

Non-Tariff Measures (NTMs) Faced by Exporters of Lao PDR: A Field Survey Report

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Preface

Lao People's Democratic Republic (Lao PDR) is one of the fastest growing economies in Southeast Asia. Given its unique geographical position, the country has been transforming gradually from a closed economy into a more open and private-led market economy. The liberalized trade policy in Lao PDR includes improvement in transparency, reduction of Non-Tariff Barriers (NTBs) and introduction of trade legislation in line with the principles of the World Trade Organization (WTO) and Association of Southeast Asian Nations (ASEAN) agreements.

This study provides a comparative overview of the landscape of Non-Tariff Measures (NTMs) affecting selected eight Lao products for exports. It attempts to identify regulatory hurdles and other NTMs and related border costs that hamper the ability of the Lao PDR to reap the gains of deeper trade integration. In other words, this study seeks to gain a better understanding of the barriers faced by Lao PDR's exporters. The study has been done by interviewing about 60 Lao exporters nationwide and a number of shipping companies. In addition to the interview, two consultative workshops were held in Vientiane capital with the public and private stakeholders prior the field work in April 2015 and at the end of August 2016 to validate the findings. Besides, pilot survey was also carried out to revalidate the questionnaire survey appropriately.

The field survey was commissioned to the Enterprise & Development Consultants Co., Ltd (EDC) – a local private consulting company in Laos, while the design of the questionnaire, analysis of the key findings and writing of the study Report has been done by a research team, headed by Dr Prabir De, Professor, Research and Information System for Developing Countries (RIS) and Head, ASEAN - India Centre (AIC), New Delhi.

We would like to express our sincere thanks to the management of Department of Import and Export (DIMEX) in the Ministry of Industry and Commerce of Lao PDR and the World Bank team for their guidance and support along the study. We would also like to acknowledge the support of the Provincial Department of Industry and Commerce in all provinces where the field work was conducted for facilitating our field work. Finally, our special thanks to Mr. Vangchai Vang – Deputy Director, Import and Export Management Division (DIMEX), Mr. Vilavong Soutthanilaxay - DIMEX and Mr. Morxeng Mouanhiabee - NTM coordinator (DIMEX) for their excellent contribution of ideas, information and continued support to EDC Team, without which the study would not have been completed.

Views expressed in this Report are those of the EDC and not the views of the Department of Import and Export (DIMEX) in the Ministry of Industry and Commerce of Lao PDR and the World Bank. Usual disclaimers apply.

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List of Abbreviations

ADB	Asian Development Bank
AIC	ASEAN - India Centre
AK	Korean Tax Exemption Form
AQSIQ	General Administration of Quality Supervision, Inspection and Quarantines of China
ASEAN	Association of Southeast Asian Nations
ATIGA	ASEAN Trade in Goods Agreement
ATR	ASEAN Trade Repository
BPA	Business Process Analysis
CAP	Conformity Assessment Procedures
COO	Certificate of Origin
DIMEX	Department of Import and Export
DOI	Department of Industry
DOIC	Provincial Department of Industry and Commerce
EDC	Enterprise & Development Consultants Co., Ltd
EDI	Electronic Data Interchange
EU	European Union
FDI	Foreign Direct Investment
GDP	Gross Domestic Products
GRP	Good regulatory practice
GSP	Generalized Scheme of Preference
hrs	Hours
IMF DOTS	International Monetary Fund Direction of Trade Statistics
ISPM	International Standards for Phyto-sanitary measures
ITC	International Trade Center
km	Kilometer
Lao PDR	Lao People's Democratic Republic
LCA	Lao Coffee Association

LFA	Lao Furniture Association	
LNCCI	Lao National Chamber of Commerce and Industry	
MA	Market access	
MAF	Ministry of Agriculture and Forestry	
MRA	Mutual Recognition Agreement	
MRL	Maximum residue level	
NTB	Non-Tariff Barriers	
NTFPs	Non-timber forest products	
NTM	Non-Tariff Measure	
NTR	National Trade Repositories	
OTRI	Overall trade restrictiveness index	
RCEP	Regional Comprehensive Economic Partnership	
REC	Regional economic communities	
RFP	Request for Proposal	
RIS	Research and Information System for Developing Countries	
SMEs	Small and Medium Enterprises	
SPS	Sanitary and phyto-sanitary	
TBT	Technical barriers to trade	
TDF-2	Second Trade Development Facility	
TEU	Twenty-foot equivalent unit	
TFA	WTO's Trade Facilitation Agreement	
TFS	Trade Facilitation Secretariat	
UML	Unified Modeling Language	
UN	United Nations	
UNCOMTRAL	DE United Nations Commodity Trade Statistics Database	
UNCTAD	United Nations Conference on Trade and Development	
US\$	United States Dollar	
WTO	World Trade Organization	

Executive Summary

Import tariffs have decreased significantly and the importance of non-tariff measures (NTMs) aimed at further reducing international transaction costs has gained more importance in promoting trade across countries. Trade facilitation has, therefore, gained a new high profile across the world. Cutting additional costs by removing NTMs and attaining improved trade facilitation have helped countries in raising trade flows and/or diversifying the exports to newer markets. Simplification of trade processes and procedures along with harmonisation of trade transaction data and documents and easier compliance to standards are thus envisaged as key to improving competitiveness of exports across most of the Asian countries including Lao PDR.

Lao PDR is one of the fastest growing economies in Southeast Asia. Its strategic location trumps its landlockedness. Lao PDR is well located sharing borders with China, Thailand, Vietnam, Cambodia, and Myanmar. Given its unique geographical position, the country has been transforming gradually from a closed economy into a more open and private-led market economy. The liberalized trade policy in Lao PDR includes improvement in transparency, reduction of NTBs and introduction of trade legislation in line with the principles of the World Trade Organization (WTO) and Association of Southeast Asian Nations (ASEAN) agreements. A renewed thrust has been given through trade policy reforms, resulting Lao PDR getting integrated gradually into the world economy through trade agreements, regional or otherwise. Lao PDR is the member of ASEAN and signed the ASEAN Trade in Goods Agreement (ATIGA) in 2010. It is also a member of ongoing Regional Comprehensive Economic Partnership (RCEP) Agreement negotiation. It is the chair of ASEAN in 2016. It became a formal member of the WTO in 2013. Lao PDR is also a member of the WTO's Trade Facilitation Agreement (TFA) and has already ratified. These agreements require profound modifications on tariffs, NTMs, customs reforms, among others.

Lao PDR has witnessed sharp rise in exports 2008 onwards. The biggest challenge is to sustain the benefits from trade by making Lao's exports globally competitive. Increased trade links with neighbouring countries and other trade partners have translated into increased access to better or cheaper imports. Yet, further challenges to market access remain.

This study provides a comparative overview of the landscape of NTMs affecting Lao's exports. It attempts to identify regulatory hurdles and other NTMs and related border costs that hamper the ability of the Lao PDR to reap the gains of deeper trade integration. In other words, this study seeks to gain a better understanding of the barriers faced by Lao PDR's exporters.

To assess the size of NTMs and implications, we have selected eight products, namely, Banana, Coffee, Dried Cassava, Maize, Rice, Rubber, White Charcoal and Wood, all exported by Lao PDR. Although the NTM classification encompasses 16 chapters (A to P), we consider only Sanitary and Phytosanitary (SPS) and Technical Barriers to Trade (TBT), based on United Nations Conference on Trade and Development (UNCTAD) classification. All the eight products have potential for growth, both within the domestic and global markets, but all of them are hindered from doing so as a result of

a number of policy and market based barriers. Interviews with 60 export firms and in addition 5 logistics firms were successfully conducted. This survey was conducted across the country. In addition to interviews with the firms, the relevant agencies were also consulted to obtain information on NTMs.

Major Findings

- The field level data indicate that about 80 percent of Lao exporters have been facing difficulties with NTMs, of which 87 percent are agricultural (SPS) firms and 76 percent are manufacturing (TBT) firms.
- Lao exporters have identified compliance to several SPS and TBT measures, of which (i) labeling requirements (B31) and (ii) inspection requirement (B84) are found as common TBT measures applied by the trade partners of Lao PDR.
- Exports of banana to China, maize to China and Vietnam and Rice to Vietnam involve low documentations, processes and actors, compared to other products. Regulations of these products are fairly liberalized and do not pose high barriers in Lao PDR. However, the entire trade processes have been dealt manually, and online/electronic submission of trade documents is yet to happen in Lao PDR.
- Among the Lao's trade partners, owing to lowest numbers of processes and actors, both Vietnam and China appear to be more trade friendly. In both countries, business process steps and corresponding actors in export are relatively less dispersed.
- While procedural barriers coming from level of documentation has been in the range of low to medium across all the products and partner countries, the same arising from the processes and actors are in the medium to high range, suggesting benefits of low documentation has been neutralized by procedural barriers faced by Lao exporters.
- Rice exporter in Lao PDR has found quarantine requirement (A86) in EU is very restrictive. Otherwise, they do not face much restrictiveness in SPS. Lao exporters of wood products to Vietnam and Thailand have found the certification requirement (B83) is very restrictive. Out of eight products, exporters are of the opinion that they do not face much restrictiveness from SPS and TBT measures except one or two cases. Labeling requirements (B31) and inspection requirement (B84) are the two common TBT measures faced by Lao exporters, which were not identified as restrictive.
- Time at transit country and port (white charcoal, coffee and rice) are found to be much higher than transportation time in Lao PDR. This is true for export of both coffee and rice. Cost of transit per container is found to be much higher than inland haulage charges in exporting countries. Transit port handling charges are abysmally high, thereby making the Lao's export relatively uncompetitive. Transit through Thailand provinces adds further costs to Lao's export.

- Clearance of goods still takes relatively longer time at Lao border posts. Waiting time at land border at Lao side is always very high. Average time required for loading/unloading has also increased a bit across all the products due mainly to the rise in trade volume at Lao border. Time at customs is, therefore, a highly significant barrier to trade when Lao trades with neighbouring countries.
- Transaction time of non-transit goods is appeared to be low, compared to the transit goods. There has been a marginal rise in average time of transportation of goods from warehouse to border between the non-transit products. Road conditions near the land border areas, narrow approach road in particular, have become bad to worse in the last few years, resulting in lengthy travel time from border to warehouse.
- Quality of border infrastructure at both Lao border with Vietnam, China and Thailand is presumed to be responsible for variations in transaction time and cost at border. In general, infrastructure at the border posts is inadequate and services of border agencies including security are not always good.
- In general, satisfaction levels are found to be considerably low in easing many trade- and borderrelated barriers. Respondents in Lao PDR have identified faster handling equipment and vehicle tracking system at the Lao PDR side of the border as major barriers to trade. These perceptions are very similar to what we have seen in cases of other landlocked countries. On the other, majority of respondents in Lao PDR have found telecom facilities, warehouse/parking, documentation and banks as low barriers to trade. Barring corruption and bribery and amenities such as hotel, respondents in Lao PDR are found to be satisfied with all the attributes we have selected in this survey. However, 40 percent of respondents have identified faster handling of goods at the border of partner countries as a major barrier to trade. Besides, 100 percent of respondents have identified corruption in the partner side as average type of barriers to trade in case Lao PDR's export. In view of the respondents, overall, trade barriers have remained low in partner's side while exporting to them or through them.
- When we asked the Lao respondents whether they expect the ease of meeting standards between Lao PDR and its partner countries to increase, decrease or unchanged in the coming three years, the majority of the respondents said that it will increase, thereby indicating high confidence on the rise of export if standards are eased. This study has revealed that 95 percent of firms are of the opinion that export will go up if NTMs and other barriers are removed or reduced. This gives high confidence to undertaking policies that lead to ease the burden of NTMs.

Things to Do to Facilitate Lao Exports

• To facilitate exports, Lao PDR must pursue a phased, focused, and incremental export strategy. This will require additional advisory and preparatory technical assistance, as well as policy reforms. This study recommends that simplification and harmonization of trade processes would be essential in order to transform the trading environment as well as improving the competitiveness of Lao exports. Harmonization of standards among the countries is also vital to eliminate repetitive procedures and practices.

- Enhancing the regulatory environment in goods sector is essential to eliminate unnecessary regulatory divergences that can only restrict the trade flows. Lao PDR shall introduce a regulatory environment that helps facilitate trade.
- Collect and disseminate all SPS and TBT notifications of importing countries among the exporters in a transparent, timely and speedy manner, preferably through digital interfaces. In parallel, strengthening the capacity of exporters on SPS and TBT requirements would be useful in gaining knowledge and boosting confidence.
- Lao PDR has to build infrastructure like testing laboratories, accreditation of testing labs, mechanism for certification of conformity, etc. For example, Lao exporters of wood products to Vietnam and Thailand have found the certification requirement (B83) is very restrictive.
- It is also quite apparent that SMEs are proportionally more vulnerable to NTMs than large companies. Therefore, it is worth logical to carry diagnostic assessment, identify the procedural obstacles and derive actions in more than one dimension to rationalise the NTMs.
- Reduce the transit cost of Lao goods, which has been found much higher than inland haulage charges. Transit port handling charges are abysmally high, thereby making the Lao's export relatively uncompetitive. Transit through Thailand provinces adds further costs to Lao's export. Thailand should allow a fast track transportation of Lao exports. Allowing Lao vehicles to deliver goods at the transit port in Thailand would reduce the transportation costs. Lao PDR has to negotiate a bilateral transit cargo facilitation agreement with Thailand (and also Vietnam) going beyond the usual transit agreement.
- Border infrastructure at Lao PDR side has to be improved. For example, approach road towards border post has to be widened and properly maintained.
- Lengthy documentation and absence of transparent environment make Lao exports uncompetitive. Simplification of documentation is must. Submission of customs documents has to be through digital portal (customs EDI system). It is recommended that Laos may consider setting up its own customs Single Window and later integrate with ASEAN Single Window.
- Facilitating standard-related documents is essential. Exporters in Lao PDR may adapt their products to the regulations in force of the country of destinations. At the same time, it might be difficult financially/technically to adapt their products to the regulations in force of the country of destinations. In the perception of firms, easing the standards or removing the NTMs will lead to increase Lao's export. All the documents should be made available on-line. Online application would save time as well as make the system transparent and faster. Lao PDR shall sign Mutual Recognition Agreement (MRAs) with standard bodies of partner countries, either bilaterally or

through ASEAN regional process. Finally, Lao PDR may consider using international standards for technical regulations.

- Respondents in Lao PDR have identified faster handling equipment and vehicle tracking system at the Lao PDR side of the border as major barriers to trade. Barring corruption and bribery and amenities such as hotel, respondents in Lao PDR are found to be satisfied with all the attributes selected in this survey. Besides, 100 percent of respondents have identified corruption in the partner side as average type of barriers to trade in case of Lao PDR's export.
- National single window and single stop border inspection facilities may be developed in order to (i) augment regional action to harmonize SPS and TBT implementation, (ii) enable mutual recognition of laboratory findings, (iii) refine border risk identification and risk management procedures, and (iv) make pertinent information accessible to all trade regulation agencies.
- Finally, coordination among different ministries, capacity building of officials dealing standards, etc. is needed to boost the export from Lao PDR. Lao PDR government alone cannot build the infrastructure required for facilitating country's export. Therefore, technical assistance, international aid and private sector investments are essential towards improvement of the country's capacity and infrastructure dealing the standards.

Chapter 1: Introduction

UNCTAD defines NTMs as follows: the concept of Non-Tariff Measures (NTMs) is neutral and does not imply a direction of impact. They are defined as "policy measures, other than customs tariffs, that can potentially have an economic effect on international trade in goods, changing quantities traded, or prices or both". Non-tariff barriers (NTBs) are a subset of NTMs (NTM \neq NTB), implying a negative impact on trade. ¹ NTMs do not offer any judgment over legitimacy or lawfulness, and is different from concept of "Procedural Obstacles". NTMs are very diverse and so is their impact on trade. Table 1.1 illustrates NTMs across product stages. NTMs are associated with production stage of a product to its marketing and distribution stage. NTMs can add costs to trade (e.g. standards require information and compliance); it can preclude trade (e.g. prohibitions, stringent requirements, etc.); it can divert trade (e.g. quotas, standards, etc.) and also create trade (e.g. SPS and TBT, which guarantee quality, single those safe, etc.).

(1) Production Stage	 Regulations on the quality or safety of inputs used Follow certain safety processes in production The producer to have Authorizations to produce, or have Certifications for producer (not for the product) Registration
(2) Final Product	 Quality or safety requirements Testing, inspection Authorizations or Certifications needed for the product, Labeling, etc. Traceability information Registration
(3) Post-Production Stage	TransportationStorage and warehousingDistribution
(4) Commercial Transaction and Administration	 Taxes and Quotas Any price limitation Regulations on the mode of payment, financial, etc.

Table 1.1 NTMs across Product Stages

Source: UNCTAD

During the past two decades, import tariffs have decreased significantly and the importance of nontariff measures (NTMs) aimed at further reducing international transaction costs has gained more importance in promoting trade across countries. In other words, tariff has gone down, but not the NTMs (Figure 1.1). The costs associated with completing documentary and other import and export procedures for international trade can account a substantial part of the value of traded goods. Trade facilitation has, therefore, gained a new high profile in the Southeast Asia. Cutting additional costs by removing NTMs and attaining improved trade facilitation have helped countries in raising trade flows and/or diversifying the exports to newer markets–regionally or otherwise. Simplification of trade processes and procedures along with harmonisation of trade transaction data and documents

¹ Refer, for example, UNCTAD (2016)

and easier compliance to standards are thus envisaged as key to improving competitiveness of exports across most of the Asian countries including Lao PDR^2 .

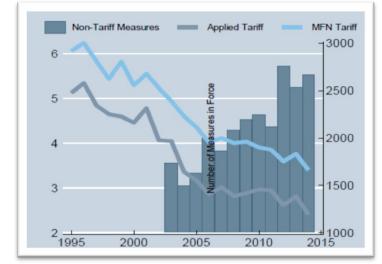


Figure 1.1: Trends in Tariff and Non-Tariff Measures in the World

Source: UNESCAP

Lao PDR is one of the fastest growing economies in Southeast Asia. Its strategic location trumps its landlockedness. Lao PDR is well located sharing borders with China, Thailand, Vietnam, Cambodia, and Myanmar. It acts as a bridge-head between Southeast and East Asia. Given its unique geographical positioning, the country has been transforming gradually from a closed economy into a more open and private-led market economy. The liberalized trade policy in Lao PDR includes improvement in transparency, reduction of NTBs and introduction of trade legislation in line with the principles of the World Trade Organization (WTO) and Association of Southeast Asian Nations (ASEAN) agreements. A renewed thrust has been given through trade policy reforms, resulting Lao PDR getting integrated gradually into the world economy through trade agreements, regional or otherwise.³ For example, Lao PDR is the member of ASEAN and signed the ASEAN Trade in Goods Agreement (ATIGA) in 2010. It is also a member of ongoing Regional Comprehensive Economic Partnership Agreement (RCEP) negotiation. It is the chair of ASEAN in 2016. It became a formal member of the World Trade Organization (WTO) in 2013. Lao PDR is also a member of the WTO's Trade Facilitation Agreement (TFA) and ratified it. All these agreements require profound modifications on tariffs, non-tariff measures, customs reforms, and trade facilitation.

Lao PDR has the potential to become ASEAN's future lifeline. It has made significant progress in poverty alleviation over the past two decades with poverty rates declining from 46 percent in 1992 to 23 percent in 2015. However, the challenge now is to ensure that Lao people benefit in the country's development. Trade has been identified as a national priority to increase country's growth and thereby welfare of the common people. In particular, trade has been identified to be a key engine of economic growth, particularly in smaller economies such as that of Lao PDR, and consequently trade does and should continue to take an increasingly central role in Lao PDR's development strategy.

² Refer, for example, UNESCAP (2014)

³ Refer, for example, ADB (2011), World Bank (2012)

This should be further enhanced, as studies show that countries that include trade a key part of their development strategy have grown at a faster rate than those that have not.⁴

Lao PDR has witnessed sharp rise in exports 2008 onwards (Figure 1.2). The biggest challenge is to sustain the benefits from trade by making Lao's exports globally competitive. Increased trade links with neighbouring countries and other trade partners have translated into increased access to better or cheaper imports. Yet, further challenges to market access remain.⁵

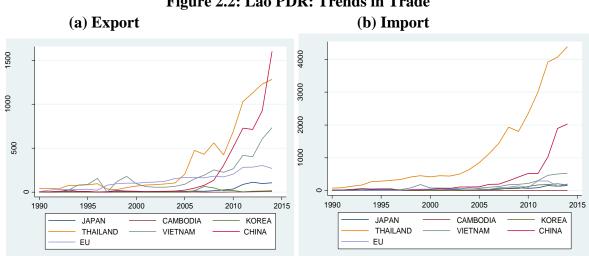


Figure 2.2: Lao PDR: Trends in Trade

Source: Calculated based on IMF DOTS

While economic growth has been fueled largely by its rich natural resources, Lao PDR can also focus on diversifying its export through integrating more closely with its neighbours (World Bank, 2016). Here, competitiveness of Lao products matters. Removal of barriers to trade, not only at home but also in partner countries, may facilitate Lao's exports globally, thereby further adding value to its growing service sector and growth subsequently.

In view of the above, this study provides a comparative overview of the landscape of NTMs affecting Lao's exports. This study attempts to identify regulatory hurdles and other NTMs and related border costs that hamper the ability of the Lao PDR to reap the gains of deeper trade integration. In other words, this study seeks to gain a better understanding of the barriers faced by Lao PDR's exporters.

Specifically, it aims to identify and assess the problems associated with such perceived trade barriers, i.e. whether the problem is the result of non-transparent NTMs on the partner side, or, the NTM is justified but there is a compliance problem on the Lao side. The results of the study would help us drawing appropriate strategies to ease the barriers to trade.

The focus of this study is to assess the extent of barriers faced by Lao's exporting firms in accessing their market and identifying obstacles faced by them in meeting technical requirements and

⁴ Refer, for example, Wold Bank (2012), Higgins and Prowse (2010), to mention a few

⁵ Refer, for example, World Bank (2016).

complying with conformity assessment procedures through a survey of firms in the exporting country for selected products. The key questions posed in the study are as follows:

- (i) How difficult do traders find it to meet the technical requirements and conformity assessment procedures laid down by the importing country?
- (ii) What are the associated problems related to meeting technical requirements and conformity assessment procedures?
- (iii) What are the impediments related to the regulatory framework?
- (iv) What is the expectation regarding the ease of meeting standards and volume of trade in the future?

This study is different from earlier studies on NTMs in the following ways:

First, it focuses on two major import related NTMs, viz, SPS and TBT which have been a concern in Lao PDR.

Second, it considers all categories of technical requirements and conformity assessment procedures laid down by the importing country for sanitary and phyto-sanitary (SPS) and technical barriers to trade (TBT) measures.

Third, it considers only selected products. The purpose of selecting a few products was to get an indepth understanding of the NTM itself and the manner in which it was applied. This approach is also useful in examining the NTM in the context of the larger regulatory framework of the country.

Fourth, it examines the NTMs based on a survey which focuses on collecting qualitative and quantitative information.

Fifth, the survey is designed to collect information related to the NTM on a particular trade flow of a specific product in the exporting and importing country in order to validate the perceptions of partner countries.

This study (Survey of External Non-Tariff Measures in Lao PDR) was commissioned by the Department of Import and Export (DIMEX), Ministry of Industry and Commerce as part of its Second Trade Development Facility (TDF-2)⁶ focusing on "mainstreaming aid for trade". Rest part of the Report is organised as follows. Chapter 2 presents the literature survey and stylized facts. Selection of products and selection of samples are discussed in Chapter 3. Chapter 4 analyses trade processes of Lao exports. Chapter 5 analyses the NTM restrictiveness faced by Lao exporters and decomposition of such restrictiveness including the procedural obstacles and associated problems, whereas the border arrangement, transaction time and cost are discussed in Chapter 6. Chapter 7 discusses the perception on future environment in general and attempts to answer the question

⁶ TDF- 2 is a multi-donor program financed by Australia, the European Union, Germany, Ireland and the World Bank focusing on improving trade and private sector development in Lao PDR. TDF-2 has three main components: (a) trade facilitation, trade policy and regulations; (b) diversification and competitiveness; and, (c) mainstreaming aid for trade.

whether or not ease of meeting standards would lead to rise in Lao's export. Conclusions and recommendations are drawn in Chapter 8.

Chapter 2: Literature Survey and Stylized Facts

Barriers to international trade in the form of tariffs have declined in the post-WTO period, while there has been an increasing use of non-tariff measures (NTMs) worldwide. NTMs are policy instruments which are applied by countries on both export and import goods. "Official Measures" requirements have been enacted within a legal text or regulation issued officially by a country.

Studies have classified NTMs into different categories either based on import and export or at the place of implementation. Import measures are categorized into technical (TBT and SPS and pre-shipment inspection) measures and non-technical measures, and export measures include export related measures such as export subsidies. Measures are organized in various chapters according to their type. The chapters are labelled with letters from A to P (Table 2.1). NTMs are of several types such as price controls measures, quantity restrictions, subsidies on exported goods, product quality standards, etc. (see Box 2.1).

	Technical	A Sanitary and phyto-sanitary (SPS)				
	Measures	B Technical barriers to trade TBT				
		C Pre-shipment inspection and other formalities				
		D Contingent trade-protective measures				
		E Non-automatic licenses, quotas, prohibitions, Quantity-				
		control measures other than for SPS or TBT reasons				
Import measures		F Price-control measures, taxes and charges				
		G Financial measures				
	Non-Technical	H Measures affecting competition				
	Measures	I Trade-related Investment measures				
		J Distribution Restrictions				
		K Restrictions on Post-Sales Services				
		L Subsidies				
		M Government Procurement restrictions				
		N Intellectual Property				
		O Rules Of Origin				
Export measures		P Export-related Measures				

Table 2.1: NTM Classifications

Source: UNCTAD (2012)

Staiger (2012) classified NTMs according to the place of implementation- at the border and behind-the-border. Measures applied at border are further distinguished between imports (for instance, import quotas, import ban) and exports (for instance, export taxes, quotas or ban). Behind-the-border measures are classified into domestic taxes, subsidies and product quality standards. TBT (Technical barriers to trade) / SPS (Sanitary and phyto-sanitary) measures are the most frequently encountered NTMs according to data collected from official sources (WTO, 2012).

Box 2.1. What are SPS and TBT?

Chapter A of UNCTAD's NTM classification deals with sanitary and phytosanitary (SPS) measures. It gathers measures such as restriction for substances and ensuring food safety, and those for preventing dissemination of disease or pests. Chapter A also includes all conformity-assessment measures related to food safety, such as certification, testing and inspection, and quarantine. Chapter B collects technical measures, also called TBT. It refers to measures such as labelling, standards on technical specifications and quality requirements, and other measures protecting the environment. As in the case for SPS, chapter B also includes all conformity-assessment measures related to technical requirements, such as certification, testing and inspection. Measures that are applied to protect human or animal life from risks arising from additives, contaminants, toxins or disease-causing organisms in their food; to protect human life from plant- or animal-carried diseases; to protect animal or plant life from pests, diseases, or disease-causing organisms; to prevent or limit other damage to a country from the entry, establishment or spread of pests; and to protect biodiversity. These include measures taken to protect the health of fish and wild fauna, as well as of forests and wild flora. Note that measures for environmental protection (other than as defined above), to protect consumer interests, or for the welfare of animals are not covered by SPS. Measures refer to technical regulations, and procedures for assessment of conformity with technical regulations and standards, excluding measures covered by the SPS Agreement. A technical regulation is a document which lays down product characteristics or their related processes and production methods, including the applicable administrative provisions, with which compliance is mandatory. It may also include or deal exclusively with terminology, symbols, packaging, marking or labeling requirements as they apply to a product, process or production method. A conformity assessment procedure is any procedure used, directly or indirectly, to determine that relevant requirements in technical regulations or standards are fulfilled; it may include, inter alia, procedures for sampling, testing and inspection; evaluation, verification and assurance of conformity; registration, accreditation and approval as well as their combinations. Measures classified under B1 through B7 are technical regulations while those under B8 are their conformity assessment procedures. Among the technical regulations, those in B4 are related to production processes, while others are applied directly to products

Source: UN (2013)

NTMs are used to correct market failures caused by externalities and information asymmetry between producers and consumers of goods. Cadot et. al (2013) elaborated on this using the cost-benefit analysis of the effects of an NTM. A major assumption of this partial equilibrium framework is that consumption of an imported good involves a negative externality. A negative externality would occur when a consumer's disutility depends on the consumption of a product manufactured by a producer, who does not take into account the disutility for the consumer into account. For instance, the use of antibiotics in production of farmed shrimps poses a risk to human health and the environment (Cadot et. al, 2013). Suppose the

government decides to address this market failure by imposing a technical regulation - setting the microbiological limit for use of antibiotics in shrimps. An NTM compliance cost would also be associated with the imposition of this technical regulation on shrimps which would raise the production costs of shrimps. This would eventually lead to a reduction in consumer surplus through higher price and lower consumption, a reduction in negative externality through reduced risk and a reduction in negative externality through lower consumption.

The existing literature points out that the main motives for using non-tariff measures can be either to correct market failures or to meet non-economic objectives, such as protection of public health. However, sometimes NTMs are also implemented by government for protectionist purposes. As protectionist measures, these policy instruments (NTMs) do not address market failures (World Bank, 2012; Fisher and Serra, 2000). In this regard, the legitimacy of a particular non-tariff barrier being imposed comes into question. However, this report does not delve into aspects of legitimacy of an NTM or determine the protectionist objective of an NTM.

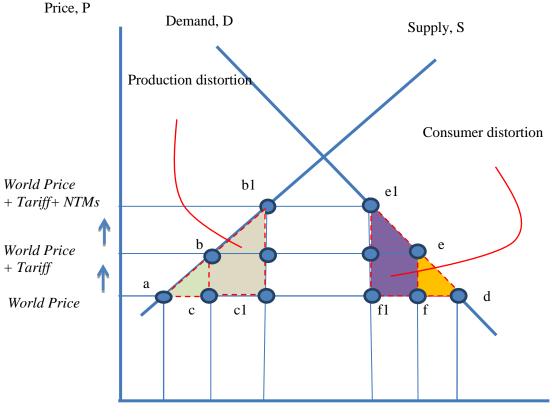


Figure 2.1: NTMs and Welfare

Quantity, Q

Barriers to trade in the form of NTMs cause huge loss of economic welfare. Therefore, improvement of trade facilitation through rationalization or removal of NTMs may increase the net economic welfare. As illustrated in Figure 2.1, production loss goes up from *abc* to ab_1c_1 and consumer loss too goes up from *def* to de_1f_1 . A move to removal of NTMs eliminates tariff barrier but not necessarily other border barriers.

The use of NTMs varies greatly across economic sectors, both for technical and economic reasons. While some products, such as agriculture, footwear, wood and motor vehicles, are highly regulated because of consumer and environmental protection and technical standards, some other goods, such as minerals, are by their nature relatively less subject to laws and regulation (UNCTAD, 2013).

The importance of NTMs is due not only to their incidence but also to their actual impact on international trade. The measurement of the effect of NTMs on trade is a complex task which requires specific quantitative tools and availability of data. Some of the most widely used indicators to measure the effect of NTMs on trade are those developed by Kee, Nicita and Olarreaga (2009) and implemented by the World Bank in its global monitoring reports. The indicators referred to are the overall trade restrictiveness index (OTRI) and market access OTRI (MA-OTRI). These indicators provide the overall level of restrictiveness of the trade policies imposed (OTRI) or faced (MA-OTRI) by a country and are based on the estimation of ad valorem equivalents of NTMs.

NTM is different from trade facilitation, even if both use the word "measure". Measures are 30+ different provisions contained in the TFA. If applied, it would permit country to solve number of issues. It talks about 'Issues to solve' and undertakes commitments. Trade facilitation talks about improving border procedures, efficiency in clearing, etc. In case of NTM, measures are legal requirements to be met. Here, we deal with product characteristics, production requirements, connected taxes or services, etc. NTMs go beyond the border. However, the requirements for NTMs sometimes are to be checked at customs at the time of crossing. Trade facilitation talks about procedures for control of conformity assessment of SPS and TBT, whereas NTMs enforce conformity assessment of SPS and TBT through checks and inspection. However, trade facilitation can help reduce cost of NTMs. For example, setting up Single Window, including IT interagency connection, which facilitate access to information, generate transparency and predictability.

Although Lao PDR applies at least one NTM for most of the HS six-digit lines (4,100 products), only about an average of 2.58 NTMs are applied for one-digit level (UNCTAD, 2013). Although these statistics provide valuable information, such large differences at the most disaggregated level should not be considered as definitive proof of overregulated import regimes. These differences could also be due to data availability and collection procedures. In particular, differences may be related to whether the document setting out the regulation is detailed enough to distinguish between several types of similar NTMs, in which case NTMs are generally classified only under broader codes. Differences at the one-digit level often reflect more real differences in the use of regulatory measures for imports and thus can provide a better assessment of the regulatory regime.

This study seeks to examine the concerns of businesses with respect to the imposition of nontariff measures particularly related to TBT and SPS measures. While businesses may find it difficult to meet the regulatory requirements of importing countries, UNCTAD (2010) introduced the concept of "procedural obstacles". Procedural obstacles are defined as issues related to the process of application of an NTM, rather than to the measure itself. Evidences suggest that procedural obstacles are the main source of difficulties for exporting firms from developing countries (WTO, 2012). Procedural obstacles could be related to arbitrary behavior of officials, delays in testing, inadequate information, etc. Within these, non-transparent practice of inadequate information is an important aspect. Also, the fact that SPS and TBT measures are often opaque and complex, compound these challenges.

The importance of transparency of non-tariff measures has been discussed by several authors. Geraats (2002), Wolfe (2003), Collins-Williams (2010), Wolfe (2010), and Helble *et al.* (2009) provided a number of useful ideas for approaching the task of assessing the transparency of NTMs. At a conceptual level, transparency can be defined as the absence of information asymmetry, a situation where policy makers and relevant economic agents have the same information. Geraats (2002) identified the stages of policy-making, which can be adapted to an NTM context. Transparency can be applied to the different stages of policy making—political, economic, procedural, policy and operational. Hence, introducing more transparency in NTMs is likely to be a difficult undertaking because of its application to a challenging process of policy-making.

The ITC Business surveys are large company-level surveys that are undertaken to review the perspectives of the business community on NTMs and their effects (ITC 2011, 2012, 2014). The surveys are undertaken among companies exporting and importing goods that face burdensome NTMs applied by the partner country and the reasons for the same. ITC uses the UNCTAD classification of NTMs and has defined NTM survey sectors with more than 2 percent share in total exports of a country. These surveys have been helpful in providing country-wise insights into the cases involving NTMs and procedural faced by the companies in exporting and importing goods. Till 2015, ITC has covered NTM surveys on Bangladesh, Burkina Faso, Colombia, Jordon, Kenya, Malawi, Mali, Mauritius, Morocco, Peru, Sri Lanka and Thailand.

Since governments all over the world tackle the problems of addressing information problems that arise while balancing trade restrictiveness and achievement of policy objectives, they seek to follow the best practice in this regulatory process. Members cooperate to address information problems related to SPS and TBT measures in at least two ways: at the multilateral level, through discussions in the TBT and SPS committees; by using international standards as a basis for regulation; and, more generally, by using and disseminating good regulatory practices (GRPs) and engaging in regulatory cooperation.

Countries cooperate on TBT/SPS measures to address problems that arise when balancing trade restrictiveness and the achievement of policy objectives (WTO, 2012). There have been studies to explore the extent to which intra-regional trade flows for regional economic communities (REC) are constrained by restrictive NTMs especially in Sub-Saharan Africa

(Keane et. al, 2010; Viljoean, 2011). The COMESA-EAC-SADC⁷ Tripartite study looked at improving coordination and harmonization of the various regional integration programmes of its member REC's. These regional integration programmes focus on expanding and integrating trade and include the establishment of Free Trade Areas, Custom Unions, Monetary Unions and Common Markets, as well as infrastructure development projects. The process of fostering closer regional integration means developing new policy tools. This includes development of regional NTMs to increase intra-regional trade flows, such as harmonized standards to facilitate trade (Keane et. al, 2010).

What follows if liberalization reduces trading costs, the "Liberalization" for NTM means harmonization, mutual recognition and cooperation in Conformity Assessment Procedures (CAP).

With regard to standards harmonization in Asia, Pettman (2013) looked at how regional grouping is addressing technical barriers to trade as part of ASEAN's trade integration agenda and what it should do going beyond 2015. He pointed out that the convergence of technical regulations and effective application of MRAs (mutual recognition agreements) for conformity assessment results is the key to ensure the realization of a single market in ASEAN.

A measure comes out of Regulation. Regulation is set by law, decree, etc., issued officially by a government. A measure appears out of mandatory trade control requirement enacted through such an official regulation, where one official regulation could bear several NTMs. In case of Lao PDR, most measures are issued directly from Ministries, and these are not available publicly as laws are kept within issues departments, and in many cases we find redundancy and overlapping of requirements.

In the context of Lao PDR, studies that highlight the impediments related to meeting standards while trading with each other are very few. Based on the primary data, the World Bank – EDC (2005) study identified barriers faced by Lao PDR exporters in five products, namely, (i) garment, (ii) wood and woods product, (iii) coffee, (iv) textile handicraft, and (v) non-timber forest products (NTFPs) and other agricultural products. The identified constraints were mostly internal non-tariff barriers such as the transport costs due to monopoly of transport in Thailand, third country transit costs and paper works in Thailand, documentations, customs procedures and border formalities in Lao PDR and in Thailand, absence of infrastructures, absence of decentralized decision-making for processing of papers (local authorities no power to issue Certificate of Origin), absence of testing and standards agencies at the sub-national level, etc.

In a recent study, the World Bank (2016) has reviewed the NMTs affecting imports in Lao PDR. This study has provided a comparative overview with respect to other countries in the

⁷ Common Market for Eastern and Southern Africa, East Africa Community and Southern African Development Community tripartite is an umbrella organization consisting of three of Africa's Regional Economic Communities (REC).

region and with the situation before WTO accession of Lao PDR. Additionally, this study has also identified current lingering regulatory hurdles that hamper the ability of the country to reap the gains of a deeper integration with the global economy. What matters for Lao PDR, as this study has indicated, is to remove the cumbersome and costly import license scheme that raises the time and costs to bring products into the market.

While these studies do provide important information on non-tariff barriers/measures faced by Lao PDR in integrating to the world, they are based either on qualitative evidence or an examination of the NTM's itself and the regulatory framework within which the NTM is applied. To find out the NTMs faced by Lao exporters, one has to investigate all regulations which are currently applied and affecting trade. Some of the measures would be official and mandatory, and detailed and specific.

Procedural obstacle is associated with a NTM measure. However, none of the studies have looked into the procedural obstacles faced by exporters in Lao PDR and corresponding NTMs. Therefore, this study does a value addition in terms of identifying the barriers to trade in the form of NTMs and providing policy options to deal with such barriers. In particular, this study looks at SPS and TBT measures that exporters from Lao PDR have been facing along with the procedural obstacles while exporting to major trade partners in selected agricultural and non-agricultural products.

Chapter 3: Selection of Products, Samples, and the Survey

Lao PDR has liberalized its trade through extensive unilateral tariff reduction with over half of its tariffs under 5 percent. Its tariff regime is even more liberal under ASEAN, which accounts for most of the country's trade. Under ASEAN, over 70 percent of its tariff lines are 0 and 25 percent are under 5 percent. This opening up has served Lao PDR well, with recorded trade increasing to 75 percent of GDP in recent years⁸. As in many other countries, non-tariff measures (NTMs) now form a more significant barrier to trade than tariffs. Several ministries are involved in establishing and implementing regulations that may have a trade impact and frequently new regulations are developed with very little regard to the negative impact they may have on the trading community.

Lao PDR is already engaged in modest streamlining of its stock of NTMs as part of its ASEAN commitments. At the AEC Council Retreat in October 2011 in Malaysia, ministers agreed to address trade barriers that impede intra-ASEAN trade by developing a mechanism for capturing all NTMs (through ASEAN Trade Repository), identifying NTBs and involving the business community to address specific bottlenecks. ATIGA implementation will be enhanced through the establishment of an ASEAN Trade Repository (ATR) and harmonization of National Trade Repositories (NTRs). Development of regional capacity to classify and notify NTMs is being implemented across the region. The intention is to support the implementation of the ATIGA, with particular focus on enhanced transparency and NTMs. The identification, classification and notification of NTMs will assist businesses, traders and governments to deal with such measures, prevent or resolve trade barriers, and foster regional integration. Towards setting an ATR, a new website, based on i-TIP software developed by the WTO (http://asean.i-tip.org/) has been launched recently, which provides comprehensive information on NTMs for the ten ASEAN countries. The collected NTMs were identified from each country's official sources of trade regulations, and classified according to the NTM classification system.

Lao PDR has made significant progress unilaterally. It has moved ahead of many other ASEAN countries by collecting all regulations and procedures that are involved in the trade of goods at the ASEAN HS-8 level and has recently launched a comprehensive Trade Information Portal⁹ where this information is posted via a user-friendly and searchable website. It has also established a Trade Facilitation Secretariat (TFS), an inter-ministerial committee representing line agencies involved in dealing trade facilitation issues, chaired by

⁸ World Bank (2012) *Lao Economic Monitor – May 2012*, Vientiane: The World Bank. Note that one of the effects of reductions in import duties has also been reductions in informal trade.

⁹ The Lao PDR Trade Portal is available at <u>www.laotradeportal.gov.la</u>.

the Vice-Minister of Industry and Commerce, DIMEX acts as the focal point and representation from the Lao National Chamber of Commerce and Industry (LNCCI).¹⁰ DIMEX is now moving to implement the component of TDF-2 that relates to reviewing and rationalizing NTMs. This component is designed to complement and extend ongoing

rationalizing NTMs. This component is designed to complement and extend ongoing government efforts to streamline and harmonize NTMs. It focuses on three interrelated activities or subcomponents and is designed to:

- Enhance transparency and predictability by making additional information on trade requirements and procedures (including NTMs) available via the Trade Portal and to ensure Lao PDR is able to meet its commitments associated with participation in the ASEAN Trade Repository programme;
- Establish a sound and well-resourced capacity to identify, categorize and review NTMs with a view to achieving a major reduction in the trade restrictive impact of NTMs and where feasibly possible, their streamlining. Furthermore, eliminate NTMs that do not longer serve sound policy objectives; and,
- Identify and assess the impact of NTMs faced by Lao PDR exporters in ASEAN and other key markets ("External NTMs") and to strengthen the capacity of relevant officials to participate in negotiations on the elimination, streamlining and harmonization of NTMs.

Sl. No	HS Code	Product	Importer
1	071410	Dried Cassava	China, Vietnam
2	0803	Banana	China
3	090111	Coffee	Thailand, EU (France, Sweden, Germany, Italy, Belgium)
4	100590	Maize	China, Vietnam
5	100630	Rice	EU (France, Germany, Sweden), Vietnam
6	400121	Rubber	China, Malaysia
7	440290	White Charcoal	Japan, Korea
8	441820 4407291090, 940350,	Wood	Vietnam, Thailand

Table 3.1: Selection of Products

To assess the size of NTMs and implications, we have selected eight products in total, namely, Banana, Coffee, Dried Cassava, Maize, Rice, Rubber, White Charcoal and Wood Product, all exported by Lao PDR. Table 3.1 presents the list of products and corresponding importers. Although the NTM classification encompasses 16 chapters (A to P), we consider only Sanitary and Phytosanitary (SPS) and Technical Barriers to Trade (TBT), based on UNCTAD classification (UN, 2013). All these eight products have potential for growth, both

¹⁰ As indicated in the Decision no 023/NSC, the TFS is the body dealing with trade facilitation issue. There is no exact word regarding NTMs. It states only import and export and trade in transit. However, DIMEX is revising the 023 by including NTMs.

within the domestic and global markets, but all of them are hindered from doing so as a result of a number of policy and market based barriers.

The selection of products for this study has considered a combination of following criterion:

- Major export products with TBT and SPS implications, including agricultural and non-agricultural specifications;
- Current export products with high potential for growth in selected markets and that are falling in line with the government's priority for promotion; and
- Minimum 10 export firms for each product group with consideration geographical locations (concentration) that allow viable logistical arrangements.

The objective here is to assess the size of NTMs across a supply chain between the exporter (origin) and importer (destination) for a particular product. Survey of the product at exporting country (Lao PDR) has been conducted only. Due to structural limitation, we could not do a back to back survey of the same product in importing country, which may be conducted in future. Not only NTMs, the field survey has also captured important information on logistics and trade procedures such as time and cost at border and behind the border at select border crossings. Annexure 3.1 presents the sample questionnaire, which was used to collect the primary data.

Year	China	World	Share*	
	(US\$ 1	(US\$ million)		
2000	1.379	1.434	96.16	
2001	0.028	0.181	15.38	
2002	0.003	0.293	1.17	
2003	0.002	0.041	3.73	
2004	0.002	0.603	0.38	
2005	0.023	0.499	4.70	
2006	0.079	0.982	8.04	
2007	0.498	1.517	32.86	
2008	1.107	4.871	22.73	
2009	0.781	2.221	35.19	
2010	0.427	2.816	15.17	
2011	0.239	2.336	10.23	
2012	0.343	5.571	6.15	
2013	0.411	5.181	7.93	

Table 3.2: Trends in Lao PDR's Export of Fruits to China

*Share in Lao's export to world Source: UNCOMTRADE

			-		
				Share*	Share*
Year	EU	Thailand	World	(EU)	Thailand
	(US\$ million)	(%)
2000	11.294		16.869	66.950	
2001	7.843		11.007	71.260	
2002	9.086		10.994	82.640	
2003	8.537	0.007	12.068	70.730	0.055
2004	8.190	0.010	12.940	63.290	0.076
2005	9.667	0.022	14.316	67.530	0.152
2006	8.212	0.093	9.630	85.280	0.969
2007	12.140	0.073	25.931	46.820	0.282
2008	22.552	0.069	33.862	66.600	0.205
2009	17.715	0.141	26.905	65.840	0.523
2010	26.687	0.109	38.148	69.960	0.286
2011	28.873	0.105	72.224	39.980	0.145
2012	22.770	0.643	59.658	38.170	1.077
2013	21.247	0.527	49.666	42.780	1.061
*Share in Lao's export to world					

Table 3.3: Trends in Lao PDR's Export of Coffee to EU and Thailand

*Share in Lao's export to world Source: UNCOMTRADE

Table 3	Table 3.4: Trends in Lao PDR's Export of Rice to EU and Vietnam					
Year	EU	Vietnam	World	Share* (EU)	Share* (Vietnam)	
		(US\$ millio	n)		(%)	
2000	0.026		0.026	100.00		
2001	0.037	0.008	0.216	17.06	3.743	
2002	0.043	0.133	0.232	18.35	57.223	
2003	0.078	0.292	0.410	19.03	71.044	
2004	0.085	0.676	0.954	8.95	70.821	
2005	0.107	2.419	2.736	3.92	88.382	
2006	0.141	2.903	4.007	3.52	72.459	
2007	0.334	0.648	1.522	21.92	42.558	
2008	0.211	0.949	1.895	11.14	50.059	
2009	0.137	9.681	13.639	1.00	70.980	
2010	0.884	3.873	6.447	13.71	60.071	
2011	1.424	0.273	3.262	43.65	8.359	
2012	1.262	4.154	10.003	12.62	41.534	
2013	1.653	3.146	8.256	20.02	38.103	

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*Share in Lao's export to world Source: UNCOMTRADE

Year	China	World	Share*
	(US\$	million)	(%)
2000	0.062	0.062	100.00
2001	0.267	0.402	66.41
2002	1.264	1.269	99.61
2003	2.005	2.131	94.10
2004	1.231	1.263	97.45
2005	3.792	3.827	99.08
2006	9.832	9.908	99.24
2007	10.326	10.363	99.65
2008	9.673	9.677	99.95
2009	10.663	10.668	99.95
2010	20.020	20.024	99.98
2011	24.111	27.388	88.03
2012	37.859	46.876	80.76
2013	47.163	64.428	73.20

 Table 3.5: Trends in Lao PDR's Export of Rubber to China

*Share in Lao's export to world Source: UNCOMTRADE

Table 3.6: Trends in Lao PDR's Export of Rubber to Malaysia

Year	Malaysia	World	Share*	
	(US\$ 1	(%)		
2011-12	0.198	4.510	4.39	
2012-13	0.706	24.844	2.84	
2013-14	0	0	0	
2014-15	1.903	46.539	4.08	
*Share in Lao's export to world				

*Share in Lao's export to world Source: DIMEX

Being an agricultural economy, Lao PDR has been a prominent exporter of rice, coffee, timber and fruits. Tables 3.2 to 3.10 present the trends in Lao PDR's export of these products to the major trade partners vis-a-vis world.

EU is a significant market for coffee and rice of Lao PDR, while China is in fruits and rubber. Export from Lao PDR to Vietnam has witnessed sharp rise in the last few years, particularly in coffee and wood. Most of these products account for a large proportion of Lao PDR's export to the world. EU's large market size compels us to consider it as a major importer in this study for the products listed in Table 3.1. Moreover, EU has been offering Generalised Scheme of Preference (GSP) to Lao PDR time to time.

In 2013, Lao PDR exported US\$ 0.411 million worth fruits, sharing 8 percent of Lao's global exports of fruits. While Lao's global export of fruits has increased from about US\$ 1.434 million in 2000 to US\$ 5.181 in 2013, Lao's export of fruits to China during the same period

has declined sharply. It appears China is an important destination of Lao's fruits, but the main market is elsewhere.

				Share*	Share*
Year	Vietnam	Thailand	World	(Vietnam)	(Thailand)
	(US\$ million)			(0	%)
2000	32.712	53.204	101.463	32.240	52.437
2001	33.318	63.416	111.067	29.998	57.097
2002	32.029	64.851	110.299	29.039	58.796
2003	48.047	69.293	131.128	36.641	52.844
2004	48.809	56.668	123.140	39.637	46.019
2005	62.857	65.042	145.253	43.274	44.778
2006	67.984	61.922	157.311	43.216	39.363
2007	75.998	44.683	158.208	48.037	28.243
2008	101.642	44.364	189.284	53.698	23.438
2009	70.772	39.045	141.783	49.916	27.538
2010	137.270	40.279	266.113	51.583	15.136
2011	226.430	34.378	431.400	52.487	7.969
2012	201.307	39.867	412.451	48.807	9.666
2013	269.751	29.121	557.192	48.413	5.226

 Table 3.7 Trends in Lao PDR's Export of Wood and Wood Products to

 Vietnam and Thailand

Note: Here Wood and Wood products are [246] Wood in chips or particles and wood waste; [247] Wood in the rough or roughly squared; [248] Wood simply worked, and railway sleepers of wood. *Share in Lao's export to world Source: UNCOMTRADE

Coffee is one of the major exports of Lao PDR. Lao's coffee is like Darjeeling tea of India – reaches to every corner in the world. EU is the major market of Lao's coffee. In 2013, out of US\$ 49.66 million global export of coffee by Lao PDR, US\$ 21.25 million worth coffee exported to EU by Lao PDR, thus had about 43 percent of export share. Over time, driven by GSP, Lao's coffee has gained higher market access in EU. In ASEAN, Thailand has started importing coffee from Lao PDR for the last one decade or so, both for domestic consumption and re-export purposes. In 2013, Lao has exported almost 1.06 percent of global coffee export to Thailand (US\$ 0.527 million), showing an decreasing trend since 2009

Lao PDR is also a rice growing economy. During 2000 to 2013, Lao's export to EU had increased substantially. Today, one-fifth of its global export of rice, primarily organic rice, has been directed to EU. In 2013, Lao PDR has exported US\$ 1.65 million worth rice to EU.

China is major buyer of Lao's rubber. It used to import almost 100 percent of Lao's export of rubber. In 2013, out of US\$ 64.43 million export of rubber to the world, China alone has imported US\$ 47.16 million worth rubber from Lao PDR.

Both Thailand and Vietnam are major destinations of Lao's wood and wood products. While Lao's export of wood and wood products to Vietnam has increased from US\$ 32.712 million in 2000 to US\$ 79.647 million in 2013, Lao's export to Thailand has faced an opposite trend. Due to environmental restrictions, Lao's export of wood and wood products to Thailand has decreased from US\$ 21.625 million in 2000 to just US\$ 0.072 million in 2013. At the same time, Lao's global export of wood and wood products have surged to US\$ 264.447 million in 2013, thereby showing almost 70 percent of Lao's export of wood and wood products have been directed to rest of the world.

Year	Korea	Japan	World	Share* (Korea)	Share* (Japan)
	(US\$ million)			(%)	
2007	0.006	0.651	0.759	0.853	85.831
2008	0.164	1.322	2.158	7.591	61.258
2009	0.358	1.989	2.825	12.660	70.395
2010	0.662	2.512	3.949	16.757	63.621
2011	1.041	3.713	9.163	11.365	40.519
2012	3.088	7.038	13.351	23.129	52.718
2013	4.235	11.389	23.923	17.702	47.606

 Table 3.8: Trends in Lao PDR's Export of White Charcoal to Korea and Japan

*Share in Lao's export to world

Source: ITC (2016a; 2016b)

L					
Year	China	Vietnam	World	Share* (China)	Share* (Vietnam)
	(US\$ million)			(%)	
2005	0.234	0.120	3.224	7.258	3.722
2006	0.591	1.095	11.091	5.329	9.874
2007	2.080	1.948	10.579	19.662	18.414
2008	4.013	1.708	17.876	22.449	9.555
2009	8.094	3.681	31.663	25.563	11.626
2010	9.083	3.246	32.086	28.308	10.117
2011	8.305	5.419	34.195	24.287	15.847
2012	13.124	5.680	36.201	36.253	15.690
2013	26.490	6.195	47.701	55.533	12.987

 Table 3.9: Trends in Lao PDR's Export of Maize to China and Vietnam

*Share in Lao's export to world Source: ITC (2016c; 2016d)

Lao's export of White charcoal has increased from less than US\$ 1 million in 2007 to US\$ 24 million in 2013, of which over 60 percent has come from exports to Korea and Japan. Japan is a major buyer of Lao's white charcoal. In 2013, Lao has exported US\$ 11.39 million white charcoal to Japan.

Year	China	Vietnam	World	Share* (China)	Share* (Vietnam)	
	(US\$ million)			(%)		
2007	0.308	0.084	0.395	77.975	21.266	
2008	0.843	0.423	1.266	66.588	33.412	
2009	0.291	0.087	0.426	68.310	20.423	
2010	0.195	0.344	0.675	28.889	50.963	
2011	0.169	1.182	2.325	7.269	50.839	
2012	0.482	2.131	5.923	8.138	35.978	
2013	0.009	4.650	10.090	0.089	46.085	

Table 3.10: Trends in Lao PDR's Export of Dried Cassava to China and Vietnam

*Share in Lao's export to world

Source: ITC (2016e, 2016f)

Lao's export of maize has witnessed a rising trend since 2005. In 2013, Lao has exported US\$ 47.701 million maize to the world, of which export to China alone has contributed 56 percent (US\$ 26.49 million). In the same year, Lao has exported US\$ 6.195 worth maize to Vietnam. Compared to maize, export of dried cassava is relatively recent phenomenon. In 2013, Lao has exported US\$ 10.09 million dried cassava to the world. Vietnam is the major importer of Lao's dried cassava.

3.1 Selection of Samples

The selection of the aforesaid products was done in close coordination with the DIMEX, the technical staff and management. Both selection of products and corresponding sample sizes were made through consultations with exporters in Lao PDR with the help of DIMEX.

The NTMs survey was conducted face to face interview with the export companies (and their agents) based on a structured questionnaire. The questionnaire has been tested and modified after the pilot survey. Prior to this, under the guidance of DIMEX, the kick-off meeting was held. It has gathered key players of the major export commodities' value chain. They include the owners, managers, manufactures, transporters, etc. One of the main objectives of the kick-off meeting was to raise awareness and share knowledge about NTMs amongst relevant stakeholders as well as to gain insights necessary to reflect on general nature of the export activities and the sample selections.¹¹

Sampling of the selected export products was made purposively, rather than randomly, given in the fact that there are limited numbers of export firms of eight (8) selected products available as sample frame. The list of exporters provided by the provincial-level industry associations was the main source of selection of samples. This is in addition to list of companies provided by a number of agencies such as, Provincial Department of Industry and Commerce (DOIC), Lao Coffee Association (LCA), Lao Furniture Association (LFA), Lao

¹¹ The national consultation was held on 22 April 2015 at the office of DIMEX. Annexure 3.2 presents the list of participants and agenda.

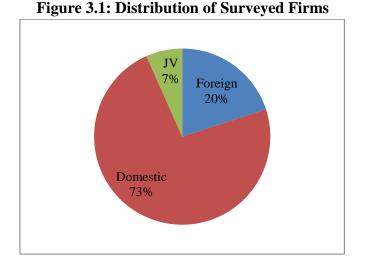
National Chamber of Commerce and Industry (LNCCI) and Enterprise and Development Consultants (EDC).

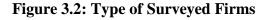
Product	Firms	Share	Geographical Location	Exporting to
	(No)	(%)	Borling Oudomyou	China
Banana	6	10.17	Borkeo, Oudomxay,	China
Dallalla	0	10.17	Luangnamtha	Theilerd Cinceren
Coffee	9	1250	Champasak	Thailand, Singapore,
Coffee Dried	9	13.56	D - 1111	France, Germany
	0	12.50	Borlikhamxay,	China, Vietnam
Cassava	8	13.56	Luangnamtha	
	10	20.24	Huaphanh, Oudomxay,	China, Vietnam
Maize	12	20.34	Luangnamtha	
			Vientiane Capital,	Vietnam, Germany,
			Khammouane,	Sweden
			Savannakhet,	
Rice	5	8.47	Champasak	
			Luangnamtha,	China, Malaysia
			Oudomxay,	
			Khammouane,	
Rubber	6	10.17	Borlikhamxay	
			Vientiane Capital,	Japan, Korea
			Borlikhamxay,	
White			Khammouane,	
charcoal	7	11.86	Savannakhet	
-			Oudomxay, Borkeo,	Thailand, Vietnam
			Vientiane Province,	
			Vientiane Capital,	
Wood			Khammouane,	
product	7	11.86	Borlikhamxay	
Total	60			

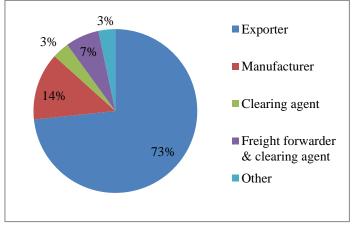
 Table 3.7(a): Sample Size (General)

 Table 3.7(b): Sample Size (Logistics Firms/Customs Agents)

Product	Number of Firm	Provinces
Rice	1	Vientiane Capital
White Charcoal	1	Borlikhamxay
Coffee	2	Vientiane Capital
Wood and wood products	1	Vientiane Capital
Total	5	







The initial sample size was consisting of 631 firms. However, after the first screening, we have found that more than half of them (398 firms) cannot be contacted due to non-availability and wrong addresses. Out of 233 contactable firms, 6 were out of business, 28 did not meet the criteria of selection and 99 firms were not the targeted samples. This left 128 firms for the next stage of the survey. Annexure 3.3 presents the further details of the selection process.

Finally, we have surveyed 60 firms (Table 3.7(a)). Maize has the highest share of 20.34 percent (12) in the total sample, followed by coffee and dried cassava. Annexure 3.4 presents the list of surveyed firms.¹² Major exporting countries as appeared from the survey are Thailand, Vietnam, Malaysia and Singapore - all from ASEAN; China, Japan, Korea – all ASEAN+3 countries, and several EU countries such as Germany, France and Sweden.

¹² We maintain the anonymity of the respondents.



Map 3.1. Geographical Locations of the Sample Firms

Interviews with 60 export firms and in addition 5 logistics firms were successfully completed. This survey was conducted across the country. Map 3.1 illustrates the surveyed products and the cities. In particular, the interviews were done in 9 provinces in three regions of Lao PDR. Surveyed firms in Northern provinces are mainly exporters of rubber, banana and maize, whereas those in the Central region primarily are exporters of wood and wood products, white charcoal, dried cassava and rice. In the Southern provinces, the export enterprises are predominantly coffee and rice exporters (Map 3.1 and Table 3.7(a)). In addition to interviews with the firms, the relevant agencies were also consulted to obtain information on NTMs.¹³

Out of 60 firms, 73 percent of surveyed firms are domestic in nature, 20 percent are having foreign ownership and rest 7 percent are JV-type (Figure 3.1). Type of firms is mixed in nature. Illustrated in Figure 3.2, most of the interviewed firms are exporters (73 percent), while 14 percent are manufacturers. Surveyed firms are on average 7 years in business having US\$ 1.47 million annual turnover. In terms of manpower, the size of surveyed firms varies. While the average employees strength is 56 per firm, there are large exporting firms having employment of over 300 (banana), 400 (coffee) and 972 (rubber).

¹³ Such as Provincial Chamber of Commerce and Industry (Champasak, Bolikhamxay and Huaphan province), Provincial of Import and Export Section (PIMEX of the visited provinces); Lao Coffee Association (LCA) in Champasak, Lao Furniture Association (LFA) in Vientiane capital.

3.2 Survey Methodology Followed

The questionnaire consisted of four main sections with several sub-headings and questions. The four main sections are (i) General Information, (ii) Non-Tariff Measures (NTMs), (iii) Logistics, and (iv) Perception of the Future. The questionnaire has used the UNCTAD classifications for SPS and TBT measures and also for the procedural obstacles. Annexure 3.5 and 3.6 present the classification of SPS and TBT measures and classification of procedural obstacles.

It took approximately 2-3 hours per interview in total, in addition to follow-up thereafter as to obtain relevant information that are not available at the time of interview (export sales records, etc). The interviews of logistics firms were complimentarily to interviews of export firms that did not have information related to logistics (as they used the services from shipping firms). It should be noted that together with the telephone call in making appointment for interviews with the sample firms, quite often the cases that the firms, especially those are located in the main province, requested the questionnaire to be sent to them before hand to help them get the right respondents, relevant information, and find available time for interviews. As for the provinces in the north, in particular, making appointment for interviews did not work well, thus "walk in" approach was used instead.

3.2.1 Survey Team and Timeframe

The survey was carried out by the Enterprise and Development Consultants (EDC), a local consulting firm. The survey team is consisted of 2 senior consultants (National Task Manager, and Co-Task Manager), 4 interviewers, and 1 administrator. The survey team received training from the international NTM expert, in which it included transferring of knowledge and experiences of NTMs in other countries, pilot testing and questionnaire finalization. The international NTM expert also provided technical supports and guideline all along the entire survey, including in the implementing, analysing and report writing stages. On the other, the team of DIMEX has provided general direction, and administrative support necessary for the NTMs survey.

The field survey (including time used of contacting/appointment with the firms and actual interviews) was actually taken place in mid-October 2015 to end December 2015. In fact, this was five months prior to the finalization of the selected NTMs products and sample frame availability for the survey to be undertaken. During the field survey, the survey team reported periodically to DIMEX and international NTM expert, particularly to update and consult for solutions to the challenges faced.

3.2.2 Impressions and Challenges

Despite the impediments associated with sample frame and database availability of export firms, the DIMEX team has provided constant support as needed to the survey team. The DOIC has also provided good coordination to the survey through request for support from DIMEX. They have provided list of contact, as available and contact person/translator (Chinese-Lao) specifically for the mission.

The challenges of the NTMs survey in addition to limited sample frame are including unavailability of the interviewers, which lead to several postponements for interviews, more importantly, denial for interviews or reluctance to provide the key information of the respondents, language barriers when the respondents are Chinese. The most difficulties and often the cases faced by the NTMs survey linked to the nature of the survey method itself, which sought views of export firms located in Lao PDR for "external NTMs", meaning that the measures derived from the importing countries. This did not work well in the context of Lao exporters, most of whom have very little, or no involvement in the import processing of the trading partners, thus lacking knowledge about TBT and SPS requirements of the trading partners, though they are not permanently present in Lao PDR, handling many of the export's activities. This included packaging, labeling, transporting, etc. Indeed, this phenomenon has reflected the market structure and supply chain development of many of the respondents activities of Laos that are in primitive and in evolving stage. As a result, most of the respondents were not able to provide sufficient information on TBT and SPS and other procedural NTMs.

Chapter 4: Trade Process Analysis of Lao Exports and Identification of Procedural Barriers

Efficiency of the international trade process crucially depend on the capacity of private individuals to deal with NTMs, exchange information with each other and provide effective transport, logistics, payment and other services.¹⁴ To assess the size of procedural barriers faced by Lao exporters, we analyse the export process of the eight export products which we have selected in this study, namely, Banana, Coffee, Dried Cassava, Maize, Rice, Rubber, White Charcoal and Wood. Lao PDR being a landlocked country, it depends very much on ports of neighbouring transit countries (e.g. Vietnam and Thailand). Since procedural obstacle is associated with a NTM measure, understanding the trade processes would help us designing the policies to tackle procedural obstacles faced by exporters in Lao PDR in a comprehensive way. Therefore, this study does a value addition in terms of identifying the barriers to trade and providing policy options to deal with such barriers. In particular, this study looks at the barriers that exporters from Lao PDR have been facing along with the procedural obstacles while exporting to major trade partners in selected agricultural and non-agricultural products.

The scope of the trade process analysis in this study includes all processes involving the exporter (seller) or its representatives directly, from signature of contract between the buyer and seller to loading the goods onto a sea vessel (or, if by land, to the border checkpoint of the importing country), and to receiving the payment. The scope of the export process analysed generally includes all procedures involving the importer (buyer), i.e., procedures related to the signature of the contract between the buyers and sellers, all procedures from arrival of goods at the border (or, seaport of the importing country) to delivery at the warehouse in the importing country.

Therefore, this study generally covers the entire BUY-SHIP-PAY process (see Box 4.1).¹⁵ Following the UNNExT's Business Process Analysis (BPA) methodology, information on export processes was collected essentially through repeated interviews of a small number of key informants, for instance, buyers, sellers and intermediaries directly involved in the process being analysed. Interviews and consultations with relevant government agencies were also conducted whenever possible. Information was collected through field survey, for the most part, during the fourth quarter of the year 2015. We have used Unified Modelling Language (UML) to describe the various procedures and process analysed; facilitating comparison of procedures across countries and understanding among the researchers (see Annexure 4.1).

The activity diagram is an elaboration of each business process displayed in the use case diagram. It portrays a sequence of activities and documentary flows from one responsible

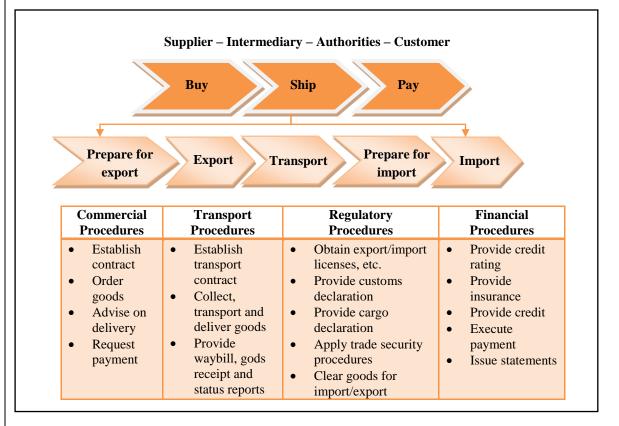
¹⁴ Refer, for example, UNCTAD (2013)

¹⁵ This in contrast with the World Bank's Doing Business Report, which mostly excludes the BUY and PAY process (except for preparation of documents for L/C) when calculating export and import time.

party to another. It provides information about who is doing what in which order, also documentary inputs that serve as prerequisites to activities and documentary outputs that can be obtained after completing certain ones. Annexure 4.2 presents relevant notations of Use Case and activity diagrams.

Box 4.1. An International Supply Chain Model

UN/CEFACT Recommendation No. 18 illustrates a simplified view of the international supply chain in the BUY-SHIP-PAY model (see the picture below).¹⁶ The model not only suggests "a series of fragmented activities" that are carried out throughout the international trade transaction, but also defines different types of actors that are associated with them. Key actors in the international supply chain are authorities, intermediaries, suppliers, and customers.



UN (2009) suggests that an international trade transaction encompasses all activities related to the establishment of commercial contracts (commercial procedures), the arrangement of inland and crossborder transportation of goods (transport procedures), the export and import formalities to meet regulatory requirements (regulatory procedures), and the payment for purchased goods (financial procedures). It requires cooperation between many individuals, including traders, government agencies and service providers from different countries. Business Process Analysis of international trade transactions, of the kind conducted as part of the study presented in this monograph, is recommended as the first step to understand the changes that will need to be made as part of the simplification, harmonisation, and automation of trade procedures and documents.

Source: UNNeXT

In brief, each business process model illustrates:

¹⁶ www.unece.org/fileadmin/DAM/cefact/recommendations/rec18/Rec18 pub 2002 ecetr271.pdf

- activities that come in a specific order and decision points
- individuals who perform those activities
- defined inputs and outputs of each activity
- criteria for entering and exiting the business process
- how actors relate to one another
- how information flows throughout the business process
- associated rules and regulations, and
- quantitative indicators such as number of steps, as well as time and cost required to complete a particular business process

In conducting this assessment, researchers gathered information from both primary (i.e. exporters and manufacturers) and secondary sources (i.e. government documents) and, whenever possible, through consultations with relevant government agencies.

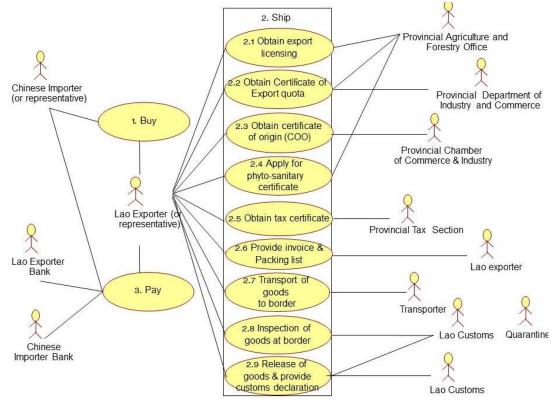
(a) Export of Rubber to China and Malaysia

Figures 4.1 and 4.2 present UML diagrams of Lao PDR's exports of rubber to China and Malaysia, respectively. While export of rubber to China involves nine major processes and eight actors, the same to Malaysia engages eight processes and seven actors. Chinese importer demands copy export quota certificate, issued by Lao's Provincial Department of Industry and Commerce, whereas export to Malaysia does not have to comply with. Rest processes under the category of SHIP between the two have been remained same. In fact, most of Chinese importers are so called "head offices", whereas Lao exporters are producers. Therefore, the contract between Lao exporter and Chinese importer, introduced by Thai broker insists of on-site inspection of products before signing the contract. The pay process is remained same in China and Malaysia. The export processes of rubber have been simplified already and do not have variations between the two countries. Documentations are also liberalized – both by Malaysia and China (Table 4.1). The entire export process, particularly under the category of SHIP, in Lao PDR has been handled manually, indicating Lao exports face high transaction time and cost.

N	D (Malaysia	l		China		G 1 · · ·
No.	Documents	Total	Laos	Malaysia	Total	Laos	China	Submission
1	Phyto-sanitary certificate	3	2 copies	1 original	1		1 original	Manual
2	COO certificate	3	2 copies	1 original	1		1 original	Manual
3	Copy of export licensing	3	3 copies		1	1 copy		Manual
4	Copy of tax certificate	3	3 copies		1	1 copy		Manual
5	Copy of export quota certificate				1	1 сору		Manual
6	Original of invoice and packing list	3	2 originals	1 original	2	1 original	1 original	Manual
7	Customs declaration (ໃບບໍ)	3	3 originals		3	3 originals		Manual

Table 4.1: Documentations Needed to Export of Rubber





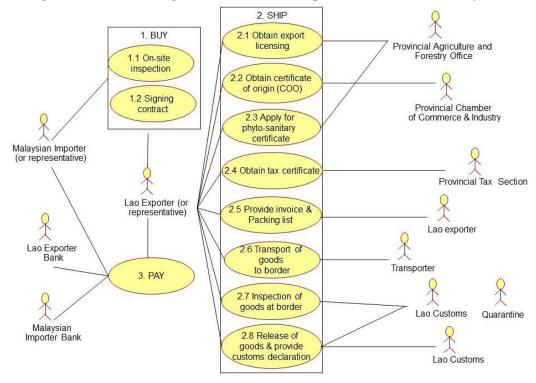


Figure 4.2: UML Diagram: Lao PDR's Export of Rubber to Malaysia

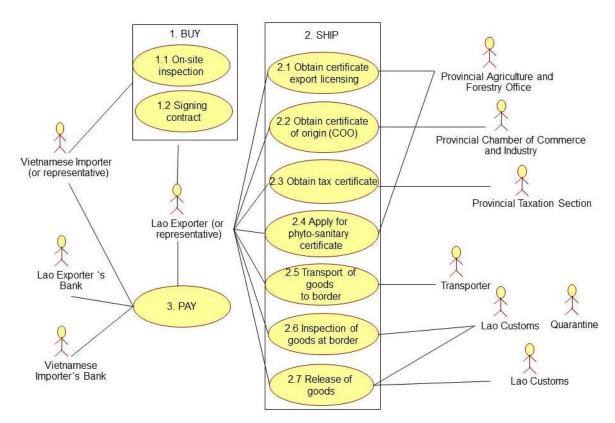
(b) Export of Maize to Vietnam and China

Figures 4.3 and 4.4 present UML diagrams of Lao PDR's exports of maize to Vietnam and China, respectively. Lao exporter of maize to China needs to use a service from one particular Lao shipping company in order to run the export documents on-behalf of these exporters. Hence, export of maize to China involves lesser processes, compared to the same with Vietnam. Consequently, a downside of using this mentioned shipping affects an increase of transaction cost for Lao exporters. Export of maize to China involves eight processes and seven actors. In case of export of maize to Vietnam, exporter has to face seven major export processes and six actors under the category of SHIP. Rest processes are same for both China and Vietnam. Importers of both the countries do on-site inspection before signing export contracts. It appears that transportation time and costs and documentation time are the major barriers to Lao's export of maize. Importers in Vietnam need copies of export quota certificate (Chinese importers do not need it), phyto-sanitary certificate, COO and copy of tax. Chinese importers, on the other, need copies of phyo-sanitary, COO, tax and export licensing (Table 4.2). However, documentations in both cases have been handled manually. To conclude, there is enough scope for reduction of transportation time and cost, which would improve the competitiveness of Lao exports.

No.	List of documents		Vietnam			China		Submission	
190.	List of documents	Total	Lao	Vietnam	Total	Lao	China	Submission	
1	Phyto-sanitary certificate	2	1 copy	1 original	2 copies	1 сору	1 original	Manual	
2	COO certificate	2	2 copies		2 originals	1 copy	1 original	Manual	
3	Tax certificate	2	2 copies		1 original	1 original		Manual	
4	Copy of export licensing	2	2 copies		2 copies	2 copies		Manual	

Table 4.2: Documentations Needed to Export Maize





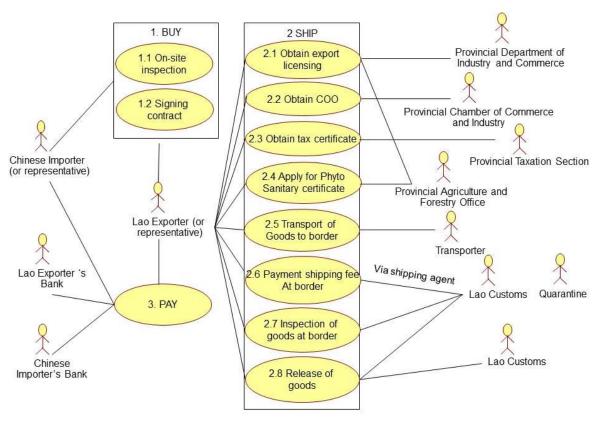
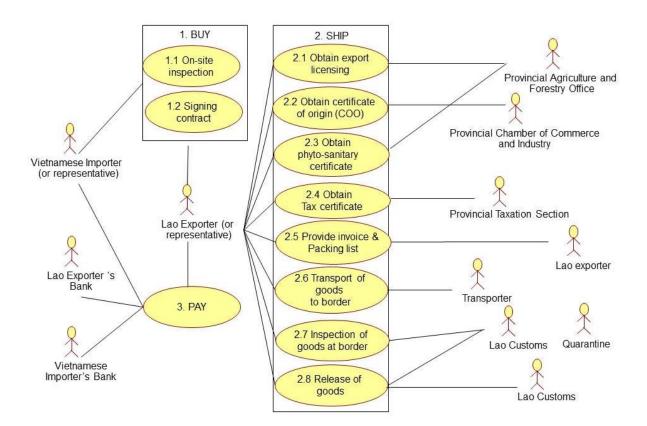


Figure 4.4: UML Diagram: Lao PDR's Export of Maize to China

Figure 4.5: UML Diagram: Lao PDR's Export of Cassava to Vietnam



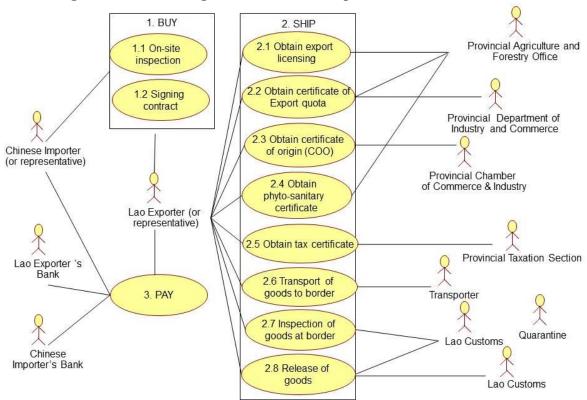


Figure 4.6: UML Diagram: Lao PDR's Export of Cassava to China

Table 4.3: Documents Needed to Export Dried Cassava

No	List of documents		China	l		Vietnam		Submission
No.	List of documents	Total	Laos	China	Total	Laos	Vietnam	Submission
1	Phyto-sanitary certificate	2	1 copy	1 original	3	2 copies	1 original	Manual
2	Copy of export licensing (for agricultural products)	4	4 copies		3	3 copies		Manual
3	Copy of tax	4	4 copies		3	3 copies		Manual
4	Copy of transport tax				3	3 copies		Manual
5	Original of invoice and packing list				3	2 originals	1 original	Manual
6	Custom clearance (ໃບບໍ)				3	3 originals		Manual
7	COO certificate	2	1 copy	1 original	3	2 copies	1 original	Manual
7	Copy of export quota certificate	4	4 copies					Manual

(c) Export of Dried Cassava to Vietnam and China

Figures 4.5 and 4.6 present UML diagrams of Lao PDR's exports of dried cassava to Vietnam and China, respectively. Export processes of cassava to Vietnam are much simplified than that to China. Export of cassava to Vietnam involves only eight major export processes and seven actors. Five documentations, namely, Phyto-sanitary certificate, COO, export permission, export tax, transport tax, invoice and packing list, custom clearance are

essential for exporting cassava to Vietnam. In case of Lao's export to China, it has to comply with eight major processes and deal with seven actors. However, rest processes are same in China and Vietnam. Importers in China just need Phyto-sanitary certificate and COO. Nevertheless, importers of both the countries carry on-site inspection before signing contracts with the exporters. Documents have been submitted manually (Table 4.3). What comes out is that transportation time and costs and documentation time, particularly with China, are the major barriers to Lao's export of cassava.

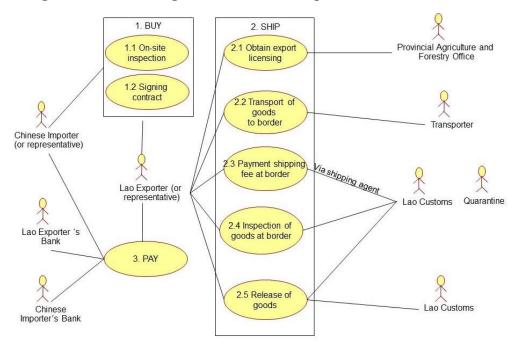
(d) Export of Banana to China

Figures 4.7 presents UML diagram of Lao PDR's exports of banana to China. Export processes of banana to China involve five major export processes and five actors only. Importing country carries on-site inspection before signing contracts with the Lao exporters. Chinese importers need copies of export licensing only. Documents have been submitted manually (Table 4.4). Transportation time and costs are the major barriers to Lao's export of banana.

No.	List of documents		Submission		
190.	List of documents	Total	Laos	China	
1	Copy of export licensing	4 copies	4 copies		Manual

Table 4.4: Documents Needed to Export of Banana

Figure 4.7: UML Diagram: Lao PDR's Export of Banana to China



(e) Export of Rice to Vietnam and EU

Figures 4.8 and 4.9 present UML diagrams of Lao PDR's exports of rice to Vietnam and EU, respectively. Export processes of rice to Vietnam are simple and do not involve many documentation, which involve six major processes and six actors. Only three documents, namely, COO, phyto-sanitary certificate and invoice and packing list, are needed to export rice to Vietnam. Lao PDR exports both ordinary (normal) and organic rice to EU. In both cases of rice, each has to comply with 12 major processes and deal with 13 actors. Nine and seven documents are needed to export ordinary and organic rice to EU (Table 4.5). Export of ordinary rice needs two additional documents, namely, quality control and test report and herbicide certificate. In contrast, food and drug certificate and organic certificate are needed for exporting organic rice to EU. EU importers do on-site testing before signing the contract. Transportation time and costs and documentation time, particularly with EU, are the major barriers to Lao's export of rice. As shown in Table 4.5, the entire export process, particularly under the category of SHIP, in Lao PDR has been handled manually, indicating Lao exports have been facing high transaction time and cost.

]	EU						
No.	List of documents		Normal ri	ce	Organic rice			Vietnam			Submission
		Total	Lao	EU	Total	Lao	EU	Total	Lao	Vietnam	
1	Phyto-sanitary certificate	4	3 copies	1 original	3	2 copies	1 original	2	1 copy	1 original	Manual
2	COO certificate	4	3 copies	1 original	3	2 copies	1 original	2	1 copy	1 original	Manual
3	Copy of Food and Drug certificate				3	2 copies	1 original				Manual
4	Original of invoice and packing list	4	3 originals	1 original	3	2 originals	1 original	2	1 original	1 original	Manual
5	Copy of export licensing	2	2 copies		3	3 copies					Manual
6	Copy of Quality control & test report	2	2 copies								Manual
7	Herbicide certificate	4	3 copies	1 original							Manual
8	Organic certificate				3	2 copies	1 original				Manual
9	Custom clearance (ໃບບໍ)	3	3 originals		3	3 originals					Manual

Table 4.5: Documents Needed to Export Rice

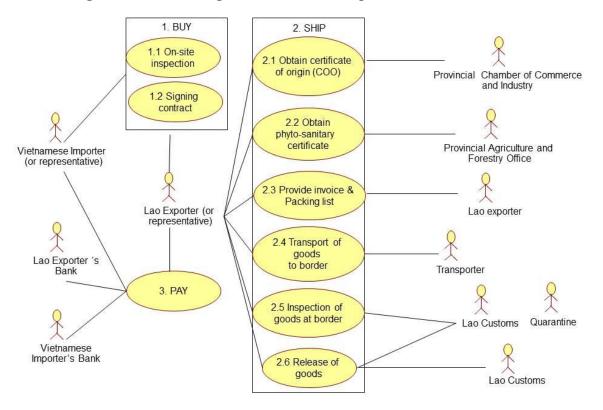
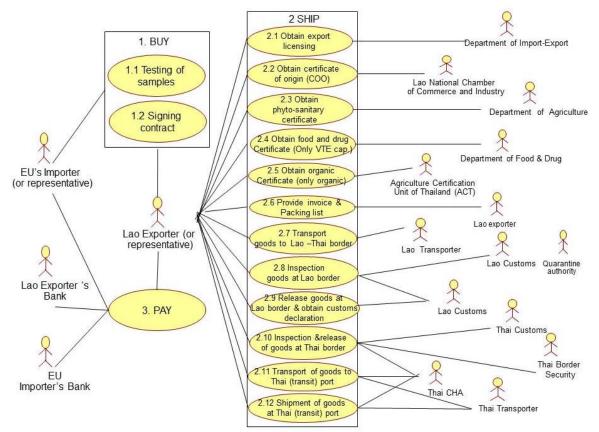


Figure 4.8: UML Diagram: Lao PDR's Export of Rice to Vietnam

Figure 4.9(a): UML Diagram: Lao PDR's Export of Organic Rice to EU



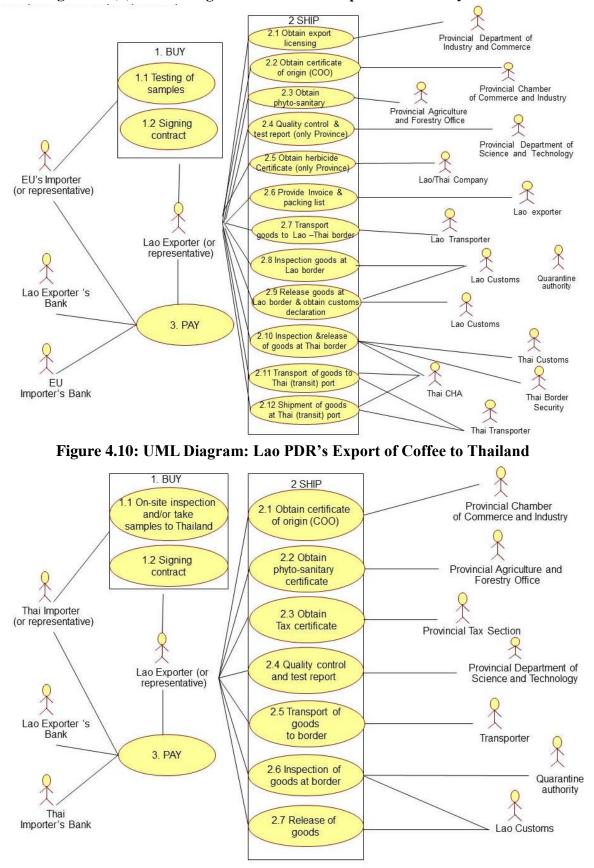


Figure 4.9(b): UML Diagram: Lao PDR's Export of Ordinary Rice to EU

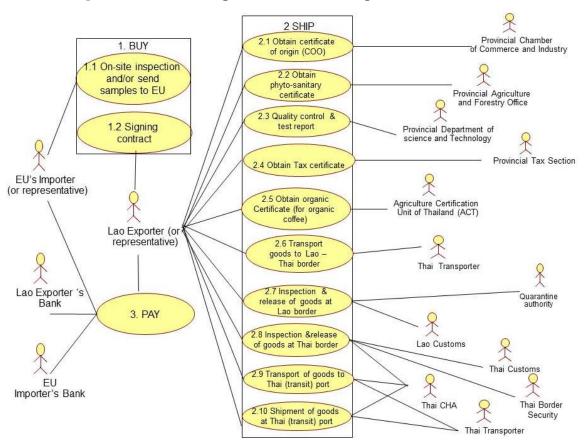


Figure 4.11: UML Diagram: Lao PDR's Export of Coffee to EU

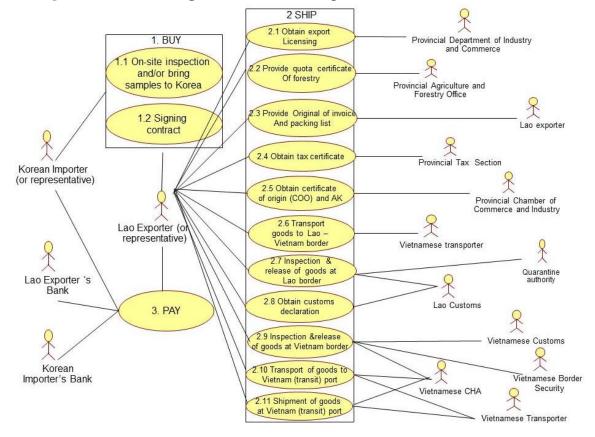
(f) Export of Coffee to Thailand and EU

Figures 4.10 and 4.11 present UML diagrams of Lao PDR's exports of coffee to Thailand and EU, respectively. Export processes of coffee to Thailand are relatively simplified, which involve only seven major processes and seven major actors. Only five documentations, namely, COO, phyto-sanitary certificate, quality control test report, tax certificate and invoice and packing list are needed to export coffee to Thailand. To export of coffee to EU, Lao exporter has to comply with 10 major processes and deal with 12 major actors. Eight documentations, in particular COO, phyto-sanitary certificate, quality control and test report, organic certificate, etc. are required to export coffee to EU. Only three main documentations are needed when exporting washed coffee to EU, namely, COO, phyto-sanitary certificate and quality control and test report. Additionally, in case of exporting natural coffee, fumigation certificate is required. For organic and fair trade label, Lao exporter needs to provide a single document like organic certificate; and not necessarily has to provide certificate of fair trade. EU importers do on-site testing before signing the contract. The entire export process, particularly under the category of SHIP, in Lao PDR has been handled manually, indicating Lao exports have been facing high transaction time and cost, both at Lao-Thailand border as well as on way to transit port.

No.	Documents		EU			Thailand		Submission
110.	Documents	Total	Laos	EU	Total	Laos	Thailand	Submission
1	Phyto-sanitary certificate	4	3 copies	1 original	4	3 copies	1 original	Manual
2	COO certificate	4	3 copies	1 original	4	3 copies	1 original	Manual
3	Quality control and testing report	4	3 copies	1 original	4	3 copies	1 original	Manual
4	Copy of tax	4	4 copies		4	4 copies		Manual
5	Copy of transport tax	4	4 copies		4	4 copies		Manual
6	Organic certificate	4	3 copies	1 original				Manual
7	Sale contract	4	3 copies	1 original				Manual
8	Original of invoice and packing list	4	3 copies	1 original	4	3 originals	1 original	Manual

Table 4.6: Documentations Needed to Export of Coffee





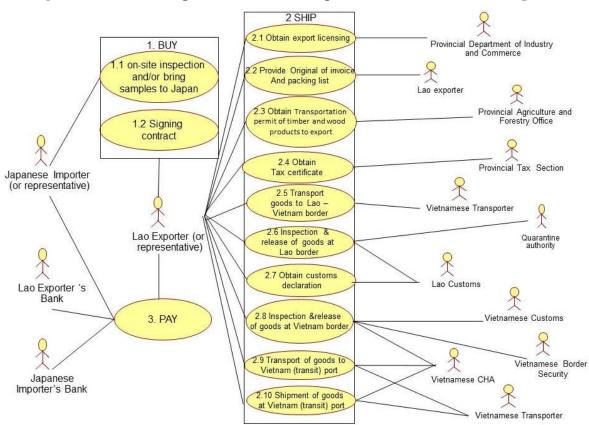


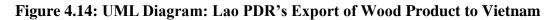
Figure 4.13: UML Diagram: Lao PDR's Export of White Charcoal to Japan

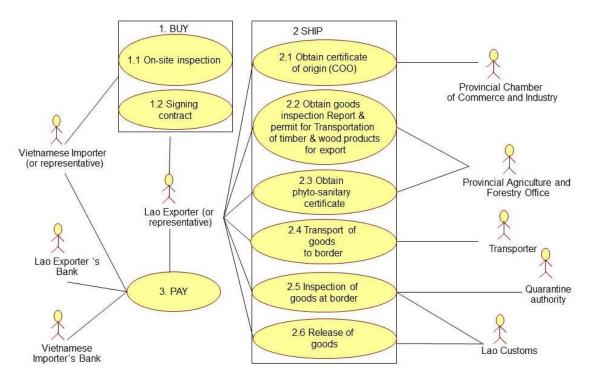
(g) Export of White Charcoal to Korea and Japan

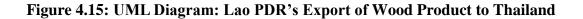
Figures 4.12 and 4.13 present UML diagrams of Lao PDR's exports of white charcoal to Korea and Japan, respectively. Exports of white charcoal to Korea and Japan need certain documentations, which are purely internal in nature such as tax certificate, permission to export non-timber product, product identity certificate, etc. To export of white charcoal to Korea, Lao exporter has to comply with 11 major processes and deal with 11 major actors. Export of white charcoal to Japan, on the other, involves 10 major processes and 10 major actors. Korean importers require six documents, while five documents are required to export to Japan (Table 4.7). The entire export process, particularly under the category of SHIP, in Lao PDR has been handled manually, indicating Lao exports have been facing high transaction time and cost, both at Lao–Thailand border as well as on way to transit port in Thailand.

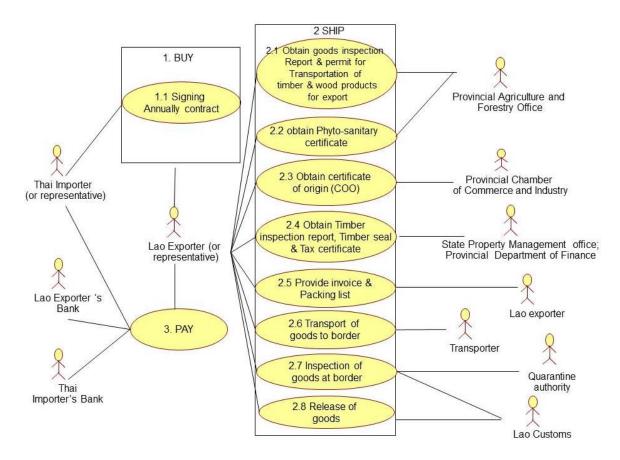
			Korea		-	Japan		
No	List of documents					_	-	Submission
		Total	Laos	Korea	Total	Laos	Japan	
1	Copy of export licensing	1	1 copy		3	3 copies		Manual
2	Original of invoice and packing list	3	2 originals	1 original	3	2 originals	1 original	Manual
3	Custom clearance	3	3 originals		3	3 originals		Manual
4	Copy of Quota certificate from District Forestry	1	1 сору					Manual
5	Tax certificate (in each export)	1	1 сору		3	3 copies		Manual
6	COO certificate	1		1original				Manual
7	AK form	2	1 copy	1 original				
8	Copy of Transportation permit of timber and wood products to export				3	3 copies		Manual

Table 4.7: Documentations Needed to Export White Charcoal









(h) Export of Wood and Wood Products to Vietnam and Thailand

Figures 4.14 and 4.15 present UML diagrams of Lao PDR's exports of wood products to Vietnam and Thailand, respectively. Exports of wood products are relatively liberalized, involving only eight major processes in case of Thailand and five processes in case of Vietnam. Vietnamese importers insist for in-site inspection before entering contract. However, Thai importers do not ask for on-site inspection. Export to Vietnam requires 4 documents and 7 documents for Thailand (Table 4.8). The entire export process, particularly under the category of SHIP, in Lao PDR has been handled manually, indicating Lao exports have been facing high transaction time and cost, both at Lao–Thailand as well as Lao–Vietnam borders.

No.	List of documents		Vietnan	1		Thailand	l	Submission
110.	List of documents	Total	Laos	Vietnam	Total	Laos	Thailand	Submission
1	Copy of Timber seal & Timber inspection Report	1	1 сору		1	1 сору		Manual
2	Transportation permit of timber & wood products for export	1	1 original		1	1 original		Manual
3	Original of invoice and packing list				2	1 original	1 original	Manual
4	Custom clearance (ໃບບໍ)				3	3 originals		Manual
5	Phyto-sanitary certificate	2	1 copy	1 original	2	1 copy	1 original	Manual
6	COO certificate	2	1 copy	1 original	2	1 copy	1 original	Manual
7	Copy of Tax certificate				1	1 copy		Manual

 Table 4.8: Documentations Needed to Export Wood and Wood Products

 Table 4.9: Level of Procedural Barriers Faced by Lao Exporters

Sl. No	Export Product	Partner (Importer)	Level of	Procedural I	Barriers
			Document	Process	Actor
1	Banana	China	Low	Low	Low
2	Coffee	EU	High	High	High
3	Coffee	Thailand	Medium	Medium	Medium
4	Dried Cassava	China, Vietnam	Medium	Medium	Medium
5	Maize	China, Vietnam	Low	Low	Low
6	Rice	EU	Medium	High	High
7	Rice	Vietnam	Low	Low	low
8	Rubber	China, Malaysia	Low	Medium	Medium
9	White Charcoal	Japan	Low	High	High
10	White Charcoal	Korea	High	High	High
11	Wood	Vietnam	Low	Medium	Medium
12	Wood	Thailand	Medium	Medium	Medium

4.1 Ways to Ease the Burden of Procedural Barriers

The main challenge in Lao PDR is how to translate benefits and opportunities that result from increased global and regional trade and investment to the local economy. It is in this context of identifying key trade barriers that this analysis in concerned with. The aforesaid analysis shows that exports of Banana to China, maize to China and Vietnam and Rice to Vietnam involve low documentations, processes and actors, compared to other products (Table 4.9). Regulations of these products are fairly liberalized and do not pose high barriers in Lao PDR. However, the entire trade processes have been dealt manually, and online/electronic submission of trade documents is yet to happen in Lao PDR. Manual handling of trade documentation is a great disadvantage that making the Lao exports uncompetitive globally.

Among the importing countries, owing to lowest numbers of processes and actors, both Vietnam and China appear to be more trade friendly. In both the cases, business process steps and corresponding actors in export are relatively less dispersed.

While procedural barriers coming from level of documentation has been in the range of low to medium across all the products and partner countries, the same arising from the processes and actors are in the medium to high range, suggesting benefits of low documentation has been neutralized by procedural barriers faced by Lao exporters. Therefore, electronic submission of documentations along with simplification and harmonization of trade processes would be essential in order to transform the trading environment as well as improving the competitiveness of Lao exports.

Chapter 5: NTMs, Restrictiveness and Barriers to Trade

NTMs are official policy measures on export and import, other than ordinary customs tariffs, that can potentially have an economic effect on international trade in goods, changing quantities traded, prices or both. As discussed before, NTMs are mandatory requirements, rules or regulations legally set by the government of the exporting, importing or transit country (in contrast to private standards which are not legally set). NTMs include technical measures and standards, as well as regulations on customs procedures, para-tariff measures, financial measures, prohibition, etc., and can affect both export and import.

NTMs being barriers to trade can prevent market access, even though some of them are WTO-compliant. Exporters in Lao PDR have to comply with a wide range of requirements including technical regulations, product standards and customs procedures, which may act sometimes as protectionist measures, and therefore, have the potential to affect the trade flows. Procedural obstacles arising from standards and regulations are challenges that make compliance with the measures difficult and cumbersome. Some of these measures include delays in testing or getting certification, lack of transparency and availability of information on given regulations, etc. The regulations are imposed by the importing country and that the exporting country is compelled to comply with these requirements.

In past, only a few number of studies attempted to identify the NTMs affecting the exports of Lao PDR.¹⁷ Some of these studies identified some prominent NTMs such as the use of only recognized/certified laboratories for testing, varied template of Certificate of Origin (COO) across countries, marking requirements on the exportable, etc. The Study by EDC (2005) noted that restrictions vary across products. First, of the five products identified as winning exports in Lao PDR, wood had been facing the most restrictions. This is also where most paper works were required. Second, most of the obstacles faced by these small scale producers were internal in nature. Procedures on standards and certification system, fees and requirements kept changing, making the entire trade procedures unfriendly. Third, among the external barriers, the most often mentioned were strict quality standards imposed by developed countries such as Japan or EU, which were not necessarily direct obstacles to trade but had indirect effects on the trade flows. Fourth, the transportation cost was identified as the most prohibitive trade barrier for Lao PDR. The rise in transport costs had occurred due to monopoly of transporters in Thailand, transit costs at Thailand ports, lengthy paper works in Thailand, complicated and duplicating customs procedures both in Lao PDR and Thailand, to mention a few. These are the barriers are not unique in case of Lao PDR. Most of the landlocked LDCs face similar types of barriers, policy or otherwise. What follows is that these barriers actually had affected the production as well as export in Lao PDR. While the essence of this Study is noteworthy and key messages are relevant to our current study, the

¹⁷ EDC identified NTMs faced by Lao exporters in selected products. Refer, for example, EDC (2005).

findings are outdated. Therefore, there is a need to understand the current state of NTM barriers being faced by Lao exporters.

In view of the above, based on the field level survey, we have made a fresh attempt to analyze the restrictiveness of NTMs that Lao exporters have been facing on account of SPS and TBT and review the procedural obstacles and associated problems.

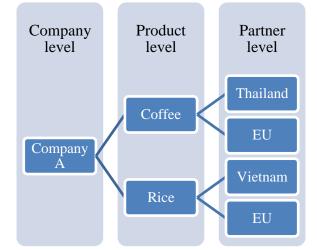


Figure 5.1: Field Level Data Collection Template

Table 5.1 SPS and TBT Categories

SPS	TBT
A1. Prohibitions/restrictions of imports for SPS	B1. Prohibitions/restrictions of imports for
reasons	objectives set out in the TBT agreement
A2. Tolerance limits for residues and restricted	B2. Tolerance limits for residues and
use of substances	restricted use of substances
A3. Labelling, marking and packaging	B3. Labelling, marking and packaging
requirements	requirements
A4. Hygienic requirements	B4. Production or post-production
A5. Treatment for elimination of plant and	requirements
animal pests and disease-causing organisms in	B6. Product identity requirement
the final product (e.g. postharvest treatment)	B7. Product-quality or -performance
A6. Other requirements on production or post-	requirement
production processes	B8. Conformity assessment related to TBT
A8. Conformity assessment related to SPS	
Source: LINCTAD (2012)	

Source: UNCTAD (2012)

As discussed in Chapter 3, the field survey follows face-to-face interviews to understand by product, partner and NTM the problems exporter experiences (Figure 5.1).¹⁸ Information captured through structured questionnaire on product, destination, burdensome NTM, etc. Specific reasons making NTMs difficult are captured for each case and in detail (e.g. requirements are too strict; lack of accredited laboratory, delays etc.) Survey questions were drafted to capture subjective perceptions on specific NTMs, where perceptions were marked

¹⁸ We have faced difficulties in scheduling appointments with companies for interview. Some of them did not trust us. They felt that interviewers were working for the government or competing firms. We have also found some concerns from firms that they were too small for their views to be taken seriously. There were complains that questionnaires were long and that they should be mailed or completed faster, which was not possible by us.

in a scale of 1 to 5, where 1 being easy (no difficulty) and 5 being hard (most difficulty). The restrictiveness score categorizes the barriers into seven categories as noted in Table 5.1. Sanitary and phytosanitary (SPS) refer to measures such as restriction for substances and ensuring food safety, and those for preventing dissemination of disease or pests. It includes all conformity-assessment measures related to food safety, such as certification, testing and inspection, and quarantine. On the other, the Technical Barriers to Trade (TBT) refers to measures such as labelling, standards on technical specifications and quality requirements, and other measures protecting the environment. As in the case for SPS, TBT also includes all conformity-assessment measures related to technical requirements, such as certification, testing and inspection.

Aggregate Results

Tables 5.2 and 5.3 present the status of SPS and TBT measures faced by Lao exporters in partner countries. Following observations are worth noting.

First, Lao exporters of banana to China have to comply with the measures like labeling (A31), marking (A32), packaging (A33), microbiological criteria of the final product (A41), hygienic practices during production (A42), and cold/heat treatment (A51) for elimination of plant and animal pests and disease-causing organisms in the final product. China.

Second, exporting rice (both ordinary and organic) to EU, most of the NTMs that Lao exporters have to comply with are related to conformity assessment (A8) such as product registration requirement (A81), testing requirement (A82), certification requirement (A83) and quarantine requirement (A86).

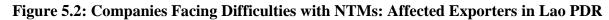
Third, exporting of rubber to China and Malaysia has to comply with (i) registration requirement for importers for TBT reasons (B15) under the category of prohibitions/ restrictions of imports for objectives set out in the TBT agreement (B1), (ii) product registration requirement (B81), labeling requirements (B31) and packaging requirements (B33), all under the category of Labeling, Marking and Packaging Requirements (B3).

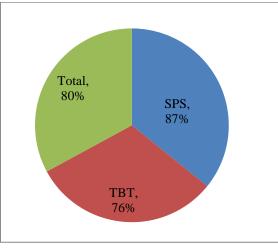
Fourth, in case of export of white charcoal to Korea and Japan, Lao exporters have informed us through the field survey that they have to comply with registration requirement for importers for TBT reasons (B15), labeling requirements (B31), marking requirements (B32), and several measures under the conformity assessment such as product registration requirement (B81), testing requirement (B82), certification requirement (B83), inspection requirement (B84), and traceability information requirements (origin, processing and distribution) (B85).

Fifth, exporting of wood to Vietnam and Thailand also requires compliance to all conformity assessment related to TBT measures (B8) such as product registration requirement (B81), testing requirement (B82), certification requirement (B83), inspection requirement (B84), and traceability information requirements (Origin, Processing and Distribution) (B85).

Export of	Importing country	A3: Labeling, Marking and Packaging Requirements A4: Hygienic Requirements A5: Treatment for elimination of plant and animal pests and disease-causing organisms in the final product		t d al								
		Labeling (A31)	Marking (A32)	Packaging (A33)	Microbiological criteria of the final product (A41)	Hygienic practices during production (A42)	Cold/heatIrradiationtreatment(A52)		Product registration requirement (A81)	Testing requirement (A82)	Certification requirement (A83)	Quarantine requirement (A86)
Banana	China		\checkmark			\checkmark	\checkmark					
Rice									\checkmark			
Rice	EU Vietnam											
Rice												\checkmark

 Table 5.2: Lao Exporters Facing SPS Measures in Partner Countries





Export of	Importing Country	B1: Prohibitions/ restrictions of imports for objectives set out in the TBT agreement	B3: Labelin	g, Marking and Requirements		B8: Conformity assessment related to TBT					
		Registration requirement for importers for TBT reasons (B15)	Labeling requiremen ts (B31)	Marking requiremen ts (B32)	Packaging requiremen ts (B33)	Product registration requiremen t (B81)	Testing requiremen t (B82)	Certification requirement (B83)	Inspection requireme nt (B84)	Traceability information requirements (Origin, Processing and Distribution) (B85)	
Rubber	China,					\checkmark					
Rubber	Malaysia		\checkmark		\checkmark						
Rubber											
White Charcoal			\checkmark								
White Charcoal			\checkmark			\checkmark		\checkmark		\checkmark	
White Charcoal	Lanan								V		
White Charcoal	Japan, Korea							\checkmark	V	\checkmark	
White Charcoal									V		
White Charcoal									V		
White Charcoal									V		
Wood Product	Vietnam,						\checkmark	\checkmark		\checkmark	
Wood Product	Thailand									\checkmark	
Wood Product											

 Table 5.3: Lao Exporters Facing TBT Measures in Partner Countries

Exporter	SPS Measures								
	Marking (A32)	Packaging (A33)	Microbiological criteria of the final product (A41)	Hygienic practices during production (A42)	Cold/heat treatment (A51)	Testing requirement (A82)	Certification requirement (A83)	Quarantine requirement (A86)	
Banana	1	1	3	3	2				
Rice						1	1		
Rice								5	
Exporter	TBT Measures								
	Registration requirement for importers for TBT reasons (B15)	Labeling requirements (B31)	Marking requirements (B32)	Product-quality or - performance requirement (B7)	Product registration requirement (B81)	Testing requirement (B82)	Certification requirement (B83)	Inspection requirement (B84)	
Rubber	1				1				
Rubber	1								
White Charcoal	3	1							
White Charcoal	1			1	1	2	1	1	
White Charcoal	1	2				1	1		
White Charcoal	2	1	1			1	1	2	
White Charcoal						1	1		
White Charcoal		2					1		
White Charcoal		2			1		1		
Wood Product				3	3	3	5	1	
Wood Product					3	3	3	3	
Wood Product							2		

Table 5.4 Opinions of the Respondents on Restrictiveness of NTM Measures [Difficulty of Meeting the Requirement/Standard for Exports: 1 (very easy); 2(easy); 3 (average); 4(hard); 5 (very hard)]

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Enhancing the regulatory environment in goods sector is essential to eliminate unnecessary regulatory divergences that can only restrict the trade flows. Identification of TBT and SPS would, therefore, help us in identifying the trade barriers that need to be eliminated. The field level data indicate that about 80 percent of Lao exporters have been facing difficulties with NTMs, of which 87 percent are agricultural (SPS) firms and 76 percent are manufacturing (TBT) firms (Figure 5.2).

The exporters have identified (i) labeling requirements (B31) and (ii) inspection requirement (B84) as common TBT measures applied by the trade partners of Lao PDR. Labeling requirements (B31) cover the measures regulating the kind, colour and size of printing on packages and labels and defining the information that should be provided to the consumers. Labeling is any written, electronic, or graphic communication on the packaging or on a separate but associated label, or on the product itself. It may include requirements on the official language to be used as well as technical information on the product, such as voltage, components, instruction on use, safety and security advice. For example, export of rubbers needs to carry a label indicating its size, weight and other technical details. On the other, inspection requirement (B84) as part of conformity assessment is the requirement for product inspection in the importing country – may be performed by public or private entities. It is similar to testing, but does not include laboratory testing. For example, import of white charcoal must be inspected for size and materials used before entry is allowed, which has been enforced by Japan and Korea.

Table 5.4 presents opinion of exporters on restrictiveness of NTMs. Following observations are important.

First, one rice exporter in Lao PDR has found quarantine requirement (A86) in EU is very restrictive. Otherwise, they do not face much restrictiveness in SPS. Quarantine requirement is to detain or isolate animals, plants or their products on arrival at a port or place for a given period in order to prevent the spread of infectious or contagious disease, or contamination. For example, certain category of rice needs to be quarantined to terminate or restrict the spread of harmful organisms.

Second, Lao exporters of wood products to Vietnam and Thailand have found the certification requirement (B83) is very restrictive. Certification of conformity with a given regulation is required by the importing country, but may be issued in the exporting or the importing country. For example, certificate of conformity for wood products is required. Exporters in Lao PDR face relatively least restrictiveness in exporting other products.

Third, out of eight products, exporters are of the opinion that they do not face much restrictiveness from SPS and TBT measures except one or two cases.

Fourth, as illustrated in Table 5.5(a), labeling requirements (B31) and inspection requirement (B84) are the two common TBT measures faced by Lao exporters, which were not identified as restrictive.

NTM	Particulars
Labeling	It covers the measures regulating the kind, colour and size of
requirements (B31)	printing on packages and labels and defining the information
	that should be provided to the consumers. Labelling is any
	written, electronic, or graphic communication on the packaging
	or on a separate but associated label, or on the product itself. It
	may include requirements on the official language to be used as
	well as technical information on the product, such as voltage,
	components, instruction on use, safety and security advice.
Inspection	It is a part of conformity assessment is the requirement for
requirement (B84)	product inspection in the importing country – may be performed
	by public or private entities. It is similar to testing, but does not
	include laboratory testing.

 Table 5.5(a): Most Common NTMs Faced by Lao Exporters

· · · · · · · · · · · · · · · · · · ·	, , , , , , , , , , , , , , , , , , , 				
NTM	Particulars				
Quarantine	It is a requirement to detain or isolate animals, plants or their				
requirement (A86)	products on arrival at a port or place for a given period in order				
	to prevent the spread of infectious or contagious disease, or				
	contamination.				
	<i>Product</i> : Rice (Importing country: EU)				
Certification	Certification of conformity with a given regulation that is				

exporting or the importing country.

required by the importing country, but may be issued in the

Product: Wood (Importing country: China, Vietnam)

Five, it goes without saying that exporters in Lao PDR have to comply with higher number of NTMs, even though none of the measures has been identified as restrictive in Lao PDR by the respondents. Among these measures, quarantine requirement (A86) and certification requirement (B83) are common (Table 5.5(b)). It is also quite apparent that SMEs are proportionally more vulnerable to NTMs than large companies. Therefore, it is worth logical to carry diagnostic assessment, identify the procedural obstacles and derive actions in more than one dimension to rationalise the NTMs. In light of the importance of streamlining the NTMs, it is crucial that we investigate further details of NTMs, which would provide an adequate and up-to-date picture of the impact of NTMs on their activities to decision makers, negotiators and the business community. Ultimately, the findings would be helpful in rationalizing the SPS and TBT measures.

5.1 The Regulatory Environment

requirement (B83)

An exporter faces two regulatory environments: one at home country and other at partner country. We have looked into the regulatory environment through field survey data. Most of the exporters have reported burdensome NTM cases relate to partner country regulations. In other words, Lao exporters have indicated that they feel more obstacles from the NTMs applied by trading partner countries rather those applied by Lao PDR. It is important to

analyze the regulatory environment of NTMs. Annexure 5.1 presents the list of NTM notifications issued by Lao's trade partners in the products selected in this study.

(a) Wood Products

Wooden products can be exported directly without a request prior to exportation. However, such products shall conform to the conditions and standards set out in Ministerial Decision No.1415/MOIC.DOI, dated 28 August 2008 on Form and Size of wooden products, which has been replaced by the recent decision No. 2005/MOIC.DOI, dated 28 September 2015.¹⁹ This new decision specifies principles, provisions and measures on defining category, type, format and size – thick, wide and length of wood products (either semi or finished products that are used, for example, as home/office furniture, flooring, builder's carpentry and joinery, builder's carpentry and construction. It aims to support the modernization development of the wood industry, increase value added, protect environment, utilize forestry resource in efficient and sustainable way, and contribute to continuously develop national economic.). MoIC's Notification (2011) also contains request of permission for exportation are the followings: (i) copy of enterprise registration allowing exercise of timber business and copy of tax registration; (ii) customs declaration form (if made through other province, shall file the document in according to the instructions of Finance sector); (iii) invoice; (iv) packing list; and (v) certificate to proof of the standard and size of wooden products.

(b) Cassava

Lao has ratified Protocol of SPS requirement for the export of cassava from Lao to China, which contains 15 Articles through agreement between MAF of Lao PDR and General Administration of Quality Supervision, Inspection and Quarantine of China. According to this protocol, dried cassava must be produced in Lao and used for processing, including cassava chips and pellets (Article 1). As per the Article 2, the cassava must comply with all applicable Chinese phytosanitary laws and regulations, be free of living insects, soil and any quarantine pests of major concern to China, and have no impurity substance added or mixed intentionally. Content of toxic and harmful substances, including pesticide residues, heavy metals, microorganisms and toxin, must comply with all applicable Chinese laws, regulations and health and safety standards. The Ministry of Agriculture and Forestry (MAF) has to adopt record management of cassava produce facilities or planters. The record must be consisted of name, address and code so that whenever any products is detected as noncompliant with the requirements herein, it can be traced back to the establishment with certainty. Under the supervision of MAF, pest monitoring and effective management measures shall have to be undertaken to avoid and minimize the occurrence of quarantine pests concerned by China. Prior to harvest and exportation season, MAF shall send the General Administration of Quality Supervision, Inspection and Quarantines of China

¹⁹ As part of Notification on the import and export of timber and wooden products N.1904/MoIC. DIMEX, Issuing Date is 30-09-2011

(AQSIQ) the information about procedures and results of disease investigation, pest monitoring and management of the year. MAF shall perform safety monitoring of toxin and harmful substances in cassava producing districts such as pesticide residues and heavy metal impurities, etc., and send the monitoring information to AQSIQ.

As per the Article 4, MAF shall take registration management of cassava processing facilities and storage facilities which wish to export, and ensure them compliance with phytosanitary and epidemic prevention requirements. The registration records must be provided by the MAF to the AQSIQ for approval prior to the beginning of the exportation season. The Article 5 suggests that in the procedures of harvest, processing and storage, MAF shall adopt greater management of cassava processing facilities and storage facilities. The cassava shall be processed, such as removing soil and impurities, sun drying and stove drying, and shall be free of soil, diseased parts, residues and other extraneous impurities. If necessary, the cassava shall be treated for instance fumigation, so as to ensure that no cassava carry quarantine pests concerned by China.

Moreover, the cassava must be packaged for transport. The package materials must comply with all applicable Chinese entry phytosanitary requirements. The package must be marked in Chinese as "this consignment of cassava will be exported to China" and be labeled with the registered facility's name and address, etc.

The cassava must be transported hermetically and vehicles must comply with Chinese safety and sanitation requirements. When through the 3^{rd} country, the cassava shall keep hermetical and the land vehicles shall not be unloaded and changed.

As per the Article 7, prior to exportation, MAF must carry out a phytosanitary inspection of cassava. Of the consignments is in compliance with requirements of this Protocol, MAF will issue a Phytosanitary certificate. The following additional declaration must be indicated in English in the certificate: "The consignment is in compliance with requirements described in the Protocol on Phytosanitary Requirements for the export cassava from Laos to China and is free from quarantine pests of concerned by China". If the consignment has been treated with fumigation or stove drying, name, dose and duration of the fumigation agent or temperature and duration of drying must be included in the Phytosanitary Certificate.

As per the Article 8, prior to export, the AQSIQ shall send quarantine inspection on a field visit to Laotian facilities. The inspectors shall check and assess the effectiveness of Laotian supervision system of planning, storage, transport, monitor the situation of pest investigation and detection of the safety and sanitation items, and ensure that the cassava are in compliance with entry inspection and phytosanitary requirements of China. MAF shall give assistance to Chinese pre-inspection and a joint inspection and quarantine group will established by Laos and China if necessary.

According to Article 9, prior to importation, related importers and agencies must submit applications and get the Animal-and-Plant Entry Permit issued by AQSIQ Entry port and facilities for storage and processing must be authorized by AQSIQ.

Once the cassava arrives to the entry port of China, CIQ will conduct the corresponding phytosanitary inspection (Article 10).

If contents of toxic and harmful substances are beyond the limits of Chinese safety standards, for instance pesticide residues and heavy metals, the consignment will be returned or destroyed or used for industrial application and all the costs will be at exporter's expense. According to above irregularities and treatments, AQSIQ will inform MAF in time, which will help MAF to determine the causes and take advanced measures. In severe cases, AQSIQ shall immediately suspend cassava import from related Laotian facilities and growing districts, even from whole country, till the problems are resolves.

According to Article 11, to be loaded and unloaded, transport, storage and processing must comply with all Chinese requirements of phytosanitary and prevention. CIQ will supervise places and procedures of cassava storage and processing. The unprocessed cassava will not be allowed to enter trading markets. AQSIQ will develop further risk analysis and have a retrospective review of the phytosanitary requirements herein based on the situation of pest occurrence in Laos and pests interceptions of the cassava. In consultation with MAF, the list of quarantine pests and relevant quarantine measures may be adjusted (Article 12). AQSIQ and MAF agree to deal with possible phytosanitary problems by means of technological conversation. If necessary, both sides may mutually send specialists to have an academic visit, exchange and joint research (Article 13).

(c) Maize

Alike to cassava, Lao PDR has also ratified protocol of Phytosanitary requirement for the export of maize from Lao to China, which contains nine Articles through agreement between MAF of Lao PDR and General Administration of Quality Supervision, Inspection and Quarantine of China.

As per the Article 1, the maize should be comply with all applicable Chinese phytosanitary law and regulation and be free of quarantine pest of concern to China and have no impurity substance added or mixed intentionally. Lao side need to inspect the company exporting corn to the China by requiring processing, warehousing, drying factory and must be registered company in the Lao PDR (Article 2). Lao side also needs to submit the list of such companies to the China side. As per the Article 3, Lao exporter has to ensure the cleanliness and keep the maize in a dry condition in order to get rid of the mold, out of the soil. According to the Article 4, before exporting, Lao side needs to carry out a phytosanitary inspection of maize. If the consignment is in compliance with requirements of this protocol, the concerned government will issue Phytosanitary certificate. The following additional declaration must be indicated in the certificate: "The consignment is in compliance with requirements described in the Protocol on Phytosanitary Requirements for the export from Laos".

Article 5: Prior to importing maize, Lao exporter need to submit the export documentations to the AQSIQ in order to request for import permission of maize to China to ensure to entry Boten Checkpoint and other checkpoints and go through processing and fumigation agents. To be loaded and unloaded, transport, storage and processing must comply with all Chinese requirements of phytosanitary and prevention. CIQ will supervise places and procedures of maize storage and processing. The unprocessed maize will not be allowed to enter trading markets.

When importing maize to China, AQSIQ will inspect the product. If they found quarantine pests/disease, they will destroy or even suspend the export company and inform Lao side for investigating. In case of exporting genetically modified for maize, it is important to get an approval from Chinese Agriculture Division. Lao side need to inform any situation of pests epidemic occurrence in Laos and its treatments. Chinese will send specialist to have an academic visit, exchange and joint research.

(d) Coffee beans and Rice²⁰

The procedures shall be taken into account before export as follows: (i) the type and quantity of plant described in the phytosanitary certificate shall be the same as actual export; (ii) phytosanitary certificates must not be issued more than 14 days prior to export; (iii) a phytosanitary certificate is invalid when it is issued after a consignment has been dispatched; (iv) the import of plant, plant products and regulated articles into the European Union shall be accompanied by the original phytosanitary certificate.

EU would like to see no harmful organism as defined in Annex I and II of EC Plant Health Directive, 2000/29/EC, phytosanitary treatment requirement PM10/11 (1) and PM 10/5 (1), - Disinfestation and/or disinfection treatment requirement. They also require the original Phyto Certificate submission, prohibited plants for export.

Vietnam, major importer of rice from Lao PDR, wants Lao exporters to explain the packing or storing means, on-site inspection and quarantine requirement, inspection procedures to imported foodstuffs²¹.

(e) Rubber

Rubber is listed in Sensitive Products List of China with the import tariff of 20 percent. In order to facilitate the export from Lao PDR to China, Lao PDR plans to initiate the

²⁰ Refer, notification on Sanitary and Phytosanitary Measures (SPS) for EU countries, NO. 0612 /DOA, dated 10 April 2013 (including coffee beans and rice)

²¹ Refer, Circular Guiding on the Food Safety Control for Imported Foodstuffs on Plant Origin, Ministry of Agriculture and Rural Development, Vietnam, No. 13/2011/TT-BNNPTNT, dated 16 March 2011.

negotiation on SPS measures of rubbers with China. At present, China is investigating rubber production in Lao PDR. The Lao PDR's Department of Agriculture, Ministry of Agriculture and Forestry is drafting the bilateral agreement with China. Once it is agreed, rubbers will be able to export to China officially.²² Therefore, exporters at the moment refer rubber import regulations of China. It was noted that the processing factories/producers are mainly Chinese investors. They received export quotas under arrangement between Lao PDR and China. China set sanitary and phytosanitary (SPS) requirements on the import of some agriculture products particularly corn, watermelon, banana, cassava (dried, powder) and rice (excluding paddy) from Lao PDR. These five products could be exported to China through international border checkpoint based on SPS requirements signed by the two countries.

(f) Banana

Lao PDR has signed protocol of Phytosanitary requirements for the export of Banana from to China, which contains nine Articles through agreement between MAF of Lao PDR and General Administration of Quality Supervision, Inspection and Quarantine of China.

The Banana shall be immature within 10-11 week after flowing, the mature bananas are forbidden to export to China (Article 1). As per the Article 2, the Banana shall be comply with the relevant phytosanitary laws and regulations of China and Laos, and be free of quarantine pest of concern to China (14 items on the list). It must be free of branch, foliage and soil, and exported through designated ports in China. The residues of Agrochemicals and other toxic substances shall not exceed the legal maximum residue levels (MRL) stipulated by Chinese laws.

The Banana shall come from orchards and packaging house registered by MAF and approved by AQSIQ. Name, address and registration code for traceability (Article 3). Banana orchards and packinghouse should take system management comprehensive measure of control plant diseases and insect pests, and fruit maturity degree, fruit bagging, pests monitoring and control and postharvest treatment (Article 4). The Packinghouses and packing process shall be maintained in the sanitary condition to keep free from pests. The packaged bananas shall be stored exclusively under low temperature conditions, using clean materials, first use and free of pests and non-contaminated by toxic substances. Phase: "Export from Laos to the P.R. China" marked in both English and Chinese. The shipment shall be in compliance with sanitary requirement and free from quarantine pests concerned by China (Article 5).

MAF shall carry out phytosanitary inspection before exportation of Banana. If the consignment approves the inspection, MAF will issue a Phytosanitary Certificate. Both the registering code of the orchard and packinghouse shall be marked in the certificate and with addition declaration in English "the consignment is in compliance with requirements described in the Protocol of phytosanitary for export of bananas from Laos to China and is

²² Source: Lao Trade Portal

free from quarantine pests concerned by China". The certificate shall be in compliance with the standard of ISPM No. 12 (Article 6).

Once the Bananas arrive to the entry port of China, AQSIQ will carry out phytosanitary inspection. When violation is detected, the consignment will be refused. The AQSIQ will notify the detection to MAF and MAF will investigate and supervise the rectification until appropriate actions have been taken and recognized by AQSIQ (Article 7).

Prior the beginning of the program of exportation each year, AQSIQ will send inspectors to Laos for cooperation with MAF to conduct onsite verification of Phytosanitary condition of the production areas and for verification and evaluation of orchards, packinghouse, transportation and certification process to ensure it meets China plant inspection and quarantine requirements. All expenses associated with transportation accommodation and living expenses of inspectors shall be paid by exporters. MAF will provide life and technical assistance to the inspectors of AQSIQ (Article 8). AQSIQ will develop further risk analysis based on the dynamic occurrence of pest in Laos and pest interception in consultation with MAF (Article 9).

5.2 Suggestions of Exporters on Trade Barriers

The field survey present crucial and important information on the perception exporters in mitigating the trade barriers. Annexure 5.2 presents the detailed list of the suggested actions. We however discuss the selected recommendations of Lao's immediate neighboring countries which are important trading partners.

(i) Thailand

- Provide suitable export quota for company
- Reduce documentations and costs, making it more export friendly
- Set-up single window for all approvals
- Provide more information about market and regulations
- Identify a responsible persons/office with clear tasks
- Disseminate information to all concerned industry associations and provincial officials. For example, withdrawing the regulation on weight limit check point nation-wide.
- Improvement of infrastructure such as establishment of railway infrastructure, wider roads, etc.
- Government to particular in informing industries changes in notifications on time. Currently, government frequently change regulations and send a late notice to related wood industries.
- Reduction in management mechanism of concerned government agencies and identify their roles and duties precisely

- Reduction in paper work process, adopt quicker approval mechanism. No need to get approval/sign at district level, which leads to time-consuming
- Need to revise the standard price for service charge (export related documents) and strictly apply; because we still pay extra-money for that
- Use IT system to facilitate trade at the border, which will reduce time and costs
- Promote Lao firms than foreign investors because it is local business
- The regulation on taxation from Ministry of Finance s to be clearly notified

(ii) China

- Government should protect the right of Lao business people and look at the effect of FDI in Laos.
- Promote the transportation companies in Udomxai because they lost their job after Chinese companies use Chinese transportation.
- The custom duty at the border should contain a list of services fee/taxes for goods clearly. Paperless trade environment
- Reduce extra payment without receipt at the police check point in Ban Pou of Luangnamtha province.
- Government should improve taxation system and also should reduce tax
- Work harder on taxation at the border, each payment must be receipt to making that tax goes to central government directly.
- Government should provide information centre about trade between Laos and China in both languages.
- Government should reconsider the weight limits in Laos. In Laos, the truck should be not more than 20 tonnes, whereas the Chinese trucks carry 38 tonnes and as a result we have to pay an extra for overweight.
- Government should designate the concerned office for the on-site inspection for the Phytosanitary Certificate
- Government should increase the export quota

(iii) Vietnam

- Government should facilitate the value chains
- Too much problems with foreigner middlemen; who come to buy the dried cassava directly. This attitude extremely impacts in Lao business. It is great if we could establish the association for dried cassava.
- Promote roles and responsibility for Provincial Chamber and Commerce and Industry
- Improve the infrastructure, esp. road expansion and comply weight limits with international standard)
- Government should revise the tax fee
- Reduce the on-site inspection process of the provincial agriculture and Forestry Section

- Notifications from the government should reach the exporters quickly
- Establish the Lab center for agricultural products in Laos
- Control the quality of export goods
- Although it is tax exemption on exporting, government still collects so-called 'transportation tax' ~ 1kg/15,000 kip (1.8 \$), which is too high.
- Reduce unnecessary security. Exporters feel unsafe when traffic police very often stops export vehicle and check the documents, especially night time

Chapter 6: Border Arrangement, Transaction Time and Cost

Trade barriers have been affecting Lao PDR exporters. While NTMs are mostly behind the border barriers, Lao exporters have been facing barriers at the border. Removal of barriers at border is found to be important in strengthening a country's economic integration in the neighbourhood. Cutting additional costs and excessive time through improved trade facilitation have helped countries in raising trade flows and/or diversifying the exports to newer markets-regionally or otherwise. Simplification of trade processes and procedures along with harmonization of trade transaction data and documents are thus envisaged key to improving trade competitiveness across most of the ASEAN countries.

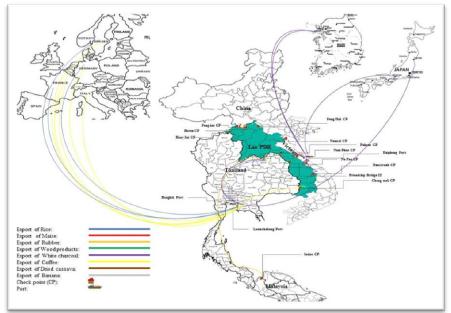
Undertaking a deeper analysis of the transaction costs and time that Lao exporters face when engaging in international trade may provide useful insights and more practical and specific policy recommendations. The analysis can also be used for improvement of infrastructure onand behind- borders. Ultimately, this would facilitate building hard infrastructure (such as, border infrastructure across corridors) and soft infrastructure (such as, reformed and simplified trade procedures, rules and regulations, knowledge and capacity, strategies), and institutions to support the development and operation of physical infrastructure along the trade corridors used by Lao PDR's exporters.

In view of the above, we make an attempt to calculate transaction time and cost for trading of selected products between Lao PDR and its trade partners; identify the administrative, regulatory and procedural barriers that unnecessarily impede the trade flow in the perception of firms; and draw some policy recommendations. In other words, we aim to identify the trade facilitation priorities and strategies in Lao PDR. The products selected for this study indicate not only the spatial importance of the regional corridors in carrying trade but also link with a growing supply chain across borders.

Average time and cost along with the frequency of time and cost taken at various stages of export process of each product for the year 2015 are calculated based on the data collected from the field survey.²³ Furthermore, perception of exporters on trade barriers, faced at the respective border posts, has also been analyzed. Finally, the competence of various agencies involved in exports, including road transporters, custom agents and quality/standards related agencies have been assessed based on the perception of the respondents. The purpose of the exercise is to determine the quality of trade facilitation infrastructure and assess the logistical competency at relevant custom points and to identify possible areas for improvement.

²³ Time has been calculated in terms of hours. Cost is expressed in per tonne unit (except for time to border which is expressed in terms of cost per tonne per km) and expressed in US\$. It should be also noted that the tables represent "normal" time and cost taken in conducting export and import. However, it does not consider the exceptional circumstances, which, for instance, idle time taken during the process of acquiring Phytosanitary certificate every six months, etc.

Map 6.1: Export of Selected Products



6.1. Transaction Time and Costs

In this study, we have calculated average transaction time and costs for all the products exported either to bordering countries such as China, Thailand, Vietnam, or non-bordering countries such as EU, Malaysia, Korea, Japan, etc. (Map 6.1). Lao PDR being a landlocked country uses transit port at Thailand (Laem Chabang) and Vietnam (Da Nang). The list of border points for both transit and non-transit cases are given in Annexure 6.1. The transaction time and costs were calculated based on the methodology given in Annexure 6.2. The average transaction time and costs of Lao PDR's export to partner countries are reported in Tables 6.1 to 6.8. Following observations are worth noting.

Tuble off. Export of Contest Cost and Time			
	Major importing countries	1)Thailand	2) EU
	Transportation modes	1) Road	2) Sea
	Border posts		2) Laem
		1) Vangtao,	Chabang Port,
		Chongmek,	Thailand
		Chonbouri	(Transit port)
	Distance (km)	7	'17
Transit (warehouse to transit port)	Time taken (hrs)	21	
transit port)	Cost taken (US\$/container)	2	276
	Time at transit port (hrs)		2
Transit (at port of	Cost at transit port (US\$/container)		
transit to border/port of destination country)	Time at border (at transit province) (hrs)		
	Cost at border (at transit province)		
	(US\$/container)	2	208
Non-transit	Distance (km)	1	.67

Table 6.1: Export of Coffee: Cost and Time

	Time taken (hrs)	3
	Cost taken (US\$/truck)	312
	Cost (dollar/ton)	14
Time at border (Lao	Total (hrs)	4
PDR)	Custom clearance (hrs)	2
	Plant & quarantine clearance (hrs)	0
	Idle time inside port (hrs)	1
	Loading/Unloading (hrs)	0
Cost at border (Lao	Total cost (US\$/truck)	308
PDR)	Custom clearance# (US\$)	986.44
	Plant & quarantine clearance#	
	(US\$)	246.61
	Cost of loading/unloading	*

*Not applicable #Per consignment

	Table 6.2: Export of Rice: 0	Cost and Time	
	Major Importing Country	1) Viet Nam	2) EU
	Transport Mode	1) Road	2) Sea
	Border	1) Na pao, Cha lo	2) Laem Chabang Port
Transit (warehouse	Distance (km)	670	
to border)	Time taken (hrs)	24	ļ
	Cost taken (US\$/container)	91	3
Transit (border to	Distance (km)		
port)	Time taken (hrs)	66	0
	Cost taken (US\$)	350	00
	Time at border at transit	3	
	Cost at border at transit (US\$)	16	4
Transit (at port of transit)	Time at border (at transit province)	1	
	Cost at border (at transit province in US\$)	78	
Non Transit	Distance (km)	28-	4
Tion Transie	Time taken (hrs)	15	5
	Cost taken (US\$)	125	50
	Cost taken (US\$/ton)	50)
Time at Border	Total time (hrs)	17	
(Lao PDR)	Custom clearance (hrs)	2	
	Plant & Quarantine clearance (hrs)	18	
	Idle time inside port (hrs)	0	
	Loading/unloading (hrs)	0	
Cost at Border (Lao	Total (US\$/truck)	220	
PDR)	Custom clearance# (US\$)	160.30	
	Plant & Quarantine clearance # (US\$)	24.0	56
	Loading/Unloading	0	

Table 6.2: Export of Rice: Cost and Time

#Per consignment

	Major Importing Country	1) Japan	2) Korea
	Transport Mode	1)Sea	2) Sea
	Border	1) Bangkok Port, Tokyo Port	2) Haiphong port, Incheon Port, Da Nang Port
Transit (warehouse	Distance (km)	9	94
to border)	Time Taken (in Hrs)	3	9
	Cost Taken (Dollar)/container	24	96
Transit (border to	Distance (in km)	39	000
port)	Time Taken (in Hrs)	2	91
	Cost Taken (Dollar)	21	.73
Time at Border (Lao	Total		3
PDR)	Custom Clearance	2	
	Plant & Quarantine Clearance		1
	Idle time inside port		0
	Loading/Unloading		0
Cost at Border (Lao	Total (US\$/Truck)	481	
PDR)	Custom Clearance (US\$)	3'	79
	Plant & Quarantine Clearance (US\$) Idle time inside port	2	25
	Loading/Unloading		
Transit (port of	Time at Border (at Transit)		
transit)	Cost at Border (at Transit in US\$)		
Transit Province	Time at Border (at Transit province) Cost at Border (at Transit		
	province in dollar)	21	.58

Table 6.3: Export	of White	Charcoal:	Cost and	Time

Table 6.4: Export of Banana: Cost and Time

	Major importing country	China
	Transportation mode	Road
	Border	Bo Ten -Bo Han, Pang Hai-Pang Thong
Non Transit	Distance (km)	181
Tion Transit	Time taken (hrs)	8
	Cost taken (US\$/truck)	567
	Cost (US\$/ton)	26
Time at Border	Total time (hrs)	1
(Lao PDR)	Custom Clearance (hrs)	
	Plant & quarantine clearance (hrs)	
	Idle time inside port (hrs)	
	Loading/Unloading (hrs)	

Cost at Border	Total (US\$/truck)	535
(Lao PDR)	Custom clearance# (US\$)	
	Plant & Quarantine clearance# (US\$)	
	Loading/Unloading (US\$)	

#Per consignment

	Maian Langertine Country		1
	Major Importing Country	1)Vietnam	2) China
	Transport Mode	1)Road	2) Road
	Border		2) Bo Ten -
			Bo Han,
		1) Namsoi, Na	Pang Hai-
		Meo.	Pang Thong
Non-Transit	Distance (km)	190	
Non Transit	Time Taken (hrs)	24	
	Cost Taken (US\$/truck)	158	
	Cost (US\$/ton)	15	
Time at Border (Lao	Total	2	
PDR)	Custom Clearance	3	
,	Plant & Quarantine		
	Clearance		
	Idle time inside port		
	Loading/Unloading		
	Total (US\$/truck)	201	
Cost at Border (Lao	Custom Clearance		
PDR)	Plant & Quarantine		
	Clearance		
	Loading/Unloading		

Table 6.5: Export of Maize: Cost and Time

#Per consignment

Table 6.6: Export of Wood Products: Cost and Time

	Major Importing Country	1) Viet Nam	2) Thailand
	Transport Mode	1) Land	2) Land
	Border		2) Thana Leng,
		1) Pang som,	Nong Khai, Pakxan,
		Tang Chang	Beungkhan
Non Transit	Distance (km)		171
Non Transic	Time taken (hrs)		6
	Cost taken (US\$/truck)		580
	Cost (US\$/ton)	29	
Time at Border (Lao	Total	31	
PDR)	Custom Clearance		
,	Plant & Quarantine		
	Clearance		36
	Idle time inside port	2	
	Loading/Unloading		0
Cost at Border (Lao	Total (US\$/truck)		522
PDR)	Custom Clearance (US\$)		80

	Plant & Quarantine	
	Clearance (US\$)	43
	Loading/Unloading	
		0
	Time at Border (at	
Time and cost at	Destination countries)	4
destination border	Cost at Border (at	
destination border	Destination countries in	
	US\$)	100

Table 6.7: Export of Dried Cassava: Cost and Time

	Major importing countries	1)Vietnam	2) China
	Transportation modes	1) Road	2) Road
	Border posts	1) Na pao, Cha lo, Nam phao, Cau Treo	2) Pang Hai, Pang Thong
Non-transit	Distance (km)	193	T ang Thong
INOII-transit	Time taken (hrs)	7	
	Cost taken (US\$/truck)	1990)
	Cost (US\$/ton)	54	
Time at Border	Total time (hrs)	2	
(Lao PDR)	Custom clearance (hrs)	2	
	Plant & quarantine clearance (hrs)	0	
	Idle time inside port (hrs)	0	
	Loading/Unloading (hrs)	0	
Cost at Border	Total (US\$/truck)	305	
(Lao PDR)	Custom clearance# (US\$)	44	
	Plant & quarantine clearance# (US\$)	23	
	Loading/Unloading (US\$)	10	

#Per consignment

Table 6.8: Export of Rubber: Cost and Time

	_	
	Major Importing Country	China
	Transport Mode	Road
	Border	Bo Ten -Bo Han,
Transit (warehouse	Distance (km)	385.00
to border)	Time Taken(hrs)	6.50
	Cost Taken (US\$/container)	
Transit (border to	Distance (km)	2000.00
port)	Time Taken (hrs)	48.00
	Cost Taken (US\$)	3750.00
Non Transit	Distance (km)	225.25
	Time Taken (hrs)	5.00
	Cost Taken (US\$/truck)	1971.25
	Cost (US\$/ton)	78.85
Time at Border	Total (hrs)	11.20
(Lao PDR)	Custom Clearance (hrs)	16.00

	Plant & Quarantine Clearance (hrs)	4.00
	Idle time inside port (hrs)	0.00
	Loading/Unloading (hrs)	0.00
Cost at Border (Lao PDR)	Total (US\$/truck	535.81
	Custom Clearance (US\$)	73.98
	Plant & Quarantine Clearance (US\$)	6.17
	Loading/Unloading	0.00
Transit (port of	Time at Border (at Transit)	
transit)	Cost at Border (at Transit in US\$)	31.25

First, time at transit country and port (white charcoal, coffee and rice) are found to be much higher than transportation time in Lao PDR. This is true for export of both coffee and rice. Cost of transit per container is found to be much higher than inland haulage charges in exporting countries.

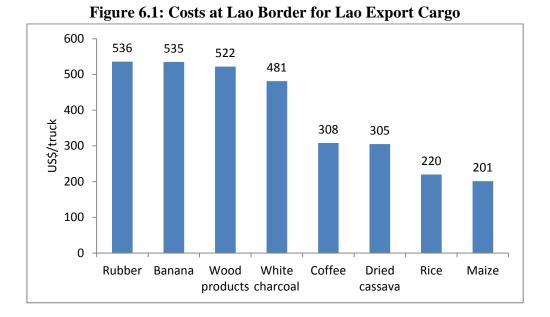
Second, transit port handling charges are abysmally high, thereby making the Lao's export relatively uncompetitive. Transit through Thailand provinces adds further costs to Lao's export.

Third, clearance of goods still takes relatively longer time and costs at Lao border posts. Costs-wise, export of wood, rubber and banana come takes over US\$ 500 per truck at Lao border side (Figure 6.1). Waiting time at land border at Lao side is always very high, particularly for wood products (Figure 6.1). Shipment of wood products takes about 31 hours to get clearance at Lao side of the border. Average time required for loading/unloading has also increased a bit across all the products due mainly to the rise in trade volume at Lao border. Time at customs is therefore a highly significant barrier to trade when Lao trades with neighbouring countries.

Fourth, Lao exporters also face very high transport costs from Lao border to transit ports in Thailand. Export of rubber involves about US\$ 3750 per container (TEU), followed by rice (US\$ 3500) and white charcoal (US\$ 2496). In comparison, transport cost of non-transit export goods is relatively low (Figure 6.4).

Fifth, in case non-transit product, transaction cost per ton varies between US\$ 15 per ton and US\$ 54 per tonne. Transaction time, on the other, is appeared to be low, compared to the transit products. Goods are cleared 3 to 24 hours (Figure 6.5). There has been a marginal rise in average time of transportation of goods from warehouse to border between the non-transit products. Road conditions near the land border areas, narrow approach road in particular, have become bad to worse in the last few years, resulting in lengthy travel time from warehouse to border.

Finally, quality of border infrastructure at both Lao border with Vietnam, China and Thailand is presumed to be responsible for variations in transaction time and cost at border. In general, infrastructure at the border posts is inadequate and services of border agencies including security are not always good.



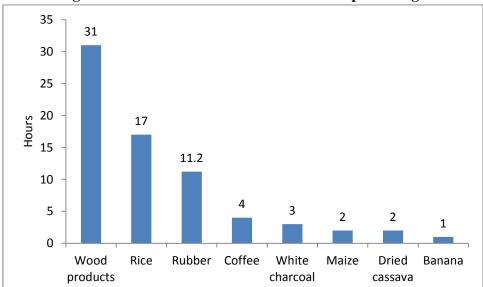


Figure 6.2: Time at Lao Border for Lao Export Cargo

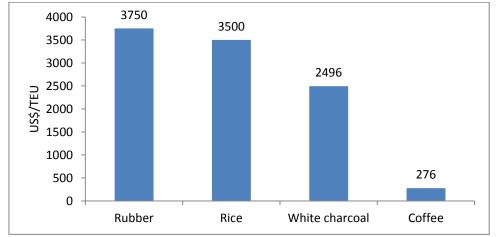


Figure 6.3: Transport Cost of Lao Export Cargo from Lao Border to Transit Port

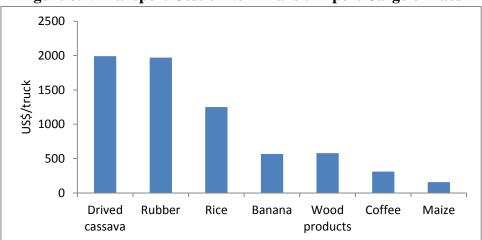
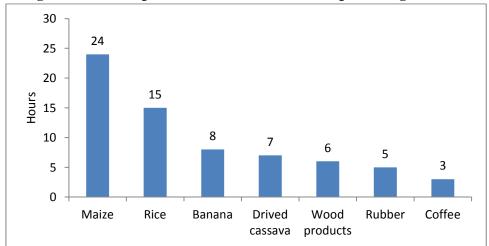


Figure 6.4: Transport Cost of Non-Transit Export Cargo of Laos

Figure 6.5: Transport Time of Non-Transit Export Cargo of Laos



6.2. Perception on Trade Barriers at Border

Perception on trade barriers are calculated based on the data collected from the field survey and has also been analyzed. The purpose of the exercise is to determine the quality of trade facilitation infrastructure and assess the logistical competency at relevant custom points and to identify possible areas for improvement. Respondents rank the difficulty for each attribute in the scale of 1 (very easy) to 5 (very hard) for Lao PDR and its trade partner. Tables 6.9 and 6.10 present the perception of respondents in Lao PDR on trade barrier (indicators).

Particulars	Very Easy	Easy	Average	Hard	Very Hard
	(Percent of Respondents)				
Warehouse / parking	32.65	22.45	18.37	16.33	10.20
Road	18.37	26.53	22.45	28.57	4.08
Telecom facilities	46.81	40.43	8.51	4.26	0.00
Bureaucracy and red-tape	22.45	30.61	30.61	12.24	4.08
Corruption and bribery	0.00	4.76	52.38	23.81	19.05
Faster handling equipment	17.86	14.29	10.71	10.71	46.43
Trained human resources	11.36	25.00	38.64	15.91	9.09
Lengthy paper work	43.75	22.92	18.75	10.42	4.17
Manual examination of goods	23.53	29.41	35.29	0.00	11.76
Amenities such as hotel	6.52	34.78	17.39	13.04	28.26
Banks	29.79	40.43	4.26	4.26	21.28
Vehicle tracking system electronically (e.g. RFID)	11.54	3.85	15.38	0.00	69.23

Table 6.9: Perception of Trade Barriers at Lao PDR

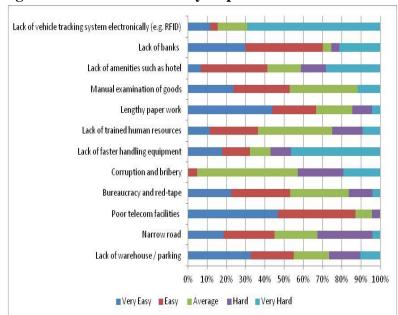
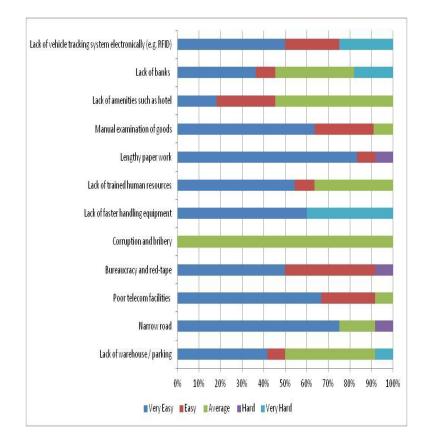


Figure 6.6: Barriers Faced by Exporters at the Lao Border

First, in general, satisfaction levels are found to be considerably lower in easing many tradeand border- related barriers (Figure 6.6). Respondents in Lao PDR have identified faster handling equipment and vehicle tracking system, at the Lao PDR side of the border, as major barriers to trade. These perceptions are very similar to what we have seen in cases of other landlocked countries. On the other, majority of respondents in Lao PDR have found telecom facilities, warehouse / parking, documentation and banks as low barriers to trade. At the same time, 19 percent of respondents identified corruption and bribery as a barrier to trade. Unlike popular belief, 28.57 percent of respondents also found road condition in Lao side as a barrier.

Particulars	Very Easy	Easy	Average	Hard	Very Hard
	(Percent of Respondents)				
Warehouse / parking	41.67	8.33	41.67	0.00	8.33
Road	75.00	0.00	16.67	8.33	0.00
Telecom facilities	66.67	25.00	8.33	0.00	0.00
Bureaucracy and red-tape	50.00	41.67	0.00	8.33	0.00
Corruption and bribery	0.00	0.00	100.00	0.00	0.00
Faster handling equipment	60.00	0.00	0.00	0.00	40.00
Trained human resources	54.55	9.09	36.36	0.00	0.00
Paper work	83.33	8.33	0.00	8.33	0.00
Manual examination of goods	63.64	27.27	9.09	0.00	0.00
Amenities such as hotel	18.18	27.27	54.55	0.00	0.00
Banks	36.36	9.09	36.36	0.00	18.18
Vehicle tracking system electronically (e.g. RFID)	50.00	25.00	0.00	0.00	25.00

Table 6.10: Perception of Trade Barriers at Trade Partners



Second, barring corruption and bribery and amenities such as hotel, respondents in Lao PDR are found to be satisfied with all the attributes we have selected in this survey. However, 40 percent of respondents have identified faster handling of goods at the border of partner countries as a major barrier to trade (Figure 6.7). Besides, 100 percent of respondents have identified corruption in the partner side as average type of barriers to trade in case Lao PDR's export. In view of the respondents, overall, trade barriers have remained low in partner's side while exporting to them or through them.

Third, in the perception of Lao respondents, most of the trade barriers are average or low in nature.

Fourth, in the perception of Lao exporters, faster handling equipment has appeared as the key barrier to trade.

To conclude, Lao exports face both high transaction time and cost at land borders sharing with neighbouring countries as well as transit ports in Thailand. The survey data shows that time at transit country and port are found to be much higher than transportation time in Lao PDR in some selected products. Besides, cost of transit per container is also found to be much higher than inland haulage charges in exporting countries. In general, infrastructure at the border posts is inadequate and services of border agencies including security are not always supportive. Time at customs is therefore a highly significant barrier to trade when Lao trades with neighbouring countries. Some of these findings do receive similar perception of Lao exporters. About 40 percent of respondents have identified faster handling of goods at the border of partner countries as a major barrier to trade. Besides, 100 percent of respondents

have identified corruption in the partner side as average type of barriers to trade in case Lao PDR's export. In the perception of Lao respondents, most of the trade barriers are average or low in nature.

Chapter 7: Perception on Ease of Standards

Meeting standards, global or otherwise, is crucial for facilitating a country's export.²⁴ Standards is an integral part of NTMs. Substantial decrease in trade barriers over the last few decades has led to technical barriers to trade (TBTs) – such as standards – becoming increasingly important determinants of international trade flows. Unlike tariffs, standards have the potential to not only decrease but also expand trade. It is therefore envisaged as key to improving competitiveness of Lao's exports.

While standards have been found to promote trade, they still have the power to be protectionist when buyers require production according to these standards and compliance costs are relatively significant. It is also not necessarily true that standards always facilitate trade. We lack sufficient empirical evidence concerning the relationship between standards and trade.²⁵

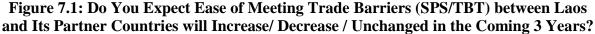
In this study we have collected perception of Lao exporters on standards. With regard to the perception of future trade, the survey posed questions to firms on specific aspects of SPS/TBT measures and the perception of firms regarding trade in the future. The survey sought responses of the exporters on the technical/financial possibility of adapting products to regulations in force in the country of destination, whether they have encountered changes in technical regulations in the country of destination over the years, the sources of information for NTMs that they use and the impact on trading (in terms of increase of sales in the domestic market) from conforming to certain foreign regulations.

Perception of exporters were also obtained whether they expect the volume of trade between Lao PDR and its partner countries to increase, decrease or unchanged in the coming three years if standards are eased. When we asked the Lao respondents whether they expect the ease of meeting standards between Lao PDR and its partner countries to increase, decrease or unchanged in the coming three years, the majority of the respondents (91 percent) said that it will increase (Figure 7.1), thereby showing high confidence on the rise of export if standards are eased. At the same time, 53 percent of respondents felt that it might increase the import, while 47 percent gave opinion that import may fall.

This study also sought opinions of Lao exporters whether they expect that the volume of trade between Lao PDR and its partner countries to increase/decrease/unchanged in the coming three years if NTMs and other trade barriers are removed or reduced. The survey has revealed that 95 percent of firms were of the opinion that export will go up if NTMs and other barriers are removed or reduced (Figure 7.2). This gives high confidence to undertaking policies that lead to ease the burden of NTMs. At the same time, 61 percent of firms also felt that import will go-up whereas 31 percent felt import may fall over time.

²⁴ Refer, for example, Deardorff and Stern (1998)

²⁵ Refer, for example, Clougherty and Grajek (2012)



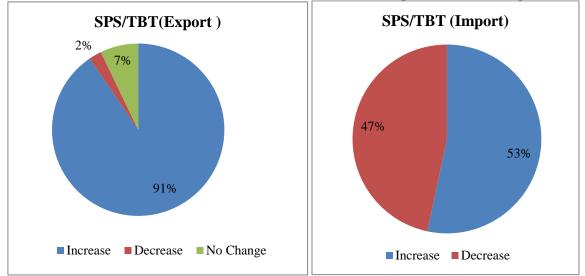
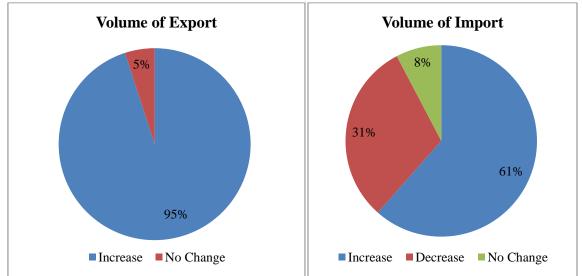


Figure 7.2: Do You Expect Volume of Trade between Laos and Its Partner Countries to Increase/Decrease/Unchanged in the Coming 3 Years if NTMs and Other Trade Barriers are Removed/ Reduced?



One of the firms during the interview told us that it is the lengthy documentation and absence of transparent environment make Lao's exports uncompetitive. Some of the Lao PDR's trading partners need the weight certificate, issued by the government or recognized institution. It takes long time to receive the quality control certificate and test report from the Provincial Science and Technology Section. Using the digital interfaces, it is possible that the regulator may notify the duration for getting these certificates. Online application would save time as well as make the system transparent and faster. Therefore, facilitating standard-related documents is essential. In the perception of firms, easing the standards or removing the NTMs will lead to increase Lao's export.

Majority of exporters has communicated that they are aware of the international standards for the products in question and those are the standards applied by Lao's partner countries such as Thailand, Vietnam, China, Malaysia, Korea, Japan, EU, etc. However, several firms in Lao PDR are not aware of the international standards, especially in case of cassava, rubber or coffee. Bringing transparency, awareness and availability of regulatory information would certainly ease the barriers to export.

Finally, exporters in Lao PDR may adapt their products to the regulations in force of the country of destinations. At the same time, it might be difficult financially/technically to adapt their products to the regulations in force of the country of destinations. Harmonization of standards among the countries is also vital to eliminate repetitive procedures and practices. Coordination among different Ministries, capacity building of officials dealing standards, etc. is needed to boost the export from Lao PDR. Lao PDR government alone cannot build the infrastructure required for facilitating country's export. Therefore, technical assistance, international aid and private sector investments are essential towards improvement of the country's capacity and infrastructure dealing the standards.

Chapter 8: Conclusions and Recommendations

During the past two decades, import tariffs have decreased significantly and the importance of non-tariff measures (NTMs) aimed at further reducing international transaction costs has gained more importance in promoting trade across countries. In other words, tariff has gone down, but not the NTMs. Trade facilitation has, therefore, gained a new high profile in the Southeast Asia. Cutting additional costs by removing NTMs and attaining improved trade facilitation have helped countries in raising trade flows and/or diversifying the exports to newer markets–regionally or otherwise.

Lao PDR is one of the fastest growing economies in Southeast Asia. Its' strategic location trumps its landlockedness. Lao PDR is well located sharing borders with China, Thailand, Vietnam, Cambodia, and Myanmar. It acts as a bridge-head between Southeast and East Asia. Given its unique geographical positioning, the country has been transforming gradually from a closed economy into a more open and private-led market economy. The liberalized trade policy in Lao PDR includes improvement in transparency, reduction of NTBs and introduction of trade legislation in line with the principles of the World Trade Organization (WTO) and Association of Southeast Asian Nations (ASEAN) agreements. A renewed thrust has been given through trade policy reforms, resulting Lao PDR getting integrated gradually into the world economy through trade agreements, regional or otherwise. For example, Lao PDR is the member of ASEAN and signed the ASEAN Trade in Goods Agreement (ATIGA) in 2010. It is also a member of ongoing RCEP negotiation. It is the chair of ASEAN in 2016. It became a formal member of the World Trade Organization (WTO) in 2013. Lao PDR is also a member of the WTO's Trade Facilitation Agreement (TFA) and ratified it. All these agreements require profound modifications on tariffs, non-tariff measures, customs reforms, and trade facilitation.

Lao PDR has witnessed sharp rise in exports 2008 onwards. The biggest challenge is to sustain the benefits from trade by making Lao's exports globally competitive. Increased trade links with neighbouring countries and other trade partners have translated into increased access to better or cheaper imports. Yet, further challenges to market access remain.

While economic growth has been fuelled largely by its rich natural resources, Lao PDR can also focus on diversifying its export through integrating more closely with its neighbours. Here, competitiveness of Lao products matters. Removal of barriers to trade, not only at home but also in partner countries, may facilitate Lao's exports globally, thereby further adding value to its growing service sector and growth subsequently.

This study provides a comparative overview of the landscape of NTMs affecting Lao's exports. It attempts to identify regulatory hurdles and other NTMs and related border costs that hamper the ability of the Lao PDR to reap the gains of deeper trade integration. In other words, this study seeks to gain a better understanding of the barriers faced by Lao PDR's

exporters. The results of the study would help us drawing appropriate strategies to ease the barriers to trade.

To assess the size of NTMs and implications, we have selected eight products, namely, Banana, Coffee, Dried Cassava, Maize, Rice, Rubber, White Charcoal and Wood, all exported by Lao PDR. Although the NTM classification encompasses 16 chapters (A to P), we consider only Sanitary and Phytosanitary (SPS) and Technical Barriers to Trade (TBT), based on UNCTAD classification. All these eight products have potential for growth, both within the domestic and global markets, but all of them are hindered from doing so as a result of a number of policy and market based barriers. Interviews with 60 export firms and in addition 5 logistics firms were successfully completed. This survey was conducted across the country. In addition to interviews with the firms, the relevant agencies were also consulted to obtain information on NTMs.²⁶ The summary of the study is presented below.

(a) NTMs

- The field level data indicate that about 80 percent of Lao exporters have been facing difficulties with NTMs, of which 87 percent are agricultural (SPS) firms and 76 percent are manufacturing (TBT) firms.
- This study shows that Lao exporters of banana to China have to comply with the measures like labeling (A31), marking (A32), packaging (A33), microbiological criteria of the final product (A41), hygienic practices during production (A42), and cold/heat treatment (A51) for elimination of plant and animal pests and disease-causing organisms in the final product. Exporting rice (both ordinary and organic) to EU, most of the NTMs that Lao exporters have to comply with are related to conformity assessment (A8) such as product registration requirement (A81), testing requirement (A82), certification requirement (A83) and quarantine requirement (A86). Exporting of rubber to China and Malaysia has to comply with (i) registration requirement for importers for TBT reasons (B15) under the category of prohibitions/ restrictions of imports for objectives set out in the TBT agreement (B1), (ii) product registration requirement (B81), labeling requirements (B31) and packaging requirements (B33), all under the category of Labeling, Marking and Packaging Requirements (B1). In case of export of white charcoal to Korea and Japan, Lao exporters have informed us through the field survey that they have to comply with registration requirement for importers for TBT reasons (B15), labeling requirements (B31), marking requirements (B32), and several measures under the conformity assessment such as product registration requirement (B81), testing requirement (B82), certification requirement (B83), inspection requirement (B84), and traceability information requirements (origin, processing and distribution) (B85). Exporting of wood products to Vietnam and Thailand also requires compliance to all

²⁶ The findings of the survey were presented and verified at the National Consultation, organised by the DIMEX, on 156 August 2016 at Vientiane. Appendix 8.1 presents the agenda and list of participants. The Report has also been updated based on the feedbacks of the participants of this Consultation.

conformity assessment related to TBT measures (B8) such as product registration requirement (B81), testing requirement (B82), certification requirement (B83), inspection requirement (B84), and traceability information requirements (Origin, Processing and Distribution) (B85).

• The exporters have identified (i) labeling requirements (B31) and (ii) inspection requirement (B84) as common TBT measures applied by the trade partners of Lao PDR.

(b) Restrictiveness and Procedural Obstacles

- Exports of banana to China, maize to China and Vietnam and Rice to Vietnam involve low documentations, processes and actors, compared to other products. Regulations of these products are fairly liberalized and do not pose high barriers in Lao PDR. However, the entire trade processes have been dealt manually, and online/electronic submission of trade documents is yet to happen in Lao PDR.
- Among the Lao's trade partners, owing to lowest numbers of processes and actors, both Vietnam and China appear to be more trade friendly. In both countries, business process steps and corresponding actors in export are relatively less dispersed.
- While procedural barriers coming from level of documentation has been in the range of low to medium across all the products and partner countries, the same arising from the processes and actors are in the medium to high range, suggesting benefits of low documentation has been neutralized by procedural barriers faced by Lao exporters.
- One rice exporter in Lao PDR has found quarantine requirement (A86) in EU is very restrictive. Otherwise, they do not face much restrictiveness in SPS.
- Lao exporters of wood products to Vietnam and Thailand have found the certification requirement (B83) is very restrictive.
- Out of eight products, exporters are of the opinion that they do not face much restrictiveness from SPS and TBT measures except one or two cases.
- Labeling requirements (B31) and inspection requirement (B84) are the two common TBT measures faced by Lao exporters, which were not identified as restrictive.

(c) Transportation and Border Barriers

• Time at transit country and port (white charcoal, coffee and rice) are found to be much higher than transportation time in Lao PDR. This is true for export of both coffee and

rice. Cost of transit per container is found to be much higher than inland haulage charges in exporting countries.

- Transit port handling charges are abysmally high, thereby making the Lao's export relatively uncompetitive. Transit through Thailand provinces adds further costs to Lao's export.
- Clearance of goods still takes relatively longer time at Lao border posts. Waiting time at land border at Lao side is always very high. Average time required for loading/unloading has also increased a bit across all the products due mainly to the rise in trade volume at Lao border. Time at customs is therefore a highly significant barrier to trade when Lao trades with neighbouring countries.
- In case non-transit product, transaction cost per ton varies between US\$ 15 per ton and US\$ 54 per tonne. Transaction time, on the other, is appeared to be low, compared to the transit products. There has been a marginal rise in average time of transportation of goods from warehouse to border between the non-transit products. Road conditions near the land border areas, narrow approach road in particular, have become bad to worse in the last few years, resulting in lengthy travel time from border to warehouse.
- Quality of border infrastructure at both Lao border with Vietnam, China and Thailand is presumed to be responsible for variations in transaction time and cost at border. In general, infrastructure at the border posts is inadequate and services of border agencies including security are not always good.

(d) Perception on Trade and Border Infrastructure

- In general, satisfaction levels are found to be considerably lower in easing many tradeand border- related barriers. Respondents in Lao PDR have identified faster handling equipment and vehicle tracking system, at the Lao PDR side of the border, as major barriers to trade. These perceptions are very similar to what we have seen in cases of other landlocked countries. On the other, majority of respondents in Lao PDR have found telecom facilities, warehouse / parking, documentation and banks as low barriers to trade. At the same time, 19 percent of respondents identified corruption and bribery as a barrier to trade. Unlike popular belief, 29 percent of respondents also found road condition in Lao side as a barrier.
- Barring corruption and bribery and amenities such as hotel, respondents in Lao PDR are found to be satisfied with all the attributes we have selected in this survey. However, 40 percent of respondents have identified faster handling of goods at the border of partner countries as a major barrier to trade. Besides, 100 percent of respondents have identified corruption in the partner side as average type of barriers to trade in case Lao PDR's export. In view of the respondents, overall, trade barriers have remained low in partner's side while exporting to them or through them.

- When we asked the Lao respondents whether they expect the ease of meeting standards between Lao PDR and its partner countries to increase, decrease or unchanged in the coming three years, the majority of the respondents (91 percent) said that it will increase, thereby indicating high confidence on the rise of export if standards are eased. At the same time, 53 percent of respondents felt that it might increase the import, while 47 percent gave opinion that import may fall.
- This study has revealed that 95 percent of firms were of the opinion that export will go up if NTMs and other barriers are removed or reduced. This gives high confidence to undertaking policies that lead to ease the burden of NTMs. At the same time, 61 percent of firms also felt that import will go-up whereas 31 percent felt import may fall over time.

8.1 Recommendations

To facilitate exports, Lao PDR must pursue a phased, focused, and incremental approach. This will require further advisory and preparatory technical assistance, as well as policy reform. The following recommendations are proposed as the best means for the Lao PDR to achieve the objectives stated in this Study:

- Simplification and harmonization of trade processes would be essential in order to transform the trading environment as well as improving the competitiveness of Lao exports. Harmonization of standards among the countries is also vital to eliminate repetitive procedures and practices.
- Enhancing the regulatory environment in goods sector is essential to eliminate unnecessary regulatory divergences that can only restrict the trade flows. Lao PDR shall introduce a regulatory environment that helps facilitate trade.
- Disseminate all SPS and TBT notifications of importing countries among the exporters in a transparent, timely and speedy manner. In parallel, strengthening the capacity of exporters on SPS and TBT requirements would help achieve higher trade. For example, rice exporter in Lao PDR has found quarantine requirement (A86) in EU is very restrictive. Quarantine requirement is to detain or isolate animals, plants or their products on arrival at a port or place for a given period in order to prevent the spread of infectious or contagious disease, or contamination. Certain category of rice coming from Lao PDR needs to be quarantined to terminate or restrict the spread of harmful organisms.
- Lao PDR has to build infrastructure like testing laboratories, accreditation of testing labs, mechanism for certification of conformity, etc. For example, Lao exporters of wood products to Vietnam and Thailand have found the certification requirement (B83) is very restrictive.

- It is also quite apparent that SMEs are proportionally more vulnerable to NTMs than large companies. Therefore, it is worth logical to carry diagnostic assessment, identify the procedural obstacles and derive actions in more than one dimension to rationalise the NTMs.
- Reduce the transit cost of Lao goods, which has been found much higher than inland haulage charges. Transit port handling charges are abysmally high, thereby making the Lao's export relatively uncompetitive. Transit through Thailand provinces adds further costs to Lao's export. Thailand should allow a fast track transportation of Lao exports. Allowing Lao vehicles to deliver goods at the transit port in Thailand would reduce the transportation costs.
- Border infrastructure at Lao PDR side has to be improved. Approach road has to be widened and properly maintained.
- Lengthy documentation and absence of transparent environment make Lao exports uncompetitive. Simplification of documentation is needed. Submission of customs documents has to be through digital portal (EDI system). It is recommended that Lao PDR may consider setting its own customs EDI system and integrate with ASEAN Single Window.
- Facilitating standard-related documents is essential. Exporters in Lao PDR may adapt their products to the regulations in force of the country of destinations. At the same time, it might be difficult financially/technically to adapt their products to the regulations in force of the country of destinations. In the perception of firms, easing the standards or removing the NTMs will lead to increase Lao's export. Some of the Lao PDR's trading partners need the weight certificate, issued by the government or recognized institution. It takes long time to receive the quality control certificate and test report from the Provincial Science and Technology Section. Using the digital interfaces, it is possible that the regulator may notify the duration for getting these certificates. All the documents should be made available on-line. Online application would save time as well as make the system transparent and faster. Lao PDR shall sign MRAs with standard bodies of partner countries, either bilaterally or through ASEAN regional process. Finally, Lao PDR may consider using international standards for technical regulations.
- Majority of exporters have communicated that they are aware of the international standards for the products in question and those are the standards applied by Lao's partner countries such as Thailand, Vietnam, China, Malaysia, Korea, Japan, EU, etc. However, several firms in Lao PDR are not aware of the international standards, especially in case of cassava, rubber or coffee. Bringing transparency, awareness and availability of regulatory information would certainly ease the barriers to export.

- The field survey present crucial and important information on the perception exporters in mitigating the trade barriers. We present only selected recommendations of Lao's immediate neighboring countries (Table 8.1).
- Respondents in Lao PDR have identified faster handling equipment and vehicle tracking system, at the Lao PDR side of the border, as major barriers to trade. Barring corruption and bribery and amenities such as hotel, respondents in Lao PDR are found to be satisfied with all the attributes we have selected in this survey. Besides, 100 percent of respondents have identified corruption in the partner side as average type of barriers to trade in case Lao PDR's export.

Thailand	China	Vietnam
 Provide suitable export quota for company Reduce documentations and costs, making it more export friendly Set-up single window for all approvals Provide more information about market and regulations Identify a responsible persons/office with clear tasks Reduction in paper work process, adopt quicker approval mechanism. No need to get approval/sign at district level, which leads to time-consuming Use IT system to facilitate trade at the border, which will reduce time and costs Disseminate information to all concerned industry associations and provincial officials. For example, withdrawing the regulation on weight limit check point nation-wide. Need to revise the standard price for service charge (export related documents) 	 The custom duty at the border should contain a list of services fee/taxes for goods clearly. Paperless trade environment Reduce extra payment without receipt at the police check point in Ban Poung of Luangnamtha province. Government should improve taxation system and also reduce tax on exports Government should provide trade regulatory information centre about trade between Laos and China in both languages. Government should reconsider the weight limits in Laos. In Laos, the truck should be not more than 20 tonnes, whereas the Chinese trucks carry 38 tonnes and as a result we have to pay an extra for overweight. Government should designate the concerned office for the on-site inspection for the Phytosanitary Certificate; Government should increase the export quota 	 Government should facilitate the value chains Remove foreign middlemen; who come to buy the dried cassava directly. Promote roles and responsibility for Provincial Chamber and Commerce and Industry Improve the infrastructure, esp. road expansion and comply weight limits with international standard) Government should revise the tax rate Reduce the on-site inspection process of the provincial agriculture and Forestry Section Notifications from the government should reach the exporters quickly Establish the Lab center for agricultural products Although export is tax exempted, government still collects so-called 'transportation tax'. Remove unnecessary security.

 Table 8.1: Selected Recommendations of Lao Exporters

- In the perception of firms, easing the standards or removing the NTMs will lead to increase Lao's export. Some of the Lao PDR's trading partners need the weight certificate, issued by the government or recognized institution. It takes long time to receive the quality control certificate and test report from the Provincial Science and Technology Section. Using the digital interfaces, it is possible that the regulator may notify the duration for getting these certificates. Online application would save time as well as make the system transparent and faster. Therefore, facilitating standard-related documents is essential.
- Short-term technical assistance and funding by international development organization for the following activities: (i) a review of the laws and regulations that govern the oversight and application of SPS and TBT measures; (ii) an inventory of laboratory assets in the country; (iii) an assessment of the training needs of each Ministry of Lao PDR country, and specification of the order of priority of the programs needed to meet those needs; and (iv) identification of the needs, opportunities, and practices that would engage SPS and TBT agencies in collaborative border management.
- Lao PDR should modernize their oversight and application of SPS and TBT measures by: (i) eliminating or at least reducing unnecessary inspections and testing-related delays, (ii) formulating a transition strategy for replacing requirements with international standards, and (iii) mainstreaming SPS and TBT concerns into the agenda of national and regional transport and trade facilitation bodies.
- National single windows and single stop border inspection facilities should be further developed to: (i) augment regional action to harmonize SPS and TBT implementation, (ii) enable mutual recognition of laboratory findings, (iii) refine border risk identification and risk management procedures, and (iv) make pertinent information accessible to all trade regulation agencies.
- Finally, coordination among different Ministries, capacity building of officials dealing standards, etc. is needed to boost the export from Lao PDR. Lao PDR government alone cannot build the infrastructure required for facilitating country's export. Therefore, technical assistance, international aid and private sector investments are essential towards improvement of the country's capacity and infrastructure dealing the standards.

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