ 56 million, whereof domestic production US\$ 31 million and imported materials US\$ 25 million. These numbers don't include production of wooden products for building purposes and bricks produced at household or village level at micro scale.

The domestic production value-wise consists mainly of plastic tubes, pipes and hoses (US\$ 7 million), cement (US\$ 6 million), corrugated roofing (US\$ 6 million) and iron bars (US\$ 5 million). In addition, there exists small-scale production of different kinds of concrete products (electric poles), wire, nails and screws, and paints. Half of the imports refer to cement (US\$ 13 million) and another 26% to iron and steel (US\$ 7 million).

The current cement manufacturing (about 250,000 tonnes per year by two factories) is operated at a loss and the largest factory can't even cover its financing costs (about half of total costs). It enjoys protection by the Government in the form of quantitative restrictions on imports of cement. Nevertheless, some consideration is given to the establishment of a couple of Portland cement plants with a capacity each of 500,000 – 600,000 tonnes per year capacity, which should be seen in the context of a total domestic consumption of about 750,000 tonnes per year in Lao PDR. In an environment free from distortions, a Portland cement plant needs to have an annual capacity of 1.5–2.0 million tonnes. A plant with only 500,000 tonnes' annual capacity would likely have production costs 20-40% higher than a large cement plant reaping all the benefits of economies of scale. Such plants exist in Thailand. As most of the cement consumption takes place along the border to Thailand, locational advantages can't compensate for the higher production costs. There would likely not be any foreign exchange savings either from cement production, as financing costs, most likely in foreign exchange, are considerable. Employment in a cement plant would be limited to 400-500 employees, jobs created at an awfully high cost.

Despite the fact that Lao PDR has deposits of lime stone, the main raw material for Portland cement, the Government should refrain from supporting the establishment of a less than economically sized Portland cement factory. Should it protect such a factory by quantitative restrictions on imports or high import duties (which will not be possible under AFTA commitments from 2008 and onwards if the Government honours these commitments), the result would be higher prices for cement which would increase the costs for building roads, irrigation systems and other infrastructure as well as the costs for other industries and ordinary people using cement and concrete for the construction of buildings.

The best option for Lao PDR in the foreseeable future is to continue to import bulk construction materials such as cement, iron and steel, glass, etc. that are based on very capital intensive and large scale production. As the domestic market grows, existing and new enterprises can increase the domestic production of goods that is already manufactured in Lao PDR as well as products that are suitable to manufacture in small scale, viz. steel construction structures, bulky concrete blocks and elements, and the like. In this context it would be advisable to introduce norms and standards for selected building materials as well as adopting quality control systems for both domestic and imported building materials.

What could also support the industry is a review of the Government procurement procedures so as to ensure that domestic suppliers get a fair chance to compete with foreign suppliers of building materials¹⁸.

Donor-funded projects represent 80% of public sector procurement. For such projects, donor procedures (e.g. World Bank and ADB procedures) are permitted to take precedence over Government procedures. For the remaining 20% of public sector procurement, only 60% is in accordance with formal Government procedures, while 40% of the procurement is carried out on a negotiation basis with reference to various Articles in Decree No. 1639/MOF.

¹⁸ The following review of procurement practices relies heavily on World Bank "Lao PDR: Country Procurement Assessment Report", December 2002.

World Bank guidelines for procurement allows for a 7.5% domestic preference when comparing the prices of bids. From the point of view to enable domestic manufacturers of goods to compete with imported goods, the major problems are:

- (i) SOEs have been favoured and it is questionable whether some of the winners of contracts actually met the World Bank's eligibility criteria under the World Bank's guidelines, something that of course is a disadvantage for the private sector manufacturers;
- (ii) the choice of procurement based on single source negotiations and not on competitive bidding has favoured SOEs;
- (iii) although SOEs are not given direct financial support, there is evidence of indirect support through delays in payment of taxes and other bills, access to credit on preferential terms and measures of debt forgiveness;
- (iv) a subjective scoring system to evaluate non-monetary items is applied which reduces transparency (comparison of bids should be made solely on price and non-monetary criteria should be included just as a pass/fail criterion);
- (v) national contractors lack understanding of procurement procedures, especially smaller ones and those in the provinces (translation of World Bank guidelines is in the process as well as training of potential bidders so as to enable them to improve on the quality of their bids); and,
- (vi) procurement opportunities are not sufficiently well communicated to domestic manufacturers, viz. by advertisement in daily newspapers or in a Gazette or on a web site on the Internet.

Lao PDR has a fairly broad range of natural resources that could be used for the production of building materials. It is recommended that further exploration and r&d regarding these natural resources be carried out. The feasibility of three specific new projects may be worthwhile looking into in further depth by the industry. The first one is the production of different types of lime from limestone, both for the domestic and export market. The second one is production of gypsum and gypsum plaster, also for both domestic and export markets. Currently, gypsum stone is mined and crushed for exports, but not further processed. The third one is the production of *specialty* kinds of Portland cement.

Summary of recommendations

The following action may be considered by the Government:

- (i) refrain from promotion of less than economically sized cement plants by distorting protectionistic measures;
- (ii) revise procurement practices so as to allow domestic private manufacturers a fairer chance to compete with SOEs and foreign firms;
- (iii) adoption of norms and standards for selected building materials;
- (iv) adoption of quality control systems for domestic and imported building materials;
- (v) promotion of opportunity studies and specific investments through DDFI; and,
- (vi) further exploration and r&d regarding raw material resources suitable for production of building materials.

5.5 Handicrafts

Key issues

Handicraft production in Lao PDR consists of a diversified range of products including traditional hand-woven textiles; products made from such textiles; embroidery;

souvenir type of wood crafts; ornamental and religious wood carvings; craft type of wooden furniture; artistically designed chopsticks and other wooden household utensils; rash baskets; posa paper and products from posa paper; silverware; jewelry; pottery; musical instruments, etc.

Statistics on output or employment in the handicraft sector are almost non-existent, but based on a variety of sources the present research study makes a qualified guess that the handicraft sector provides employment for an equivalent of 30-40,000 full-time working persons. Out of these, an estimated 15-20,000 people actually work full-time, while another maybe 100,000 people or so have the handicraft activity as a complementary activity to a main occupation (mainly agriculture). The total value of output is estimated at US\$ 30-40 million. Traditional textile weaving and the production of clothes from such textiles probably account for about half of the handicraft sector in terms of employment and output.

As the handicraft production to a large extent is a complimentary activity, it often means that it provides precisely that extra income needed to bring a household above the "poverty line". As such, the handicraft sector may be even more important from a poverty reduction point of view than the above mentioned employment figures indicate.

Production is mainly for the domestic market. Exports are probably limited to US\$ 5 million at most.

Future domestic demand for traditional handicrafts is likely to decrease. Traditional household utensils of wood or rash are increasingly replaced by more functional and cheaper imported products of plastic. The demand for clothes made from traditionally hand-woven textiles are also likely to decrease, as people will increasingly prefer more western-style types of clothes, often imported at low prices, as can be seen from the development in Vietnam or Thailand.

A conclusion is therefore that Lao PDR has to export its handicraft products if it is to maintain, or increase, the present level of employment in the handicraft sector. Some enterprises have already started to export certain niche products on niche markets such as boutique type of silk dresses, table clothes and napkins, home decorative items (viz. cushion and bed covers), bags, souvenir wooden items, etc. These items are, however, typically rather expensive as compared to corresponding functional products being mass-produced in several parts in the world. As such, these exports are unlikely to compensate for the declining domestic market and can't generate the larger numbers of jobs needed.

There is therefore a need to identify product categories that are bought in large quantities in the international market and could be produced in Lao PDR on a large scale, based on its low wages and traditional skills.

One such product category may be woolen and silk carpets, maybe with traditional Lao textile patterns. In Nepal 15 years ago, there was only an embryonic carpet industry, but they had much the same preconditions at that point in time as Lao PDR has today, viz. low wages, traditional weaving skills and interesting textile patterns. Then Nepal started to import good quality wool from New Zealand and good chemical dyes from Switzerland and combined those raw materials with the traditional weaving skills and the traditional Nepalese patterns. Thus Nepal was able to find a specific market position in the international carpet market and is today exporting around US\$ 100 million annually from a domestic carpet industry providing employment for about 60,000 people.

Another example of potential future large-scale handicraft based production may be the gem and jewelry industry. This industry in Thailand alone provides employment for 1.2 million people and generates export revenues amounting to US\$ 2 billion annually. Thailand is trying to move up to the medium- and high-end markets of the gem and jewelry market as it is increasingly feeling the competition in the lower-end, labour intensive market segments from India, China and Vietnam. Lao PDR with its domestic gem resources may be in a position to compete in this huge global market too.

It may be worthwhile to explore more in detail the global large "mass handicraft" markets into which Lao PDR may tap based on traditional skills, patterns and low wages.

In light of the importance of the handicraft sector, it would be advisable to prepare a master plan for development of the sector as well as including handicrafts as a "priority sector" under the Law on Domestic Investment to enable the sector to benefit from incentives under this law. Other types of support may include the introduction of an accreditation system for "living" preservation and promotion of handicrafts as well as the merger of current efforts to support and promote the handicrafts sector into one centre, a National Handicrafts Centre.

As handicrafts activities are to a large extent carried out by very small or micro-sized units and households, support regarding raw material supply, training, exports, etc., could preferably be provided by "clustering" of such units. In this context, the application of the Japanese "one village, one product" concept, the Vietnamese "occupational villages" concept or the Thai "one thomboune, one product" concept may offer interesting opportunities in Lao PDR.

Summary of recommendations

The following action is recommended for Government consideration:

- (i) include handicrafts as a "priority industry" under the Law on Domestic Investment;
- (ii) prepare Master Plan for development of the handicraft sector;
- (iii) study of international markets for large scale production of handicrafts and Lao PDR's possibilities to tap into these markets;
- (iv) initiate programme for improved international competitiveness;
- (v) implement pilot projects to "cluster" handicrafts producers for joint raw material supply, training, exports, etc.
- (vi) study introduction of an accreditation system for "living" preservation and promotion of traditional crafts; and,
- (vii) study of existing support institutions and the feasibility to merge these into a National Handicrafts Centre.

5.6 Other manufacturing sub-sectors

Assembly of motor vehicles. A very "visible" sub-sector is the assembly of motor vehicles, viz. motorbikes, accounting for 4% of total manufacturing output as well as value added in 1999. In February 2000, there were 5 assembly factories of motorbikes in Lao PDR. In April 2002, there were 14 factories with a total capacity for production of 60,000 units. The actual production is lower though. MOC establishes a total annual quota for imports of parts for assembly and MIH distributes

this quota to individual enterprises on an enterprise by enterprise basis¹⁹. In addition, a high effective rate of protection on the assembly of motorbikes is maintained. This system effectively nullifies any sound commercial competition in the sector, except for competition to receive import quota allocations from the Government, and hampers the development of large-scale production.

Electronics industry. The electronics industry has been successfully developed on a large scale in several countries in ASEAN, notably Malaysia and Thailand (but not Vietnam). While assembly of consumer electronics and the manufacture of many electronic components for various reasons are not suitable for Lao PDR²⁰, there are, however, certain electronic components which require labour intensive operations for their manufacture and represent a high monetary value relative to their volume and weight (= low transportation costs by air relative to the value of the goods). Such goods would *a priori* be suitable for production in Lao PDR. A point in case is an existing Japanese factory in Vientiane, manufacturing trigger coils for camera strobes, that started operation in 1999 with 80 employees and now employs 340 people, more or less all female. Intermediate inputs for production are imported from Thailand and the trigger coils are exported to Japan.

Another Japanese firm has also recently started production of electronic components in Vientiane. It may be worthwhile for the Government to study more in detail how this embryonic industry could be promoted more actively. In light of the huge size of the electronics industry, both regionally and in the world, if Lao PDR could only attract a miniscule share of this market, the electronics industry might become in absolute terms a significant sub-sector of the manufacturing sector in Lao PDR.

6 PROPOSAL FOR A MEDIUM-TERM STRATEGY AND ACTION PLAN FOR INDUSTRIAL DEVELOPMENT

In the present chapter a proposal for a medium-term (3-5 years) strategy and action plan for industrial development is put forward. It is based on the apparent comparative advantage of Lao PDR. It is linked to the Government's objectives of economic growth and poverty alleviation. The thrust of the strategy is highlighted and made more actionable by specifying main policies and concrete action needed to achieve the objectives. A final section is devoted to the issue how to implement the action plan.

6.1 Comparative advantage and opportunities

For the manufacturing sector, there are some apparent comparative advantages upon which future expansion of the manufacturing sector could build. It needs to be pointed out, however, that *comparative* advantage doesn't transform automatically into *competitive* advantage. Comparative advantage has to be exploited and combined with entrepreneurial/managerial skills, capital and technology. Also, weaknesses and impediments that hinder an efficient exploitation of the comparative advantage have to be removed. Comparative advantage is a necessary, but not a sufficient, precondition for competitiveness.

¹⁹ Against central Government regulations, provincial governments too issue import licenses, which in terms of value even exceed the import quota established by the central Government.

²⁰ This is due to the small domestic market and/or requirements for skilled workers or large capital investments.

Reasonable availability of unskilled labour. Over the next 10 years there will be an average of about 100,000 new entrants to the labour market every year in Lao PDR. Considering the current small size of the manufacturing sector, even a manufacturing sector growing at around a healthy 10% per year would only need up to 15,000 new employees per year. Although labour living in the vicinity of the major towns is not in abundance, with the demonstrated labour mobility and an unavoidable rural-urban migration, it is believed that availability of unskilled labour will not be a constraint to industrial development in the foreseeable future²¹.

Low wages. Labour costs (wages and social costs) are lower than in other countries in the region (and in the world), much lower in comparison with some countries and slightly lower in comparison with some of the other countries (Table 5 refers).

Traditional handicraft skills. Several tens of thousands of Lao women master the skills of traditional weaving by manually operated looms and some of the traditional patterns may be of interest in the international market.

Land. As compared to other countries in the region, Lao PDR is well endowed with land that can be used for forestation and pasture.

Forests. Despite deforestation at an unacceptable rate, Lao PDR still is well endowed with natural forests that can provide inputs for a secondary wood processing industry until wood from plantation forests become the major source of input for the industry.

Availability of electricity at low to moderate cost. Nam Theun 2 is estimated to be able to produce hydropower generated electricity at a cost of US cent 1.40 per kWh. Most of the other hydropower projects in the pipeline are estimated to produce electricity at a cost of US cent 2.50-3.50 per kWh. However, as in principle all of the primary electricity can be exported to Thailand over the next 10 years at an estimated price of US cent 4.20 per kWh, electricity for domestic industrial use should probably be supplied at a price of about US cent 4.00 per kWh based on sound economic and financial principles. This can be considered to be a low to moderate cost. Given also other considerations, the hydropower can, however, not be a base for pursuing a heavy, energy-intensive industry oriented strategy for industrialization²².

Closeness to large regional markets. The closeness to China, Vietnam and Thailand offers a potentially large regional market and may also open up business opportunities for Lao PDR as a "transit" country (e.g. concepts on which the Savanna-Xeno Special Economic Zone is based on).

²¹ Some sources estimate that there are 300,000 Lao people working permanently or seasonally in Thailand, most of them illegally.

²² The most energy intensive industries in the world are producing products such as alumina, aluminium, steel and other metals, ferro-alloys and hot-bricketted iron, and are based on electricity at prices around US cent 2-3 per kWh. To be internationally competitive, they also need cheap raw materials and capital as well as a location minimizing transportation costs (often in connection with a port). Lao PDR doesn't have these advantages. In the future, when domestic demand has risen considerably, a cement plant may be considered. Also, a pulp and paper mill may be considered for Lao PDR, but except for these industries, Lao PDR isn't well positioned to pursue a strategy of energy-intensive industrialization.

Export opportunities. As to future export potential in 5-10 years' time, *given* adequate Government policies *and* private sector initiatives, areas that may offer opportunities in the future are indicated below. Values are of course just broad indications of magnitudes.

- primary processed coffee	US\$ 50 – 100 million
- meat (from beef)	US\$ 40 - 50 million
- "niche" food products	US\$ 10 - 25 million
- beer	US\$ 10 - 20 million
- high value added secondary wood products	US\$ 100 – 150 million
- garments with high labour content	US\$ 200 – 250 million
- woolen and silk carpets	US\$ 15 - 30 million
- electronic components	US\$ 5 - 10 million
- other light manufacturing	US\$ 10 - 20 million
- handicrafts	US\$ 10 - 20 million

Total above, annual exports: US\$ 450 – 675 million

The above indicated export potential is equivalent to a doubling or tripling of Lao PDR's current exports of manufactured goods.

However, if appropriate Government policies are *not* implemented and private sector initiatives are *not* forthcoming (and the garment industry and wood processing industry collapse), exports may decline by half from the current level of about US\$ 225 million annual exports of the above-mentioned goods.

6.2 Objectives

The Government has as a long term vision to have the country graduate from the cadres of least developed countries by 2020. This implies an average annual GDP growth rate of about 7%.

The Government has also subscribed to the global Millennium Development Goals (MDGs), where the overarching goal is to reduce by half the incidence of poverty between 1990 and 2015.

The development of the industrial sector can contribute to the aforementioned goals by creating economic growth. Economic growth, in turn, is the most powerful tool for the reduction of poverty. Cross-country comparisons have clearly demonstrated that there is a strong correlation between economic growth and reduction in poverty. This correlation can be stronger or weaker depending on (i) patterns of economic growth (to what extent poor people are sharing in the benefits of economic growth) and (ii) Government's redistributive policies (to what extent the Government's use of its revenues are actually benefiting the poor).

The overarching objective of the manufacturing sector (from society's point of view) is to contribute to sustainable economic growth. Complementary policies can be pursued that strengthen the linkages between economic growth and reduction of poverty, viz. promotion of employment, rural development, SMEs and handicrafts. When formulating complementary policies, however, the tradeoffs between economic growth objectives and social objectives have to be carefully analyzed. Some measures proposed in the medium-term action plan do refer to policies that aim at strengthening the linkages between economic growth in the manufacturing sector and income poverty reduction.

From a practical planning point of view, quantitative economic growth targets or objectives are not particularly interesting²³. More important is to focus on what to *do* to achieve as much economic growth as possible, whatever the final outcome later on will be. Over the last decade, an overall GDP growth rate of about 6% annually has been associated with a growth rate of the manufacturing sector of about 9% annually. However, to say that the Government's vision of a long-term average annual GDP growth of 7% would be associated with an average annual growth rate of the manufacturing sector of, say 10%, would be an oversimplification. Given the current and future challenges and problems facing the Lao industry (in particular the garment and the wood processing industry) in the near future and in the medium-term perspective, a significantly lower growth scenario for the manufacturing sector in the medium-term perspective may be at least as plausible.

6.3 Main thrust of a medium-term industrial development strategy

The medium-term action plan for industrial development is based on an industrial development strategy consisting of five core elements, viz. (i) good governance; (ii) creation of a conducive business environment, in particular for SMEs; (iii) support for productivity and competitiveness improvements; (iv) improving access to finance; and, (v) increased international trade integration.

Good governance. Good governance is based on an appropriate definition of the role of the Government and the role of enterprises and the market. The Government should act as a regulator and a facilitator to allow market mechanisms to function in an orderly manner. The Government needs to radically change its approach to industrial planning away from the typical approach of a centrally planned economy towards an approach that is more suitable for a market economy. Improvements in the legal and regulatory framework and its consistent and honest application are of primordial importance in this context. The Government also needs to create the institutional framework and implementing mechanisms, if it is at all to be able to pursue policies to promote industrial development.

Creation of an enabling business environment, in particular for SMEs. An "enabling" business environment consists of "hardware" such as good infrastructure (industrial land, roads, electricity, water, telecommunications, etc.) available at internationally competitive prices as well as "software" such as a good educational system, simple and transparent government regulations and procedures, a fair and transparent taxation system, well targeted and affordable business incentives, access to information, etc.

Support for productivity and competitiveness improvements. Improving labour productivity is a key factor for Lao PDR to be able to transform its comparative advantage of low nominal labour costs into international competitiveness. Although productivity and competitiveness matters primarily are the concerns of enterprises themselves, Government's support is critical when it comes to areas such as broad-based primary and secondary education; higher education and vocational training, targeting the needs of the enterprises; facilitation and promotion of foreign direct investment; creation of ICT infrastructure to allow for broad-based access to Internet at low cost; incentives to encourage enterprises' training of labour and technology upgrading; and promotion of business development services.

²³ Centrally planned economies tend to focus on growth *objectives*, whereas a more fruitful approach, as normally applied in more advanced market economies, is to focus more on growth *projections* (sometimes alternative projections), which can be used as a basis for planning of infrastructure, education, training, investment planning purposes, etc.

Improving access to finance. In order to improve access to finance by businesses, one of the key factors for new investments and expansion of existing manufacturing activities, the ongoing banking reform needs to progress further. Also, the viability of new innovative financing schemes needs to be explored in fields such as credit guarantee schemes, export credit guarantee schemes, rural micro-finance schemes, leasing, etc.

Increased international trade integration. The Government needs to shift its current focus on import substitution towards a more export oriented regime, complemented by efficient import substitution. The Government should pursue its trade liberalization within the context of WTO and ASEAN, and pursue consistent trade policies coordinated with ongoing tax reform.

6.4 Main policies and specific action

In this section, proposed main policies and specific action are presented in a matrix form. They are categorized according to the five main thrusts of the medium-term industrial development strategy and complemented with additional recommendations according to manufacturing sub-sectors.

For each proposal, an indication is made of the importance/priority of that particular proposal (medium, high or top importance/priority) as well as the costs involved to implement the proposal (low, medium or high cost). It goes without saying that those measures that are classified as top important and that could be implemented at low cost are "high-yielding" and would be of particular and immediate interest to consider

References are also made in respect of each recommendation regarding the section of this report in which the particular issue is covered. In one column there is also a reference to technical assistance proposals for implementation of that particular recommendation, when such proposals have been made. These proposals are enumerated in the next chapter and elaborated upon in separate standardized one-page sheets in the Annex section of this report.

Table 12 Summary of Main Policies and Specific Action of the Medium-term Strategy and Action Plan for Industrial Development

Main policies and specific action	Covered in Section No.	Importance and priority			Cost of implementation			TA proposal No.
		Med.	High	Top	Low	Med.	High	
A. <i>Cross-cutting issues according to 5 major thrusts of the medium-term industrial development strategy</i>								
1 Good governance								
1.1 Review and revise MIH's current industrial strategy document to become more market economy oriented	3.1-2		x		x			1
1.2 Review and revise MIH mission, functions, organization, procedures, staffing and staff requirements, budget and training needs	4.12		x		x			2
1.3 Study of singling out hydropower, electricity and mining from MIH into a separate Ministry of Natural Resources	4.12			x	x			2
1.4 Study of merging MIH and MOC into a new Ministry of Trade and Industry or establishing a joint MIH/MOC secretariat servicing the Steering Committee for Production of Commercial Goods	4.12			x	x			2
1.5 Establish Public-Private SME Development Advisory Council (SMEDAC)	3.2		x			x		3
1.6 Establishment of an SME unit linked to MIH as the secretariat of SMEDAC to promote and coordinate support for SMEs	3.2		x			x		4
1.7 Strengthening of LNCCI and local chambers of commerce and industry	3.2		x			x		5
1.8 Prioritize and carry out amendments of Business Law, Tax Law, Manufacturing Industry Law and the Laws on domestic and foreign investment	4.1-2			x		x		6-7
1.9 Prepare legal framework for establishment of business organizations	4.12		x		x			8
1.10 Establish a centralized register of companies at MOC	4.2	x				x		9
1.11 Revigorate the initiative to publish a National Gazette with all legal documents	4.1		x			x		
1.12 Continued public service reform and efforts to raise salaries of Government officials	4.12			x			x	
1.13 Raise manufacturing statistics to international standards	3.1		x			x		10
2. Creation of an enabling business environment, in particular for SMEs								
2.1 Promulgation of the PM's Decree on Support for Development of SMEs	3.2			x		x		

2.2	Establishment of an SME Development Fund	3.2		x			x		11
2.3	Further simplification of business registration and licensing procedures	4.2		x		x			12
2.4	Revise business incentives to become transparent, factor cost or performance related, and "automatic"; reduce exemptions	4.4	x				x		
2.5	Continued tax reform to make tax administration more efficient and thereby more fair and transparent	4.6			x			x	
2.6	Harmonize taxation of foreign and domestic enterprises	4.6		x		x			
2.7	Dissemination of laws, decrees, regulations, etc. through provincial Governments and LNCCI	4.8		x			x		
2.8	Promulgate a decree on development of industrial land	4.10	x				x		
2.9	Assistance to the establishment of local SME development organizations	3.2			x			x	4, 13
2.10	Introduce entrepreneurship courses at NUOL	3.2	x			x			14
2.11	Programme to promote awareness of importance of SMEs	3.2	x					x	15
2.12	Development of roads, electricity and other infrastructure	4.13		x				x	
3. Support for productivity/competitiveness improvements									
3.1	Increased budget allocation for primary and secondary education	4.7			x			x	
3.2	Revise curricula of vocational training institutes to become more targeted towards the actual needs of the industrial sector	4.7			x		x		16
3.4	Promotion of FDI to encourage technology acquisition	4.9			x		x		
3.5	Formulation of policy for strengthening of the "National Innovation System"	3.11	x					x	17
3.6	Establishment of a National Productivity and Competitiveness System, including standardization, metrology, accreditation and certification, and a National Productivity Organization	4.9		x			x		18-19
3.7	ICT infrastructure development to provide broad-based and low cost access to Internet	4.8-9			x			x	
3.8	Introduce a double deduction scheme for training costs for tax calculation purpose	4.7		x			x		
3.9	Introduce an accelerated depreciation scheme for technology upgrading for tax calculation purpose	4.9		x			x		
3.10	Assistance to Local Enterprise Development Organizations to implement quality and productivity improvement programmes	3.2		x			x		20
3.11	Strengthening of LNCCI and its sectoral Groups to provide support for its members	3.2		x			x		5
3.12	Strengthen capacity for quality and competitiveness improvement programmes, technology information provision and promotion of standards and quality	3.2		x			x		21
3.13	Measures to promote product innovation	4.9	x				x		22

3.14	Promotion of cleaner production (CP) technologies	4.11		x				x	23
4 Improving access to finance									
4.1	Pursue banking reform	4.5			x			x	
4.2	Amend the Secured Transaction Law	4.5			x	x			
4.3	Establish a central register for mortgages	4.5			x			x	
4.4	Study of regulations on existing financial instruments	4.5	x					x	24
4.5	Study of regulations on new financial instruments such as credit guarantee fund, venture capital fund, etc.	4.5		x		x			25
4.6	Develop and implement "good practices" and guidelines for rural micro-credit schemes	4.5		x				x	26
4.7	Strengthening of accounting profession	4.5	x					x	27
5 Increased international trade integration									
5.1	Replace current import substitution focus with a focus on export orientation complemented by <i>efficient</i> import substitution	3.2			x	x			1
5.2	Establish a Trade Policy and Taxation Committee for coordinated and consistent policy formulation/implementation	4.3		x				x	
5.3	Accelerate process to accede to WTO and proactively amend requisite laws and regulations	4.3			x			x	
5.4	Pursue commitments under CEPT/AFTA without "slippage"	4.3			x			x	
5.5	Coordinate WTO/AFTA/MFN and avoid "trade diversion"	4.3		x				x	
5.6	Make tariff regime transparent and reduce exemptions	4.3			x	x			
5.7	Transfer selected tariff lines to CEPT IL to enable exports	4.3		x		x			
5.8	Strengthen capacities related to standards, metrology, testing and quality for improved market access and trade facilitation	4.9		x		x			28
5.9	Promote agro-based industries for Savannakhet-Xeno Special Economic Zone	4.4		x				x	29
5.10	Improve the production of external trade statistics	4.3		x				x	
5.11	Establish an Export Promotion Fund	4.3		x				x	30
5.12	Strengthen capabilities of Trade Promotion Centre	4.3	x					x	31
B. Manufacturing sub-sector specific issues									
6 Wood-processing industry									
6.1	Strategic focus on secondary, high value added secondary wood processing increasingly based on forest plantations	5.1			x	x			

6.2	Relax temporarily and restrictively ban on foreign investment in secondary wood processing based on natural forests	5.1		x		x			
6.3	Improve and extend the system of competitive bidding for log quota allocations	5.1			x			x	
6.4	Establish a Forestry Training and Service Centre (FTSC)	5.1		x				x	32
6.5	Establish a Primary Wood Industry Consultancy Centre (PWICC)	5.1		x				x	33
6.6	Establish a Secondary Wood Processing Service Centre (SWPSC)	5.1			x			x	34
6.7	Support to the Wood Exporters Group under LNCCI	5.1	x				x		35
6.8	Transfer remaining tariff lines for secondary wood products to the AFTA/CEPT Inclusion List	5.1		x		x			
6.9	Promote wood waste minimization and utilization	5.1	x				x		36
6.10	Promote industrial processing of bamboo and rattan	5.1		x			x		37
7 Garment industry									
7.1	Achieve NTR with USA before the end of 2004	5.2			x		x		
7.2	Conclude implementable transit trade agreement with Thailand	5.2			x		x		
7.3	Further improve and streamline customs procedures	5.2		x		x			
7.4	Amend Labour Law to achieve equal working conditions as in neighbouring countries				x	x			
7.5	Provide support for collective export promotion	5.2		x				x	38
7.6	Provide support for a "crash programme", including in particular training for employees in the garment industry	5.2			x		x		39
7.7	Establish a separate garment industry training and support centre in close cooperation with the industry itself	5.2		x				x	40
7.8	Exempt domestic second-tier sub-contractors for exports from the 3% turnover tax	5.2	x				x		
7.9	Promote opportunity studies specific new investments through DDFI	5.2	x				x		41-45
8 Food industry									
8.1	Establish ASEAN aligned agricultural commodity standards	5.3		x			x		
8.2	Promote appropriate post-harvest technologies	5.3		x				x	46
8.3	Improve hygiene, food safety and quality standards for processed food	5.3		x			x		47
8.4	Strengthen university education related to food industry	5.3	x				x		48
8.5	Transfer products with export potential (e.g. beer, meat) to AFTA/CEPT Inclusion List	5.3		x		x			
8.7	Promulgate legislation on "geographical indication of origin"	5.3	x			x			49
8.8	Encourage the establishment of a Food Processors Group under LNCCI	5.3		x		x			
8.9	Promote opportunity studies and specific investments through DDFI	5.3	x				x		50-52

9	Construction materials industry							
9.1	Refrain from promotion of less than economically sized cement plants by distorting protectionistic measures	5.4		x	x			
9.2	Revise procurement practices so as to allow domestic private manufacturers a fairer chance to compete with SOEs and foreign firms	5.4		x	x			
9.3	Adopt norms and standards for selected building materials	5.4		x		x		
9.4	Adopt quality control systems for domestic and imported building materials	5.4		x		x		
9.5	Further exploration and r&d regarding raw material resources suitable for production of building materials	5.4		x			x	
9.6	Promote opportunity studies and specific investments through DDFI	5.4	x			x		53-55
10	Handicrafts							
10.1	Include handicrafts as a "priority industry" in the Law on Domestic Investment	5.5		x	x			
10.2	Prepare master plan for development of the handicraft sector	5.5		x		x		56
10.3	Study of international markets for large scale production of handicrafts and Lao PDR's possibilities to tap into these markets	5.5			x		x	
10.4	Initiate programme for improved competitiveness	5.5		x			x	57
10.5	Implement pilot projects to "cluster" handicraft producers for joint raw material supply, training, exports, etc.	5.5		x			x	58
10.6	Study introduction of an accreditation system for "living" preservation and promotion of traditional crafts	5.5	x				x	
10.7	Study of existing support institutions and the feasibility to merge these into a National Handicrafts Centre	5.5		x			x	59

6.5 Implementation modalities

Actions proposed in the previous section fall within the responsibility of MIH, MOC, MOF, MAF, MOL, STEA, CPC and Bank of Lao PDR, to mention the ministries/agencies mainly concerned. Consequently, the implementation of the medium-term strategy and action plan for industrial development needs the involvement of all economic ministries as well as other ministries and Government agencies. Furthermore, all these actors need to carry out implementation in their respective fields in a coordinated manner. This raises certain difficulties, as was elaborated upon in Section 4.11.

Although MIH has an overall mandate to promote industrial development, it only has the legal mandate to act directly upon a few of the actions proposed in the action plan. And, of course, MIH hasn't got the authority to "instruct" other ministries and agencies what to do, or not to do.

Other ministries and agencies than MIH, on the other hand, have the legal base to take action in different fields, but such action is unlikely to be forthcoming as their main mandates and focus are on other issues than industrial development.

Other countries too have experienced the same difficulties. Measures to deal with such difficulties are e.g. to have the strategy and action plan adopted by the Cabinet, in combination with instructions to line ministries and agencies regarding implementation. In other countries, recommendations have been included in a Government's overall socio-economic development plan.

In Lao PDR, an appropriate implementation strategy may include as a first step to bring the proposed medium-term strategy and action plan for industrial development to the Steering Committee for Production of Commercial Goods, chaired by the Vice Prime Minister for Economic Affairs, for its deliberations. Following such deliberations, a Prime Minister's Decree, Order or Instruction may be issued to ensure actual implementation.

To strengthen the coordination between industry and trade policy formulation and implementation, the Government may also consider merging MIH and MOC into one single ministry, viz. a Ministry of Trade and Industry. Such an organizational solution is seen in many, if not most, market economies.

Associated with such a solution would be to single out hydropower, electricity, geology and mining into a separate Ministry of Natural Resources. These latter fields are so important and involve such large investments that they may justify a separate ministry. If combined with manufacturing and handicrafts, there is a risk that manufacturing and handicrafts are not given due attention, but instead are overshadowed by the interests in huge hydropower development.

As a short term measure, to improve coordination between MIH and MOC, the Government may also consider to have a joint MIH/MOC secretariat to provide services for the Steering Committee for Production of Commercial Goods.

7 PROJECTS AND TECHNICAL ASSISTANCE PROPOSALS FOR IMPLEMENTATION OF THE ACTION PLAN

This chapter contains a numbered list of projects and technical assistance proposals in support of the implementation of the action plan. The numbers are inserted in the

last column of the action plan matrix. Some of these projects are of such importance that they should preferably be included in the Government's Public Investment Programme, while other projects are best suited to be implemented by the private sector. Most of the proposals, however, refer to technical assistance concepts, which may be considered by the donor community for funding. Each project and technical assistance proposal is also elaborated upon in a one-page standardized sheet included as an Annex.

Title of Projects and Technical Assistance Proposals

1. *Good governance*

- 1 Assistance and capacity building to review and amend the MIH industrial strategy until 2005, 2010 and 2020
- 2 Review and strengthening of the Government organization for industrial policy formulation and implementation
- 3 Assistance to SME Development Advisory Council (SMEDAC)
- 4 Assistance to the establishment of a national and provincial SME support infrastructure
- 5 Project to strengthen the capacity of Lao National Chamber of Commerce and Industry (LNCCI) and a selected number of local Chambers of Commerce and Industry
- 6 Programme to assist in reviewing a number of business legislation and regulations
- 7 Assistance to review and amendment of the Domestic and Foreign Investment Promotion Laws
- 8 Project to assist the development of a legal framework for the establishment of business organizations
- 9 Programme to set up a centralized register of companies
- 10 Facilitating the integration of CLMV Countries in AFTA and beyond; monitoring manufacturing productivity and competitive performance

2. *Creation of an enabling business environment, in particular for SMEs*

- 11 Project to assist the setting up of the SME Development Fund
- 12 Programme to assist in streamlining business licensing requirements
- 13 Assistance to the establishment of local SME/enterprise development organizations (LEDOs)
- 14 Project to develop and offer entrepreneurship courses for NUOL undergraduate and graduate students
- 15 Programme to promote the significance of the SME sector in contributing to economic development and the entrepreneurs as positive role models within the society

3. *Support for productivity/competitiveness improvements*

- 16 Pilot project to incorporate basic entrepreneurship training into vocational and technical training curricula
- 17 Formulation of a policy for strengthening of the "National Innovation System"
- 18 Establishment of a National Productivity and Competitiveness System (NPCS).
- 19 Strengthening of the Centre for Industrial Research and Development (CIRD)
- 20 Programme to assist a selected number of sectoral Business Groups to implement quality and productivity improvement programmes

- 21 Programme to strengthen STEA's capabilities in technology information provision and promotion of standards and quality
- 22 Introduction of product innovation approach to Lao industry and stakeholders
- 23 Promotion of cleaner industrial production in Lao PDR

4. *Improving access to finance*

- 24 Project to study regulations on existing financial instruments
- 25 Project to study regulations on new financial instruments
- 26 Project for the development of a microfinance policy
- 27 Project for strengthening the accounting profession - Phase I

5. *Increased international trade integration*

- 28 Market access and trade facilitation support for Mekong Delta countries through strengthening institutional and national capacities related to standards, metrology, testing and quality (SMTQ)
- 29 Capacity strengthening for FDI promotion of agro-based industries in Savannakhet-Xeno Special Economic Zone
- 30 Project to assist in setting up of the Export Promotion Fund
- 31 Project to strengthen the capabilities of the Trade Promotion Center to offer domestic and international market information to SMEs

6. *Wood-processing industry*

- 32 Establishment of a Forestry Training and Service Center (FTSC)
- 33 Establishment of a Primary Wood Industry Consultancy Center (PWICC)
- 34 Establishment of a Secondary Wood Processing Service Center (SWPSC)
- 35 Support to the Wood Exporters Group under LNCCI
- 36 Promotion of wood waste minimization and utilization as well as energy recovery in the wood processing industry
- 37 Promotion of industrial processing of bamboo and rattan

7. *Garment industry*

- 38 Garment industry export promotion project
- 39 "Crash Programme" to improve competitiveness of the garment industry
- 40 Assistance and capacity building for establishment of a garment industry training and support centre
- 41 Opportunity study of a woven fabric dyeing and finishing plant
- 42 Opportunity study of a garment washing/dyeing/printing plant
- 43 Opportunity study of production of flat bed knitted products
- 44 Opportunity study of a knitted fabric processing plant
- 45 Opportunity study of production of hand-knitted baby garments

8. *Food industry*

- 46 Quality standards for agricultural commodities and promotion of post-harvest technology
- 47 Strengthening of capacities of the Food and Drugs Department in food inspection and analysis

- 48 Strengthening of Nabong Faculty of Agriculture in food science and technology
- 49 Assistance in establishing legal framework for "protection of origin"
- 50 Preliminary studies for investment in the vegetable oil sub-sector
- 51 Preliminary studies for glutinous rice exports to the EU
- 52 Preliminary studies for beef meat exports to the Greater Mekong Sub-Region

9. Construction materials industry

- 53 Opportunity study of a lime production plant
- 54 Opportunity study of a gypsum production plant
- 55 Opportunity study of special kinds of Portland cement manufacturing

10. Handicrafts

- 56 Master plan study for the artisan craft sector development
- 57 Trouble shooting for the artisan craft sector
- 58 Cluster development for the selected artisan crafts
- 59 Establishment of an integrated artisan craft preservation and promotion center

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ANNEX

Summary Sheets of Projects and Technical Assistance Proposals

1. Assistance and Capacity Building to Review and Amend the MIH Industrial Strategy until 2005, 2010 and 2020

Project title	Assistance and Capacity Building to Review and Amend the MIH Industrial Strategy until 2005, 2010 and 2020
Project description	<p>Under the project, MIH staff, in close cooperation with international consultants, will review and amend its existing industrial development strategy as well as other industrial policy related documents, e.g. the Master Plan for Development of Industry and Handicrafts in the Northern Region and the forthcoming Master Plan for the Central Region.</p> <p>The work will have as a starting point the Government's socio-economic plans and programme for industrialization and modernization as well as the UNIDO proposed "Lao PDR: Medium-term Strategy and Action Plan for Industrial Development".</p>
Project objectives	<p>The first objective is to assist MIH to update and improve its strategy for industrial development until 2005, 2010 and 2020 with a view to render it more market economy oriented and more action oriented.</p> <p>The second objective is to provide inputs for forthcoming reviews and updates of the Government's socio-economic plans.</p> <p>The third objective is to improve the understanding of key MIH staff regarding market oriented industry and trade policy formulation.</p>
Expected outputs	<ul style="list-style-type: none"> - an amended MIH strategy for industrial development; - a Prime Minister's Decree, or equivalent, endorsing the strategy and ensuring the implementation of key elements of the strategy; and, - deepened understanding of industry and trade policy formulation in a market economy context.
Main activities	<p>The process should be driven by the MIH staff itself. Interactive and highly participatory combined working and training sessions will be undertaken in key policy areas, such as the legal framework, trade, investment, finance, taxation, productivity and competitiveness, etc.</p> <p>Participation by, and inputs from, other concerned ministries and Government agencies need to be ensured.</p>
Project timeframe	6 months.
Proposed counterpart	MIH and concerned other ministries and other Government agencies through the Steering Committee for Production of Commercial Goods.

2. Review and Strengthening of the Government Organization for Industrial Policy Formulation and Implementation

Project title	Review and Strengthening of the Government Organization for Industrial Policy Formulation and Implementation
Project description	A key problem in terms of supporting industrial development in Lao PDR is weak, split and uncoordinated responsibilities in respect of industrial development issues. The project will review existing mechanisms and assess their strengths and weaknesses. Alternative options to improve these mechanisms will be analyzed. A detailed "corporate audit" of MIH itself will be carried out.
Project objectives	The first objective is to review the overall organizational mechanisms at cross-ministerial level for industrial policy formulation and implementation, including the possibility of a merger between MIH and MOC and the establishment of a new separate Ministry of Natural Resources. The second objective is to review the functions and organization of MIH itself, including working procedures, performance and staffing as well as training needs, and make detailed recommendations regarding MIH organization at central, departmental and divisional levels. The suitability of autonomous or semi-autonomous organizational units linked to MIH should also be reviewed.
Expected outputs	<ul style="list-style-type: none"> - Recommendations at cross-ministerial level; - Recommendations regarding a revised organization of MIH, including mission statement, functions and responsibilities at central, departmental and divisional levels; and, - Proposal for a training programme of MIH staff.
Main activities	A review of the functions performed by various ministries and other Government agencies in respect of support for industrial development will be carried out, including mechanisms for coordination. A separate "corporate audit" of MIH will be carried out. Interactive workshops will be organized with, <i>inter alia</i> , sharing of international experience.
Project timeframe	6 months.
Proposed counterpart	MIH and other concerned ministries through the Steering Committee through the Steering Committee for Production of Commercial Goods.

3. Assistance to SME Development Advisory Council

Project title	Assistance to SME Development Advisory Council
Project description	This project aims to assist the SME Development Advisory Council (SMEDAC) by sponsoring research studies on issues of concern to SMEs. SMEDAC is expected to carry out its advisory role by formulating recommendations for the Government on SME development issues. Recommendations of the Council would have to be based on a sound understanding of the situation of SMEs. SMEDAC is likely to set up groups to study various SME issues.
Project objectives	To improve availability of information for policy makers on the issues affecting the development SMEs.
Expected outputs	<ol style="list-style-type: none"> 1. Capacity of Council members on international experience and practices in SME development is enhanced. 2. A number of SME issues are researched as basis for formulation of recommendations to the Government.
Main activities	<ol style="list-style-type: none"> 1. Strengthen capacity of SMEDAC members through seminars supported by international experts and through study tours abroad, 2. Design and conduct a number of research studies in fields such as: <ul style="list-style-type: none"> • Taxation and SMEs, • Access of SMEs to legislative, regulatory and administrative information • Access to Finance and Investment Support • Access to Business Development Services, • Workforce Development, • Export Promotion, • Technology Development, Technical Services and Sub-contracting 3. Conduct seminars, workshops and publish results of research and disseminate widely.
Project timeframe	3 years
Proposed counterpart	SMEDAC working groups, organizational members of SMEDAC, SMEDA

4. Assistance to the Establishment of National and Provincial SME Support Infrastructure

Project title	Assistance to the Establishment of National and Provincial SME Support Infrastructure
Project description	The project aims to assist the Ministry of Industry and Handicrafts in establishing the SME Development Agency (SMEDA), operationalizing the SME Development Advisory Council (SMEDAC) and facilitating Local SME/Enterprise Development Organizations (LEDOs) as public-private partnerships of local Governments and local public and private sector SME service providers in selected localities. SMEDA is the national level SME development policy coordination unit within the Government structure and SMEDAC is to advise the Prime Minister on SME development policies and SME constraints.
Project objectives	To improve the national policy and institutional frameworks for SME development
Expected outputs	<ol style="list-style-type: none"> 1. SMEDA is operational and capable of supporting the development of SMEs, 2. SMEDAC is operational and capable to advise the Government on SME needs and effectiveness of SME support programs, 3. Setting up of LEDOs in a selected number of provinces is facilitated. 4. SME development related programmes, including research to assist policy makers to take better-informed decisions based on needs of SMEs, are designed and initiated, 5. An information service that will inform SMEs of legal, regulatory, administrative requirements, available Government support and ODA programmes for SMEs is set up within SMEDA.
Main activities	<ol style="list-style-type: none"> 1. Develop organizational structure of SMEDA and train SMEDA staff to carry out their work effectively, 2. Assist SMEDAC in providing recommendations to the Government, 3. Develop guidelines and support scheme for LEDOs and facilitate setting up of a pilot group of LEDOs (5-6 localities), 4. Design, initiate and facilitate SME support programmes in cooperation with specialized agencies, coordinate program implementation and monitor trends in the SME sector 5. Initiate knowledge and information bases to support SME development
Project timeframe	4 years
Proposed counterpart	Ministry of Industry and Handicrafts, SMEDA, SMEDAC and a selected number of LEDOs as they are established

5. Project to Strengthen the Capacity of Lao National Chamber of Commerce and Industry (LNCCI) and a Selected Number of Local Chambers of Commerce and Industry

Project title	Project to Strengthen the Capacity of Lao National Chamber of Commerce and Industry (LNCCI) and a Selected Number of Local Chambers of Commerce and Industry
Project description	The project will assist LNCCI and a selected number of provincial CCIs in providing services for SMEs and advocating improvements in the business environment. Presently, local Chambers of Commerce and Industry are branches of LNCCI and managed and staffed by salaried employees. A more participatory local and national chamber structure will be investigated.
Project objectives	To strengthen the capabilities of LNCCI and local CCIs
Expected outputs	<ol style="list-style-type: none"> 1. Capacity of LNCCI to assist SMEs is improved 2. Capacities of a selected number of CCI to assist SMEs are improved
Main activities	<ol style="list-style-type: none"> 1. Assess capabilities of LNCCI and a selected number of CCI, 2. Identify and implement measures to develop the LNCCI as a national umbrella membership organization of local CCIs 3. Develop capabilities of LNCCI to participate in policy dialogue with the Government, 4. Develop capabilities of LNCCI to assist the development of CCIs, 5. Identify and implement measures to develop the local CCIs as local self-help membership organizations for the provincial business community, 6. Develop capabilities of local CCI to act as a channel for provincial SMEs to participate in policy dialogue with provincial authorities 7. Develop capabilities of local CCI to design and deliver a number of services to SMEs; e.g. information on markets and business opportunities, information and guidance on complying with regulation, facilitation of business linkages, etc.
Project timeframe	3-4 years
Proposed counterpart	LNCCI and a selected number of provincial CCIs

6. Program to assist in Reviewing of a Number of Business Legislation and Regulations

Project title	Program to Assist in Reviewing of a Number of Business Legislation and Regulations
Project description	This program will initially assist the Ministries of Commerce, Finance, Industry and Handicrafts and Justice to review the Business Law, Tax Law and the Manufacturing Law.
Project objectives	To streamline legislation and regulation affecting business establishment and growth in Lao PDR
Expected outputs	<ol style="list-style-type: none"> 1. Recommendations to improve the Business Law 2. Recommendations to improve the Tax Law, 3. Recommendations to improve the Manufacturing Law 4. Capacity building for civil service on implementing the (revised) Business, Tax and Manufacturing Laws
Main activities	<ol style="list-style-type: none"> 1. Set up task forces of experts to conduct reviews, establish schedule of consultations with the private sector through SMEDAC on findings, international best practice and recommended amendments to Business, Tax and Manufacturing Laws, 2. Conduct comparative study on international best practice in legislation and regulation related to Business, Tax and Manufacturing Laws in the ASEAN region—seminars with international legal experts, study tours to observe implementation of regulation related to these laws 3. Prepare recommendations on revisions for legislation, carry out consultation with the public and private sectors through SMEDAC and draft amendments to the Laws, 4. Submit to Government for consideration and approval, 5. Prepare implementing regulations for the Laws, 6. Prepare and implement capacity building training for central and provincial level civil service on amended Laws, 7. Prepare informative materials for SMEs/businesses on revised regulations and how to comply with them, 8. Prepare project /program proposals on further streamlining business legislation and regulations
Project timeframe	2 years
Proposed counterpart	Ministries of Commerce, Finance, Industry and Handicrafts and Justice

7. Review and Amendment of the Domestic and Foreign Investment Laws

Project title	Review and Amendment of the Domestic and Foreign Investment Laws
Project description	The project will analyze and assess the actual implementation of the laws, including perceived flaws in the laws, incentives provided (mainly various kinds of tax and duty exemptions), costs of such incentives, and difficulties perceived by actual and potential domestic and foreign investors. Based on this analysis and assessment, amendments in the laws will be proposed, including a set of "automatic" performance-based incentives targeting employment creation, exports and skills upgrading in particular.
Project objectives	To improve on the existing laws on promotion of domestic and foreign investment by making them more transparent, less subject to discretionary interpretation and providing incentives that are well targeted and less costly to the Government as compared to the present legislation and its application. The both laws should be harmonized and possibly merged into one law.
Expected outputs	<ul style="list-style-type: none"> - Proposal for amendment of the laws as well as requisite amendments of the implementing regulations; and, - Concerned civil servants having achieved a better understanding of formulation of targeted and cost-effective incentives, their benefits to investors and their costs.
Main activities	<ul style="list-style-type: none"> - review and analysis of the laws; - review and analysis of actual application of the laws, including extent and nature of special conditions prescribed, incentives actually provided, and their costs and benefits; - field survey of domestic and foreign enterprises operating under the two laws as well as of domestic enterprises that are not receiving incentives under the Domestic Investment Law; and, - training and study of investment laws in other countries.
Project timeframe	6-8 months.
Proposed counterpart	DDFI and MOF.

8. Project to Assist the Development of a Legal Framework for the Establishment of Business Organizations

Project title	Project to Assist the Development of a Legal Framework for the Establishment of Business Organizations
Project description	Presently, a legal framework for the establishment of business (membership) organizations does not exist in Lao PDR. Business organizations provide a channel for SMEs to pool their resources to achieve sector specific and business objectives. These organizations facilitate business linkages and learning from each other and act as effective focal points in reaching the business community, especially at local levels. Development and promulgation of a legal framework will encourage SMEs to set up or join business organizations.
Project objectives	To encourage SMEs to set up and join membership organizations
Expected outputs	A draft legal framework for establishment and operation of business membership organizations is developed and submitted to the Government for consideration and approval.
Main activities	<ol style="list-style-type: none"> 1. Consolidate previous and on-going work on the development of legal framework for the establishment and operation of business organizations, 2. Carry out consultations with SMEs and relevant authorities, 3. Prepare draft legal framework and obtain inputs on the draft framework from SME stakeholders, existing business organizations, relevant authorities, etc. 4. Finalize draft framework and submit to Government for consideration.
Project timeframe	1 year
Proposed counterpart	SMEDA, Working Group from SMEDAC in cooperation with Ministry of Justice

9. Program to set up a Centralized Register of Companies

Project title	Program to set up a Centralized Register of Companies
Project description	This program will assist the Ministry of Commerce in setting up a national, centralized register of companies. The system will be computerized and link provincial registration offices with a national registration office.
Project objectives	To improve access of policy makers and the public to information on the business sector
Expected outputs	<ol style="list-style-type: none"> 1. Legislation setting up an Enterprise Registry is promulgated, 2. Provincial registration offices are set up and strengthened. 3. National registry is set up and strengthened.
Main activities	<ol style="list-style-type: none"> 1. In conjunction with revisions to the Business Law, develop and include legal basis for the setting up of a national, centralized business registry, 2. Develop streamlined registration procedures, develop appropriate software and database management systems for computerization of registration information, 3. Procure hardware and software, train staff at national and provincial levels, 4. Implement action plan to link up provincial level registration offices with the national register, 5. Define and implement procedures to enable public access to business registration information, 6. In cooperation with the National Statistics Center, publish periodic analyses on the business sector using the national enterprise register
Project timeframe	3 years
Proposed counterpart	Ministry of Commerce, Departments of Commerce in all Provinces and Municipalities, National Statistics Center

**10. Facilitating the Integration of CLMV Countries in AFTA and Beyond;
Monitoring Manufacturing Productivity and Competitive Performance**

Project title	Facilitating the Integration of CLMV Countries in AFTA and Beyond; Monitoring Manufacturing Productivity and Competitive Performance
Project description	The project is in line with the Initiative for ASEAN Integration (IAI) launched at the Fourth Informal Summit held in Singapore 22-25 November 2000 with the aim to close the development gap between the ASEAN 6 and the CLMV countries. The project would include training and workshops at a regional basis as well as need-based individual country activities.
Project objectives	The main objectives are to produce manufacturing statistics according to international standards as well as improve capacities to analyze such statistics to monitor manufacturing performance and formulate appropriate industrial policies.
Expected outputs	<ul style="list-style-type: none"> - manufacturing statistics raised to international standards; - economic analysis of industrial data; - effective policy support to strengthen domestic competitiveness; and, - upgraded capabilities.
Main activities	<ul style="list-style-type: none"> - updating of the MIH/UNIDO survey of manufacturing establishments from 1999; - training and workshops at CLMV regional basis; - training of staff at concerned ministries and other Government agencies in Lao PDR. <p>The project would draw extensively on experts from Thailand where a related project has been implemented with the assistance of UNIDO.</p>
Project timeframe	18 months.
Proposed counterpart	MIH, MOF, MOC, CPC and the National Statistical Centre.

11. Project to Assist the Setting up of the SME Development Fund

Project title	Project to Assist the Setting up of the SME Development Fund
Project description	The program will assist the MIH to establish a central level SME Development Fund for partial financing of business development services, quality and productivity improvement programs for SMEs. SMEs, groups of SMEs, and SME support organizations, including Local Enterprise Development Organizations (LEDOS) from provinces and municipalities will be able to access the Fund by submitting projects and programs.
Project objectives	To enhance competitiveness of SMEs by removing internal barriers to growth through business development services for SME owner-managers and professional staff
Expected outputs	<ol style="list-style-type: none"> 1. SME Development Fund is operational with transparent, competitive and easily accessible procedures. 2. SMEs take part in business development programs in financial, human resource, and production management, marketing, information and technology management, and quality improvement with partial financing from the Fund.
Main activities	<ol style="list-style-type: none"> 1. Develop principles and procedures for provision of subsidies from the SME Development Fund, coordinate with the Export Promotion and Vocational Training Funds to ensure similar basic principles are followed for similar SME support activities by each Fund, launch SME Development Fund officially, 2. Promote the Fund, offer short training / seminars on how to access the fund for central and provincial level stakeholders, including private sector service providers, 3. Facilitate technical assistance to stakeholders in the preparation of programs and projects on BDS delivery for SMEs 4. Receive applications to the Fund, process and extend subsidies, 5. Monitor progress in SME support programs and conduct assessments on effectiveness, 6. Prepare projects / programs for enhancing operations of the Fund, including for additional financing
Project timeframe	2 years, establishment phase, then on-going
Proposed counterpart	Ministry of Industry and Handicrafts as Fund management agency, SMEDA as facilitator of TA for fund applicants and for monitoring and assessment of programs implemented

12. Program to Assist in Streamlining Business Licensing Requirements

Project title	Program to Assist in Streamlining Business Licensing Requirements
Project description	This program will initially assist the Ministries of Commerce, Industry and Handicrafts, Agriculture and Forestry and Justice to review licensing procedures under the jurisdiction of these ministries
Project objectives	To streamline business licensing procedures in Lao PDR
Expected outputs	<ol style="list-style-type: none"> 1. Recommendations to improve licensing procedures related to commerce and trade, 2. Recommendations to improve licensing procedures related to industry and handicrafts, 3. Recommendations to improve licensing procedures related to agriculture and forestry.
Main activities	<ol style="list-style-type: none"> 1. Set up task forces of experts to conduct reviews and to establish a list of licensing requirements that are under the jurisdiction of Ministries of Commerce, Industry and Handicrafts, Agriculture and Forestry, including explanations on why the licenses were instituted. 2. Conduct comparative study on international best practice in licensing practices in the ASEAN region—seminars with international legal experts, study tours to observe implementation of regulation related to these laws 3. Prepare recommendations, through a consultative process, on abolishment of some licenses, replacement of some licenses with standards and codes and continued implementation of some other licenses, 4. Submit recommendations to Government for consideration and approval, 5. Prepare standards and codes for those licenses that will be replaced with such conditions, 6. Streamline the licensing process for those licenses that will be kept, 7. Train civil service in implementing new procedures. 8. Prepare project /program proposals to embark on new areas that require licensing.
Project timeframe	2 years
Proposed counterpart	Ministries of Commerce, Finance, Industry and Handicrafts, Agriculture and Forestry and Justice

13. Assistance to the Establishment of Local SME/Enterprise Development Organizations (LEDOS)

Project title	Assistance to the Establishment of Local SME/Enterprise Development Organizations (LEDOS)
Project description	This program aims contribute to the setting up of local level public-private partnerships that will support enterprise creation and SME promotion in a selected number of provinces. A LEDO can be a limited liability company, or another legal entity that will reflect the public-private partnership's structure. (See Supplemental Note to Draft SME Development Framework, June 2002).
Project objectives	To improve local level capabilities in SME development
Expected outputs	<ol style="list-style-type: none"> 1. A pilot group of LEDOs are set up and strengthened to facilitate and implement SME support programs at local levels. 2. Networking and information sharing between LEDOs is facilitated.
Main activities	<ol style="list-style-type: none"> 1. Develop and promote a modality for the establishment of local level public-private partnerships, facilitate interactions between local government, public and private organizations, including prominent SMEs in the locality, 2. Assist setting up a selected number of LEDOs in localities, strengthen LEDOs in mobilizing resources at the locality, from central levels and through donors to implement and facilitate BDS for SMEs and potential entrepreneurs, 3. Facilitate regular interactions, networking and information sharing between LEDOs, 4. Promote the LEDO experience in other provinces, making necessary adaptations based on local conditions, 5. Actively seek development partner assistance, incorporating the LEDO activities in a rural/local economic development context.
Project timeframe	5 years
Proposed counterpart	SMEDA as facilitator, selected Provincial Governments, local Chambers of Commerce and Industry, local chapters of LWU, LYU, technical/vocational schools in province, business leaders/SMEs in the locality as partners of LEDO.

14. Project to Develop and Offer Entrepreneurship Courses for NUOL Undergraduate and Graduate Students

Project title	Project to Develop and Offer Entrepreneurship Courses for NUOL Undergraduate and Graduate Students
Project description	The project aims to develop and implement entrepreneurship skills courses for undergraduate and graduate students of Faculties of Economics and Business Administration and Engineering. Students will be offered as electives introductory and advanced entrepreneurship courses to learn how to develop their ideas into business plans, how to present their plans to prospective investors. Students taking the advanced course will be provided with a chance to do practical training in an SME. During practical training students will be asked to focus on identifying and solving a technical or managerial problem together with the SME owner-manager.
Project objectives	To encourage entrepreneurship among university graduates
Expected outputs	<ol style="list-style-type: none"> 1. Introductory and advanced entrepreneurship courses are offered as electives on a regular basis for students of Economics and Business Administration and Engineering 2. A practical training program for NUOL student at premises of participating SMEs is offered.
Main activities	<ol style="list-style-type: none"> 1. Develop introductory and advanced entrepreneurship courses to be offered as electives, including development of teaching texts, cases, aids, audio visuals and other training materials, 2. Train instructors, including study tours to universities abroad offering similar courses (e.g. UK, Netherlands, etc.) 3. Develop, in collaboration with Lao National Chamber of Commerce and Industry, of practical summer training program in SMEs for students taking entrepreneurship courses 4. Prepare and conduct "business plan clinics" every semester where entrepreneurs from the sector and supporting services sectors comment on the most well prepared business plans by up to 3 students
Project timeframe	3 years
Proposed counterpart	National University of Laos; Engineering and Economics and Business Administration Faculties

15. Program to Promote the Significance of the SME Sector in Contributing to Economic Development and the Entrepreneurs as Positive Role Models within the Society

Project title	Program to Promote the Significance of the SME Sector in Contributing to Economic Development and the Entrepreneurs as Positive Role Models within the Society
Project description	The program will aim to raise awareness and appreciation of the society at large on the importance of SMEs and promote the opportunities offered by setting up in business.
Project objectives	To encourage entrepreneurship in all layers of society
Expected outputs	<ol style="list-style-type: none"> 1. Different groups within the society perceive entrepreneurship more positively. 2. Positive messages on the media increase in frequency.
Main activities	<ol style="list-style-type: none"> 1. Conduct baseline survey covering different groups of the society to identify perceptions of entrepreneurship and SMEs 2. Identify and implement elements of an entrepreneurship promotion campaign: <ul style="list-style-type: none"> • A TV program (e.g. talk show interviewing successful entrepreneurs, or a sit-com chronicling how a young graduate decides and sets up in business, etc.) • A radio program interviewing entrepreneurs from different sectors and where people can call in to ask questions about the sector, setting up a business, etc. • Awards established for "the entrepreneurs of the year"; STEA "quality award for SMEs", Tax Authority "highest taxpayers among private SMEs", MOC "export award for SME", MIH "innovation award for SMEs", etc. • Declaration of a year as the Year of SMEs and preparation of various activities, • Seminars for newspaper reporters on significance of SMEs in the economy. • Other appropriate programs. 3. Follow up results achieved with periodic surveys of perceptions and attitudes.
Project timeframe	3-4 years
Proposed counterpart	SMEDA, Ministry of Information and Culture in partnership with STEA, Tax Authority, MIH and MOC

16. Pilot Project to Incorporate Basic Entrepreneurship Training into Vocational and Technical Training Curricula

Project title	Pilot Project to Incorporate Basic Entrepreneurship Training into Vocational and Technical Training Curricula
Project description	The project aims to assist the Ministry of Education to develop and incorporate basic entrepreneurship training into the formal vocational, technical and ethnic minority school curricula.
Project objectives	To improve entrepreneurial skills of vocational, technical and ethnic minority school graduates
Expected outputs	<ol style="list-style-type: none"> 1. Basic entrepreneurship curricula is developed and implemented in a pilot group of schools, 2. Training of trainers program developed and tested. 3. Training materials for basic entrepreneurship training developed and tested. 4. A proposal to incorporate basic entrepreneurship into the TVET system in Lao PDR is submitted to the Government for approval.
Main activities	<ol style="list-style-type: none"> 1. Development of basic entrepreneurship curriculum and training materials, 2. Development of training of trainers courses, 3. Selection of a pilot group of vocational, technical and ethnic minority schools and implementation of pilot basic entrepreneurship courses at appropriate levels (possibly at junior and senior levels), 4. Monitoring of results through tracer studies among graduates, 5. Preparation of proposal for the Ministry of Education for wider implementation based on results.
Project timeframe	3-4 years
Proposed counterpart	Ministry of Education

17. Formulation of a Policy for Strengthening of the "National Innovation System"

Project title	Formulation of a Policy for Strengthening of the "National Innovation System".
Project description	<p>The capacity of any institution or enterprise to generate, import, assimilate, adapt, transfer and utilize new or traditional knowledge is a key factor affecting its productivity and competitiveness in the long-term perspective.</p> <p>It is within this context that a "draft policy paper" has been prepared in one of UNIDO reports providing a set of ideas and guidelines that can contribute to the adoption of a policy addressed to strengthen the "National Innovation System". Several issues are raised in the proposal and need to be considered under a policy framework. Example are:</p> <ul style="list-style-type: none"> - Intellectual property systems and regulations; - Regulatory framework, including anti trust and product liability; - Dissemination of non proprietary technological information in industry; - Education (higher, vocational, technical); - Network fostering mechanisms; - Capital markets, including venture capital systems; - Manufacturing extension services; - Technology / business incubators; - Quality standards, metrology systems; - R&D ; and, - Economic, trade and foreign policy context. <p>Independent of the final form these issues take, the institutional structure is strongly impacted and also needs to be discussed. As a particular case in the Policy definition, the Project will also include the final adoption of a Policy destined to insert Lao PDR into International Partnerships and Networks.</p>
Project objectives	<ol style="list-style-type: none"> 1. Detailed assessment of the "National Innovation System"; 2. Definition of a final policy proposal; 3. Adoption of a national policy; and, 4. Adoption of a national policy regarding international insertion as part of the national policy for the strengthening of the "National Innovation System".
Expected outputs	<ol style="list-style-type: none"> 1. Revised Policy proposal; 2. Draft Decree for the adoption of the proposal; and, 3. Draft regulations that will accompany the main proposal.
Main activities	<ol style="list-style-type: none"> 1. Distribution of the draft proposal prepared under UNIDO IP; 2. Interviews and meetings with relevant stakeholders; 3. Preparation of the final proposal and discussion with key decision makers; 4. Preparation of a draft Decree and draft regulations; and, 5. Promotion for the adoption of the proposal.
Project timeframe	6 months.
Proposed counterpart	Department of Science and Technology of the STEA and the National Research Council.

18. Establishment of a National Productivity and Competitiveness System (NPCS).

Project title	Establishment of a National Productivity and Competitiveness System (NPCS).
Project description	<p>Lao PDR requires the establishment of its NPCS as an instrument for a productive based development process that includes increased capacities for exports and satisfying local demands. The NPCS will also allow Lao PDR to participate in the ASEAN and other regional and sub-regional efforts in an organized and institutionalized manner.</p> <p>The Project will define the ways and means to establish the NPCS. In particular, it will undertake an extensive institutional analysis in such a way as to incorporate existing institutions into it, without the need of creating new ones, in line with the idea that it is through synergies that important first steps can be taken to create local capacities.</p> <p>The above will be done through interviews, working sessions and finally preparing a draft proposal, which in its final form will become a government decree.</p> <p>As a specific issue to be dealt with in the Project, the establishment of the System for Standardization, Metrology, Accreditation and Certification (SSMAC) will also be dealt with. The increasing complex organization of production as well as the growing importance of international trade require increasingly strict compliance with international quality assurance standards. The availability of basic metrology and calibration tools and equipment, of a network of internationally accredited testing laboratories, and of product and service certification institutes is, therefore, becoming increasingly necessary. Further, the commercial integration negotiations currently underway under AFTA and with other regions and countries, include agreements to be reached on technical standards.</p>
Project objectives	<ol style="list-style-type: none"> 1. To create the NPCS; 2. To Strengthen CIRD as the Secretariat of the NPCS and as the National Productivity Organization; 3. To engage all stakeholders in the process of building up the System; 4. To create the National SSMAC; and, 5. To define ways to strengthen the operative organizations for SSMAC.
Expected outputs	<ol style="list-style-type: none"> 1. A Decree establishing the NPCS and start up of the institutional framework for the NPCS; 2. A Decree establishing National SSMAC; and, 3. The implementation of CIRD as a Technical Secretariat of the NPCS, including the support needed to strengthen its physical, human and financial infrastructure.
Main activities	<ol style="list-style-type: none"> 1. Review of the proposals; 2. Visits to institutions; 3. Meeting with relevant stakeholders, workshops; 4. Preparation of final draft proposals; and, 5. Drafting of Decree and regulations.
Project timeframe	1 year.
Proposed counterpart	CIRD at the MIH and the Department of Intellectual Property, Standardization and Metrology of STEA.

19. Strengthening of the Centre for Industrial Research and Development (CIRD)

Project title	Strengthening of the Centre for Industrial Research and Development (CIRD)
Project description	<p>The CIRD needs to be developed into a full fledged supporting institution for the improvement of productivity and competitiveness capacities in Lao PDR.</p> <p>For this goal to be reached it requires support in several areas that will be developed in this project. In particular, the CIRD will need to develop its potential and capacities as a think tank and information provider.</p> <p>A set of well functions will be defined, including:</p> <p>Identification of market demands. In this identification a set of key productive chains will be assessed, and products and services along the chain will also comprise the market demand.</p> <p>Identification of technology opportunities to satisfy demands. An important part of this activity will be, for example, a review of UNIDO's databases of available technologies of priority to industrial sectors. Available technologies in national centres will be identified and evaluated.</p> <p>Based on the activities to be developed, CIRD will generate studies and documents, will invite for discussion in workshops and other type of diffusion activities.</p> <p>In its role as think tank and information provider, CIRD will also support technology management efforts and promote international collaboration.</p>
Project objectives	<ol style="list-style-type: none"> 1. To establish CIRD as a National Productivity Organization; 2. To create a document centre; 3. To develop and implement a web page; 4. To digitalize its document centre; and, 5. To develop think tank capacities.
Expected outputs	<ol style="list-style-type: none"> 1. A National Productivity Organization established; 2. Document centre installed and operating; 3. A web page defined and operating; 4. An information service fully installed and operating; and, 5. A plan for the development of the role of CIRD as a think tank.
Main activities	<ol style="list-style-type: none"> 1. Training on the UNESCO Micro Isis software; 2. Digitalize the existing information in CIRD; 3. Develop the web page from the ideas already presented; and, 4. Negotiate with Laotel the support of the web page.
Project timeframe	2 years.
Proposed counterpart	CIRD of MIH.

20. Program to Assist a Selected Number of Sectoral Business Groups to Implement Quality and Productivity Improvement Programs

Project title	Program to Assist a Selected Number of Sectoral Business Groups to Implement Quality and Productivity Improvement Programs
Project description	The program will assist a number of sectoral Business Groups to identify sector and company based constraints to competitiveness in domestic and international markets and to implement quality and productivity improvement programs.
Project objectives	To enhance competitiveness of SMEs by improving quality and productivity
Expected outputs	1. Groups of SMEs in different sectors implement quality and productivity improvement programs
Main activities	<ol style="list-style-type: none"> 1. Identify Business Groups to be assisted based on their commitment to improve and to contribute their own resources towards implementation of quality and productivity improvement programs, 2. Assist Business Groups to form smaller groups of companies that would take part in the programs, 3. Assist the small groups of companies to identify problem areas that constrain their competitiveness comparing their performance to domestic and international companies in their fields of business—use of experts, including international to facilitate groups to benchmark their performance, prioritize problems and to identify solutions, 4. Assist small groups to develop plans of action involving training, counseling and consultancies to remove barriers to competitiveness, 5. Facilitate delivery of necessary services to small groups through projects and programs supported by development funds and development partner assistance.
Project timeframe	2 years.
Proposed counterpart	CIRD of MIH.

21. Program to Strengthen STEA's Capabilities in Technology Information Provision and Promotion of Standards and Quality

Project title	Program to Strengthen STEA's Capabilities in Technology Information Provision and Promotion of Standards and Quality
Project description	The program will strengthen capabilities of STEA in provision of information on technologies and in assisting SMEs to implement standards and quality assurance systems
Project objectives	To enhance competitiveness of SMEs by improving quality and productivity
Expected outputs	<ol style="list-style-type: none"> 1. STEA's technology information access and dissemination capabilities are enhanced, 2. STEA's testing and qualification capabilities are enhanced, 3. STEA's linkages with the business sector are enhanced.
Main activities	<ol style="list-style-type: none"> 1. Conduct technology and quality needs assessments of SMEs in a selected number of sectors, 2. Formulate action plan to address a selected group of technology information, standardization and quality management needs of SMEs by strengthening STEA's existing capabilities, 3. Assess existing capabilities, identify needs and carry out investments to strengthen capabilities of STEA in technology information, standardization and quality assurance systems, 4. Conduct awareness raising and training courses for SMEs on technology and quality management, 5. Establish close working linkages between STEA, NUOL and the business community to continuously address SMEs' technology information and quality management needs, 6. Prepare additional project / program proposals to improve technology and quality management in SMEs
Project timeframe	4 years
Proposed counterpart	STEA

22. Introduction of Product Innovation Approach to Lao Industry and Stakeholders

Project title	Introduction of Product Innovation Approach to Lao Industry and Stakeholders.
Project description	<p>The project will prepare and execute a two-day start-up conference on Product Innovation for selected industrial sectors. The conference will explain the concept, highlight successful projects in other developing countries, and show the potential for the Lao industry.</p> <p>Selected high-level international industry representatives and experts will participate, and representatives of relevant Lao industries, government organizations, industry organizations and others.</p> <p>Connected to the conference, a three-day intensive training will be organized for a selection of some 20 Lao key stakeholders from industry and institutions.</p>
Project objectives	<ul style="list-style-type: none"> - to introduce the concept of Product Innovation to Lao Industry and stakeholders; - to clarify the opportunities and barriers in the specific situation of Lao; and, - to train key relevant actors in this field for carrying out future initiatives.
Expected outputs	<ul style="list-style-type: none"> - insight into the concept of Product Innovation and its potential for the Lao industry; - knowledge of the international status on Product Innovation; - support for future activities in this field identified; and, - a group of well-trained key persons identified to develop future initiatives in Lao.
Main activities	<p>The three-day training programme for a selection of industrial and consultancy participants will focus in-depth on the actual implementation of Product Innovation in industry.</p> <p>A manual will be provided with a step-by-step approach for Product Innovation. A variety of tools will be used in practical exercises. Hands-on work with both example products as with own products of the participants' companies will be carried out.</p>
Project timeframe	2 months.
Proposed counterpart	Ministry of Industry and Handicrafts, Ministry of Commerce.

23. Promotion of Cleaner Industrial Production in Lao PDR

Project title	Promotion of Cleaner Industrial Production in Lao PDR.
Project description	<p>The project will assist Lao PDR to improve the productivity and competitiveness of its growing industry as well as improve its access to international and regional markets through the application of cleaner industrial production technologies. The project will focus on building national capacities in applying cleaner production technologies.</p> <p>Assistance will be provided by international experts, <i>inter alia</i> from the Vietnam Cleaner Production Centre in Hanoi and other cleaner production centres established in the world with UNIDO assistance.</p>
Project objectives	The project aims to support the Millenium Development Goal of poverty eradication and environmental sustainability.
Expected outputs	<p>By the end of the project, it is expected that many Laotian enterprises will have increased their productivity and competitiveness as well as their environmental performance through greater resource efficiency.</p> <p>In addition, export oriented enterprises will be in a position to be more competitive and have greater access to international markets.</p> <p>Capabilities developed to replicate projects.</p>
Main activities	<ul style="list-style-type: none"> - Awareness-raising activities; - in-plant demonstration projects; - training and study tours; and, - establishing a Focal Point in Lao PDR for cleaner production.
Project timeframe	4 years.
Proposed counterpart	MIH

24. Project to Study Regulations on Existing Financial Instruments

Project title	Project to Study Regulations on Existing Financial Instruments
Project description	This project aims to identify and eliminate bottlenecks in the utilization of existing financial instruments by SMEs
Project objectives	To improve access of SMEs to finance
Expected outputs	<ol style="list-style-type: none">1. Bottlenecks identified and recommendations developed.2. Legal and regulatory measures are implemented.
Main activities	<ol style="list-style-type: none">1. Design study on existing financial instruments, including negotiable instruments and commercial paper such as checks, bills of exchange, promissory notes, etc.2. Conduct study to identify bottlenecks on utilization of existing financial instruments through interviews, focus group meeting, etc.3. Prepare recommendations,4. Prepare relevant regulatory measures for submission to Government
Project timeframe	6-8 months
Proposed counterpart	Ministry of Finance, BOL, Ministry of Justice

25. Project to Study Regulations on New Financial Instruments

Project title	Project to Study Regulations on New Financial Instruments
Project description	This project aims to conduct studies for new financial instruments for SMEs
Project objectives	To improve access of SMEs to finance
Expected outputs	Recommendations developed for credit guarantee fund, venture capital, etc.
Main activities	<ol style="list-style-type: none"> 1. Design studies on applicability and establishment principles of credit guarantee funds, venture capital and other appropriate new financing instruments for SMEs. 2. Prepare recommendations, 3. Prepare relevant regulatory measures for submission to Government
Project timeframe	6-8 months
Proposed counterpart	Ministry of Finance, BOL, Ministry of Justice

26. Project for the Development of a Microfinance Policy

Project title	Project for the Development of a Microfinance Policy
Project description	This project aims to develop a microfinance policy
Project objectives	To improve access of SMEs to finance
Expected outputs	<ol style="list-style-type: none"> 1. A microfinance policy is developed with wide participation 2. Stakeholders are aware of the microfinance policy and implement it
Main activities	<ol style="list-style-type: none"> 1. Review through secondary and primary studies implementation of microfinance schemes in Laos and compare with international best practice 2. Develop good practice guidelines on microfinance in collaboration with stakeholders 3. Implement measures for raising awareness and knowledge of stakeholders on good practice guidelines and their implementation 4. Develop recommendations for submission to the Government on implementation of microfinance schemes in Laos
Project timeframe	12-18 months
Proposed counterpart	Ministry of Finance, BOL, a number of NGOs

27. Project for Strengthening the Accounting Profession-Phase I

Project title	Project for Strengthening the Accounting Profession-Phase I
Project description	This project aims to assist the development of the accounting profession in the country.
Project objectives	To improve access of SMEs to finance
Expected outputs	<ol style="list-style-type: none"> 1. Recommendations to strengthen the accounting profession in the country are identified, 2. Recommendations to encourage SMEs to implement sound financial management practices are identified.
Main activities	<ol style="list-style-type: none"> 1. Conduct a comparative review of accounting practices implemented within the country, 2. Review the state of education and training in accounting, identify measures to strengthen the education and training in accounting, 3. Identify the constraints of accounting professionals, including their training needs, legal and regulatory issues related to accounting, etc. 4. Identify measures that will encourage SMEs to make use of improved financial management practices, 5. Implement training courses for SMEs on financial management, 6. Prepare recommendations on measures to strengthen the accounting profession and to encourage SMEs to implement sounder financial management practices, 7. Prepare project and program proposal according to recommendations developed.
Project timeframe	3 years
Proposed counterpart	Ministry of Finance, Association of accountants, Pakpassak Technical School, NUOL—listed counterparts will implement different parts of the program as relevant to their field.

28. Market Access and Trade Facilitation Support for Mekong Delta Countries, through Strengthening Institutional and National Capacities Related to Standards, Metrology, Testing and Quality (SMTQ)

Project title	Market Access and Trade Facilitation Support for Mekong Delta Countries, through Strengthening Institutional and National Capacities Related to Standards, Metrology, Testing and Quality (SMTQ)
Project description	<p>One of the major queries regarding globalization refers to an in-built, cumulative deficit in developing countries' capacity to conform to developed country market requirements. These requirements take the form of a myriad of technical conditions imposed through mandatory domestic regulations and, to some extent, international standards.</p> <p>The project aims, on a CLMV regional basis, at strengthening the standards, metrology, testing, conformity assessment, quality and productivity capacities in these countries, to enable them to reap the benefits of globalization.</p>
Project objectives	<ul style="list-style-type: none"> - National capacity creation related to market access requirements and technical barriers to trade and identifying manufacturing sub-sectors and export market focus for remedial action; and - To review and upgrade the required technical infrastructure for standards development and harmonization; metrology and testing laboratories required by the selected sectors; and standards for labeling and accreditation and/or certification of laboratories and quality systems.
Expected outputs	<ul style="list-style-type: none"> - Awareness created regarding trade issues and market access implications arising from technical barriers to trade; - Programme initiated on harmonizing regional standards; - Knowledge of institutional requirements for SMTQ; - Eight persons trained on ISO 9000 and ISO 14000; - Four persons trained on food safety and HACCP.
Main activities	A series of workshops, seminars, training at specific institutions, and study tours.
Project timeframe	2 years (the project has already been initiated).
Proposed counterpart	STEA and concerned agencies.

29. Capacity Strengthening for FDI Promotion of Agro-based Industries in Savannakhet-Xeno Special Economic Zone and Southern Lao PDR

Project title	Capacity Strengthening for FDI Promotion of Agro-based Industries in Savannakhet-Xeno Special Economic Zone and Southern Lao PDR
Project description	The Government is according high priority to promote industrial and service development in the regional "West-East Corridor" and the Greater Mekong Sub-region to exploit the advantageous geographical location of southern Lao PDR. The present project will assist the government to attract domestic and foreign investment to this part of Lao PDR as well as strengthening institutional capacities to carry out such promotion.
Project objectives	The first objective of the project is to attract foreign and domestic investment in agro-based industries to the southern parts of Lao PDR, in particular to the Savannakhet-Xeno Special Economic Zone. A second objective is to improve capacities of the Savannakhet-Xeno Investment Authority and provincial governments investment promotion activities.
Expected outputs	<ul style="list-style-type: none"> - Agro-food processing chains identified for promotional targeting and assistance; - Wood based processing chains identified for promotional targeting and assistance (sector studies); - 20-25 potential investment projects identified and in the processing chains with base line information for investors; - Pre-feasibility studies carried out for the establishment of a "food park" and a "wood processing park" within the Savannakhet-Xeno Special Economic Zone; - Promotional tools having been developed; and, - Linkages having been established with various promotional networks (UNIDO ITPO network, foreign chambers of commerce and industry, etc.).
Main activities	<ul style="list-style-type: none"> - Studies of industrial processing chains, preparation of sector and project profiles, pre-feasibility studies; - Training in preliminary project formulation and assessment as well as use of promotional tools; - Participation in UNIDO delegate programmes in selected countries; - Preparation of promotional materials, incl. website, brochure, newsletter; and, - Organization of in-bound and out-bound business tours.
Project timeframe	2 years.
Proposed counterpart	DDFI, Savannakhet-Xeno Investment Authority and provincial governments.

30. Project to Assist the Setting up of the Export Promotion Fund

Project title	Project to Assist the Setting up of the Export Promotion Fund
Project description	The program will assist the Ministry of Commerce to establish a central level Export Promotion Fund for partial financing of export promotion services and programs for SMEs. SMEs, groups of SMEs, and SME support organizations, including Local Enterprise Development Organizations (LEDOS) from provinces and municipalities will be able to access the Fund by submitting projects and programs.
Project objectives	To support the expansion of domestic and international markets of SMEs by facilitating market access services and capacity building training and consultancy for SME owner-managers and professional staff
Expected outputs	<ol style="list-style-type: none"> 1. Export Promotion Fund is operational with transparent, competitive and easily accessible procedures. 2. SMEs take part in export promotion programs such as export marketing training and consultancy programs, trade fairs, exhibitions abroad, quality improvement programs with a view to improve export readiness, etc. with partial financing from the Fund.
Main activities	<ol style="list-style-type: none"> 1. Develop principles and procedures for provision of subsidies from the Export Promotion Fund, coordinate with the Business Development and Vocational Training Funds to ensure similar basic principles are followed for similar SME support activities by each Fund, launch Export Promotion Fund officially, 2. Promote the Fund, offer short training / seminars on how to access the fund for central and provincial level stakeholders, including private sector service providers, 3. Facilitate technical assistance to stakeholders in the preparation of programs and projects on export promotion program delivery for SMEs 4. Receive applications to the Fund, process and extend subsidies, 5. Monitor progress in SME support programs and conduct assessments on effectiveness, 6. Prepare projects / programs for enhancing operations of the Fund, including for additional financing
Project timeframe	2 years, establishment phase, then on-going
Proposed counterpart	Ministry of Commerce as Fund management agency, SMEDA as facilitator of TA for fund applicants and for monitoring and assessment of programs implemented

31. Project to Strengthen the Capabilities of the Trade Promotion Center to Offer Domestic and International Market Information to SMEs

Project title	Project to Strengthen the Capabilities of the Trade Promotion Center to Offer Domestic and International Market Information to SMEs
Project description	The project will assist the Trade Promotion Center to develop capabilities in disseminating information on domestic and international markets for SMEs.
Project objectives	To improve access of SMEs to domestic and international market information
Expected outputs	<ol style="list-style-type: none"> 1. Trade Promotion Center is capable of informing SMEs of domestic market opportunities, including public procurement opportunities. 2. Trade Promotion Center is capable of informing SMEs of international market information.
Main activities	<ol style="list-style-type: none"> 1. Develop a domestic market opportunities database—of buy and sell offers, develop appropriate dissemination tools to deliver market information to SMEs—a newsletter, web-based access to “buy and sell offers” database, etc. 2. Collaborate, initially with a selected number of Ministries in setting up a public procurement opportunities database for access by SMEs—Ministry of Education, Ministry of Health, Ministry of Construction, etc.—develop appropriate dissemination tools to deliver information to SMEs—a newsletter, web-based access, etc. 3. Set up an inquiry service for SMEs to address international market information needs through the Internet and other sources 4. Identify, in collaboration with main exporting sectors, international market information needs and develop appropriate information services 5. Promote use of Internet among SMEs by offering awareness raising seminars and short training courses for SME staff 6. Develop projects and programs to further develop Internet access of SMEs—e.g. in collaboration with Ministry of Industry and Handicrafts for promotion of information and communication technologies for manufacturing industries and handicraft producers.
Project timeframe	3 years
Proposed counterpart	Trade Promotion Center

32. Establishment of a Forestry Training and Service Center (FTSC)

Project title	Establishment of a Forestry Training and Service Center (FTSC)
Project description	<p>One of the main challenges for GOL identified is to achieve sustainable resource management within the forestry sector combined with the highest revenue possible for GOL sustainable forest management is an important tool to create a sound raw material supply basis on which back a flourishing wood processing industry can be established. The existing Muang May Forestry School has to be further evaluated to be the starting point for a Forestry Training and Service Center (FTSC). The target groups for training courses offered by this center are MAF staff but as well forestry technicians and managers from private plantations/forests. Courses to be conducted are focusing on forest management, log grading systems and their hands-on application. For logging technicians of production forests, harvesting technologies with a low environmental impact (waste minimization) have to be transferred.</p> <p>Additionally, the center will be able to conduct technical testing of lesser-used wood species to determine their suitability for industrial processing including nomenclature to compare them with internationally marketed species from other countries. A complimentary survey has to be conducted to establish sufficient volumes of suitable species before marketing activities of these can be initiated.</p>
Project objectives	<ol style="list-style-type: none"> 1. To train public and private forestry staff in logging and grading systems to support sustainable forest management through higher utilization and waste minimization 2. To test and commercially establish lesser used wood species
Expected outputs	High forest related revenues for GOL can be achieved by improved application of transparent grading systems, reduced waste and additional income from new commercial species.
Main activities	<ol style="list-style-type: none"> 1. Study international harvesting, grading and logging systems as basis for the preparation of training courses; 2. Preparation and implementation of respective courses; 3. Setting-up of test laboratory and testing of promising species complimented by surveys on existing volumes; and, 4. Publishing of technical datasheets for LUS.
Project timeframe	24 months.
Proposed counterpart	Ministry of Agriculture and Forestry (MAF)

33. Establishment of a Primary Wood Industry Consultancy Center (PWICC)

Project title	Establishment of a Primary Wood Industry Consultancy Center (PWICC)
Project description	One of the main challenges for GOL identified is to lower the capacity and raise the productivity of the primary industry . This is essential to create a balance between the sustainable raw material supply and the capacity of the industry. A low technical skills level, outdated equipment and an extremely low utilization rate of the raw material characterize especially the saw milling industry. Additionally, the achieved revenues are low, as only traditional markets like Thailand are served and the products are not graded according to international standards. In order to support companies, which are willing to undergo re-engineering and training processes to upgrade their production, the creation of the proposed PWICC is envisaged. This service center, to be set-up within the premises of one of the state-owned saw mills to assure sustainability after the projects duration, will cater to the needs of the industry in form of consultancy services with regard to re-engineering, investment planning, production layout, quality improvement and market access. Additionally, it will serve as a training facility for saw-milling technicians and technical managers, who will undergo hands-on production oriented skills upgrading courses. The ongoing production in the mill will generate income to support the center on the long run.
Project objectives	To raise the productivity of the primary wood industry by means of a service center providing re-engineering consultancy and training services.
Expected outputs	Consultancy services, modular managerial and technical training courses provided by PWICC improve the level of performance of the sector and respective market values for the products are achieved.
Main activities	<ol style="list-style-type: none"> 1. Assessment of suitable state-owned sawmill to set-up PWICC; 2. Re-engineering and technical upgrading of sawmill into PWICC; and, 3. Planning and implementation of service and training programs.
Project timeframe	24 months.
Proposed counterpart	Ministry of Industry and Handicraft (MIH). Ministry of Education (MOE).

34. Establishment of a Secondary Wood Processing Service Center (SWPSC)

Project title	Establishment of a Secondary Wood Processing Service Center (SWPSC)
Project description	<p>One of the main challenges for GOL identified is to raise the capacity and productivity of the high value-added secondary industry as this sector is still at its infant stage.</p> <p>In order to foster the growth, a market pull for Laotian secondary wood products has to be achieved, which can be created by programs to establish the industry on the global market as a competitive player with a sound reputation for unique designs, quality, in-time delivery and reasonable prices. These programs have to be implemented in close cooperation between GOL and the industry to assure services according to the demand of the companies; the main tool to assure a long-term implementation of such activities is the creation of a Secondary Wood Processing Service Center (SWPSC), which compliments PWICC.</p> <p>The existing main center for vocational education in LAO PDR, the Pakpasak Technical School will be extended and transformed into a focal point for the industry to suit this purpose. The main tasks of the center will be the creation of innovative and material saving product designs conduction of modular training courses according to the needs of the industry, technical consultancy services for foreign and domestic investors and existing companies and the creation of international marketing links for secondary products. Technical services like tool sharpening, furniture part production and wood drying for the industry will create additional income for SWPSC/Pakpasak.</p>
Project objectives	To raise the capacity of the secondary wood industry by means of a service center providing product design, marketing, consultancy and training services.
Expected outputs	Domestic and foreign investment into higher-valued added secondary wood industry has been raised and the established companies produce high quality and innovative products, which find domestic and international market access.
Main activities	<ol style="list-style-type: none"> 1. Assess Pakpasak Technical School to set-up SWPSC within the administrative and technical structure; 2. Technical upgrading of woodworking training workshop of Pakpasak; 3. Need assessment of the industry, planning and implementation of service and training programs; and, 4. Set-up Product Design and Marketing Center with permanent (student) exchange with international design institutions.
Project timeframe	36 months.
Proposed counterpart	Ministry of Industry and Handicraft (MIH). Ministry of Education (MOE).

35. Support to the Wood Exporters Group under LNCCI.

Project title	Support to the Wood Exporters Group under LNCCI.
Project description	This project aims at supporting the Wood Exporters Group under LNCCI to build up an organizational structure representing the industry and complimenting the GOL structure. The main objective of such an organization has to be to foster economic growth within Lao PDR through value added wood processing. Programs have to support such an organization in its long-term building process to enable it to fulfill its role as a responsible partner of GOL on the various levels related to the wood value chain. The creation of various chapters representing the different levels of the wood industry (forestry, primary and secondary industry) has to be envisaged to develop specific and relevant objectives for each sector. Advisory Boards consisting of public and private representatives have to be created, where industrial groups can contribute to decision-making. The creation and strengthening of wood industry clusters to improve networking and sub-contracting schemes between the various levels and sectors will contribute to the development of the whole industry.
Project objectives	To improve linkages between the public and private sector by creating and strengthening industry groups with the common objective of higher value-addition throughout the wood value chain.
Expected outputs	<ol style="list-style-type: none"> 1. Relevant industry groups have been established and are enabled to contribute to decision-making by means of Advisory Boards; 2. Sub-contracting schemes linking primary and secondary industry are implemented through networking and clustering; and, 3. Industry groups are enabled to contribute at a high level to the success of service centers.
Main activities	<ol style="list-style-type: none"> 1. Meetings and workshops with specific interest groups and GOL; 2. International study tours of public and private representatives; 3. Develop and implement national strategy for industry organizations; 4. Form respective interest groups as chapters of the Wood Exporters Group; and, 5. Conduct courses on organizational strengthening
Project timeframe	24 months.
Proposed counterpart	LNCCI, Ministry of Industry and Handicraft (MIH), Ministry of Agriculture and Forestry (MAF)

36. Promotion of Wood Waste Minimization and Utilization as well as Energy Recovery in the Wood Processing Industry

Project title	Promotion of Wood Waste Minimization and Utilization as well as Energy Recovery in the Wood Processing Industry
Project description	<p>In order to upgrade the level of value addition throughout the wood value chain, waste minimization and utilization have to be given special attention. The first priority has to be the reduction of waste in the forestry, primary and secondary industries. The levels of waste during the production chain in Lao PDR are extremely high and thus huge volumes of valuable raw materials are not utilized. Improved harvesting and logging technologies for the forestry sector, tool sharpening and improved band sawing technology for the primary industry and material saving designs and technologies for the secondary industry can easily reduce excess waste levels by 10-20%.</p> <p>Waste utilization will be approached with two strategies, one with the focus on turning sawdust into a source of energy and the other one with the target of generating income from this currently worthless waste. Briquetting technology is the most common method of energy recovery from solid waste like sawdust. Such briquettes can either replace firewood or be used for electricity generation. Income generation activities will be based on two traditional Japanese technologies; edible mushroom production (Shii-Take) on saw dust as planting base and pottery burned in a bed of sawdust.</p>
Project objectives	To reduce excess waste throughout the wood production chain and to utilize waste -especially in the form of sawdust- as a source for energy and income generation using economically, environmentally and socially sustainable technologies
Expected outputs	<ol style="list-style-type: none"> 1. Waste management and utilization will reduce local and global environmental impacts; levels of excess waste will have been reduced by 10-20%. 2. Two briquetting demonstration units are established and income-generating activities have been promoted with 10 communities; respective products find domestic market access.
Main activities	<ol style="list-style-type: none"> 1. Study of reasons for excess waste, adapting and transferring relevant technologies; 2. Construction of two demonstration briquetting plants in the vicinity of wood processing clusters; 3. Promotion of income generating activities with rural communities; and, 4. Creation of urban marketing links for the communities and the briquetting facilities.
Project timeframe	18 months.
Proposed counterpart	Ministry of Industry and Handicraft (MIH).

37. Promotion of Industrial Processing of Bamboo and Rattan

Project title	Promotion of Industrial Processing of Bamboo and Rattan
Project description	<p>This project aims at promoting industrial bamboo processing as bamboo represents an environmentally sound raw material due to the fact that it is growing very fast; it can be harvested after 3-5 years and the mother plant is not destroyed by selective harvesting but will drive new shoots again. Thus bamboo plantations contribute to soil stabilization at a high level. There are already existing bamboo processing companies in Lao PDR, producing chopsticks and other products for Vietnam.</p> <p>Industrial bamboo processing goes yet beyond the production of such simple items and can be the starting point for industries producing flat boards, which have suitable properties to replace wooden raw materials for furniture items and products like flooring boards. The setting up of a pilot demonstration unit for bamboo processing (possibly as a sub center of SWPSC) has to be based on various studies on the availability and volumes of suitable bamboo species with a strategy on respective sustainable plantations.</p> <p>Additionally, other NWFPs like rattan and their potential need further assessment and can contribute to the development of typical Lao products.</p> <p>Complimentary activities of the project shall result in construction prototypes and furnishing for tourist resorts to contribute to the development of this important and hard currency earning sector.</p>
Project objectives	To promote industrial bamboo processing as a value adding processing technology based on an environmentally sound and economically viable raw material.
Expected outputs	<ol style="list-style-type: none"> 1. Pilot demonstration unit is functioning as an advisory center for potential investors and provides respective services like training; 2. Bamboo product development and applied research contribute to the development of the overall furniture industry; and, 3. Linkages between bamboo, wood and the tourism industry are established, respective resorts are under construction in various tourism centers.
Main activities	<ol style="list-style-type: none"> 1. Studies on indigenous species and volumes of bamboo and other NWFPs; 2. Technical testing of bamboo samples in China; 3. Setting up of demonstration unit with strong linkages to the proposed SWPSC; 4. Establish applied product research; 5. Promote bamboo plantations as private investment opportunity; and, 6. Build bamboo constructions and furnishings for the tourism industry
Project timeframe	24 months.
Proposed counterpart	Ministry of Industry and Handicraft (MIH)

38. Garment Industry Export Promotion Project

Project title	Garment Industry Export Promotion Project
Project description	The project will include a number of export promotion activities, the establishment of a sales office in Bangkok as well as strengthening of the capacity of mainly Lao companies and joint ventures in the field of export marketing and selling. Activities are foreseen to be carried out on a Government/industry cost-sharing basis with donor support.
Project objectives	In the short term, to assist garment enterprises to carry out export marketing/selling and, in the medium to longer term, to build up capacities for export marketing in these enterprises.
Expected outputs	Increased exports, capacity developed for export marketing and selling, increased employment.
Main activities	The project will include <i>inter alia</i> : <ul style="list-style-type: none"> - Organizing outward and inward trade missions; - Organizing participation in international trade fairs; - Establishment and operationalization of the Bangkok office; - Collective sales activities from the Bangkok office; - Marketing assistance to individual enterprises; and, - Training.
Project timeframe	3 years.
Proposed counterpart	Lao Textile and Garment Industry Group of LNCCI, individual participating enterprises.

39. "Crash Programme" to Improve Competitiveness of Garment Industry

Project title	"Crash Programme" to Improve Competitiveness of the Lao Garment Industry
Project description	With the phasing out of the Multi Fiber Arrangement (MFA) by the end of 2004, Lao manufacturers will no longer be able to benefit from the current quota system and they will instead face stiff international competition. As a National Garment Industry Vocational Training Institute may take some time to be established and become operational, the present "crash programme" is intended to meet the immediate needs to improve productivity and competitiveness in the Lao garment industry. Government/industry cost-sharing arrangements with donor support are foreseen.
Project objectives	To achieve short term yielding improvements in productivity to improve the competitiveness of garment enterprises.
Expected outputs	By the end of 2004, 25 enterprises would have significantly improved their productivity and international competitiveness.
Main activities	<p>At the core of the "crash programme" would be to initially carry out 2-day corporate audits at some 25 enterprises including a SWOT analysis and the preparation of an action plan. Implementation would then be carried out as an assisted self-help programme with intermittent support by international experts over a one-year period.</p> <p>The programme would include in-plant activities and on-the-job training as well as collective training for groups of enterprises. Skills upgrading would focus on <i>inter alia</i>:</p> <ul style="list-style-type: none"> - Machine operatives; - Technicians (mechanics, electricians, etc.); - Shop floor supervisors; - Middle management; - Production planning and materials control; - Manufacturing and lines of balance; and, - Quality control and assurance methods.
Project timeframe	18 months.
Proposed counterpart	MIH, Lao Textile and Garment Group under LNCCI, Pakpasak Vocational Training Institute.

40. Assistance and Capacity Building for Establishment of a Garment Industry Training and Support Centre

Project title	Assistance and Capacity Building for Establishment of a Garment Industry Training and Support Centre
Project description	The project aims at establishing a Garment Industry Training and Support Centre
Project objectives	To improve the competitiveness of the Laotian garment industry
Expected outputs	<ol style="list-style-type: none"> 1. Capacity to train Laotian supervisors and managers in the clothing sector enabling them to replace expatriates which are presently holding these positions. 2. Capacity to train sewing machine operators aiming at productivity and quality improvement and subsequently increasing the competitiveness of the Laotian garment industry. 3. Provide direct industry support through services in the field of specialized CAD/CAM, sharing of highly productive machinery (e.g. automatic collar and cuff sewing) and a "library" of sewing attachments.
Main activities	<ol style="list-style-type: none"> 1. Provide courses for production managers, line supervisors, quality controllers, time-study engineers, pattern makers, cutting room supervisors, etc. 2. Test and screen applicants for jobs as sewing machine operators and conduct training courses based on "analytical method training". 3. Establish a CAD/CAM support centre to provide pattern-making, grading and marker making services to the local industry, aiming to reduce cutting-waste and improve the quality of markers. Furthermore, the centre will assist local garment manufacturers in the training of their own CAD/CAM operators. A "library" of specialized sewing machine attachments, gauges, feet and rulers will be established. These attachments are reducing the sewing time and improving the quality. As they are specific for certain garment models they will be used for specific orders only. Especially for the smaller Laotian garment factories the purchase of these attachments is therefore not economic. To circumvent this disadvantage "borrowing" against a fee will be a solution. Similarly, the purchase of highly productive automated machinery like collar and cuff sewing, pocket sewing and fusing machines might not be feasible for the majority of Laotian SMEs in the clothing industry. Support services from the centre in these operations against a fee will enable the small scale manufacturers to increase their competitive position in delivery time, price and quality.
Project timeframe	3 years.
Proposed counterpart	Lao Textile and Garment Group under LNCCI, Pakpasak Vocational Training Institute and MIH.

41. Opportunity Study of a Woven Fabric Dyeing and Finishing Plant

Project title	Opportunity Study of a Woven Fabric Dyeing and Finishing Plant
Project description	<p>In order to reduce garment delivery lead times, there would be a great advantage if there were a local mill in Lao PDR carrying out dyeing and finishing of woven fabrics. A minimum sized, balanced plant would probably need to have a capacity of about one million metres per month. Whether local demand would be sufficient and could be captured by a new enterprise is the key to its viability.</p> <p>A mill would probably process 100% cotton and polyester/cotton apparel fabrics that would be held in five or six standard qualities as greige stock, that would be imported and held in stock for quick dyeing.</p> <p>This kind of plant involves a fairly large investment, probably in the magnitude of US\$ 10-15 million.</p>
Project objectives	To carry out an opportunity study regarding the feasibility of a plant for scouring, bleaching, dyeing and finishing of woven fabrics.
Expected outputs	A completed opportunity study. If deemed feasible, a plant could contribute to other garment factories becoming more competitive by reducing their deliver lead times.
Main activities	<p>Study of:</p> <ul style="list-style-type: none"> - Market; - Technical aspects; - Preliminary financial viability; - Investment requirements; and - Environmental aspects.
Project timeframe	4 months.
Proposed counterpart	Private sector undertaking.

42. Opportunity Study of a Garment Washing/Dyeing/Printing Plant

Project title	Opportunity Study for a Garment Washing/Dyeing/Printing Plant
Project description	An attractive opportunity for the Lao garment industry is to increase the value added of products and increase the "fashion content" of the products. A significant part of the Lao finished garments are currently washed, dyed and printed with international designs abroad. These are labour intensive operations and may be well suited for being carried out in Lao PDR.
Project objectives	To carry out an opportunity study regarding the feasibility of a plant for washing, dyeing and printing of finished garments. To realize own and customer created, differentiated products to meet the requirements of the middle market quartiles.
Expected outputs	A completed opportunity study.
Main activities	Study of: <ul style="list-style-type: none"> - Market; - Technical aspects; - Preliminary financial viability; - Investment requirements; and - Environmental aspects.
Project timeframe	4 months.
Proposed counterpart	Private sector undertaking.

43. Opportunity Study of Production of Flat Bed Knitted Products

Project title	Opportunity Study of Production of Flat Bed Knitted Products
Project description	<p>Flat bed knitting is a very labour intensive segment of the garment industry, especially if it is carried out on manually operated machines, as it is in many low-cost countries. The subsequent linking, finishing, pressing, checking and other operations make these kinds of products appear well suited for production in Lao PDR.</p> <p>There are already a few enterprises active in this field in Lao PDR, but there are huge markets in Europe, USA and in other countries with temperate climates that indicate that there is scope for much more of this kind of production in Lao PDR. An advantage is that there are two seasons: the autumn/winter season, when wool or acrylics are the main fibres, and the spring/summer season, when cotton is used.</p> <p>Value added could be increased if the garments would also embrace various kinds of decorations such as embroidery of company or club logos, fashion appliqués and the like.</p>
Project objectives	To carry out an opportunity study regarding the feasibility of production and exports of flat bed knitted products such as sweaters, pullovers, cardigans, etc.
Expected outputs	A completed opportunity study. If deemed feasible, viable production may be established in Lao PDR that could provide significant employment.
Main activities	<p>Study of:</p> <ul style="list-style-type: none"> - Market; - Technical aspects; - Preliminary financial viability; and, - Investment requirements.
Project timeframe	4 months.
Proposed counterpart	Private sector undertaking.

44. Opportunity Study of a Knitted Fabric Processing Plant

Project title	Opportunity Study of a Knitted Fabric Processing Plant
Project description	As the markets become even more demanding for shorter delivery times, there may be an opportunity in Lao PDR for a knitted fabric processing house that could offer services to knit garment enterprises to provide small to large dye batches within three to four days. This kind of services would enable the garment industry to be more responsive to buyers' orders than is now possible. The dyeing and finishing of circular knitted fabrics could be either in tubular form or open width form.
Project objectives	To carry out an opportunity study regarding the feasibility of a knitted fabric processing plant.
Expected outputs	A completed opportunity study. If deemed feasible and implemented, a plant may materialize with a capacity of 4.5 tonnes per day of dyed tubular knitted fabric or 5.5 tonnes per day of dyed open width knitted fabric from a balanced plant.
Main activities	<p>Study of:</p> <ul style="list-style-type: none"> - Market; - Technical aspects; - Preliminary financial viability; - Investment requirements; and, - Environmental aspects. <p>The study may consider the possibility of either a new mill or a second hand mill to be transferred from a third country.</p>
Project timeframe	4 months
Proposed counterpart	Private sector undertaking (possibly a potential investor in a medium- to high cost country, perhaps Thailand or elsewhere, that finds it can no longer manufacture competitively and wants to transfer its facility to a low-cost country)

45. Opportunity Study of Production of Hand-knitted Baby Garments

Project title	Opportunity Study of Production of Hand-knitted Baby Garments
Project description	<p>There is a continuing market demand for hand-knitted baby garments that grandmothers in Europe and elsewhere used to knit at home but no longer do. Lao PDR appears ideally suited for this sort of operation with a large female population in rural areas and highly competitive costs.</p> <p>The requirement is for a local entrepreneur to have responsibility for the provision of the yarns to produce the garments according to demand-based patterns and have the baby garments produced on a sub-contract basis and marketed abroad.</p>
Project objectives	To carry out an opportunity study regarding the feasibility of production and exports of hand-knitted garments for babies up to one year age.
Expected outputs	A completed opportunity study. If deemed feasible, viable production may be established in Lao PDR that could provide significant employment for female workers in rural areas.
Main activities	<p>Study of:</p> <ul style="list-style-type: none"> - Market; - Technical aspects; - Preliminary financial viability; and, - Investment requirements.
Project timeframe	4 months
Proposed counterpart	Private sector undertaking, maybe as a joint venture or in close cooperation between a local enterprise and a foreign enterprise with good market links.

46. Quality Standards for Agricultural Commodities and Promotion of Post-harvest Technology

Project title	Quality Standards for Agricultural Commodities and Promotion of Post-harvest Technology.
Project description	Establishing standards for main commodities; Setting-up specific competencies within NAFRI and NAFES; Providing MAF extension staff with basic competencies; and, Creating awareness among farmers.
Project objectives	Overall quality of food commodities and processed products improved and compatible with integration within AFTA.
Expected outputs	Competencies built at central and local levels. As a result, awareness will be created and spread in the most market-oriented areas of the country. Ultimately, the country will establish a reputation as a reliable exporter. Farmers in general, and particularly smallholders, are the priority target, since they will be able to receive better prices for products of adequate quality they will be able to deliver. Local companies will also be better considered internationally, especially within the Greater Mekong Sub Region.
Main activities	Specialized long-term training (in the region if possible) of two research officers within MAF; Drafting of standards in collaboration with private sector; Short term training for MAF extension officers; and, Information campaigns for farmers.
Project timeframe	4 years.
Proposed counterpart	MAF, NAFRI, NAFES, MIH.

47. Strengthening of Capacities of the Food and Drugs Department in Food Inspection and Analysis

Project title	Strengthening of Capacities of the Food and Drugs Department in Food Inspection and Analysis.
Project description	Short-term training (3 months sessions) of FDD central and regional staff in food inspection and analysis. To be held in the region (Thailand / Malaysia / Vietnam). Provision of appropriate equipment for food analysis to the FDQCC (Food and Drugs Quality Control Centre).
Project objectives	Upgrade Technical officers' knowledge in food control. Increase FDD's capabilities for certification of food products and food processing plants.
Expected outputs	Improved hygiene status of food processing SMEs. As a result, potential health hazards for Lao population in general will be reduced, and hygiene awareness created among workers. Food processing SMEs, especially those involved in the most sensitive animal products, are the priority target beneficiaries.
Main activities	FDD staff participation in training. Selection and installation of equipment in FDQCC laboratory.
Project timeframe	12 months.
Proposed counterpart	MIH, FDD.

48. Strengthening of Nabong Faculty of Agriculture in Food Science and Technology

Project title	Strengthening of Nabong Faculty of Agriculture in Food Science and Technology.
Project description	Participation of selected Nabong B. Sc. graduates in the upcoming M. Sc. level regional training on Food Science and Technology under EU-ASIALINK financed programme (to be held at Karsetsart University, Bangkok). Provision of equipment for a Food Technology teaching laboratory (20 posts) to be set-up at Nabong.
Project objectives	Expand teaching capacities of Nabong Faculty of Agriculture.
Expected outputs	Two professors / assistant professors trained per year, for two consecutive years. At a later stage, this will result in a sustainable teaching capacity in food science and technology in Nabong faculty, and permanent competencies within the country.
Main activities	Participation in the course work; starting early 2004 – duration 19 months. Selection of equipment and setting up of laboratory.
Project timeframe	2 years (first phase).
Proposed counterpart	NUOL, Nabong Faculty of Agriculture.

49. Assistance in Establishing Legal Framework for Protection of Origin

Project title	Assistance in Establishing Legal Framework for Protection of Origin.
Project description	Formulation of law / decree based on international experience.
Project objectives	Protect targeted Lao food products with original and historical features (glutinous rice, coffee, tea, etc.) and contribute to the promotion of these products.
Expected outputs	<p>Niche markets better and more securely reached, notably in EU. While the average unit value of coffee and tea from the Boloven Plateau will be increased, a very significant market outlet will be created for glutinous rice, with potential for increased income among thousands of smallholders especially in the sloping lands of the North.</p> <p>Food processing SMEs and / or producers cooperatives from the Boloven Plateau and the provinces of the North (Luang Prabang notably) are the main beneficiaries.</p>
Main activities	Study of current situation and historical background of targeted products.
Project timeframe	8 months.
Proposed counterpart	STEA, Ministry of Commerce, MIH, MAF.

50. Preliminary Studies for Investment in the Vegetable Oil Sub-sector

Project title	Preliminary Studies for Investment in the Vegetable Oil Sub-sector.
Project description	Survey of sub-regional market for vegetable oil (Laos, Vietnam, Yunnan /PRC) and availability or development potential of raw materials (rice bran, soybean).
Project objectives	Substitute imports of vegetable oil and build-up a regional-oriented competitive export industry.
Expected outputs	Objective elements for investment decision in a vegetable oil processing plant. At a later stage, it is likely that a national competitive industry in vegetable oil production will be set up. Potential beneficiaries are those companies already involved in vegetable raw oil extraction or vegetable oil packaging. Potential beneficiaries are also the farmers of the flatlands in the Mekong corridor.
Main activities	Market, supply and feasibility study by local and international consultants.
Project timeframe	8 months.
Proposed counterpart	Private sector and MIH, DDFI and SXIA.

51. Preliminary Studies for Glutinous Rice Exports to the EU

Project title	Preliminary Studies for Glutinous Rice Exports to the EU
Project description	Identification of market access strategies for Lao glutinous rice in the EU; policy setting and action plan for the development of an export-oriented cluster.
Project objectives	To build-up an EU-oriented competitive glutinous rice export industry. Quantity-wise, the objective could be set at 50,000 tones, or 5% of the potential market.
Expected outputs	<p>Pilot farmers informed of the potential and constraints of the market, potential sites for rice sorting / grading facilities identified, "umbrella" marketing actions clarified, potential partners in Europe identified. Potential impact on the national economy towards 2010 would be up to a US\$15 million worth of export revenues.</p> <p>Lao companies with some experience in commodities exports and /or business in Europe, and local farmers groups mainly in the northern provinces will be the main beneficiaries.</p>
Main activities	Study of potential EU market for glutinous rice and potential trade partners, formulation of a marketing strategy, study of appropriate sites and legal entities for collecting and grading of the production, formulation of an action plan and identification of critical path for development of a cluster, setting up of a national committee, undertaking information campaigns with pilot farmers groups.
Project timeframe	12 months.
Proposed counterpart	MIH, MAF and MOC.

52. Preliminary Studies for Beef Meat Exports to the Greater Mekong Sub-Region

Project title	Preliminary Studies for Beef Meat Exports to the Greater Mekong Sub-Region
Project description	Identification of regional export markets, policy setting and action plan for the development of an export-oriented cluster.
Project objectives	To build-up a region-oriented competitive beef meat export industry. Quantity-wise, the objective could be set at 25,000 tones of beef meat exported by 2020.
Expected outputs	<p>Pilot farmers groups informed, potential private investors identified, public support projects reactivated or expanded. Potential impact on the national economy towards 2010 would be up to US\$30-40 million worth of export revenues.</p> <p>Lao and foreign companies with experience or interest in meat processing and trading, and local farmers groups mainly in Xiengkhouang and Champasak provinces will be the main beneficiaries.</p>
Main activities	Identification and characterization of regional neighbouring markets (Thailand, Vietnam, China) and requirements for accreditation of export-oriented farms and primary processing facilities, formulation of an action plan and identification of critical path for development of a cluster, setting up of a national committee, organizing investment promotion seminars.
Project timeframe	12 months.
Proposed counterpart	MIH, MAF and MOC.

53. Opportunity Study of a Lime Production Plant

Project title	Opportunity Study of a Lime Production Plant
Project description	<p>The project aims at promoting the building materials industry development in Lao PDR. It covers:</p> <ul style="list-style-type: none"> - analysis of current binding materials production and the market for air hardening cementing materials, and products based on these materials, in Lao PDR and neighbouring countries; - lime manufacturing technologies and equipment; and, - the data collection and formulation of proposals for production of <ul style="list-style-type: none"> - lump lime; - hydrated lime and lime paste; and, - milled non-hydrated lime. <p>The project also includes the study of the different variants of the above mentioned materials application for production of other silicate products, such as</p> <ul style="list-style-type: none"> - lime-sand ready mixtures and mortars; - silicate bricks and blocks, aerated concrete (walling, roofing, flooring and other covering slabs and panels) for construction of buildings and structures; and, - application for other industries development.
Project objectives	Preliminary assessment of the viability of establishing a lime production plant.
Expected outputs	A completed opportunity study.
Main activities	<p>Study of <i>inter alia</i>:</p> <ul style="list-style-type: none"> - Markets; - Technical aspects; - Financial viability; - Investment; and, - Environmental aspects.
Project timeframe	6 months.
Proposed counterpart	Private sector undertaking.

54. Opportunity Study of a Gypsum Production Plant

Project title	Opportunity Study of a Gypsum Production Plant
Project description	<p>The project aims at promoting the building materials industry development in Lao PDR. It covers:</p> <ul style="list-style-type: none"> - analysis of current binding materials production and the market for air hardening cementing materials, and products based on these materials, in Lao PDR and neighbouring countries; - gypsum (plaster) binder materials manufacturing technologies and equipment; - data collection and formulation of proposals for production of gypsum plaster (plaster of Paris); and, - high-strength and water-resistant gypsum. <p>The project also includes the study of the different variants of above mentioned materials application for production of the other gypsum based products, such as:</p> <ul style="list-style-type: none"> - building structural elements; - ventilation air-channels and blocks; - gypsum wall boards and ready dry mixtures; - plaster boards; - architectural and decorative building elements; and, - artificial marble.
Project objectives	Preliminary assessment of the viability of establishing a gypsum production plant.
Expected outputs	A completed opportunity study.
Main activities	<p>Study of <i>inter alia</i>:</p> <ul style="list-style-type: none"> - Markets; - Technical aspects; - Financial viability; - Investment; and, - Environmental aspects.
Project timeframe	6 months.
Proposed counterpart	Private sector undertaking.

55. Opportunity Study of Special Kinds of Portland Cement Manufacturing

Project title	Opportunity Study of Special Kinds of Portland Cement Manufacturing
Project description	<p>The project aims at promoting the cement industry development in Lao PDR and covers:</p> <ul style="list-style-type: none"> - analysis of current cementing binding materials (with special properties) production and the market of the hydraulic hardening binding materials and products in Lao PDR and neighbouring countries; and, - data collection and formulation of proposals for production of <ul style="list-style-type: none"> - super sulfate-resistant cement; - non - contracting cement; - self-stressing cement; and, - expanding cement. - Areas of application and formulation of proposals for using of these cements in Laos and neighbouring countries.
Project objectives	Preliminary assessment of the viability of production of special kinds of cement in Lao PDR
Expected outputs	A completed opportunity study.
Main activities	<p>Study of <i>inter alia</i>:</p> <ul style="list-style-type: none"> - Markets; - Technical aspects; - Financial viability; - Investment; and, - Environmental aspects.
Project timeframe	6 months.
Proposed counterpart	Private sector undertaking.

56. Master Plan Study for the Artisan Craft Sector Development

Project title	Master Plan Study for the Artisan Craft sector Development.
Project description	<p>The project will assist the government in its efforts to achieve poverty eradication and develop income generation activities through the promotion of artisan crafts through the conduct of an in-depth study to formulate a future development vision. Specifically, it reviews the current production and marketing situation of the artisan crafts and establishes a sound database through artisan craft mapping and analyzes the collected data for preparation of the future development policy framework. The study takes into account the following strategic aspects:</p> <ul style="list-style-type: none"> o Further development of the domestic market; o Improving the international competitiveness in the export market; o Facilitating business linkages with global value chains o Decentralization and regional development; o Improving raw material supply systems; o Identification of new raw materials; o Clustering of craft producers in rural areas; o "Living" preservation of traditional crafts; o Establishing effective raw material supply systems; and, o Promotion of cooperative movement through legal support. <p>Towards the end of the project, a workshop shall be organized to discuss the findings of the survey and to make the policy makers and artisan craft producers aware of the current situation. This will also be a venue to disseminate information on best practices implemented in other countries as well as a possible legal support framework to the craft producers.</p>
Project objectives	To provide the Government with a clear future development policy framework and visions for the artisan craft development and to strengthen policy formulation capability of the government policy makers.
Expected outputs	<ul style="list-style-type: none"> - Database of the existing artisan craft producers in the country. - A clear future development visions.
Main activities	<ul style="list-style-type: none"> - Conduct a mapping survey of the existing households, craft producers, clusters (if existing), raw material suppliers, distribution systems, etc; - Analyze the collected data and identify constraints hindering export promotion of existing artisan crafts; - Formulate the specific development strategies for the entire sector; - Select the targeted priority artisan crafts to be promoted in the export market and prepare the detailed action plan for implementation of the promotional activities; and, - Organization of workshops.
Project timeframe	12 months.
Proposed counterpart	Ministry of Industry and Handicraft.

57. Trouble Shooting for the Artisan Craft Sector

Project title	Trouble Shooting for the Artisan Craft Sector
Project description	<p>The project will assist the craft producers, through the Lao Handicraft Group, in strengthening their members' international competitiveness. It covers a wide range of support activities, which would result in the immediate impacts. Specifically, it shall cover the following:</p> <ul style="list-style-type: none"> • Identifying niche export markets which can absorb the Laotian existing artisan crafts and make collective marketing efforts such as trade promotion tours to Europe and Japan. • Develop a workable solution to address the poor drying process of woodcraft raw materials and proceed to the implementation of the problem solving. • Establishing an authentic image of Lao traditional textiles in the export market through intensive promotional activities.
Project objectives	<p>The project shall also investigate the most practical way to improve the business environment such as facilitating access to credit facilities without collaterals and guarantee to the qualified craft producers, if possible.</p> <ul style="list-style-type: none"> - To strengthen Laotian artisan craft sectors international competitiveness. - To improve business performance of the artisan craft producers.
Expected outputs	<ul style="list-style-type: none"> - Successful trade promotion. - Strengthened raw material processing capability of woodcraft producers. - Improved business environment particularly in financing and marketing.
Main activities	<ul style="list-style-type: none"> - Dispatch of a team of management consultants to review very closely the current managerial problems of the Lao Handicraft Group (LHG) members and provide immediate consulting services. This also includes the problems associated with the raw material supply. - Prepare the sales promotional materials such as video, pamphlets, improvement of the existing website of the LHG members, etc. - Organize trade promotion missions to Japan and Europe with the promotional materials prepared. - Organize workshop to disseminate the experience gained through the project.
Project timeframe	2 years.
Proposed counterpart	Ministry of Industry and Handicraft/Lao Handicraft Group.

58. Cluster Development for the Selected Artisan Crafts

Project title	Cluster Development for the Selected Artisan Crafts
Project description	The project will carry out a series of cluster development activities for the selected high priority artisan crafts aiming at penetration of export markets. It will be implemented on a pilot project basis in the selected provinces focusing on the selected villages/district with the selected crafts. The project will seek for possible cooperation between the cluster and global value chains as well with international NGOs. The result will be presented at the workshop.
Project objectives	<ul style="list-style-type: none"> - To strengthen collective efficiency of the selected clusters. - To improve business performance and international competitiveness of the targeted artisan craft sectors.
Expected outputs	<ul style="list-style-type: none"> - Identified cluster leader in the selected clusters. - Strengthened collective efficiency and international competitiveness through improved productivity, entrepreneurship, product designs, and market access capability. - A clear future vision for artisan craft cluster development.
Main activities	<ul style="list-style-type: none"> - Selection of 10 provinces, one craft per province, for the pilot implementation; - Review of the current problems jointly with a leader of the cluster development such as a cooperative, and propose specific support programmes; - Implement the proposed programmes such as facilitating business information networks, establishing firm linkages with the foreign wholesale buyers, assuring access to the export markets, entrepreneurship development, etc. Trade promotion tours and exhibitions are also included in the implementation activities; - Assess the pilot projects and present the future development framework and strategies for the nationwide scale artisan craft development at the workshop.
Project timeframe	3 years.
Proposed counterpart	Ministry of Industry and Handicraft, the Handicraft Group under LNCCI, Provincial governments.

59. Establishment of an Integrated Artisan Craft Preservation and Promotion Center

Project title	Establishment of an Integrated Artisan Craft Preservation and Promotion Center
Project description	The project has three major components: (1) Investigate the applicability of accreditation systems in light of traditional craft's "living" preservation; (2) Conduct of a feasibility study on the establishment of a national integrated artisan craft promotion center, the National Handicraft Headquarters/Lao Traditional Craft Center, and (3) Review the rational of establishing a Design Center separately from the integrated headquarters/center. If the accreditation system and design center's functions could be integrated in the proposed Center, they will be incorporated into one organization. The specific action plan and budgeting will also be prepared to advance the implementation.
Project objectives	To strengthen the institutional capacity of the supporting institutions serving the artisan craft sector.
Expected outputs	<ul style="list-style-type: none"> - Economic viability of the establishment of an integrated support center. - Specific plan of action for the establishment.
Main activities	<ul style="list-style-type: none"> - Analyze the needs in supporting traditional craft's "living" preservation and review the practicality of introducing an accreditation system for the authentic traditional crafts. - Review the best practices implemented in other countries such as Japan for accreditation of the traditional crafts and prepare a base guideline for accrediting them with a "Seal of Authenticity", taking into account the specific attributes of Laotian traditional crafts. - Conduct a feasibility study to define the expected functions and services to be provided. It should start with an in-depth review of the existing support institutions' performance. Furthermore, it could include the analysis of possible integration of the proposed traditional craft museum, accreditation systems as well as the design center. The study report shall cover the following areas: <ul style="list-style-type: none"> • Background; • Functions and services provided; • Locations; • Management structure; • Staffing; • Implementation plan; • Financial analysis; and, • Conclusions and recommendations for the future actions.
Project timeframe	
Proposed counterpart	Ministry of Industry and Handicraft, the Handicrafts Group under LNCCI.