

ASIAN DEVELOPMENT BANK

TAR: LAO 38090

TECHNICAL ASSISTANCE

(Financed by the Poverty Reduction Cooperation Fund)

TO THE

LAO PEOPLE'S DEMOCRATIC REPUBLIC

FOR

INTEGRATING THE POOR IN REGIONAL TRADE

THROUGH INDUSTRIAL STANDARD DEVELOPMENT—PHASE II

December 2004

CURRENCY EQUIVALENTS

(as of 24 November 2004)

Currency Unit	–	kip (KN)
KN1.00	=	\$0.0001
\$1.00	=	KN10,773.00

ABBREVIATIONS

ADB	–	Asian Development Bank
CSP	–	country strategy and program
CSPU	–	country strategy and program update
ISO	–	International Organization for Standardization
Lao PDR	–	Lao People's Democratic Republic
LDCs	–	least developed countries
LHA	–	Lao Handicraft Association
LNCCI	–	Lao National Chamber of Commerce and Industry
MAF	–	Ministry of Agriculture and Forestry
MIH	–	Ministry of Industry and Handicraft
MOC	–	Ministry of Commerce
MOH	–	Ministry of Health
NGO	–	nongovernment organization
PSD	–	private sector development
SME	–	small and medium-sized enterprise
SSTA	–	small-scale technical assistance
STEA	–	Science, Technology and Environment Agency
TA	–	technical assistance
UNIDO	–	United Nations Industrial Development Organization
WIPO	–	World Intellectual Property Organization
WTO	–	World Trade Organization

TECHNICAL ASSISTANCE CLASSIFICATIONS

Targeting Classification	–	General intervention
Sector	–	Industry and trade
Subsector	–	Trade
Theme	–	Private sector development
Subtheme	–	Policy/institutional/legal/regulatory reforms

NOTES

- (i) The fiscal year (FY) of the Government ends on 30 September.
- (ii) In this report, "\$" refers to US dollars.

This report was prepared by M. Varkay.

I. INTRODUCTION

1. In recognition of the role of industrial standards in facilitating trade, the Government of the Lao People's Democratic Republic (Lao PDR) has requested the Asian Development Bank (ADB) to support a Technical Assistance (TA) on Integrating the Poor in Regional Trade through Industrial Standard Development. The TA builds on a Small-Scale Technical Assistance (SSTA),¹ which developed the strategy and road map to upgrade the national standards regulatory framework and supported pilot testing of standards among producer groups from poverty-stricken districts. In order to implement the policy, institutional, and regulatory measures to support the framework, as well as to expand pilot activity across several sectors, the Government requested ADB for TA funds from the Poverty Reduction Cooperation Fund (PRF) to upgrade the national standards regulatory framework so that it becomes aligned with international benchmark procedures. The TA will support the Government, the private sector, including industry associations, academia and nongovernment organizations (NGOs), to develop the supporting institutional structure as well as to integrate the poor in the process of standards development. Funding was endorsed in July 2003 and an advisory TA² was included in the 2004 country strategy and program update (CSPU). The TA will complement capacity building and programs to support reform in the private sector³ (see the TA framework in Appendix 1). The Fact-Finding Mission, fielded in October 2003, reached an understanding with the Government on the purpose, approach, and implementation arrangements of the TA.⁴

II. ISSUES

2. The Government has recognized the importance of trade in supporting growth and employment. At present three product categories—namely wood products, garments, and agroindustrial food products (mainly coffee)—account for 96% of total exports of merchandise goods. The garments industry, dominated by foreign enterprises, has the highest labor concentration and employs close to 50% of people engaged in manufacturing.⁵ However, with the phaseout of the Multifiber Arrangement by end-2004, the Government has focused on the need to diversify export products to generate trade-related employment in other kinds of labor-intensive light manufacturing industries such as textiles, handicrafts, semiprocessed meat as well as wood processing, produced in both urban and rural areas. At present, over 56% of light manufacturing output is produced by small businesses⁶ in the major urban areas of Vientiane municipality, Champasak, Savannakhet, and Luang Phrabang. These businesses engage 40,000 people (in both the manufacturing and retail sectors). Statistics on the handicraft sector, gathered from surveys⁷, indicate that approximately 20,000 people are employed on a full-time basis. An additional 100,000 are engaged, part-time, in rural areas.

¹ The SSTA, funded by the Poverty Reduction Cooperation Fund, was initiated in June 2003 and completed in May 2004. It developed the road map for the upgrading of the national standards regulatory framework and supported the training of 700 poor households on quality control in the silk sector.

² The TA first appeared in *ADB Business Opportunities* (Internet edition) on 1 March 2004.

³ The implementation of the standards regulatory reform framework will take place in three stages: the SSTA (June 2003–May 2004), the ADTA (September 2004–September 2005), and the Small and Medium-Sized Enterprise and Private Sector Development Program Loan (January 2006–January 2009), to finalize training and policy framework implementation.

⁴ The Mission comprised M. Varkay (private sector development specialist), Governance, Finance, and Trade Division, Mekong Department and an industrial standards and poverty reduction specialist (consultant).

⁵ In terms of total industrial output, manufacturing contributes 56%, electricity 42%, and mining 2%. In terms of employment, manufacturing employs 32,000 people, electricity over 3,500, and mining, 700.

⁶ UNIDO. 2001. *Survey of Small Establishments*. p.14. Small businesses employ on average 1–5 people.

⁷ UNIDO. March 2003. *Report on Lao PDR: Medium-Term Strategy and Action Plan for Industrial Development* (working manuscript), p. 44. The total value of output in the handicraft sector is estimated at \$30 million–40 million.

3. In terms of international market access, products that do not conform to international benchmarking procedures recognized by the World Trade Organization⁸ (WTO) and the International Organization for Standardization (ISO) are either excluded from the export market or significantly penalized in terms of pricing. With respect to the export readiness of Lao PDR products, surveys and workshops indicate that, with the exception of foreign owned or managed enterprises producing for an international supply chain, the variability of product quality originating from Lao PDR enterprises has constrained domestic and international buyers from sourcing products on a regular volume basis—from both rural and urban areas.

4. The absence of consistent quality control, resulting from disparate regulations across ministries, has become an issue of concern to rural and urban small and medium enterprises (SMEs) producing for export. In workshops held under the SSTA, SMEs indicated (i) growing dissatisfaction over the lack of consistent procedures for standard development, particularly for agricultural inputs used in the light manufacturing sector; and (ii) the adverse impact on industry's ability to access consistent quality of input and ensure volume procurement through contracts⁹ with producer areas. In a country with a strong reliance on the agriculture sector to provide for the welfare of a large proportion of the population—agriculture's share of domestic output is slightly above 50%, and 80% of the population are engaged in the agriculture sector—the urgency to develop quality control processes that are recognized by industry, government, and producers has become significant to employment and poverty reduction. This is especially relevant for producers located in remote regions where improved quality control would enable national SMEs to initiate procurement contracts, facilitate grade/price differentiation at farm gate, and thus lead to improved producer household incomes.¹⁰

5. ADB's country strategy and program (CSP) emphasizes private sector development (PSD) and SME¹¹ development as a major factor in reducing poverty. The Government's National Poverty Eradication Program also states that economic growth should be hastened through strong PSD/SME development, combined with poverty-reducing interventions in human resource skills development, and trade-based employment generated through improved commercial linkages between rural and urban areas and production for export.

6. The challenge for the Lao PDR is to streamline the national standards framework in accordance with WTO- and ISO-approved procedures, and to upgrade institutional capacity and technical skills in order to facilitate trade. The present regulatory framework, however, excludes the major institutions involved in trade. Standards regulations are developed by the apex institution in the Prime Minister's Office, i.e., the Science, Technology and Environment Agency (STEA), with only sporadic consultation of government or industry on technical specifications of standards.

⁸ The Uruguay Round Agreement on Technical Barriers to Trade clearly specifies the onus on governments, particularly Least Developed Countries (LDCs), to upgrade/harmonize their national standards regulatory framework to conform to multilateral norms and procedures. A product standard provides attributes in respect of quality, usability, and related safety or environment aspects against certain established benchmarks, where applicable. Standards are supported by testing/evaluation facilities, metrology, and conformity assessment.

⁹ The SSTA undertook a detailed analysis of the technology, labor, and investment along the silk supply chain and reviewed the impact on production costs and investment.

¹⁰ From the point of view of households, the fundamental causes of poverty are natural and man-made disasters that affect livestock and rice yields, and lack of technical and commercial knowledge.

¹¹ The Government's SME Decree will be implemented under TA 4279-LAO: Advisory Assistance on Small and Medium-Sized Enterprise and Private Sector Development.

7. The Government has recognized the constraints of the present system and adopted a policy road map, during the SSTA,¹² on upgrading the standards regulatory framework in support of economic policy objectives both on trade facilitation and on consumer and environment protection. The Government has proposed the development of a national standards regulatory framework whereby standards are developed by the relevant government agency in close cooperation with the line ministries, trade associations, research institutes, consumer associations, and international bodies, such as the ISO, and supported by law. Other development partners active in this area are the United Nations Industrial Development Organization (UNIDO), on capacity building of standards development in the chemistry and biochemistry sectors; and the European Union, providing capacity building on policy related to WTO accession. However, no comprehensive assistance package combines the sector development strategy¹³ (including policy and legal reform), financial assistance/loan, and TA.

8. The strategy initiated by the Government for an industry-led national standards regulatory framework, with specific targets on poverty reduction, needs to address the following: (i) the limited access to skills development and training in quality control, occupational health, and environment safety at the producer level in poverty-stricken areas. (To facilitate the integration of poor producers in the formal economy, training in technical skills that support the approved standards will likely be best achieved through the industry association and existing NGO network.); (ii) the absence of a law guiding the institutional structure of a standards council, and the guiding regulations whereby the National Committee for Management of Standards and Quality assumes the apex role and becomes the Standard Council; (iii) the absence of ministry-level steering committees¹⁴ and technical committees on standards with representatives from the Government, private sector (including NGOs), and academia; (iv) the lack of differentiation between government-led mandatory standards (health, safety, environment) and industry-led voluntary standards; (v) the absence of a quality control knowledge center in the university; and (vi) sporadic coordination with other development partners on the development of the conformity assessment infrastructure (metrology, accreditation, and certification).

III. THE TECHNICAL ASSISTANCE

A. Purpose and Output

9. The purpose of the TA is to (i) support the Government in developing an internationally recognized standards regulatory framework and in training stakeholders along the process, i.e., producers, purchasers, and regulators, in its application, in the textiles and handicraft subsector, agroindustry subsector, manufacturing subsector (selected industrial chemicals), and pharmaceutical subsector (priority drugs); and (ii) train producer groups from poverty-stricken pilot districts in quality control, occupational health, and environment safety in the areas of silk processing, handicrafts, and nontimber forest products, through the Lao Handicraft Association

¹² The Poverty Reduction Fund-funded TA 4108-LAO (ADB. Year. *Technical Assistance to the Lao People's Democratic Republic for Integrating the Poor in Regional Trade through Private Sector Standard-Setting*. Manila), undertook policy workshops with the Government, private sector, and NGOs to develop the strategy for upgrading the national standards regulatory and institutional framework. The TA also developed the specifications of the silk standard. The policy and institutional training workshops took place in July and August 2003 and February 2004, and the participatory workshops in selected poverty areas for the silk sector took place in June, July, August, and October 2003. Over 700 households were trained in quality control.

¹³ The legal and regulatory issues relating to the national standards framework are addressed under TA 4279-LAO: Advisory Assistance on Small and Medium-Sized Enterprise and Private Sector Development and the programmed Private Sector Development Program Loan in 2006–2009.

¹⁴ The Steering Committee on Handicrafts and Textiles and the Technical Committee on Silk has been formed under TA 4108-LAO.

(LHA) and NGO network. The regulatory framework will be consistent with and supplementary to government development strategies. Further to consultations undertaken with the Government and stakeholders under the SSTA, the TA will expand the pilots developed under the SSTA in Xieng Khouang and Louang Namtha, to Houaphanh and Borikhamxai,¹⁵ in order to facilitate knowledge transfer on quality control between producers from poverty-stricken areas and SMEs in the LHA.¹⁶ There are over 118,000 households in the pilot provinces.¹⁷

B. Methodology and Key Activities

10. Component A will implement the revised institutional structure for standards setting. The TA will provide capacity building to develop the institutional and regulatory framework. The TA will support the development of a standards council in the STEA, and the development of the consultative steering committee and the technical committee in the line ministries, with involvement of the private sector, academia, and NGOs to ensure wide acceptance of the standards. The SSTA has implemented the committee structure in the Ministry of Industry and Handicraft (MIH) for handicraft and textiles. (See Appendix 4, subheading 5, on stakeholder-approved revised institutional structure for standard setting). Based on strong support from the Government and the private sector, the TA will (i) replicate and implement the committee structure in the Ministry of Agriculture and Forestry (MAF), Ministry of Health (MOH), and Ministry of Commerce (MOC); (ii) maintain capacity building initiated under the SSTA in MIH; and (iii) involve academia in the National University and the private sector through the Lao National Chamber of Commerce and Industry and its members, including the LHA. It is expected the TA will train up to 80 officials in the Government, at the national and provincial levels, and twice that number in the private sector, academia, and NGOs.

11. Component B will organize pilot area producers from poverty-stricken districts into producer groups linked to the LHA. The TA will continue training in the silk standard undertaken under the SSTA, and will also initiate training in manufacturing product/process quality management in nontimber forest products, which will facilitate the integration of poverty-stricken district producers into national supply chains, and thus improve household income. Training will focus on (i) quality control procedures in silk cocoon raising, silk reeling, and dyeing; (ii) quality control in nontimber forest products (regional rice products, seasonal herbs, and vegetables); (iii) application of improved natural dyeing methods, further to research and development on natural dyes and testing of synthetic chemicals;¹⁸ (iv) market monitoring techniques and utilization of market information to upgrade quality control processes and standards; and (v) integration of pilot area producers into the LHA to facilitate training in quality control. Based on the pace of training program outreach under the SSTA, it is expected that the TA will complete the training of over 3,000 producers in quality control methods in the silk sector and nontimber agroforestry products.

12. During TA inception, a policy review and capacity-building road map will be drawn up for components A and B, to be agreed to with the Government, the private sector, academia and

¹⁵ Poverty incidence in Houaphanh (75%), Oudomxai (73%), and Louang Namtha (58%) remains high, while it has decreased in Xieng Khouang (from 57% in 1992 to 35% in 1998) but has risen in Borikhamxai (from 11% to 26%).

¹⁶ The LNCCI represents 13 industry associations. The Lao Handicraft Association is the most proactive in terms of membership outreach to SMEs as well as development of international information networks.

¹⁷ December 1999. *Lao Expenditure and Consumption Survey 1997/98: The Households of Lao PDR*. (Appendix 1, Table 4).

¹⁸ One consequence of increased silk production will be soil pollution arising from the discharge of waste dyeing chemicals. There is a need to consider the application of alternate dyeing techniques that will safeguard worker health and prevent environment pollution.

NGOs. Each stage of TA implementation, namely (i) development of a standards council and supporting technical and steering committees in four line ministries; (ii) review and development of priority standards with the Government, private sector, and academia; (iii) development of producer organizations linked to LHA; and (iv) training in quality control of producers and SMEs, will be reviewed in consultation workshops with the Government, private sector, and NGOs.

C. Cost and Financing

13. The total cost of the TA is estimated to be \$825,000 consisting of \$529,000 in foreign exchange costs and \$296,000 equivalent in local currency costs. The entire foreign exchange cost and \$171,000 equivalent of the local currency cost will be financed on a grant basis by the Poverty Reduction Cooperation Fund, which was made available to ADB and is to be administered by ADB. The Government will finance the remaining \$125,000 equivalent of the local currency costs in kind by providing office accommodation, support facilities, counterpart staff, local transportation, and workshop and communications support. The TA will be charged against the indicative planning figure for 2004. The cost estimate and financing plan are in Appendix 2.

D. Implementation Arrangements

14. STEA will be the Executing Agency. ADB has requested that a high-level consultation group be established, headed by STEA. The implementing agencies include the MIH; MAF; Ministry of Communications, Transport, Post and Construction; MOH; and other relevant government agencies, as well as the Lao National Chamber of Commerce and Industry. Inputs from business associations, as well as NGOs, will be sought throughout TA implementation.

15. The TA will be implemented over 12 months, from January 2005 to end-December 2005, and will require a team of eight international (27.5 person-months total) and eight domestic (43 person-months total) consultants. For the international consultants, the following experts will be recruited: institutional standardization expert; senior advisor to a standards council in STEA; expert in sericulture, agroindustry, and nontimber forest standards; expert in manufacturing and construction processes; expert in pharmaceuticals and cosmetic soaps; expert in wood processing; expert in quality control management; and expert in audit and inspection. The domestic consultants will include four sector specialists and 4 expert trainers. The consultant team will produce an inception report, two interim reports, and a final report; each will be discussed during tripartite meetings. The consultant team will either be a firm or individual consultants. The contract with the consultants will be based on quality- and cost-based selection. The simplified technical proposal will be used. The terms of reference for the consultants are in Appendix 3. All procurement under the TA will be in accordance with ADB's *Guidelines for Procurement*.

IV. THE PRESIDENT'S DECISION

16. The President, acting under the authority delegated by the Board, has approved ADB administering technical assistance not exceeding the equivalent of \$700,000 to the Government of the Lao People's Democratic Republic to be financed on a grant basis by the Poverty Reduction Cooperation Fund for Integrating the Poor in Regional Trade Through Industrial Standard Development—Phase II, and hereby reports this action to the Board.

TECHNICAL ASSISTANCE FRAMEWORK

Design Summary	Performance Targets	Monitoring Mechanisms	Assumptions and Risks
<p>Goal</p> <p>The goal is to foster trade facilitation and improve the volume and value of Lao People's Democratic Republic's (Lao PDR) light manufacturing exports.</p>	<p>Lower rate of poverty incidence and depth.</p> <p>Trend to increase volume and value of export by small and medium-sized enterprises (SMEs) (including manufacturing product) and poor producers for products such as silk and nontimber forest products.</p>	<p>Poverty incidence studies in the Lao Expenditure and Consumption Survey. (Source: Committee for Planning and Cooperation, National Statistical Centre). External trade statistics. (Source: UNCOMTRADE, UN external trade statistics).</p>	
<p>Purpose</p> <p>Internationally recognized standards regulatory framework adopted by the Government, private sector, and producers in poverty-stricken districts.</p>	<p>Implementation of a standards council in Science, Technology and Environment Agency. Structuring of steering committees and technical committees in the line ministries—agriculture, industry and handicraft, health—in the Lao PDR, with representation from private sector, academia, nongovernment organizations (NGOs). (The small-scale technical assistance [SSTA] has implemented the committee structure on handicraft and textiles in the Ministry of Industry and Handicraft. See Appendix 4.)</p> <p>Standards and supporting technical regulations, quality control processes developed on silk, health, and environmental aspects of natural and chemical dyes, agroforestry products, and health aspects of basic pharmaceuticals (antibiotics).</p> <p>Higher farm-gate prices for silk and agroforestry inputs.</p>	<p>TA consultants review rate of development of standards and quality control procedures at technical committee level in coordination with private sector. TA consultants monitor policy review by steering committee. Implementation reviewed and reported by the international advisors to the Standards Council.</p> <p>TA consultants review with STEA the new standards.</p> <p>TA consultants review number of trained producers/firms and laborers in implementation of standards and quality control procedures.</p> <p>TA consultants review improved quality control processes at production level.</p> <p>Development of production specialization centers and use of improved technology to develop economies of scale and improved quality control.</p>	<p>Assumption:</p> <p>Standards Council framework is operationalized and enforced.</p>

Continued on next page

Design Summary	Performance Targets	Monitoring Mechanisms	Assumptions and Risks
		Reviewed by Lao Handicraft Association and NGOs active in target production areas.	
<p>Outputs</p> <p>1. Consistent methodology on standards development procedures.</p> <p>2. Eco-labeling and trademark developed and supported by national industry associations.</p>	<p>The line ministry technical committees, steering committees, and private sector industry association(s) have developed expertise in standards methodology development procedures according to Lao PDR's industrial needs.</p> <p>Standards and quality control procedures have been defined by the technical committee, verified by the steering committee, and ready for implementation by private sector and producers: silk, health, and environmental aspects of natural and chemical dyes, agroforestry products, and health aspects of basic pharmaceuticals (antibiotics).</p> <p>Blueprint of required codes of practice/quality control procedures prepared by the standards experts. Community training and skills development undertaken by the standards experts and domestic trainers.</p> <p>Regional poverty-area producers linked to Lao Handicraft Association. Training of trainers program on codes of practice linked to industry associations.</p>	<p>Technical assistance (TA) consultants' reports.</p> <p>TA review missions.</p> <p>Minutes of the TA task force (TA task force to hold weekly meetings to identify and remedy gaps in implementation).</p> <p>Standards methodology training module results in monitoring by industry associations of membership implementation of voluntary standards (silk, agroforestry products).</p> <p>Monitoring by Science, Technology and Environment Agency (STEA) of line ministry implementation of mandatory standards (health and environmental aspects of natural and chemical dyes, and health aspects of basic pharmaceuticals [antibiotics]).</p>	<p>Assumption:</p> <p>Road map on the sequencing and targeting of capacity building, policy workshops, training modules and overseas training will be effective in convincing Government of the importance of regulatory and institutional reforms.</p> <p>Poverty-area producers are committed to representation at regional industry association level.</p> <p>Poverty-area producers are committed to improved production technologies and related skills training</p> <p>Risks:</p> <p>Delays in introducing regulatory reform and lack of coordination among ministries in supporting holistic standards development framework. Counterpart staff may not show adequate interest in learning.</p>

Continued on next page

Design Summary	Performance Targets	Monitoring Mechanisms	Assumptions and Risks
<p>Activities</p> <p>1.1. Operationalization by policy makers, line ministry officials, private sector, and NGOs of standards regulatory framework.</p> <p>1.2. Review of required legal amendments to support standards regulatory framework is finalized (under SME/Private Sector Development (PSD) advisory technical assistance).</p> <p>2.1. Poverty-area producer associations from Houaphanh, Louang Namtha, Xieng Khouang, and Borikhamxai are linked to Lao Handicraft Association.</p> <p>2.2. Members of Lao Handicraft Association have developed specifications of eco-labeling and trademark on silk.</p>	<p>Standards interministerial task force is established by February 2005.</p> <p>Two policy workshops held before December 2004 on role and function of Standards Council, steering committee, and technical committees.</p> <p>Cadre of trained technical committee and steering committee members (including private sector) is presented to Government by end-March 2005. Members of the committees have mastered the procedures on standardization for voluntary (silk, agroforestry products) and mandatory standards (health and environmental aspects of natural and chemical dyes, health aspects of basic pharmaceuticals [antibiotics]).</p> <p>Areas for amendment are identified and proposals for upgrading laws and regulations are submitted by December 2004. Training of judges in adjudication of standards disputes, intellectual property rights is initiated by November 2004 (under SME/PSD TA).</p> <p>Poverty area and producer association representatives are trained members of the technical committee on silk and handicrafts. March 2005.</p> <p>Lao Handicraft Association members have developed a sustainable business plan for implementation of eco-labeling and trademark on silk.</p>	<p>Minutes of the task force.</p> <p>TA review missions.</p> <p>TA training modules and consultants' reports.</p> <p>TA review missions.</p> <p>TA training modules.</p> <p>TA consultants' reports.</p> <p>TA review missions.</p> <p>TA training modules.</p> <p>TA consultants' reports.</p> <p>TA review missions.</p>	<p>Assumptions:</p> <p>Counterpart staff is available.</p> <p>Reforms are owned by the Government, the private sector, and producer groups from poverty-stricken districts.</p>

Continued on next page

Design Summary	Performance Targets	Monitoring Mechanisms	Assumptions and Risks
<p>Inputs</p> <p>1. Consultants (including travel and per diem)</p> <p>2. Equipment</p> <p>3. Workshops/study tours</p> <p>4. Counterpart services</p> <p>5. TA task force</p> <p>6. ADB review mission</p> <p>7. Surveys</p>	<ul style="list-style-type: none"> • Recruitment of 30 person-months of consultant services by April 30, 2005. • Recruitment of additional 40.5 person-months by May 31, 2005. • Organization of 4 workshops, conferences and study tours by April 30, 2005. • Availability of first survey by February 2005. 	<p>Progress reports from STEA.</p> <p>TA review missions.</p>	<p>Assumptions:</p> <p>Training is targeted according to area of professional and occupational responsibility.</p>

NGOs = nongovernment organizations, Lao PDR = Lao People's Democratic Republic, PSD = Private Sector Development, SME = small and medium -sized enterprise, SSTA = small-scale technical assistance, STEA = Science and Technology Environment Agency, TA = technical assistance.

COST ESTIMATES AND FINANCING PLAN
(\$)

Item	Foreign Exchange	Local Currency	Total Costs
A. Poverty Reduction Cooperation Fund			
Financing^a			
1. Consultants			
a. Remuneration and Per Diem			
i. International Consultants	385,000	0	385,000
ii. Domestic Consultants	0	100,000	100,000
b. International and Local Travel	35,000	14,000	49,000
c. Reports and Communications	10,000	0	10,000
2. Equipment ^b	16,000	0	16,000
3. Training, Seminars, and Conferences	55,000	30,000	85,000
4. Survey ^c	0	15,000	15,000
5. Miscellaneous Administration and Support	28,000	12,000	40,000
Costs			
Subtotal (A)	529,000	171,000	700,000
B. Government Financing			
1. Office Accommodation and Transport	0	70,000	70,000
2. Remuneration and Per Diem of Counterpart Staff	0	45,000	45,000
3. Others	0	10,000	10,000
Subtotal (B)	0	125,000	125,000
Total	529,000	296,000	825,000

^a Administered by the Asian Development Bank.

^b Equipment includes four desktop computers and photocopy machine. Equipment also includes fax machines for the Ministry of Industry and Handicraft, Ministry of Agriculture and Forestry, and Governor's Office in the four pilot provinces. The technical assistance (TA) will also underwrite the costs of radio equipment for the more remote producer associations in the provinces of Luang Namtha, Houaphanh, Xieng Khouang, and Borikhamxai.

^c Field survey includes per diem remuneration for project implementation unit staff, based on United Nations Development Programme rate.

Source: Asian Development Bank estimates.

OUTLINE TERMS OF REFERENCE

A. International Consultants (27.5 person-months)

1. Capacity Building in Standards Council Regulatory Framework

a. Lead Advisor and Team Leader (4 person-months)

1. The expert will be a senior member of an international standards board with proven experience in policy linkages between standards, competitiveness, trade, environment, and human resource development. The expert will:

- (i) Coordinate subproject team leaders and review with Lao People's Democratic Republic (Lao PDR) stakeholders the scope of required interventions to improve benchmarking of Lao PDR standards regulatory framework as per international best practice. The expert will consult with stakeholders on the terms of reference of the institutional structure i.e., the standards council, the steering committee, and the technical committee both at national and regional levels.
- (ii) Identify specific capacity-building requirements with Government (Science, Technology and Environment Agency [STEA], Ministry of Industry and Handicraft [MIH], Centre for Industry Research and Development [CIRD], Ministry of Health [MOH], Ministry of Agriculture and Forestry [MAF]) and the private sector in the area of institutional development, conformity assessment, metrology (including laboratory facilities), and develop a road map of actions and capacity-building workshops with international experts.
- (iii) Identify the nature and scope of mandatory (safety, occupational health and environment) and voluntary standards (industry-driven). Identify the role of government, private sector, consumers, and academia.
- (iv) Assess conformity assessment infrastructure (metrology, calibration), identify priorities for upgrading, and coordinate with international development partners on capacity building.
- (v) Develop a road map on linkages between national and regional testing centers for priority sectors.
- (vi) Assess and guide training in audit and inspection for priority sectors.
- (vii) Identify gaps in the legal framework with international legal expert, review scope of required amendments to commercial laws, identify areas of dispute settlement, and develop appropriate incentive and penalty mechanisms, as well as enforcement procedures. Identify required association with International Organization for Standardization (ISO) and begin process of Lao PDR representation.
- (viii) Identify the nature of licensing constraints with standards experts coordinate with Ministry of Commerce and Department of Promotion and Management of Domestic and Foreign Investment to facilitate the streamlining of enterprise licensing.
- (ix) Provide regular advisory input to the standards council on technical and policy issues and propose agenda development in coordination with the STEA secretariat.
- (x) Coordinate the international and domestic consultants, their activities and outputs, and monitor the technical assistance (TA) training budget and submission of project reports.

- (xi) Assist STEA in the development of a quarterly donor coordination matrix to ensure complementarity in project activity.

b. International Advisors to the Standards Council
(1 person-month)

2. The intermittent experts, from the international private sector, an international regulatory agency such as the World Intellectual Property Organization (WIPO) or ISO, will review the benchmarks developed by the Standards Council. They will coordinate input with the lead advisor.

c. International Standards Specialist(s) and Expert in Sericulture, Agroindustry, and Nontimber Forest Products (7 person-months)¹

3. The expert, to be engaged independently, will be a recognized expert in the silk and agroforestry sectors with skills in capacity building and supporting research and development. The expert will (i) coordinate the domestic consultants and monitor the TA training budget. The expert will provide capacity building to the technical and steering committees (MIH, MAF, Lao National Chamber of Commerce and Industry [LNCCI], Lao Handicraft Association [LHA]) on the characteristics of the product standards, quality management, and skills training; (ii) Undertake a diagnostic and review of industry production centers, assess the cost of production, assess improved production efficiencies to facilitate specialization and integration along the value chain, assess application of the standard, and assess quality control procedures with the Lao Handicraft Association; (iii) assess technical and steering committee skill levels in coordination with the team leader; develop a capacity-building framework, implement training, and initiate the training of trainers; (iv) coordinate with domestic specialists on research and development to facilitate benchmarking in silk and natural dyes; (v) prepare Lao PDR silk standard and standards for other agroforestry products for certification and coordinate with United Nations Industrial Development Organization (UNIDO) on the implementation of testing and calibration facilities in the Lao PDR. Finalize the Lao PDR silk trademark with the Lao Handicraft Association; (vi) provide input to and coordinate with the Quality Management Network and the National University of Laos. Review the Asian Productivity Organization's Green Productivity Program in silk and agroforestry processes; and (vii) develop a road map of medium- and long-term capacity building.

d. International Standards Development Specialist and Expert in Cement, Zinc, and Industrial Chemicals (4 person-months)

4. The expert will have proven expertise in the diagnostic, review, and application of the above standards, with a focus on consumer health, labor safety, and environmental protection, as well as is the sequencing of capacity building in a line ministry and the private sector. The expert will (i) provide capacity building to the technical and steering committees (MIH; Ministry of Communications, Transport, Post and Construction; and LNCCI) on the characteristics of the products standards, quality management, and skills training in response to Lao PDR production and supply chain factors; (ii) undertake a diagnostic and review of industry production centers, and assess cost of production, improved production efficiencies along the value chain, and the integrated application of the standard and quality control procedures; (iii) assess technical and steering committee technical skill levels, scope of capacity building in coordination with the team leader, and coordinate with UNIDO on the development of metrology, calibration, and

¹ Consultant to be engaged independently, from quality and cost-based selection (QCBS).

certification in the Lao PDR; (iv) coordinate with the Quality Management Network and the National University of Laos; and (v) develop a road map of medium and long-term capacity building.

e. International Standards Development Specialist and Expert in Pharmaceuticals and Cosmetic Soaps (3 person-months)

5. The expert will have proven expertise in the diagnostic, review, and application of the above industrial standards, with a focus on consumer health, labor safety, and environmental protection, as well as sequencing of capacity building in a line ministry and the private sector. The expert will (i) provide capacity building to the technical and steering committees (MOH, LNCCI) on the characteristics of the products standards, quality management and skills training in response to Lao PDR supply chain factors; (ii) assess industry production centers, costs of production, and improved production efficiencies to facilitate specialization and integration along the value chain and, therefore, integrated application of the standard and quality control procedures; (iii) undertake a diagnostic review of technical and steering committee technical skill levels and capacity building in coordination with the team leader. Coordinate with UNIDO on the development of metrology, calibration, and certification; (iv) coordinate with the Quality Management Network and the National University of Laos; and (v) the expert will develop a road map of medium- and long-term capacity building.

f. International Expert on Quality Control Management Networks and Training (4 person-months)

6. The expert will be required to have expertise in internationally recognized quality control methods, with proven application in the implementation of training modules on standards. The expert will (i) coordinate with the international sector specialists, the National University of Laos to assess the skills training requirements on standards in government, the private sector, university, and vocational training; (ii) develop a series of training modules and curriculum on quality control; (iii) implement and teach the training modules in support of the international experts within the ministries and in the private sector, in coordination with the team leader, and the National University of Laos; and (iv) coordinate on the training of audit and inspection in the area of quality control.

g. International Expert on Audit and Inspection (2.5 person-months)

7. The expert will be deployed as the technical committees and steering committees are trained in the area of standards methodology development. The audit and inspection expert will undertake a diagnostic review of the present level of inspection and audit and develop the required capacity building training road map for a core team of inspectors and auditors. This activity will be coordinated with the international sector experts and the quality control expert.

h. International Expert on Wood Processing (2 person-months)

8. The expert will undertake a value-added diagnostic of the wood processing industry requirements in the area of standards and quality control, and coordinate with the international expert on quality control management in developing a training module for the line ministry and the LNCCI. The expert will undertake a literature review of the regulations guiding wood production and extraction and propose relevant quality control processes for the Lao PDR.

B. Domestic Consultants (43 person-months)

9. The domestic consultants will support the international consultants, undertake community outreach, producer association development, implement training modules on quality control processes, undertake research and development in specific product area, and conduct surveys.

1. Social Mobilization Specialist and Domestic Team Leader (8 person-months)

10. The specialist will coordinate the domestic specialists with the team leader and international expert in sericulture, agroindustry and non-timber forest products, document the technical assistance (TA) expenses. He or she will work with the poverty-area producers and NGOs to organize producers into industry association groups in the four pilot provinces, and link the regional associations to the national industry associations. Translation and proficiency in English are a requirement. Monitoring of anticorruption issues is also required.

2. Economic Monitoring and Market Assessment Specialist (4 person-months)

11. The specialist will undertake household and regional surveys to monitor the rate of absorption of new production technologies and productivity improvements at farm level, and document productivity gains and impact on household income. The specialist will review the present market communication channels and supply chains of poor producers, and work with sector specialists and the vocational training, methods, and material design specialist to develop market awareness training for poor producers. Translation and proficiency in English are required.

3. Silk Production and Technology Development Specialist (6 person-months)

12. The specialist will document the characteristics of the Lao PDR silk worm, cocoon, reeling, and spinning techniques; undertake laboratory research on the characteristics of Lao PDR silk fiber; and document the results of stress-testing according to ISO procedures. The results will be forwarded to others for regional silk testing capacities for benchmarking purposes, under relevant ISO procedures to ensure recognition of Lao PDR silk fiber. The specialist will collaborate as required with researchers in the Lao PDR, experts from UNIDO, and international experts identified by the international expert in sericulture, agroindustry, and nontimber forest products. The specialist will review the supply chain structures and develop a road map of capacity building under the TA. Translation and proficiency in English are a requirement.

4. Chemicals, Cosmetics, Pharmaceuticals, and Natural Dye Development Specialist (10 person-months)²

13. The specialist will analyze the major chemicals in the construction, cosmetics, and pharmaceutical industries together with international experts. He or she will document the technical and testing procedures for consumer and environment safety, and disseminate information to the vocational training specialist and international expert on quality control. He or she will document results of laboratory analysis, and develop upgraded procedures on quality control processes for consideration by the technical committee.

² Consultant to be hired independently and not under QCBS.

14. In a separate activity, the specialist will analyze the priority natural dyes identified by the international expert in sericulture, agroindustry, and nontimber forest products and the Lao Handicraft Association and introduce environmentally sound, energy-efficient dyeing equipment to facilitate ecological labeling of Lao PDR silk fiber at regional production centers.

5. Food Products Quality Control Specialist (3 person-months)

15. The specialist will support the research undertaken by the international expert in sericulture, agroindustry, and nontimber forest products and the international expert on quality control management networks and training to review major agroindustry products for commercial release by producers in the four provinces. The specialist will also support the development of training manuals on quality control processes.

6. Wood Products Quality Control Specialist (3 person-months)

16. The specialist will support the research on quality control procedures and wood drying techniques developed by the international expert on wood processing, and will also work with the international expert on quality control management networks and training to develop training material for utilization by the vocational training specialist in the pilot areas. The specialist will also assist in the documentation of appropriate quality control processes for submission to the technical committee.

7. Water, Hygiene, and Sanitation Specialist (3 person-months)

17. The specialist will be responsible for developing outreach and demonstration programs in poor pilot areas on awareness of hygiene and the use of clean water and of wastewater collection and filtering devices. The specialist will develop manuals for utilization in vocational training in the provincial pilot areas. Translation and proficiency in English are a requirement.

**8. Vocational Training, Methods, and Material Design Specialist
(6 person-months)**

18. The specialist will develop the training curriculum and training methods with a group of trainers in consultation with the international and domestic experts. This will also ensure the development of a train-the-trainers program. The training modules will be targeted at poor producers, including minority area producers, and will incorporate design elements that will facilitate knowledge absorption through visual, audio, and relevant training methodologies. Training will be targeted to poor area producers and government sector specialists. Private sector and training material developed under the TA will be placed with provincial authorities as well as the National University of Laos for further utilization by trainers in new projects. Translation and proficiency in English are a requirement.

REVISED INSTITUTIONAL STRUCTURE FOR STANDARD-SETTING IN THE LAO PDR

A. Background

1. The World Trade Organization (WTO) has made a clear requirement for all member and acceding countries to upgrade their trade and commercial regulatory frameworks to ensure that products traded internationally conform to a harmonized regime of international standards¹ and technical regulations. Consequently, developing country standards bodies now need to consider what evolving international rules² are most critical to their national interest in order to facilitate and maintain access to export markets.

2. Many developing countries and economies in transition have strengthened the role of their national standards body in order to improve market access for exports as well as facilitate industry integration into global value chains. For example, Central American countries have encouraged their national standards bodies to integrate standards upgrading strategies with economic policy objectives on productivity and trade. In Poland, the national standards body has worked with the domestic private sector and relevant line ministries, to identify and implement international standards that have facilitated local company integration in the production and marketing arrangements of multinational corporations.

3. The purpose of the national standards regulatory framework is to ensure a "standard for a standard" and thus avoid unnecessary or inappropriate regulatory guidelines. A national standards regulatory framework consists of the following: (i) standards developed by the relevant government agency in close cooperation with the line ministries, trade associations, research institutes, consumer associations, and international bodies such as the International Organization for Standardization (ISO); (ii) the conformity assessment infrastructure, which is the testing, accreditation, and certification system; and (iii) audit and inspection. The national standards regulatory framework is supported by laws and regulations in the area of legal metrology as well as environment, consumer and industrial safety, and trademark and intellectual property rights. Standards may be voluntary or mandatory (health, environment, safety) and are supported by technical regulations or codes of practice.³ Voluntary standards are driven by the private sector and guided by government policies. All trading economies have a national standards regulatory framework.⁴

¹ The Organisation for Economic Co-operation and Development (OECD) estimates that up to 80% of world trade is affected by standards and by their rapid evolution. OECD. 1999. Regulatory Reform and International Standardization. TD/TC/WP (98) 36. January.

² The most accessible mechanism for upgrading a developing country's standards regulatory framework has been to improve information exchange between the national standards body and the International Organization for Standardization (ISO) in order to adopt internationally approved standards and monitor their consistent implementation by national government ministries and the private sector.

³ The OECD has defined a standard as "a document, approved by a recognized body that provides for common and repeated use, rules, guidelines or characteristics for products or related processes and production methods." OECD, Regulatory Reform and International Standardization, TD/TC/WP (98) 36, January 1999. A technical regulation may rise to the level of a standard if its characteristics are recognized by expert consensus and its use is consistent.

⁴ Post-World War II OECD economies recognized the importance of harmonized standards to the development of their private sector—specifically to facilitate consistency of imported inputs for improved productivity in manufacturing plants. The ISO was established in 1947 as a federation of national standards bodies, to promote standardization.

B. Revised Institutional Structure for Lao PDR National Standardization

4. During the small-scale technical assistance (SSTA), public-private sector standards workshops revised and developed the organization chart for the standardization process. Post-workshop discussions with Science, Technology and Environment Agency (STEA) and Ministry of Industry and Handicraft (MIH), as well as with the private sector, confirmed stakeholder commitment to establish the steering and technical committee structure. The terms of reference for the steering committee on handicraft and textile were developed and agreed, and the committee structure was implemented, by end-August 2004.

5. The model is based on that practiced in Singapore for more than 30 years. Members in the workshop considered the existing National Committee for Management of Standards and Quality (NCMSQ) as the apex, equivalent to the proposed Standards Council, in the new organization structure. Based on feedback from the workshop, the various steering committees will report to the NCMSQ. The workshop also recommended to upgrade Prime Minister's Decree No. 85 to a law incorporating the new features of the standardization infrastructure. This will demonstrate the commitment of the Lao PDR to aligning its standardization infrastructure to international practice.

1. Institutional Framework

a. Standards Council

6. The Standards Council formulates the strategies and direction for the Lao PDR national standardization program. It is positioned at the apex of the standardization process and its role entails the highest level of strategic decision-making. To this end, it is recommended that its members should be nominated from senior decision makers of enterprises at Chief Executive Officer (CEO) level and from at least director generals from the public sector. Membership should also include the president of Lao National chamber of Commerce and Industry (LNCCI), dean of engineering or science of National University of Laos, and chairpersons of all standards steering committees, the last category of membership being provided for in the steering committee terms of reference. Given the revised membership to reflect the high level of representatives, it is appropriate to invite the president of STEA to be the chairperson of the Standards Council (see proposed structure in Figure A4: Revised Standards Organization Structure for the Lao PDR). It is envisaged that standardization will be much more efficient in terms of approving standards in a shorter period.

b. Steering Committees

7. At the steering committee level, members will have a broad business and strategic view on the industry sector in which product/process standardization takes place. Members have to ensure the draft standards submitted by technical committees are not biased toward certain commercial products or processes. The governance process is carried out by public consultation of draft standards prior to publication. It is recommended that the chairperson of the steering committee be a senior management member from the industry sector or a director general of the relevant ministry. The terms of reference for the steering committee of handicraft and textile sector are also applicable to steering committees of other industry sectors.

c. Technical Committees

8. In accordance with the hierarchy of the revised standardization organization and the terms of reference of steering committees, the SSTA agreed the technical committees are the core operating units in deliberating the contents and drafting the text of standards. Members are mainly experts who have domain knowledge in the specific field considered for standardization. Domain knowledge in this case refers to product/process technology, user requirements, and benchmarking in deciding the product/process attributes to be included in a standard. A technical committee may form an ad hoc work group to address certain aspects of the standard under drafting.

9. The SSTA determined in stakeholder workshops that standardization for products and processes is meaningful to the extent that quality, acceptable to customers and achievable in production, is specified in standards. Standardization at the industry or enterprise level should address processes that lead to establishing the pertinent standards. Standardization is a tool, not the end product, in enhancing the competitiveness of industry. Capacity building for the particular industry sector in terms of technology upgrading, supply chain management, quality management, and human resources/skills development is essential in achieving quality product and process standards commensurate with international benchmarks.

2. Roles of Science, Technology and Environment Agency

a. National Standards Body of the Lao PDR

10. The SSTA confirmed that STEA would continue to play its role as the national standards authority. It is responsible for establishing and publishing Lao PDR standards and for representing the Lao PDR in regional and international standards activities. It will also promote the alignment of national standards to international standards, wherever applicable, and ensure transparency in the standardization process and conformity assessment to facilitate Lao PDR exports and product competitiveness. STEA will also continue to play its role as the secretariat for all levels of standardization committees.

b. Certification/Inspection vs Accreditation Service

11. Currently the Standards and Quality Division of STEA conducts certification and inspection for certain categories of products. However, STEA is expected to introduce an accreditation service in line with international practice. Having certification/inspection and accreditation within the same ministry will give rise to conflicts of interest. It is recommended that STEA consider transferring the operation to MIH in due course when it will take charge of accreditation for certification/inspection bodies.

3. Role of Line Ministries

12. Complementing the administrative tasks of STEA, the SSTA stakeholder workshops determined that line ministries (Ministry of Agriculture and Forestry [MAF], MIH, Ministry of Commerce [MOC], Ministry of Health [MOH], etc.) are in a position to discharge their respective responsibilities in inputting technical contents of products and services standardization through working with private sector. Also under the current arrangement, line ministries are responsible for approving members in steering committee for products and services under the purview of the ministry.

13. At present, the Centre for Industry Research and Development [CIRD] of MIH is accepting second-party inspection reports based on witness testing at laboratory of the manufacturer. In the absence of calibration capability in the Lao PDR, such practices should only be considered temporary, pending the setting up of metrology facilities in a new building.

4. Roles of Lao PDR Industry Associations

14. The SSTA determined, together with the private sector and Government, the importance of assigning effective membership from both private and public sectors, at all levels of the standardization organization. The credibility of voluntary standards hinges on the private sector playing a pivotal role and taking ownership of the standardization process. Industry associations play a key role, in partnership with government agencies, in driving the Lao PDR's standardization work. Such roles could include coordination of training in trade skills, quality control, and basic concepts of standardization to supervisors and middle managers of enterprises. This view was supported by the president of LNCCI in a workshop meeting with the SSTA experts.

5. Governance Structure of the Steering Committee on Handicraft and Textile

15. The following terms of reference for the steering committee within MIH was adopted at the SSTA workshops.

a. Reporting structure

16. The steering committee (handicraft and textile) will report to the Standards Council of the Lao PDR.

b. Membership

17. Nominated members of the steering committee (handicraft and textile) will be individuals who understand the general technical requirements of pertinent standards and who possess broad and strategic views of the handicraft business in the Lao PDR

18. The Chairperson and members of the steering committee will be nominated by the Minister of MIH upon recommendation of the Cabinet of MIH. Representatives will be submitted by the following organizations.

(i)	MIH/Handicraft	1 member
(ii)	MIH/CIRD	1 member
(iii)	LNCCI	1 member
(iv)	Lao Handicraft Group	1 member
(v)	MAF	1 member
(vi)	MOC	1 member
(vii)	STEA	1 member
(viii)	Sericulture Centre	1 member
(ix)	National University of Laos	1 member
(x)	Chairpersons of technical committees set up by the steering committee (handicraft and textile)	

c. Responsibilities of the Steering Committee (Handicraft and Textile)

19. The responsibilities of the steering committee are as follows:

- (i) Review and endorse first draft standards submitted from technical committees.
- (ii) Invite public comments on draft standards (period: 3 months) and feedback to secretariat.
- (iii) Secretariat works with pertinent technical committee to evaluate public comments and where appropriate, to update the contents of the draft standards and resubmit for approval by the steering committee.
- (iv) Endorse updated draft standard and submit to Standards Council for approval as a Lao PDR standard.
- (v) Formulate standards requirements of the handicraft and textile industry in the Lao PDR.
- (vi) Set up new technical committees and approve membership therein for deliberating and drafting standards of industry products identified by the steering committee.
- (vii) Liaise with the Conformity Assessment Division of STEA on certification of companies in the handicraft and textile industry sector.
- (viii) Identify training needs of the handicraft and textile industry in respect of skills, technology, and quality management and propose resources for training with a view to enhance the productivity and competitiveness of the industry sector and industry association.
- (ix) Liaise with experts of international funding agencies on projects pertaining to handicraft and textile industry sector.
- (x) The secretariat of STEA will provide secretariat service to the steering committees.

d. Responsibilities of Committee Members

20. The following are the responsibilities of the committee members. Members shall:

- (i) Discharge duties personally.
- (ii) Attend meetings regularly.
- (iii) Contribute ideas proactively.
- (iv) Communicate views between nominating organizations and committee.
- (v) Recognize that standards are produced and published in the public interest.

e. Responsibilities of Committee Chairperson

21. The following are the responsibilities of the committee chairperson:

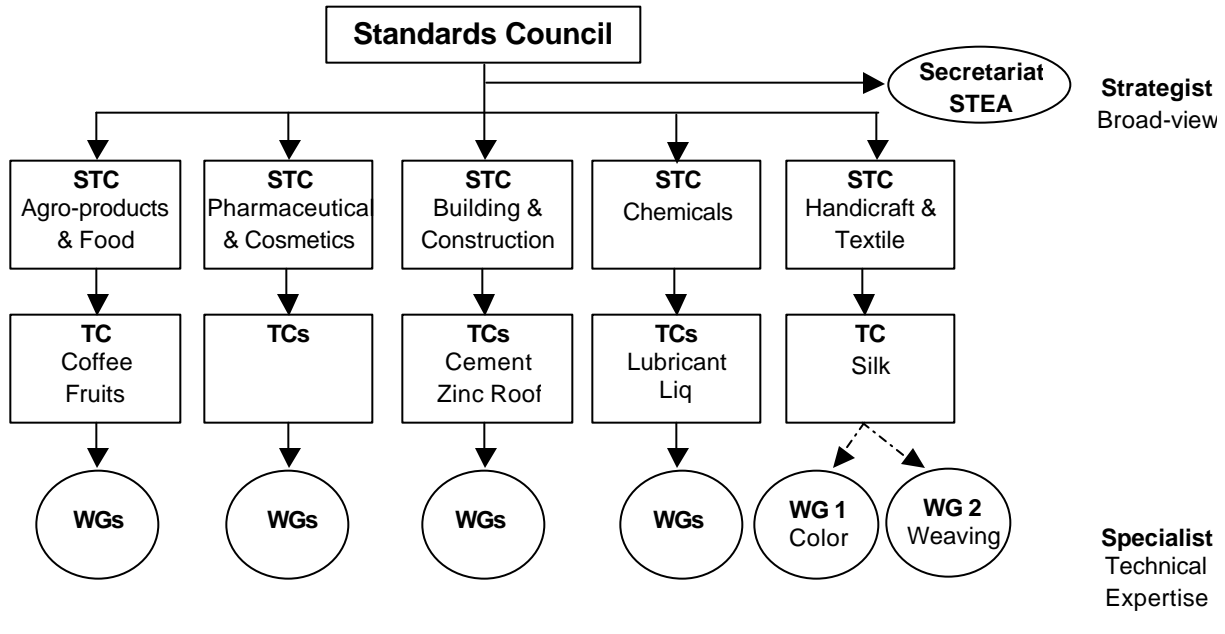
- (i) Build rapport between the members of his committee so that discussions can take place in an atmosphere of trust.
- (ii) Guide and control discussions with the object of reaching consensus in a timely manner.
- (iii) Exercise judgment without bias (particularly as some committee decisions have financial and legal consequences).
- (iv) Act as a spokesperson for the committee and liaison person with other committees.
- (v) Be a member of the Standards Council.

f. Responsibilities of Secretariat

22. The following are the responsibilities of the secretariat:

- (i) Record and maintain minutes of meetings and correspondence files.
- (ii) Schedule committee meetings in consultation with respective chairperson.
- (iii) Serves as the repository for standards documents.
- (iv) Assign numbers to and publish Lao PDR standards.
- (v) Act as the national liaison body for international standards organizations.
- (vi) Ensure consistent format of draft Lao PDR standards prior to publication.
- (vii) Advise on review of Lao PDR standards (5-year review cycle in principle).

Figure A4: Revised Standards Organization Structure for the Lao PDR



Legend:

Lao PDR – Lao People’s Democratic Republic, STC – Steering Committee, STEA – Science, Technology and Environment Agency, TC – Technical Committee, WG – Working Group (project basis).