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Laos on its Way to WTO Membership

Challenges and opportunities for developing high-value agricultural exports

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German Development Institute / Deutsches Institut für Entwicklungspolitik (DIE)

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First Preface

The following study on challenges and opportunities for developing high-value agricultural exports in view of Laos' projected WTO accession is the result of three months of desk research and two and a half months of empirical research.

During our stay in Laos, we had a wide range of interviews and discussions with Lao government officials, representatives of provincial and district governments, research institutes and extension centres, with private enterprises and their business associations, with farmers, and with a number of governmental and non-governmental development organisations. The interviews were supplemented by visits to farming projects, agricultural research centres, and processing plants.

Our interviews and project visits from South to North made us aware of the multitude of encouraging activities in Laos. These activities can be seen as first stepping stones towards a niche-market strategy based on high-value agricultural products. We were impressed by the openness of our Lao interlocutors, who talked about their professional activities and the host of problems they face on the way to a successful export strategy. Having looked at the challenges and impediments producers and exporters are faced with, we hope that this study can contribute to identifying opportunities regarding high-value agricultural exports.

We would like to thank all persons interviewed for the time they spared and for the patience they showed in answering a wide variety of questions. We are especially grateful to our partner organisation, the Lao National Chamber of Commerce and Industry's (LNCCI), and to the Chamber of Commerce and Industry offices in the provinces visited for the time and effort they invested in developing programmes of visits and interviews. We wish particularly to express our gratitude to Ms. Souphaphone Khamsennam, chief of LNCCI foreign relations division.

Of course, we are indebted for considerable technical and intellectual support to our German colleagues at Deutsche Gesellschaft für Technische Zusammenarbeit / German Technical Cooperation (GTZ), Deutscher Entwicklungsdienst (DED), Centrum für Internationale Migration und Entwicklung (CIM), and Deutsche Welthungerhilfe (DWHH), to the Swiss aid organisation Helvetas, and to many other donor agencies that took an interest in our study and encouraged us in our search for high-value agricultural exports.

Notwithstanding, the team of the German Development Institute / Deutsches Institut für Entwicklungspolitik (DIE) alone is responsible for all errors and omissions and for any misinterpretations in the present text.

Vientiane, 27 April 2009 DIE team

Second Preface

Since the inception of this study, the world economy has gone through the worst recession of the last 80 years. In 2009, world trade has shrunk dramatically by 9 per cent (according to WTO statistics), the biggest downturn since the Second World War. In most years before 2008, global trade had increased faster than global economic output, indicating an increasing international economic integration of both developed and developing countries. During the crisis, some disintegration seems to be unavoidable. Fortunately, this has not been aggravated yet by an upsurge of protectionism. So far, both the multilateral trading system of the WTO and regional and bilateral trade agreements have had a disciplining effect on trade policies of member countries. This is different from 1929, when the financial crisis was turned into the Great Depression by rising tariff walls in one country after another. Another difference to the Great Depression is that in the present crisis central bankers and finance ministers have learned their lessons and managed to prevent a meltdown of the financial system by bailing out failing banks, insurance companies and even major manufacturing companies by providing close-to-zero interest rates, liquidity injections and stimulus packages financed by additional government debt of unprecedented scale.

This means, however, that the present recovery (2009) relies more on government spending and liquidity injections from central banks than on endogenous impulses from private investors. Another slump may happen as soon as governments phase out their extraordinary spending programmes and start to pursue fiscal austerity in order to repay the public debt they have accumulated. What is even more disturbing, the quick bailouts for failing banks have created incentives for future irresponsible behaviour. Excessive liquidity will fuel new speculative bubbles, the next time perhaps not in the U.S. but in some other corner of the world. When the new bubbles eventually burst, we may well see ourselves faced with another financial crisis which will spread around the world via fully integrated global financial markets. If that happens again, however, governments and central banks will have less capacity to extinguish the new financial crisis on the basis of even more deficit spending and easing of interest rates.

At this critical junction for the world economy, a compromise among the major trading nations to conclude the Doha (Development) Round in the WTO is overdue. The Doha Round has been in progress since 2001, longer than any of the previous GATT rounds. At every new meeting, the heads of government of the leading nations – now the G20, including the major emerging nations – pledge to conclude the WTO round before the end of each respective year. Yet no breakthrough has emerged, and the WTO Ministerial Conference in Geneva at the beginning of December 2009 has been declared a non-negotiating conference, giving trade ministers only the opportunity to voice the concerns of their countries. It is impossible to predict whether the global environment will be more conducive for concluding the round in 2010 or in 2011.

One of the major stumbling blocks is the huge current account imbalances between the United States on one side and China plus some other East Asian countries on the other. These imbalances must be dissolved through structural adjustment in both the United States (raising the saving rate and increasing exports) and China (increasing domestic spending and reduction of export surpluses) if trade wars and competitive devaluations are to be avoided. One can only hope that the governments of the leading nations will behave responsibly and contribute to economic disarmament. A conclusion of the ongoing WTO round would help to avoid an upsurge of protectionism which would undermine the precarious economic recovery. It would also clear the table to set an up-to-date agenda for future negotiations, under the umbrella of the WTO, on trade and trade-related issues such as trade and climate change, food crises, export restrictions and land grabbing by rich food-deficit countries, etc.

Laos is not a major player in the global governance arena. Neighbouring on the most dynamic countries of the world, it will be affected by their moves and need to navigate its economy through the stormy weathers of the coming years. In view of today's transport and communication technologies, the country cannot be insulated from the global economy. Thus, there is no alternative but to face the upcoming challenges and to prepare to respond flexibly to them. In view of recent developments in the global economy, the recommendations of this study on exploring the potential for agricultural development and diversification of agricultural exports are even more relevant than before the financial crisis. For a late-coming country like Laos, developing its agricultural base and its capacity to process whatever its agriculture produces will be a sensible and responsible strategy. This does not mean that industrial development and the development of efficient services should be neglected, but global integration of manufacturing industries may decelerate, and even reverse, for some time to come. Small developing countries in particular may be well advised to take precautions for times of economic turmoil, and what better precaution can there be than to make the country's agriculture fit both to feed the Lao population and to develop new and high-value exports?

After returning from its field visit to Laos, the DIE study team completed the draft of the study in Bonn by the end of May 2009. Since then, in addition to the usual proof reading and editing, Chapter 3.1, on the opportunities and risks of trade integration, has been expanded to take account of the international discussion on what policy space should be given to developing countries' governments to actively promote industrial development and export diversification. A new international consensus is building that the successful emerging economies in South East and East Asia have managed to stimulate industrial development and export diversification with a mix of industrial policies and active export promotion. Late-coming countries would be well advised to study the policy mix of the successful developers and not to rely on the mantra of the Washington Consensus, recommending that all governments, regard-less of the level of development of their country, refrain from using subsidies and policy loans from state-owned banks to stimulate and guide economic development. The fact that major developed countries are resorting to industrial policies and protectionism in the guise of nationalist stimulus packages may be taken as the final proof of the inadequacy of simplistic recommendations for countries in distress.

This does not mean, however, that such policies will always prove successful. Every country must find its own path to development, taking account of its natural endowment, its institutional setting and the capacity of its people to learn and master new technologies. We wish the Lao PDR good luck in finding a suitable path for improving the well-being of its wonderful people.

Bonn, 2 December 2009 Dr. Jürgen Wiemann

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Abbreviations

AFD	Agence Française de Développement (French Development Agency)
AFTA	Association of South-East Asian Nations' Free Trade Area
AoA	Agreement on Agriculture
ASEAN	Association of South-East Asian Nations
AVRDC	World Vegetable Center
BRC Standard	British Retail Consortium Standard
CADC	Clean Agriculture Development Centre
CCI	Chamber of Commerce and Industry
CIM	Centrum für Internationale Migration und Entwicklung
DAC	Development Assistance Committee
DED	Deutscher Entwicklungsdienst
DIE	Deutsches Institut für Entwicklungspolitik (German Development Institute)
DWHH	Deutsche Welthungerhilfe (German Agro Action)
EBA	Everything But Arms
EIU	Economist Intelligence Unit's
EU	European Union
EUREPGAP	Euro-Retailer Produce Working Group for Good Agricultural Practise now GLOBALGAP
FAO	Food and Agriculture Organization of the United Nations
FDI	Foreign Direct Investment
FLO	Fairtrade Labelling Organizations
FTA	Free Trade Area
FY	Fiscal Year
GAPE	Global Association for People and the Environment
GATT	General Agreement on Tariffs and Trade
GDP	Gross Domestic Product
GMS	Greater Mekong Subregion
GSP	Generalised System of Preferences
GTZ	Deutsche Gesellschaft für Technische Zusammenarbeit (German Technical Cooperation)
HACCP	Hazard Analysis and Critical Control Point
HDI	Human Development Index
IFAT	International Federation for Alternative Trade
IFOAM	International Federation of Organic Agriculture Movements

IFPRI	International Food Policy Research Institute
ISO	International Organization for Standardization
ITC	International Trade Centre
JCFC	Jhai Coffee Farmers Cooperative
IUCN	International Union for the Conservation of Nature
LDC	Least Developed Country
LNCCI	Lao National Chamber of Commerce and Industry
LPRP	Lao People's Revolutionary Party
MAF	Ministry of Agriculture and Forestry
MDG	Millennium Development Goal
MFN	Most Favoured Nation
MIC	Ministry of Industry and Commerce
MOC	Ministry of Commerce The People's Republic of China
MPI	Max Planck Institute
NAFES	National Agricultural and Forestry Extension Service
NAFReC	Northern Agriculture and Forestry Research Centre
NAFRI	National Agriculture and Forestry Research Institute
NGO	Non-Governmental Organisation
NSEDP	National Socio-Economic Development Plan
NTB	Non-Tariff Barrier
NTFP	Non-Timber Forest Product
NTR	Normal Trade Relations
ODA	Official Development Assistance
OECD	Organisation for Economic Cooperation and Development
PAFES	Provincial Agricultural and Forestry Extension Service
PCADR–PAB	Programme de Capitalisation en Appui à la Politique de Développement Rural – Point d'Application Bolovens (Programme of Capitalisation in Support to Rural Development – Implementation Point Boloven Plateau)
PDAF	Provincial Department of Agriculture and Forestry
PDIC	Provincial Department of Industry and Commerce
PDR	People's Democratic Republic
PROFIL	Promotion of Organic Farming and Marketing in Laos
PTP	Paksong Tea Product
SAFReC	Southern Agriculture Forestry and Research Centre
SME	Small and Medium-Size Enterprises
SMEPDO	Small and Medium-Size Enterprise Promotion and Development Office

SNV	Netherlands Development Organisation
SPS	Sanitary and Phytosanitary (Agreement)
SWOT	Strengths, Weaknesses, Opportunities, Threats
TRIPS	Trade-Related Aspects of Intellectual Property Rights
UNCTAD	United Nations Conference on Trade and Development
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UNIDO	United Nations Industrial Development Organization
UNODC	United Nations Office on Drugs and Crime
US	United States of America
WFTO	World Fair Trade Organization
WTO	World Trade Organization
WWF	World Wide Fund for Nature / World Wildlife Fund

Summary

Background

Laos is preparing for WTO (World Trade Organization) accession. This will be another important step on its way to an open market economy, integrated in the regional and the global economy. Being located in the most dynamic region of the world, ASEAN (Association of South-East Asian Nations) / AFTA (ASEAN-Free Trade Area) and its special trade relations with China may be even more important for Laos. However, WTO membership will provide Lao exports with more secure access to the EU (European Union), the US (United States), and Japan. This may not seem to be a great advantage for a least developed country (LDC) whose exports are already granted special preferences, for example by the EU, with its "Everything but Arms" initiative. However, Laos aims to graduate from LDC status by 2020 and will need secure market access after that. What may be even more important is the fact that joining the WTO requires a wide range of reforms of economic policies, legislation, and institutions. These reforms will make Laos more attractive to foreign investors and importers in search of reliable sources of inputs for their sophisticated value chains. This will help diversify Laos' exports, making the country less vulnerable to the volatility of commodity prices. Trade integration offers huge opportunities for poverty reduction and development. As most of the poor still depend on agriculture for their livelihoods, the liberalisation and development of this sector is often considered as particularly promising for poverty reduction. At the same time, trade in agricultural goods ranks among the most contentious issues due to its high sensitivity and complexity.

Against this background, we decided to study in more detail what possible strategies there are for an agriculture-based LDC like Laos to benefit from trade integration. As a small landlocked country with weak infrastructure, Laos faces high transport costs and has difficulties in making inroads into regional and global markets for standard food and agricultural commodities using mass production, i.e. heading for the "lowest price" option. On the demand side, consumers in both developed and developing countries are increasingly asking for safe, quality products and specialty food. Compliance with standards is thus becoming more and more important in world food markets. Taking into account the above-mentioned preconditions for Laos, together with world demand trends, we have concluded that developing high-value agricultural exports would be a promising strategy for

Laos to benefit from trade integration. Therefore, the study focuses on challenges and opportunities for developing high-value agricultural exports in Laos.

The focus on high-value agricultural exports is related to WTO accession in several ways:

- Secure access to export markets is a sine qua non for investment in infrastructure and development of the human resources necessary for such an ambitious high-value strategy.
- The improvement in economic legislation and economic policies that will result from compliance with WTO rules and agreements will make Laos attractive to foreign investors and foreign buyers. They are searching for reliable suppliers of high-quality agricultural inputs for their value chains. This can link Lao producers to consumers in developed countries.
- As a WTO member, Laos will have to implement the requirements of the Technical Barriers to Trade Agreement and the Sanitary and Phytosanitary Agreement, i.e. Laos will have to develop its own system of technical standards and norms as well as sanitary and phytosanitary standards and measures in conformity with international standards. It will have to establish the necessary institutions to apply these standards and provide foreigners with all relevant information (enquiry points). Laos will face pressure from its neighbours and from international buyers to improve not only its legislation but also its technical capacities. With improved capacity for testing and certifying products for compliance with international standards, Laos will be able to meet the requirements of foreign business partners.
- As a WTO member, Laos will be allowed to use health, sanitary, and phytosanitary standards as a trade policy measure in both directions. On the export side, Laos will have the right to complain about misuse of quality standards by importing countries as a protectionist instrument and as unfair treatment of Lao exports by foreign inspection agencies. On the import side, contaminated food that would cause health risks to Lao consumers may be rejected by the domestic inspection authorities.
- Finally, the WTO Agreement on Trade-Related Intellectual Property Rights (TRIPS) requires Laos to upgrade its legislation on pat-

ents and copyrights as well as its implementation capacity in conformity with international standards. This may be cumbersome in the beginning, but effective protection of intellectual property rights will help Lao producers and exporters in venturing into high-quality markets with their own company names, product labels, and geographical indications.

Producing high-value agricultural exports

There is no single and all-encompassing definition of high-value agricultural products. One or several of the following elements can determine high value, and they have been considered in this study:

Scarcity

A product that is scarce in relation to market demand can be sold at a higher price than less scarce products. Examples of scarce products in Laos are off-season fruits or some non-timber forest products that are difficult to find.

High quality

High-quality agricultural products require intensive treatment, from seeds to harvest. Quality inputs (e.g. seeds, fertiliser) need to be used and measures undertaken to improve crop quality, including weeding, pruning, irrigation, pest control, and in Laos, the respective national quality standards are missing for most products.

Processing

Processing agricultural products can contribute to adding value to them, and it helps to prevent quality losses and waste, especially for perishable products. Examples would include drying, canning, pickling, or transformation of raw products into fruit juice, jam, wine etc. The degree of processing activities in Laos differs between the products considered in this study. However, only a marginal number of products are currently processed for export.

Compliance with special standards like organic or fair-trade standards

Production in accordance with standards deemed essential by consumers makes it possible to set higher prices than for similar products that do not comply with these specific requirements. One example of this strategy are organic products cultivated with methods adapted to local conditions rather than using chemical inputs. Since Lao farmers do not yet use many chemical fertilisers and pesticides, they could easily shift to organic farming. Certification of the organic quality of their produce would be essential for obtaining premium prices on export markets. Laos has already established a national organic standard and a certification body. The latter, however, does not yet offer certification services.

Fair trade is a concept that provides for selling at a pre-defined fair-trade minimum price which is usually higher than the market price and supposed to reflect real production costs. In addition to the minimum price, buyers pay a premium that should be used to improve the business, the community, and / or the environment. The concept of fair trade is not yet well known in Laos. Nevertheless, there is a group of companies with fair-trade activities, and they are planning to establish a fair-trade association.

Branding

Value can be added to products by increasing marketing efforts and creating a special brand identity or brand promise around quality features recognised by buyers. To be successful in the sense of developing higher-value products, branded products must show consistently higher quality and reliability of supply. Very few Lao agricultural companies have well-known brands.

Product examples

Based on our focus on high-value agricultural exports, a range of products were selected to be studied during the empirical phase in Laos. The main selection criteria were high export potential and potential for high-value production, as outlined above. An additional selection criterion was the products' likely positive impact on human development in terms of poverty reduction and promotion of gender equality. Furthermore, only products consistent with (or at least not harmful to) the goal of environmental sustainability were considered.

The agricultural products selected are fruits and vegetables, coffee, tea, silk, and non-timber forest products (NTFPs). Fruits and vegetables are in high demand and have the potential for high-quality, partly off-season production and processing in Laos. Coffee is one of the country's most important agricultural export goods and global demand for speciality coffee is growing. Tea is not widely grown in Laos, but due to increasing world demand the export potential is high. High-quality silk weaving has a long tradition in Laos and there is considerable potential to increase the domestic production of raw silk. The vast variety of NTFPs in Laos contributes strongly to rural cash incomes. Furthermore, NTFPs are in high demand in foreign niche markets due to their special properties.

During the two-month interview period in Laos, we looked at the potential for adding value to each of these products, at specific impediments to adding value, as well as at current activities geared to exploring this potential and overcoming impediments. Based on the information gathered during the interviews, we developed specific recommendations for each product. However, since many impediments and recommendations apply to a greater or lesser extent to all products in the study, only the general impediments and recommendations are presented in this summary.

Overarching recommendations to address impediments

The majority of our interview partners, including government, the private sector, and donors, agreed that a strategic orientation towards high-value agricultural products is among the best viable options for Laos. Several activities in this direction can already be witnessed. However, there are still many challenges to be addressed. While most of the following recommendations address impediments that hamper development in general, they are particularly relevant for implementing a high-value agricultural export strategy.

Ensure a long-term perspective

When deciding to adopt a high-value agriculture-based export strategy, all stakeholders have to keep in mind that this requires a long-term commitment and perspective in order to reap potential benefits. For example, while many Lao farmers are currently producing ‘organically by default’, the increasing - uncontrolled - influx of chemical fertilisers and pesticides could quickly undermine this comparative advantage. Furthermore, high-value agricultural production requires investment in quality seeds and other inputs, training, land etc. Insecure land titles and frequently changing regulations, however, hinder long-term activities.

Expand and improve primary education and adapt higher education to market needs

Education is a bottleneck for producing, marketing, and exporting high-value agricultural goods. Illiterate farmers cannot read a contract or written instructions by extension services. A minimum understanding of market mechanisms (supply, demand, price formation) is important in a market economy and reduces the risk of farmers being cheated and exploited. Moreover, learning and obtaining additional know-how is difficult without any basic education. Learning foreign languages (particularly English) is also recommended as a means of enabling public servants, company staff, researchers, and extension workers to benefit from the vast information available on the Internet (e.g. research findings, market information).

Promote research, extension, and technology development

Skills development and training are considered to be among the most important issues for the successful development of a high-value agricultural export strategy. Above all, government and donor activities regarding research, extension, and technology should focus on farmers' needs. At present, research is limited to specific subjects that do not take into account the changing context (e.g. climate change, plantations versus family farms, monoculture cash crops like maize and rubber versus diversified crop patterns). Furthermore, research in Laos is reactive rather than seeking pro-actively to shape agricultural development. Extension services could, for example, promote basic marketing skills by offering trainings in reading contracts and negotiating prices. Private companies can play a role in offering extension services and technology for producing high-value niche products. In particular, farmers should be given support and advice for contract farming and high-value production.

In addition, education, research, and extension need to be better linked. For example, if there is a strategic decision on organic farming, then "producing organically" should be integrated in all three areas. Similarly, promotion of high-value products can only be successful if research and extension cover the entire chain of production, processing and marketing.

Develop quality standards, control and certification

Quality standards, their implementation and control, as well as certification are prerequisites of any export strategy for high-value agricultural products. Laos should implement its own quality standards in line with international standards. Furthermore, an internationally accredited certification and quality control system should be developed. The organic certification body already established needs to be made operational as soon as possible. If these certification and quality control systems are to work, investment is required in laboratories and equipment for testing. The latter should be supported by donors, as they have so far mostly focused their activities on human capacity building and regulation. As long as there is no functioning national certification system, donors should bridge the gap and bring in international certifiers to certify emerging activities in Laos in the field of organic and fair-trade production.

Improve access to financial services

Be it for seeds, machines, or certification, most farmers, processors, and companies interviewed complained about the non-availability of credits, restrictive credit policies, and high interest rates. Microfinance structures that offer adequate and tailored financial services to farmers and small enterprises should be implemented, and risk mitigation instruments (e.g. crop insurance) should be available to farmers. As processing of agricultural produce is crucial for adding value, processing companies should be given special support (e.g. credits to buy machines).

Develop necessary infrastructure

Especially for perishable high-value agricultural goods like fruits and vegetables, but also to reduce transport costs, it is important to continue the construction of all-weather roads, to improve feeder roads, and to not neglect road maintenance. Exporting depends very much on the ease and speed with which borders can be crossed, and thus more border crossings should be established and equipped with modern office technology in order to avoid delays at customs offices. Storage and cooling facilities should be developed to make processing possible and to prevent post-harvest losses.

Collect and disseminate reliable market information

Market information should include data on prices, domestic and export markets, demand trends, as well as requirements for different products, and it should be collected for all agricultural goods, not only staple crops. At present, this information is not available or not readily accessible in Laos. Furthermore, market information collected by one government institution sometimes is not shared with and distributed to other government institutions, let alone to producers. In many cases, exports depend on personal ties abroad or on foreign facilitators rather than on informed business decisions. Timely, cheap, and accessible market information can be provided on the basis of an SMS-based market information system or through newspapers, radio, and TV. In addition, market information centres could be established at the local level. A national database on agricultural production volumes could be created to provide information for potential processors. The Trade Promotion Centre within the Ministry of Industry and Commerce could be developed into a focal point for market information for private companies, business associations, and government staff. Overall, government institutions should be more pro-active in gathering market information with a particular focus on international trade information. Private companies and / or business associations should regularly participate in special trade fairs that address high-value agricultural producers, processors, and exporters.

Increase knowledge of trade integration

In Laos, the implications of WTO accession and regional trade integration within ASEAN are sometimes misconceived or not well understood due to lack of information. This is a problem because farmers, private companies, associations, and government representatives do not have the information needed to adapt to changing circumstances and to take specific measures to benefit from trade integration. Therefore, government institutions, in cooperation with donors and private actors, should increase their efforts to disseminate knowledge on trade integration more widely. This could be achieved through workshops, discussions, trainings, websites, and extension services, all of which are especially important at the provincial and district level, where information gaps are the largest.

Support producer groups

Farmers and collectors should continue to form groups, as they facilitate the sharing of market information, training in new production forms and techniques (e.g. sericulture), marketing of agricultural produce (e.g. larger production quantities), and reduce certification costs. Participation in such groups enables farmers and collectors to gain a better bargaining position and reduce their dependency on traders and companies. Quality trainings within groups can help to improve product quality. However, quality control should be carried out by independent inspectors. The voluntary formation of producer groups should be supported by the government and donors. Private companies may also have an interest in supporting producer groups, as they make it easier to collect larger volumes at one time and to inform and train farmers regarding product quality.

Create and strengthen associations

Stakeholder meetings should be institutionalised, for example by forming associations, in this way ensuring a regular exchange of information and best practices. In addition, institutionalised stakeholders are better able to articulate their interests and formulate an overall sector strategy, for example for high-quality organic coffee. To reduce costs, association members instead of single entrepreneurs could represent Lao business interests at international trade fairs. Donors should support the formation of associations and strengthen chambers of commerce and industry, as they are institutions important to promoting private sector development.

Enhance government cooperation, coordination and regulation

Decision-making processes should become more transparent, predictable, efficient, and consistent across districts, provinces, and the national level. At provincial and district level in particular, rules should be sufficiently simple and clear to be understood and followed as well as enforced without too much room for discretion. Quotas and licences should be distributed or auctioned in a transparent manner. In doing so, monopolisation should be avoided, especially with regard to NTFPs. Across all government levels, cooperation between the Ministry of Agriculture and Forestry (MAF) (which is responsible for agricultural production) and Ministry of Industry and Commerce (MOC) (which is responsible for marketing and export promotion) needs to be intensified and improved. For example, the MAF should be included in the decision-making on an updated organic product strategy. There should be a clear and transparent division of responsibilities between different levels of government and between ministries. For example, the institutions responsible for research and extension services should each have a clear mandate, and overlapping competencies should be avoided. As regards land titles, the government could provide model contracts to farmers and make impact assessments obligatory before large land concessions are allocated to investors. Furthermore, participatory land use planning should be promoted, possibly including chemical-free zones.

Overall, the Lao government should focus on facilitation, regulation, and enforcement rather than on planning and control. Instead of telling farmers what products to cultivate, the government should provide farmers with education and market information to empower them to make their own decisions based on their personal judgement of production capacities, market opportunities etc. Participants in the workshop at the end of the empirical research phase in Laos pointed out that a high-value agricultural export strategy requires a number of different measures, many of which call for government initiative. In implementing them, however, the government should cooperate with the private sector and other actors such as research institutions and donors.

Improve sustainability of donor activities and foster government ownership

In contrast to many verbal and written statements, the sustainability of donor activities continues to be problematic. We thus recommend that a sustainability check be carried out prior to every project or programme. Several interviewed government officials had the impression that their ideas and requests had not been taken notice of. Government ownership and close cooperation with Lao partner institutions should beprerequisites from the very start.

While operating within existing government structures, government capacities should be further developed. Donor activities should be designed in such a way that they can be continued by government staff after donor support for projects and programmes has been phased out. This is especially relevant for the funding of staff and activities. Furthermore, coordination among donors should be improved through institutionalised meetings that go beyond any mere exchange of information and result in an effective coordination of activities.

Looking ahead

The recommendations presented above are a selection of the measures that could be taken to make a high-value agricultural export strategy work. Many of the activities recommended above require additional funding. It is not the aim of our study to propose additional sources of government revenue. Nevertheless, in view of the multitude of tasks it is responsible for, the government needs to broaden its tax base (e.g. through a value-added tax, taxes on minerals and hydropower, fees for concessions) and ensure that government resources are used transparently. In addition, the above recommendations require support by donors as well as increasing engagement on the part of the national and international private sector.

It remains for the Lao government, the National Assembly, chambers of commerce and industry, associations, traders, processors, and farmers to decide which strategy to pursue and what recommendations to adopt. However, we want to emphasise that a pro-active and long-term approach is required to enable the Lao people reap the greatest benefits from trade integration. As there are so many challenges to address, it would be highly recommendable to strategically prioritise government activities. With regard to organic agriculture in particular, it is evident that Laos is at a crossroads and that timely decisions need to be made. Improving the business climate and giving more room to private initiatives and private enterprise is necessary to attract private investment, for example efforts to use improved techniques to build processing facilities and increase production quality. Private companies are essential for developing high-value agricultural production and exports in Laos.

1 Introduction

1.1 Background

The rediscovery of agriculture

The sharp increase in world food prices between 2005 and 2008 and its repercussions on poverty, hunger, inflation, and balances of payments in many developing countries have put agriculture back on the international agenda. Three of four poor people live in rural areas, and most of them depend on agriculture to make a living (World Bank 2007, 6; MAF 1999, 45). Consequently, it is widely acknowledged that rural development has a high impact on poverty reduction. Nevertheless, agricultural development had been neglected by governments and aid agencies for decades (World Bank 2007, 38–42), and the lack of donor commitment in support of agricultural research and development has contributed to the gap between rising demand for and stagnant or even declining supply of major food crops and agricultural commodities.

Trends in world food markets

Since the onset of the global financial crisis in the second half of 2008, world market prices have fallen again for most crops (e.g. rubber, coffee, and other traditional cash crops, but also for staple foods like rice), mainly due to declining demand caused by the global recession and the collapse of commodity speculation. However, most research institutes and international agricultural organisations predict that food prices and prices of agricultural commodities will be rising in the long run. They differ only in their degree of scepticism about the capacity of world agriculture to keep pace in production and productivity with the rising demand of a growing world population that will consume more and better food as its income levels rise. An often quoted projection is that world population will reach 9 billion by 2030, and to feed them '*cereal production will need to rise by an estimated 50 per cent by 2030 and meat production by 85 per cent.*' (IFAD 2009).[1]

1 The global food crisis of 2007/8 stimulated a host of studies on the reasons for the price hike and on possible remedies to avoid excessive price increases, hunger and failure to achieve the MDGs: OECD / FAO (2008); High Level Task Force (2008); IFPRI (2008); Evans (2009).

Rapid population and income growth as well as increasing urbanisation in large developing countries like India and China have led to rising demand for a more diversified range of food and agricultural products from around the world. With rising affluence, people tend to eat more meat and fresh products like vegetables and fruits (FAO 2008b, 12) as well as to purchase more convenience products that are processed and ready to eat. With urbanisation, the value chain between commodity production and food consumption becomes longer and more complex. At the same time, food prices will become increasingly dependent on energy prices as longer transport and additional services like refrigeration become necessary (OECD / FAO 2008, 46).

Many countries are adjusting their energy policy on the heels of the oil price hike of 2008 and with respect to increasing awareness of climate change. The resulting attention to renewable energies is raising demand for bio fuels and accordingly for the food crops they are based on. This further pushes up prices for grain, maize, sugar beet, sugar cane, soybean, palm oil etc.

In functioning markets, a rise in demand triggers a supply response. Regarding agriculture, there are two challenges: Firstly, adjustment of food production to changes in demand is faced with special impediments and becomes effective only with a delay – after the next harvest. Consequently, the delayed response of production can lead again to a mismatch of supply and demand. This is why food prices tend to be volatile. Secondly, world agricultural markets are heavily distorted by subsidies and trade barriers. Additionally, there are many actors involved in the supply chain between producers and consumers, which further widens the spread between the prices consumers pay and the prices producers receive.

As a short-term response to rising demand for food, existing food stocks have been depleted recently. With an increasing share of bio fuels in total agricultural production, there will be increasing competition for land and other scarce resources for food production. Expanding the acreage for agriculture is not always feasible. Land degradation and higher frequency of severe weather occurrences like floods or droughts due to climate change could affect future harvests and lead to even more price volatility in the future. In the past, production of staple food has grown mostly through increased productivity. But in the future, a slowdown in productivity growth is to be expected as a result of underinvestment in agricultural research during the last decades.

Higher food prices and poverty

In the long run, moderate price increases can have a positive impact on poverty reduction due to the higher incomes and purchasing power for farmers they entail. But this is by no means automatically so. Market signals have to translate into appropriate producer reactions. Yet in many developing countries, markets are still underdeveloped and distorted. Timely information on price developments is either not available to small farmers or prices are distorted by trade restrictions, high transport costs, and food taxes. Farmers who lack access to credit and other necessary resources are not able to increase their output in the short run (Brüntrup 2008, 3). Additionally, measures have to be taken to avoid severe difficulties for (especially urban) consumers who do not benefit, like producers, from rising food prices. Domestic products and imports have to be available at affordable prices. Thus, governments need to design an adequate strategy to promote agricultural development and ensure food security.

The role of trade integration and the World Trade Organization (WTO)

The reduction of trade barriers resulting from the multilateral trade negotiations under the General Agreement on Tariffs and Trade (GATT), and now the WTO and the Agreement on Agriculture, has increased international trade in food and agricultural commodities during the last decades.[2] Nevertheless, governments tend to shelter their domestic markets against import competition and volatility of world market prices. In seeking to justify market interventions and trade restrictions, they cite food security reasons and their interest in stimulating rural development (*multifunctionality of agriculture*). Import or export restrictions are used to shelter *special agricultural products* against world market volatility. Another option is to take *special safeguard measures* in the event of extreme price changes. In times of high world food prices, tariffs for agricultural prod-

2 International trade negotiations have taken place as negotiation rounds since the establishment of the GATT in 1948. The WTO was established in 1995 as a result of the Uruguay Round negotiations (1986–1994) and is responsible for the further liberalisation of trade by facilitating the negotiation of trade agreements and settling trade disputes of member countries. See http://www.wto.org.

ucts are lowered to facilitate imports and thus support consumers. Conversely, when food prices fall, tariffs are raised again in order to prevent sudden income losses for domestic farmers (Polaski 2008, 11–12). These interventions in agricultural and food markets tend to amplify the fluctuations on world markets. This is the justification for international trade agreements requiring more discipline and restraint from governments when they intervene in food and agricultural markets.

During the food crisis of 2008, many countries introduced export bans on rice or other staple foods, which made it even more difficult for food-importing countries to avert famine. Thus, it is important to reach an agreement on these exemptions from trade liberalisation on a global level. The obvious option to do this would be under the WTO. The current Doha Round of multilateral trade negotiations was launched in 2001 with the explicit intention to make it a "development round", i.e. one focussing on the interests of developing countries. Consequently, one of the main issues of negotiations is the reduction of developed countries' agricultural subsidies as well as the permissibility of safeguard measures and the exemption of 'special products' from tariff reductions.[3] Progress in the Doha Round negotiations has been slow, and negotiations were suspended again in July 2008, as no agreement could be reached.[4]

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3 See http://www.wto.org/english/tratop_e/agric_e/negoti_e.htm for the latest news on negotiations regarding agriculture.

4 The global financial crisis that started mid-2008 has provoked new thinking about the relevance of keeping international trade open and avoiding any surge in protectionism like the one that aggravated the Great Depression of the 1930s. So far, the major trading nations have not resorted to outright protectionism by raising tariffs or imposing import quotas and other trade barriers, although some of the stimulus packages and measures taken to bail out banks and large industrial companies can be labelled as "murky protectionism", supporting domestic companies against foreign competition (Baldwin / Evenett 2009). Thus, to conclude the Doha Round successfully has become more urgent than ever, but the political circumstances in major WTO member countries make it unlikely that this will happen before the end of 2010.

The growing importance of value chains and standards

With increasing trade in food products, agriculture has become an important player in the globalisation process. In ways similar to manufacturing industries, which outsource parts of the manufacturing process to lower-cost locations and manage their value chains across many borders, agribusiness companies use more and more inputs from different countries for the processing of food. Supermarkets in developed countries respond to the demand of affluent and middle-class consumers for a widening range of products from around the world, e.g., new and exotic fruits, vegetables, or processed food. Some developing countries, like Brazil and Thailand, have benefited from these trends and become major suppliers of tropical fruits, vegetables, cereals, and vegetable oils to world markets. Other developing countries have succeeded in developing a few high-quality agricultural exports to the developed world, like Peru with asparagus or Kenya with green beans.

Considering these developments, it is no surprise that standards for food safety, plant and animal health, and traceability of products have assumed a prominent role in recent discussions on international trade. The Uruguay Round led to the Sanitary and Phytosanitary (SPS) Agreement, which requires WTO members to apply international standards like those of the Codex Alimentarius Commission[5] (created by FAO / WHO in 1963) or of the International Organization for Standardization (ISO). These standards have to be applied in a transparent way in order to prevent protectionism. The transparency of SPS measures has increased since the SPS Agreement came into force, but at the same time, exporters, especially in developing countries, face increasing challenges from the proliferation of standards and specifications set by the governments of importing countries as well as by private actors like supermarket chains (Jaffee / Henson 2004, 7; Caswell 2003).

The economic crisis and its impact on developing countries

In the second half of 2008, the world's attention shifted away from the food crisis and towards the global financial crisis. Even though this crisis has its origin in the United States and most developing countries are not

5 See http://www.codexalimentarius.net.

fully integrated into global financial markets, their economies will be affected via other channels. With the recession in the developed world, demand for developing countries' exports is declining, the volume of foreign direct investment (FDI) shrinking and remittances from nationals working abroad going down. After accumulating huge volumes of toxic loans, private banks in the developed countries are becoming extremely risk-averse, and thus lending to developing countries is drying up. Consequently, resources for investment and consumption are becoming increasingly scarce, threatening the economic development of developing countries.

Laos on its way to WTO membership: Challenges and opportunities for developing high-value agricultural exports

In 1997, the Lao People's Democratic Republic – "Laos" hereinafter – joined the Association of South-East Asian Nations (ASEAN).[6] In the same year, the country applied for WTO membership, which is still under negotiation today. Laos thus decided to open up its economy and integrate it into regional and global markets. This is remarkable for several reasons. Trade integration offers huge opportunities for poverty reduction and development. This is especially true for liberalisation and development of the agricultural sector, on which most of the poor still depend for their living. At the same time, agriculture remains a highly sensitive and complex sector, particularly with regard to the new trends in world food markets outlined above. Markets for agricultural products continue to be volatile and volatility provokes protectionist reactions from governments around the world, further adding to the volatility in world markets. Despite repeated declarations by the major trading nations, the negotiations under the Doha Development Round in the WTO are stalled and there is no end in sight.

Against this background of persistent changes in agricultural markets and international turmoil, the present study investigates in more detail what

6 ASEAN was founded in 1967 by Thailand, Indonesia, Singapore, Malaysia, and the Philippines. Brunei joined in 1984, Vietnam in 1995, Myanmar and Laos in 1997, and Cambodia in 1999, and the association is now comprised of ten member states. ASEAN's main goals are liberalisation of intra-regional trade, further economic integration, social and cultural exchange, cooperation in security matters, and promotion of regional peace.

possible strategies could serve to allow a least developed country (LDC)[7] like Laos to benefit from trade integration. As an agriculture-based economy located in a highly dynamic region, Laos seems predestined to profit from further integration by exploiting its potential for agricultural exports. But benefits will not come automatically. Strategies have to be designed and adapted to seize opportunities, to overcome domestic impediments, and to limit risks. The underlying assumption of this study is that Laos will have difficulties making inroads into regional and global markets for standard food and agricultural commodities. The higher transport costs of a small landlocked country with infrastructure deficiencies cannot be compensated for by lower wages (there are seasonal labour shortages), and the small average acreage of Lao agricultural producers rules out a strategy of mechanisation and mass production aiming at lower unit prices. Considering the country's preconditions, high-value agricultural products seem to be a more promising avenue for developing exports and benefiting from further trade integration. Of course, standard commodities like rice or maize will always remain important as staple foods for a growing population. High-value agricultural exports may also become more relevant from the demand side, as outlined above. With the succession of food scandals in China, consumers in the region will probably follow consumers in developed countries and demand high-quality and safe food, not only in their own countries but also from exporting countries.

This short introduction will be followed by an outline of the research design, including the guiding questions and the methodological approach. The second chapter will give an overview of Laos. The third chapter looks at trade integration from a theoretical angle and in view of the current situation in Laos. Bilateral and regional trade integration is considered, as is Laos' process of accession to the WTO. Since the focus of our study is on agriculture in Laos, key information on the structure of the agricultural sector and important agricultural products as well as a SWOT analysis[8] of Lao agriculture are given in Chapter four. Chapter five presents the con-

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7 According to the United Nations, an LDC is characterised by low gross national income per capita (below 750 US$), weakness in human resources (health, nutrition, education etc.), and economic vulnerability. For a complete list of LDCs and more information, see http://www.un.org/special-rep/ohrlls/ldc/list.htm.

8 SWOT stands for Strengths, Weaknesses, Opportunities, and Threats, and SWOT is a widely used strategic planning tool.

ceptual background involved in producing high-value agricultural exports as well as the preconditions currently given in Laos. The potential of high-value agricultural products in Laos will be discussed in Chapter six along several product examples, drawing on the results of our empirical work in Laos. Chapter seven will give a summary of opportunities, challenges, and recommendations for the Lao government, the private sector, and donors.

1.2 Research design

Starting with a focus on Laos' application for WTO membership, the team spent three months of desk research and discussions at the DIE in Bonn. During this phase the focus of research was constantly narrowed. From a broader perspective of what might be the impact of WTO accession on Laos, the focus was put on the question what the Lao government, the private sector, and donors can do to allow the country's agricultural sector to benefit from regional and global trade integration. The underlying assumption derived from the desk research is that development of high-value agricultural exports will be a promising strategy for Laos' agriculture to benefit from trade integration. Based on this assumption, the goal for the empirical research phase in Laos was to gather sufficient empirical data and evidence to answer the following key questions:

1. Which agricultural products hold potential as high-value agricultural production and exports in Laos?
2. What examples for high-value agricultural production and exports can already be found in the country? What are the ingredients for success?
3. What are the specific impediments or reasons for failure in other cases?
4. What roles do various government agencies, research institutes, and extension centres play in overcoming these impediments?
5. What roles do other stakeholders - like farmers, associations, processing companies, traders, and foreign investors – play in this respect?

6. In what ways are international donor organisations supporting the production and export of high-value agricultural goods in Laos?
7. What measures could be undertaken to improve the conditions for high-value agricultural production and exports?

The answers to these questions are of interest for the Lao government and different national stakeholders as well as for the scholarly discussion on agricultural development and trade integration in general.

Working with the systematic research methodology of grounded theory, the research process was based on the overriding principle of openness, allowing anything new or unexpected to be taken into account as far as possible. Following this approach does not mean that prior theoretical knowledge is not relevant for our understanding of principles and possible impacts of trade integration. A qualitative approach based on semi-structured interviews was chosen and implemented in order to be able to respond flexibly to local circumstances. The interview guidelines derived from the key questions were discussed with a representative of the Lao National Chamber of Commerce and Industry (LNCCI) during her visit to the DIE. During the field research in Laos, the questionnaires were tested and continuously adapted to the different interview partners.

The relevance of the study focus and the potential for high-value agricultural exports from Laos was confirmed during initial meetings and discussions with stakeholders. From mid-February to mid-April 2009, interviews were conducted in the provinces of Vientiane, Champasak, Sekong, Savannakhet, Luang Prabang, Oudomxay, and Luang Namtha. Representatives of government institutions, research and extension centres, associations, private companies, farmers, and foreign donor organisations were interviewed in these provinces. A complete list of visited provinces and interview partners is included in Annex 1.

The questionnaires were used as open, flexible instruments, i.e., they did not contain any parameters bearing on the type of answers to be given. Instead, the goal was to offer respondents the opportunity to express their opinions and experiences freely. Most interviews were conducted in English or in Lao language (the latter with the assistance of interpreters), some – with representatives of donor agencies, embassies and international NGOs

(Non-Governmental Organisation) – in German and French. Each interview was recorded in writing and marked with a series of codes,[9] using ATLAS.ti, a scientific software. Overall, it has to be noted that the availability and quality of scientific data on Laos is still deficient. In addition, interview partners sometimes provided different or contradictory information on the same aspects. We therefore used methods of triangulation to verify our empirical results, meaning that we cross-checked data with several people and compared it to related literature. The majority of information presented in this report was obtained through interviews with the above-mentioned stakeholders. Where literature or other sources were used, the respective quotations and references are specifically indicated.

The main results were presented and discussed at a workshop in Vientiane on 30 April 2009. Specific questions were dealt with in several working groups. Back in Bonn, the team worked another month at the DIE to include comments that were made during and after the workshop in Vientiane. The results were reflected in the broader context of development policy and discussed with interested colleagues at the DIE and GTZ headquarters.

2 Overview of Laos

An overview of the country is given to facilitate an understanding of Laos' agricultural sector and trade integration. Important framework conditions include the country's ethnic and natural diversity (especially the differences between highlands and lowlands), its one-party political system, and its geographical situation as a landlocked country. In recent years, Laos has achieved economic growth rates that have been among the highest in Southeast Asia. However, despite its economic development and improvements in human development, Laos is still considered an LDC, a status from which the Lao government wants to graduate by 2020.

9 Codes are used as classification devices at different levels of abstraction in order to create sets of related information units for the purpose of comparison (e.g. "access to financial services"). A code is clearly linked to a quotation.

2.1 Population and geography

Laos has a population of 5.9 million (EIU 2008a, 5). With an area the size of the United Kingdom, its population density of 24 people per square kilometre is relatively low. 23 % of the population lives in urban and 77 % in rural areas (UNDP 2006, 1). The ethnic groups living in remote and mountainous regions are mostly cut off from economic opportunities in the towns. The remote northern part of the country, in which the proportion of the rural population is highest, is much poorer than the relatively more urbanised central provinces. The capital Vientiane has the lowest poverty incidence (World Bank 2006b, 161). There are 49 officially recognised ethnic groups, divided into three major groups: Lao Loum, Lao Theung, and Lao Soung. The majority of Laotians are Hinayana Buddhists.[10]

70 % of the country's surface area is mountainous and with 41.5 % of its land area covered by forest, Laos is still Southeast Asia's most densely forested country. Only 6 % of the total land area is permanently used for agriculture – half for crops and half for pasture. Estimates of potential land for agricultural production vary, as no soil and land use surveys have been completed for the whole of the country. Those regions where soils / landscapes are considered too steep, shallow, wet, or coarsely structured for agricultural purposes are estimated at 68 % of the country, leaving 32 % of the land suitable for agricultural purposes. Of these areas, 17 % have some soil fertility constraints, which only leaves 15 % of the country's land without major constraints for agriculture (MAF 1999, 20; World Bank 1998). Shifting cultivation still occurs on about 30,000 additional hectares, with fallow periods of varying duration (UNDP 2006, 3; MAF 2005).

Laos is the only country in the Greater Mekong Subregion (GMS) that borders on all other countries of the region:[11] Cambodia, Myanmar, Thailand, Vietnam, and the Yunan and Guangxi provinces of China. Except for Cambodia, its neighbouring countries are highly and densely populated (UNDP 2006, 3). In contrast, there is more land for agricultural purposes

10 The original belief of the Lao multi-ethnic people was animism, which was later influenced by Indian culture. Today, animism continues to co-exist with Buddhism.

11 The GMS comprises six countries which in 1992 entered into a programme of subregional economic cooperation. This programme has contributed to the development of infrastructure and promotes the freer flow of goods and migration of people in the subregion.

available in Laos. Due to the small population, the domestic market is limited and economies of scale are difficult to realise. Furthermore, there are labour shortages in some regions (e.g. in those with labour-intensive agriculture and a small population), and during certain periods (especially harvesting seasons).

One specific challenge is bound up with the fact that Laos was the most heavily bombed nation in the world.[12] It is estimated that up to 30 % of all such ordnance did not explode. Despite many efforts, unexploded ordnance continues to remain in the ground, harming people and hindering socio-economic development. Land clearance for agriculture development and the subsequent farming of the land play a significant role. Overall, unexploded ordnance remains a relevant obstacle for the expansion of agricultural land (UXO 2008).

2.2 Socio-economic indicators

Even if economic growth rates are promising, there are wide disparities within the Lao population regarding people's ability to reap the benefits of economic growth. Considerable differences exist between people living in rural and people living in urban areas, uplands and lowlands, as well as between speakers of ethnic dialects and Lao native speakers.

Life expectancy at birth increased between 1995 and 2007 from 51 years to 63 years, and the mortality rate for children under 5 years fell from 170 to 98 per 1,000 live births. At this rate, the 2015 MDGs (Millennium Development Goals) targets seem within reach. The maternal mortality rate per 100,000 live births fell from 560 in 1995 to 405 in 2007. The proportion of the population with access to safe drinking water increased from 15 % in 1995 to 55 % in 2007. In comparison, the drinking water coverage in Thailand is 99 %, in Vietnam 85 %, and in Cambodia 41 %. Educational attainment is low but improving. Thus far, only 27 % of all adults have gone beyond primary school, for women the proportion is only 22 %. One quarter of the population has never attended school. Significant steps have

12 Between 1964 and 1973, the United States of America dropped more than two million tons of explosive ordnance to block the flow of North Vietnamese arms and troops through Lao territory. Land battles, including those during the war for independence, also contributed to Laos' unwanted distinction.

been taken by improving key indicators such as net enrolment rates in primary education (89 % in 2007 / 2008) and teaching quality (UNDP 2007, 4; World Bank 2006b, 163).

Currently, Lao women have, on average, 4.8 children. Compared to other countries in Southeast Asia, especially Thailand (1.9) and Vietnam (2.3), Laos has one of the highest fertility rates in the region. Rural areas account for, and will continue to account for, most of the population growth in Laos. The labour force is projected to increase by 45 % in the next 15 years (UNDP 2006, 5).

The quality of health care in Laos is still relatively low, particularly in rural areas. In the 2002–2003 household survey, 56 % of the population reported health problems that disrupted work. In the most remote rural areas, 63 % reported such problems (UNDP 2006, 9).

According to estimates from Max Planck Institute (MPI), 40 % of all children were still malnourished in 2007 (MPI, 2008, 17). Child malnutrition not only reduces school enrolment and performance but it can also permanently reduce cognitive ability, thus compromising future human development. The current Human Development Index (HDI) ranks Laos 130 out of 177 countries.

In the years between 1995 and 2005, there was an increase of women in wage employment of less than one percent per year – close to the rate at which girls narrowed the school enrolment gap (in 2006 there were 86 girls per 100 boys in primary education, 74 in secondary, and 62 in tertiary education). Looking at these figures, the MDG target for the elimination of gender disparity at all levels of education by 2015 seems ambitious. In contrast, women's political representation tripled between 1990 and 2003 and is among the highest in the region (Lao People's Democratic Republic / United Nations 2009, xii).

Table 1: Selected indicators for Laos		
Indicator	2007	Source
Population (million)	5.9	(EIU 2008a)
Social		
Population below national poverty line (%)	30	(MPI 2008) (estimate)
Human Development Index (HDI)	Rank 130 out of 177 countries	(UNDP 2008)
Malnourished children under 5 (%)	40	(MPI 2008) (estimate
Infant mortality ratio (deaths per 1,000 live births)	70	(MPI 2008) (estimate)
Child mortality ratio (deaths per 1,000 live births)	95	(MPI 2008) (estimate)
Maternal mortality ratio (deaths per 100,000 live births)	400	(MPI 2008) (estimate)
Population with access to clean water (%)	55	(MPI 2008) (estimate)
Net enrolment in primary education (%)	89	(MPI 2008) (estimate)
Literate, aged 15+ (%)	77	(MPI 2008) (estimate)
Life expectancy at birth (years)	65 (female) / 61 (male)	(MPI 2008) (estimate)
Economic		
Gross domestic product (GDP) (billion US$)	4.1	Economist Intelligence Unit (EIU, 2008a)
Real GDP growth (%)	7.5 (world: 4.8, OECD: 2.7)	(EIU 2008a)
Total debt (% of GDP)	76.9	(World Bank 2008a)
Exports of goods fob* (million US$) * free on board	922 (EIU) or 648 (World Bank)	(EIU 2008a), (World Bank 2008a)
Imports of goods cif* (million US$) * cash insurance freight	1,067 (EIU) or 1,059 (World Bank)	(EIU 2008a), (World Bank 2008a)

Ease of doing business	rank 164 out of 178 countries	(World Bank 2008b)
Total disbursement of Official Development Assistance (ODA)[13] (gross, million US$)	410	(MPI 2008) (estimate)

2.3 Political framework

Laos was created in the mid-14th century as the kingdom of Lan Xang Hom Khao, the area of today's Laos came under Siamese (Thai) control during the 18th and 19th century. From 1893 on, Laos was ruled as part of French Indochina. After the Second World War, French rule was briefly replaced by Japanese rule before Laos was declared independent in April 1945. The vacuum of power led to a conflict within the newly formed Pathet Lao (Land of Laos) resistance organisation, committed to the communist-led struggle against the French. In 1954, a Franco-Laotian treaty was signed that granted Laos full sovereignty, and elections took place in the following year. In 1975, the Lao People's Democratic Republic was founded. Today, Laos is one of the world's five remaining countries with communist one-party rule – alongside China, Vietnam, North Korea, and Cuba. Under Vietnamese and Soviet tutelage, the Lao People's Revolutionary Party (LPRP) imposed a series of orthodox socialist measures, including the nationalisation of industry and finance, trade and price controls, and, within three years, cooperativisation of agriculture. The failure of this last measure led to a change of course, as government procurement paid minimal prices, provoking a decline in production. The decision to shift to a market economy was taken at the 1985 Fourth Party Congress (Stuart-Fox 2008, 38).

The Council of Ministers is the highest executive body in Laos. All members of the Council are appointed by the Council chairman, Prime Minister Bouasone Bouphavanh. The head of state is President Choummaly

13 Aid considered in the large sense, covering Development Assistance Committee (DAC) and non-DAC donors. OECD (Organisation for Economic Cooperation and Development) / DAC data show amounts lower than those presented in this figure because they are expressed in 'net', which means after debt repayment, and also because OECD / DAC considers only DAC donors.

Sayasone. The LPRP, led by an 11-person Politburo, is still the only political party and policy-making body in the country. Decision-making is highly centralised within the Party hierarchy, be it concerning the Party itself, government, or administration. In Laos, social order is prominent in political rhetoric. The regime requires everyone to know and accept his or her place in society without political complaint. Furthermore, social hierarchy has deep historical roots and is understood as the natural order of things (Stuart-Fox 2008, 45). The Prime Minister reminded the National Assembly in 2008 that the government's primary commitment was to maintain political stability, social peace, and security (EIU 2008a, 4). Accelerating inflation, especially for staple food items and fuel, has so far failed to provoke any vocal protest among the public. Foreign observers believe that growing prosperity, combined with a relatively low level of education and a strong state security apparatus, makes political dissent unlikely to be voiced publicly in the short term (EIU 2008b, 7).

The unicameral National Assembly, with 115 seats, was elected in 2006 by popular vote from a list of candidates selected by the ruling LPRP to serve five-year terms. According to the government, strengthening the National Assembly has become a top priority to promote good governance (MPI 2008, iii).

While policy is made at the central level, provincial governors, who are LPRP members and share the same rank as ministers, have great autonomy in the administration and implementation of policy. This autonomy, which has in part been supported by donors promoting decentralisation, is sometimes overstretched and therefore problematic. In many cases, this results in inappropriate differences in laws and regulations between provinces. One example is the limited power of the customs department, which prevents the national government from enforcing national regulations and stopping informal payments at the provincial level.[14] One measure taken by the national government to overcome such problems is a Citizen Report Card, on which citizens are asked to benchmark the quality of services (MPI 2008, 28–29).

Four official mass organisations function under LPRP direction: the Lao Front for National Construction, the Federation of Lao Trade Unions, the

14 Even though Laos has comprehensive anti-corruption laws, they are not enforced (Stuart-Fox 2008).

Lao Women's Union, and the Revolutionary Youth Union. There has been an official policy of people's participation, and there have been pilot projects in local participatory planning mechanisms. However, these initiatives are still at an early stage and at present there is little significant popular participation in policy issues (UNDP 2007, 5).

2.4 Planning and legislation

The five-year (2006–2010) National Socio-Economic Development Plan (NSEDP), a policy framework, supports the achievement of the Millennium Development Goals (MDGs)[15] by 2015 and the graduation of the nation from LDC status by 2020. This is to be achieved through sustained equitable economic growth (targeting 7.5 % to 8 % p.a.) and social development, while safeguarding the country's social, cultural, economic, and political identity. According to the government, the foundations for reaching these goals are strengthened by:

- moving steadily towards a market-oriented economy,
- building necessary infrastructure throughout the country,
- improving the well-being of the people through greater food security, extension of social services and environmental conservation, while enhancing the spiritual and cultural life of the Lao multiethnic population (MPI 2008, 1).

Ongoing reforms in public financial management have resulted in higher domestic budget revenues. The four priority sectors (education, health, agriculture, and transport) received 51.3 % of total expenditure in fiscal year (FY, *Fiscal Year*) 2006 / 2007 compared to 46.1 % in FY 2004 / 2005 (MPI 2008, 7).

To combat short-term fears regarding food security, the government has promised greater spending on irrigation, more investment in food production, and the establishment of a rice bank to ensure food supply. The government has instructed the central bank to make loans available to encour-

15 The MDGs consist of eight goals, to be achieved by 2015, that respond to the world's main development challenges. The MDGs are derived from the actions and targets contained in the Millennium Declaration adopted by 189 nations in 2000.

age growth in agriculture, manufacturing, and construction (EIU 2008a, 13).

Much of the legislation governing business activities was enacted soon after the start of Laos' transition to a market-oriented economy.[16] Consequently, laws are strongly control-oriented and only a few have been updated to meet the needs of a modern market economy. The lack of a clear and well-communicated government policy towards the business sector creates an unpredictable operating environment, undermines business confidence, and discourages investment. These findings are illustrated by the recent World Bank report on the *ease of doing business,* in which Laos ranks 164 out of 178 countries (World Bank 2008b). According to the World Bank, Laos is a country where the '*business ground rules may change without warning*' (World Bank 2006b, 100). Therefore, the business community is risk-averse and avoids longer-term productive investments. Even though the government has taken steps towards a more comprehensive approach, the problem of poor coordination of policies between central and provincial authorities remains. The effect is that practices at provincial levels may differ from the central government's explicit policy as well as from a stronger market orientation decided on at national level (World Bank 2006b, 101–102).

2.5 Economy

During the first six months of FY 2007 / 2008, real GDP (Gross Domestic Product) grew by 7.9 % (EIU 2008a, 3). The main drivers of industrial growth are construction and mining. Construction is booming due to a rising number of infrastructure development projects, particularly the building of roads and bridges as well as power generation (construction of the1.2 billion US$ Nam Theun II hydroelectric project began in November 2005 and is on schedule to be completed by 2010). Agricultural growth

16 In 1986, Laos started its transition from a centrally planned to a market economy. This process was initiated through the "New Economic Mechanism". Several important changes took place: Price controls were removed, the exchange rate system was unified, tariffs were rationalised, a two-tier banking system was introduced, the number of state-owned enterprises was sharply reduced, private enterprises were allowed to operate and, important for the focus of this study, the government's monopoly on trade was removed.

remains slow, but it could receive a boost from the government's proposed move to support development in this sector (UNDP 2006, 70). International tourism is Laos' largest service export. It is linked to the domestic economy for food products, handicrafts, transport, restaurants, entertainment, and other services. In 2006, tourists from countries other than neighbouring countries accounted for 26 % of arrivals but for 78 % of total expenditures. FDI in tourism plays an important role – mainly in high-end hotels and restaurants (UNDP 2006, 65).

Macro-economic stability and fiscal discipline are important for attracting investments from other countries and for sustained economic growth with equity. Inflation, which has been a persistent problem since the second half of the 1990s, harms the poor in a disproportionate way. Consumer price inflation surged in the aftermath of the Asian economic crisis, peaking at a rate of 128.5 % in 1999 (EIU 2008b, 21). National income accounts in Laos show a large balance of payments deficit and a large fiscal deficit, filled by FDI and ODA (Official Development Assistance). In 2006 / 2007, the government depended on ODA for more than 80 % of its investment budget (World Bank 2008a, 26).

About 10 % of the Lao labour force works in Thailand. The migrants send or carry home at least 100 million US$ a year. While the lack of sufficient employment for Lao nationals at home could be viewed as a sign of failure, the UNDP calls it a normal pattern of trade and a normal feature of the East Asian pattern of development (UNDP 2006, 75).

2.6 Transport and infrastructure

Two thirds of total freight is transported on roads.[17] Waterways carry most of the remainder in the form of bulk commodities moving along the Mekong. The road network includes some 32,600 km, of which about one quarter is national roads and less than 1/6 is paved. Progress in infrastructure development has been remarkable during the last five years, but road density remains relatively low. A large portion of the population lives more than five km away from an all-weather road (World Bank 2006b, 53). Nearly 40 % of all rural villages still have no proper road access at all. There is a strong positive correlation between poverty and lack of road

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17 To gain an impression of the road network in Laos, see Annex 2.

access. Road maintenance is another important aspect. The World Bank estimates that 30 to 46 million US$ is needed for the required maintenance of the existing road network, compared to the 17.5 million US$ presently committed to it (World Bank 2007, 6).

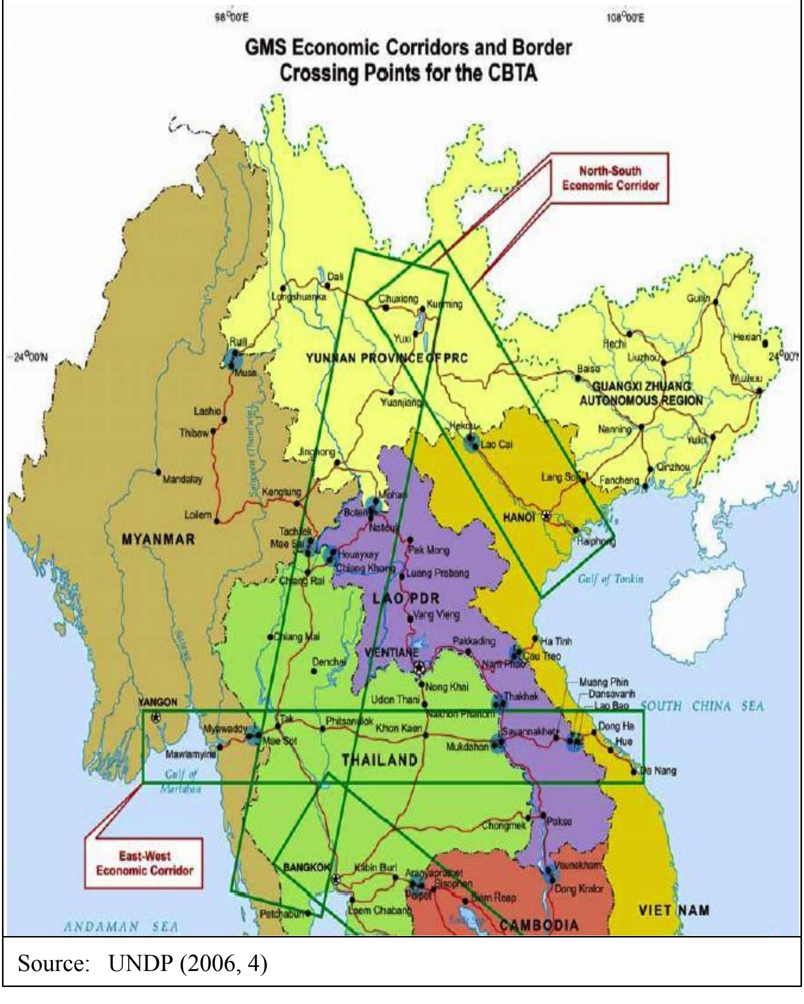
Even though Laos is landlocked, ports in Thailand and Vietnam are not too far away (less than 700 km). Logistical services are being enhanced through improved access to services in neighbouring countries. Remaining difficulties associated with cost and availability are a result of small volumes of domestic traffic rather than of the fact that Laos is landlocked. The number of official international border crossings is limited and procedures are lengthy, costly, and unpredictable (World Bank 2006b, 51).

Like its neighbouring countries, Laos signed the GMS (Greater Mekong Subregion) Cross-Border Transport Agreement in Vientiane in 1999. The agreement is expected to improve and facilitate cross-border trade. In addition, Laos stands to benefit from the proposed GMS Transport Sector Strategy, since this would make it part of both the North-South Economic Corridor and the East-West Economic Corridor. These corridors are shown on the following map:

Because of these infrastructure projects, UNDP's National Human Development Report from 2006 calls Laos a country "soon being land-linked not land-locked" (UNDP 2006, 5). As a result of internal migration, 50 % of the Lao population already lives in border districts, where average household incomes are higher than the national average (UNDP 2006, 3).

To take full advantage of further trade integration, Laos' export competitiveness needs to be strengthened. Prior to looking at possible export strategies, the current situation of Laos' trade integration is described in the following chapter.

Figure 1: Economic corridors in the Greater Mekong Subregion



Source: UNDP (2006, 4)

3 Laos' trade integration

Before going into more detail about Laos' integration into regional and global markets, the following pages will draw attention to the theoretical process and effects of trade integration, which have a strong impact on development.

3.1 Opportunities and risks of trade integration

Since the implementation of the GATT in 1948, trade barriers of the contracting parties have been reduced step by step. As a result, trade in goods has exploded. While the value of world merchandise exports amounted to 59 billion US$ in 1948, it rose to 13,619 billion US$ in 2007 (WTO 2008c, 10–11). The share of exports in world GDP gives an idea of the relative importance of trade compared to overall economic activity: In 1950, after the Great Depression of the 1930s and the Second World War, the trade to GDP ratio had been only 5.5 %. In 2005, this ratio had risen to 19.4 % (WTO 2007a, 244) showing the greater degree of openness of most countries.

Taking into account these developments and the impressive success stories of China and other Asian countries during the last decades, it seems straightforward to consider trade integration as a promising strategy to fight poverty and foster development. At the same time, however, there are concerns about possible negative effects on poverty, food security, inequality, and the environment. Furthermore, governments complain about a loss of *policy space* as they are required to give up protection for their emerging industries and to refrain from industrial policies that would not be in conformity with WTO agreements on trade-related policies and export subsidies. Therefore, we need a clear understanding of the mechanisms at work when analysing the role of trade in development.

Since Adam Smith (1776/1991), it is a core lesson of economics that division of labour is a fundamental prerequisite for welfare gains. As no one is able to do everything on his or her own effectively, specialising in the production of certain goods and services and exchanging them on markets will leave everyone better off. The benefits from specialisation and exchange depend on the differences in skills and resources between trading partners as well as on the existence of markets and the quality of competition. What is true in every community and every country is also true for trade between countries. Each country benefits from specialising in economic activities for which it is better endowed (nature, climate etc.) or has better skills and technologies than for others, which it leaves to other countries because they have comparative advantage for these activities.

Contrary to common sense, economists can show that a country can benefit from international trade and specialisation even if it has an overall absolute disadvantage in productivity and skills compared to other countries. Even 'less developed countries' benefit from specialising in what they can produce relatively better and/or more productively in comparison to other activities. This is the essence of the famous theorem of *comparative advantage*. Specialisation pays through international trade: every country will find some export activities to earn the foreign currencies needed to pay for necessary imports. If its exportable products do not find buyers in other countries because of too high prices and insufficient quality, its currency will have to be devalued until the prices for its exports in foreign currency fall to a level that attracts foreign buyers. Devaluation makes imports more expensive in local currency, and thus nationals will restrict their purchases of imported goods. Hence devaluation can make for a balancing of exports and imports.[18]

The rationale for specialisation and international trade is even more relevant for small countries. Most industries and some services sectors show increasing returns for mass production of the same or similar products (Krugman 1979). These *economies of scale* cannot be achieved in small markets, only the world markets are large enough, e.g. for several automobile producers competing with each other by selling millions of cars every year. Exporting to world markets increases opportunities to trade and allows countries to benefit from economies of scale (mass production). Products that were not available domestically before can be imported now. International competition reduces the domestic prices of importable goods.

18 Of course, this argument needs to be qualified. Imports can be paid for not only with foreign exchange earned from exports but also with foreign exchange flowing into the country through remittances of nationals working abroad, foreign investment, and international aid. One could think of a country entirely dependent on foreign exchange inflows of this type that would not need to export anything, and, possibly, would not be able to export anything due to its overvalued currency (*Dutch disease*).

Additionally, imports may have positive spill-over effects via improved access to technology etc.

However, the classical theory of comparative advantages and specialisation of countries in international trade has to be qualified with respect to the long run. Specialisation produces quick gains by doing what a country's producers can do best today. But tomorrow the world will be different. New technologies can change the international pattern of comparative advantages between developed and developing countries. What had been labour-intensive goods for which developing countries had a comparative advantage may be produced competitively by developed countries with high wage levels by using labour-saving machinery and automated production processes. New products like computers or mobile phones will only be produced and exported by countries that have reached a certain level of technological capacity. Moreover, the income elasticity of demand varies for different product categories. Once basic needs for food and shelter have been satisfied, consumers spend an increasing share of their income for high-quality food, for manufactured goods, and for services. With rising living standards, the composition of total demand constantly changes, and the share of agriculture in gross national product tends to decline in the long run. Countries specialising only in basic agricultural commodities will develop less dynamically than countries specialising in more sophisticated food products and manufactured goods. From this it follows that countries must find ways of changing their production patterns in line with changes in global demand patterns. This is the rationale for active government promotion of new producers and new products that have larger growth prospects than the standard goods a country produces at an early stage of its economic development.

It may even be justified to protect new producers and new industries against competition from imports – at least for the time they need to learn to apply new technologies and manage new production processes required for high-quality products. This is the famous *infant-industry* argument for protection of new industries (including new and more sophisticated agricultural production).[19] Countries can try to climb the ladder from being a

19 In the 18th century, Alexander Hamilton propagated a need to protect the newly developing American industries; in the 19th century, Friedrich List propagated a need to pro-

producer of basic commodities to producing ever more sophisticated manufactured goods and high-end services. Thus, specialisation in line with comparative advantages is not the end of the story of development through international economic integration. Countries must develop their *capacity to transform* (Kindleberger 1989), i.e. their capacity to move from sectors with low demand potential and stagnant or declining prices into sectors and activities with high demand potential and rising prices on export markets.

The rapid development of East and South-East Asian countries is the most recent and impressive example for successful government promotion of new industries by selective import protection and active export promotion. There is a heated debate over whether the East Asian model of industrial policy can be copied by today's late-coming countries under the stricter rules and agreements of the WTO (Amsden 2000; Chang 2002; Bown / Hoekman 2007). Even if one accepts the rationale for active government promotion of new industries and new economic activities, one has to be cautious in applying this argument to small countries that have less room for manoeuvre to develop new industries than large countries like China or India. The resources of small countries are limited, and even if their domestic market could be protected against imports (which may not be possible for Laos, with its long and virtually uncontrollable borders), it would be too small to allow new industries to develop the large-scale production required to become cost-competitive on international markets. Investing resources in the development of new industries with future comparative advantages makes sense only if these industries become internationally competitive one day and can pay back to society the costs invested for their development. Therefore, governments of developing countries should be very cautious before protecting infant industries. If they fail, this policy will make the country poorer than before. This lesson had to be learned by China and India – both countries had excessively long periods of infant-industry protection and self-reliance before they opened up their economies to international competition, which meant that their industries had to adopt international technologies and production methods. And meanwhile these industries are becoming competitive on global markets.

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tect the newly developing German industries against cheap imports from the then leading industrial country, Great Britain.

Finally, trade integration will always and in all countries be a subject of controversial discussion – it produces winners and losers. On the one hand, rising prices for export products post liberalisation may translate into higher incomes for producers, but at the same time domestic consumers have to pay the higher prices as well. On the other hand, import liberalisation will lead to cheaper import products, which will be welcomed by consumers, but certainly not by formerly protected domestic producers, who are now faced with increasing competition. In an open economy, trade thus induces structural change, and this comes with adjustment costs. These costs vary with the scope of change and the capability to adjust, which depends, among other things, on the mobility of workers and capital as well as on levels of education.

Trade integration has an impact on employment as well as on the level and distribution of incomes. Consequently, in analysing the impact of trade on poverty and the feasibility of trade reforms, it is important to be clear about the winners and losers. Even though there are losers of trade integration, this does not mean that protectionist policies are called for or liberalisation should be stopped. The government of the liberalising country should, rather, design targeted complementary and compensatory policies for disadvantaged groups to enable them to benefit from trade integration, cope with risks and compensate for losses (McCulloch / Winters / Cirera 2002, 11). However, most developing countries have no social security policies and retraining measures. The costs of rapid trade liberalisation are thus more difficult to deal with than in countries with adequate coping policies.[20]

Apart from these costs of adjustment, there is another major challenge for many developing countries. To benefit from trade integration, producers have to be able to actually respond to changes in prices by adjusting their production. But price incentives often do not reach producers because of high transport costs or because information is not available. And even if producers wish to expand their production for export, they frequently lack access to credits or input materials. Without these preconditions in place, it is as good as impossible to make all necessary adjustments and reap the benefits of trade integration.

20 See Chang (2007) for a rather critical view on rapid trade liberalisation and the difficulties developing countries have in adjusting to and coping with a free trade environment.

On the macro-level, countries with large natural resource endowments are exposed to a further risk, the so called *Dutch Disease*. The inflow of large amounts of foreign currency due to the exploitation of these resources can drive the exchange rate up and render other export sectors less competitive. The output of these sectors may decline, negatively affecting long-term growth.[21] As Lao mining and hydropower exports are still growing at considerable rates, the government needs to be aware of the Dutch Disease risk, especially as Laos is receiving additional foreign resources through large aid inflows and remittances. Therefore, Laos should strive to diversify its exports with a focus on value-added exports in order to reduce its dependency on volatile (raw) commodity markets.

Nevertheless, trade integration offers huge opportunities for poverty reduction and development. The agricultural sectors of developing countries in particular are assumed to benefit from full trade liberalisation of the world's agricultural markets (World Bank 2007, 117). But there are a number of preconditions that have to be in place and risks that need to be addressed. Most importantly, a liberalising country should be aware of its comparative advantages and develop an adequate strategy to translate these advantages into actual benefits. Before we turn to the agricultural sector in Laos and to a possible strategy for benefiting from further trade integration, the following chapters will outline the status quo of Laos' international trade integration.

3.2 Regional and bilateral trade integration

As a landlocked country surrounded by its fast-growing neighbours Thailand, Vietnam, and China, Laos has no other choice than to open its economy if it wants to benefit from the region's dynamic development. Moreover, "regional integration and WTO accession are seen as drivers for economic reforms" by the Lao government (World Bank 2008a, 26). The degree of openness that Laos has achieved since the introduction of its New Economic Mechanism in 1986 is best illustrated by its strong integration in the ASEAN regional community and the ASEAN Free Trade Area

21 For a more detailed analysis of Dutch Disease effects, see, for example, Tressel / Prati (2006).

(AFTA),[22] both of which Laos joined in 1997. As regards the country's bilateral trade relations, a far-reaching agreement concluded with the United States of America (US) in 2004 and its preferential access to the European Union (EU) market under the "Everything but Arms" (EBA) initiative play important roles. In addition, Laos enjoys bilateral trade preferences granted by Australia, China, and Japan.

AFTA

The AFTA agreement includes extensive regional tariff reductions which had to be completed by the year 2008 (2015 for Laos as a non-founding member) as well as plans to eliminate non-tariff barriers (NTBs) and quantitative restrictions, to harmonise customs procedures, and to develop common standards for product certification (US-ASEAN Business Council 2008a, 1). Under AFTA's Common Effective Preferential Tariff scheme, tariffs on all tradable goods meeting a 40 % ASEAN content requirement had to be reduced to 0–5 % by the year 2002 / 2003 (2008 for Laos). Exceptions from this "Inclusion List" are only allowed for products that a country wishes to protect temporarily ("Temporary Exclusion List"), for sensitive agricultural products ("Sensitive List"), and for products that cannot be imported at all for reasons of public health, safety, or protection of culture ("General Exclusion List") (UNDP 2006, 34; US-ASEAN Business Council 2008a, 1). Eventually, all products except those on the General Exclusion List must be moved to the Inclusion List and their tariffs be reduced according to the agreed schedule. By 2015, there will be zero tariffs for all products on the Inclusion List.[23]

At present, Laos is well on track in completing the AFTA liberalisation scheme, having put 85 % of its tariff lines on the Inclusion List by 2005 and only 2.5 % and 2.1 %, respectively, on the Sensitive List and General Exclusion List (UNDP 2006, 34). In 2001, only 47.1 % of Laos' tariff lines were on the Inclusion List and 48.3 % still on the Temporary Exclusion List (UNDP 2006, 201). This major shift in only four years time

22 Within a free trade area like AFTA, trade in goods (and, if agreed, in services) is free of tariffs and quantitative restrictions. However, in contrast to a customs union, the right to set external barriers to trade with non-free trade area members remains within each country's own sovereignty.

23 More information on AFTA is provided by the ASEAN Secretariat (2002; 2007a; 2007b).

clearly illustrates the positive impact that AFTA membership has had on Laos' openness to trade.

Key opportunities for tariff reductions within AFTA include a decrease in informal trade and under-invoicing of imports due to lower costs, an increased integration of Lao producers in ASEAN supply chains, higher Lao exports, more trade-related FDI, the possible transfer of sunset industries[24] from neighbouring countries to Laos, as well as lower costs for Lao consumers (UNDP 2006, 35). On the negative side, threats to domestic producers from new, more competitive import products and decreasing state revenues due to tariff reductions play a key role. The latter is an especially important issue for Laos, as an LDC already highly dependent on external support.[25] Based on different projections, [26] the World Bank (2006b, 6) predicted a reduction in government tariff revenues from 1.8 % (2.3 %) of GDP to 1.4 % (1.5 %) of GDP between 2004 and 2008. In 2007 / 2008, the actual percentage was 1.6 % of GDP (MPI 2008, 5). Thus, tariff reductions under AFTA actually led to decreasing government revenues, but the decline was smaller than expected and has remained within a moderate range.

As regards the destinations of Laos' exports and the origins of its imports, no major trade diversion has occurred due to AFTA, because much of Laos' trade had in any case been with ASEAN countries (particularly Thailand, Vietnam) and China. In 2004, 75.9 % of Lao imports came from ASEAN countries and 53.9 % of Lao exports went to them (UNDP 2006, 194, 196). In total, Laos' economic openness, as indicated by the total value of exports and imports in relation to GDP, had reached 50.5 % in 2004 (UNDP 2006, 190).[27]

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24 This term is used for labour-intensive types of industry (e.g. garments or cement factories) that are closing down in rapidly developing and technologically advancing countries, because their relative profitability is declining compared to that of newer industry types.

25 As mentioned in Chapter 2.5, donor funding accounted for 81 % of Laos' total expenditures for public investments in 2006 / 2007 (World Bank 2008a, 26).

26 The first projection is based on Lao customs data, whereas the second projection uses trade statistics from partner countries (see World Bank 2006b, 6).

27 According to UNDP estimates (2006, 70-71), a considerable share of trade in Laos is informal in nature (see Chapter 4.1). It is therefore highly probable that Laos' openness

As a newer member, Laos benefits from the ASEAN Integrated System of Preferences, which is offered by the more advanced ASEAN members to Laos, Cambodia, Myanmar, and Vietnam. Recently, a Free Trade Area (FTA) agreement was signed between ASEAN, Australia, and New Zealand. Current negotiations include India, Korea, Japan, and may in the future possibly include Russia. A new FTA is also being negotiated between ASEAN and China and is expected to be in full effect for Laos by 2015, a step likely to further promote its regional integration.[28] Aside from trade liberalisation within AFTA, the ASEAN members are also in the process of removing national restrictions on investments in order to attract more FDI (from both ASEAN and non-ASEAN sources). Creation of a common ASEAN Investment Area [29] is set to be completed by 2010 and is expected to create a region that will be far more attractive to foreign investors than each member country would be (or already is) on its own.

The EU's EBA initiative

The EU was the first to follow the 1968 recommendation of the United Nations Conference on Trade and Development (UNCTAD) to implement a Generalised System of Preferences (GSP) for developing countries. Since 1971, the EU-GSP has been updated on a regular basis, the current scheme extending from 2006 to 2015. In 2001, the European Council adopted the EBA regulation[30] as a special preference scheme for LDCs[31],

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is in fact much greater than expressed by this coefficient, which only includes formal trade.

28 See UNDP (2006, 39) for more information on the Early Harvest Programme of the ASEAN-China FTA, which provides for tariff reductions for selected agricultural products (see also Section 4.1).

29 The goal of the ASEAN Investment Area is "*to substantially increase the flow of investment into ASEAN from both ASEAN and non-ASEAN sources by enhancing the region's competitiveness.*" In particular, "*barriers to intra-regional investment would be lowered and removed, regulations would be liberalised, streamlined, and made more transparent, and incentives would be offered to boost regional investment.*" Most importantly, "*all industries are to be opened up for investment*" and "*national treatment is granted immediately to ASEAN investors with few exclusions*" (US-ASEAN Business Council 2008a, 3).

30 Regulation EC 416 / 2001 (EC 2008, 1).

31 In order to benefit from EBA, a country must be formally recognised as an LDC by the United Nations. Currently, 50 developing states are categorised as LDCs (see EC 2008, 1–2, for a complete list).

granting them duty-free access to the EU market for all export products, except arms and ammunition, without any quantitative restrictions (temporarily excluding bananas, rice, and sugar[32]) (EC 2008, 1). As a developing country, Laos has received trade preferences under the EU-GSP since the early 1990s, and as an LDC it benefits even more from the EBA arrangement. Today, Laos counts the EU among its major trading partners. After ASEAN, the EU is Laos' second-largest export market, having taken in 28 % of Lao exports in 2004 (UNDP 2006, 196). Less important but still worth mention, the EU is Laos' third-largest source of imports after ASEAN and China, having supplied 7.6 % of Lao imports in 2004 (UNDP 2006, 194).

The strong growth in Lao exports to the EU over the past 15 years has been driven mainly by clothing products, which accounted for around 90 % of total Lao exports to the EU in 2004 (World Bank 2006b, 23). In order to benefit fully from the EBA arrangement by exporting more agricultural products to the EU, Laos will have to counteract its disadvantage of having comparatively high transport costs. Furthermore, Laos will have to comply with EU standards on food safety and quality.

The US-Laos Trade Agreement

With the ratification of a bilateral trade agreement between Laos and the US in 2004, Laos was granted normal trade relations (NTR) with the US. In fact, NTR are not trade preferences. They simply mean that all Lao exports to the US are now subject to standard, Most Favoured Nation (MFN) tariffs and hence "*compete on an equal footing in the US market with exports from all other countries that are members of the WTO*" (UNDP 2006, 35). Prior to 2004, Lao exports were treated under the autonomous duties of the US tariff schedule, which are much higher than MFN rates.[33] On average, the bilateral agreement has lowered tariffs on Lao exports to the US from 45 % to 2.4 % (UNDP 2006, 35). The largest tariff reduction was granted for silk products (from 90 % down to 0.8 %), while tariffs on wood products and handicrafts (formerly 42.5 %) as well

32 Full liberalisation for rice and sugar is to be achieved by September and October 2009, respectively.

33 See World Bank (2006b, 27) for a more detailed comparison of the two tariff schemes.

as on coffee (formerly 10 %) were eliminated completely (UNDP 2006, 35).

This large decrease in tariff rates has proven to be an important stimulus for bilateral trade. Since the agreement was concluded, the total value of Lao exports to the US rose from 3 million US$ in 2004 to over 8 million US$ in 2006 and 20 million US$ in 2007 (US-ASEAN Business Council 2008b, 1; Vorachak 2008, 1).[34] As for products, Lao exports to the US consist mainly of clothing, silk products, coffee, green tea, and beer. Given the possibility of US restrictions on the increasing textile imports from China, Laos (as a clothing exporter itself) could benefit even more from its NTR with the US, at least for a limited period of time (UNDP 2006, 36).

In return for granting Laos NTR with the US, the agreement commits Laos "to adapt and comply with international trading norms and standards including those of the WTO to eliminate NTBs to trade", as well as to "the almost complete liberalisation (for US and other foreign investors) of tourism, banking, insurance, communications, and other service sectors" (UNDP 2006, 35). In addition, the agreement obligates Laos to protect intellectual property rights on a very strict basis. These requirements entail high implementation costs and efforts for Laos, including legal changes on different levels. Especially the rapid and far-reaching opening of Laos' services sector is seen as a potential threat to the country's human development (UNDP 2006, 17). On the other hand, increasing FDI from the US (and other sources) as well as growing exports to the US could be important drivers for accelerating Laos' economic development.

Following this overview of Laos' regional and bilateral trade relations, the views of our interview partners on these trade relations will now be presented to make it possible to compare the facts and personal perspectives involved.

34 More detailed trade statistics for Laos and the US can be found on the website of the US Census Bureau (2008).

Perceptions, opinions and expectations of stakeholders

Private sector

Some of the farmers interviewed for this study know nothing about trade liberalisation and its consequences for the agricultural sector. Other private actors are generally of the opinion that trade is facilitated by regional integration and that ASEAN and the GMS offer opportunities for Laos in terms of capacity building.

Regarding regional integration, some companies believe that there are still many barriers to trade, e.g. many fees that need to be paid for exports. But they are aware of the fact that these trade barriers will have to be lowered in the context of ASEAN. High quality standards, e.g. those of the EU, are also seen as barriers to trade by private actors. They do not feel ready to export to these quality-conscious markets and need more time to adapt their production to high quality standards. Therefore, they believe that they are not yet able to benefit from bilateral trade preferences like the EU's EBA Initiative.

Most producers and exporters are aware of the fact that foreign markets have special requirements. Different labelling and certification requirements, e.g. of the EU and Japan, are seen as challenging by most and as confusing by some producers and exporters. A few actors even think that they will be unable to benefit from regional and bilateral trade integration at all because their products do not comply with the quality specifications of foreign countries.

There is a general feeling that other countries in the region benefit more than Laos from ASEAN and AFTA. Laos is said to need more time to prepare for trade integration. Some producers even feel that Laos is losing from trade integration within ASEAN because, unlike its neighbouring countries, Laos does not have much to export and will only be losing state revenues by lowering tariffs on imports.

Government

The government recognises the need to improve regulations and learn from neighbouring countries as one positive effect of ASEAN. Overall, integration into the ASEAN community is expected to push Laos forward in terms of filling development gaps.

Further regional and bilateral market access is not considered to be a major issue because Laos already has trade relations with more than 50 countries and is granted trade preferences by many of them (e.g. Australia, New Zealand, Japan, EU). Furthermore, Laos benefits from the ASEAN Integrated System of Preferences that has already been mentioned in this chapter.

One challenge seen is that, with the opening of the Lao economy, tariffs will be reduced, and the government will lose revenue. As Laos already maintains low tariffs within ASEAN, government officials do not want any further reductions because of the negative effect this will have on the public budget.

Regarding bilateral trade integration, the government points out that despite Laos' NTR with the US and its integration into the EU's EBA Initiative, most of the country's trade is still with ASEAN countries. One reason could be the fact that even though both the US and the EU are phasing out quotas on agricultural products, they impose very strict quality standards and regulations (e.g. for products of animal origin), which prevent Laos from exporting products like honey to these markets.

For lack of sufficient funds and human resources, the workshops and trainings currently provided by the government are not considered by officials as sufficient to raise awareness of regional and bilateral trade integration at all levels. If there were more funds available, government staff would wish to inform business people and farmers through TV, radio, and newspapers.

Donors

In general, most foreign experts interviewed expect Laos to benefit more from regional integration than from access to remote international markets, as the country's main export markets are in the region. An enterprise survey conducted by a donor organisation in 2007 shows that knowledge on AFTA issues among Lao business people is still rather limited. However, most experts have the impression that trade integration within ASEAN has stimulated reflection and discussion in the Lao business community about export marketing.

The benefit from regional integration is considered to be immense for Laos, a landlocked country, in terms of infrastructure development. Donors expect regional investment to increase again when the current global economic crisis comes to an end. Thailand, China, and Vietnam in particular were mentioned as having a strong interest in investing more in Laos, for example in large land concessions.

However, this perspective is not seen by all donors as positive, since large concessions can lead to land conflicts with the local population. In addition, some donors are concerned about the fact that Laos is surrounded by faster-developing countries that have a better understanding of trade integration and might take advantage of Laos. Increasing imports of chemical pesticides from China and Thailand as well as weaker registration and control on the Lao side were pointed out by donors as negative examples of regional trade integration.

Several experts also pointed out that despite liberalisation within AFTA, there are still trade restrictions and other protectionist measures in place in ASEAN members and informal trade flows are rising. Both trends are considered negative for Laos. Countries like China and Thailand are imposing barriers to agricultural products in the form of certification and testing requirements that Laos is unable to meet. In addition, some countries do not allow imports of certain processed goods from Laos, thus preventing Laos from exploring its processing potential in the respective sectors. The problem that Laos often exports raw inputs and then re-imports them in processed form will not be not solved by regional trade integration. Overall, the more developed neighbouring countries are considered more competitive than Laos in terms of quality and price.

Concerning bilateral trade relations, donors pointed out that despite the EU's EBA initiative and Laos' NTR with the US, exports from Laos to these two markets are still rather limited. In some cases this is due to lacking certificates of origin for certain products. Other major impediments that prevent Laos from realising the full potential of its bilateral and regional trade integration are its deficient SPS legislation, institutions, equipment, and capacity. Both the EU and neighbouring countries are increasing their monitoring of imported goods for compliance with SPS standards. Economic cooperation in the context of the new FTA between Laos, Australia, and New Zealand is expected to provide more support for SPS standards development in Laos.

As regards information and awareness raising, some donors expressed difficulties in explaining issues and consequences of trade integration to villagers. Nevertheless, farmers were described as being increasingly aware of being drawn into the regional and global economy. Especially in the South of Laos, donors reported a rising number of farmer groups and improvement in marketing and quality due to increasing trade.

Regional trade integration and the WTO

One frequently mentioned concern is that regional integration poses a threat to multilateralism. Contrary to what one might think, trade liberalisation within communities like ASEAN does not necessarily compete with but may also complement the multilateral system of the WTO.[35] Normally, setting up an FTA would violate the MFN principle guaranteeing equal treatment to all trading partners (WTO 2008b, 2). However, "*WTO agreements recognise that regional arrangements and closer economic integration can benefit countries*" (WTO 2008b, 1–2). Therefore, GATT Article XXIV explicitly allows for regional trading arrangements as special exceptions, provided that they "help trade flow more freely among the countries in the group without barriers being raised on trade with the outside world" (WTO 2008b, 2).[36]

As the examples of regional and bilateral trade integration in this chapter have shown, Laos is already very open economically. It is therefore only logical that it should apply for membership in a multilateral trading system like the WTO. The agreements that Laos has already concluded with its ASEAN neighbours and with other bilateral trading partners are important stepping stones on its way to full trade liberalisation and have paved the country's way to WTO accession.

3.3 Joining the WTO

In connection with its membership in AFTA and bilateral trade agreements, Laos has already undergone a demanding reform process, opening up for trade and laying the ground for WTO accession. As the Lao gov-

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35 Actually, by 2005 there was only one single WTO member state (namely Mongolia) that was *not* part of a regional trade agreement. By 2005, a total of 330 regional trade agreements had been notified to the WTO, of which 180 are currently in force (WTO 2008b, 1).

36 In 1996, the WTO General Council created the Regional Trade Agreements Committee, whose task consists in examining regional alliances and determining whether they are consistent with WTO rules (WTO 2008b, 2).

ernment firmly believes that the benefits of joining the WTO will outweigh the costs (Anderson 1999, 2), it is investing substantial efforts in getting Laos ready for accession. In the following, we indicate what steps Laos needs to take to become a WTO member and where the country stands at the end of 2008. This is followed by an introduction to the two most relevant WTO agreements in the sphere of agriculture as well as the requirements they imply for Laos. Finally, the benefits and challenges of joining the WTO are discussed.[37]

Procedures and current status of the accession process

In 1997, Laos applied to join the WTO, and a year later a Working Party[38] was established to consider the request and to conduct negotiations. In 2001, Laos presented a memorandum on its foreign trade regime which serves as a basis for negotiating accession and a response to questions posed by WTO members. At present, Australia, Canada, Chinese Taipei, the EU, India, Japan, and the US are negotiating market access bilaterally with Laos. Applying the MFN rule, these bilateral agreements will then be multilateralised in the Working Party. Once consensual agreement has been reached on conditions of entry and schedules of market access commitments, the Working Party will presents its Draft Report and the Protocol of Accession to the General Council or the Ministerial Conference of the WTO. If approved, the Lao National Assembly must ratify the Protocol of Accession for Laos to become a new WTO member (WTO 2008d; WTO s. a. a; WTO s. a. b).

Although the trade agreements presented in Chapter 3.2 established a frame of reference, Laos is free to negotiate its own conditions for membership. In order to facilitate and accelerate accession negotiations with LDCs, the WTO decided to streamline accession procedures and provide support in the form of technical cooperation and capacity building (WTO 2003). Laos can thus demand that its national development, financial, and trade needs are respected when negotiating concessions, commitments,

37 Chapter 3.3 mostly draws on Anderson (1999), UNDP (2006), and World Bank (2006b). If other sources are referred to, they are indicated appropriately.

38 Currently, the Laos Working Party is composed of 30 WTO members. All WTO members are free to join the Working Party, but usually only those with particular interest in trade relations with the acceding country choose to participate (WTO 2008d).

and transitional periods. It may also expect technical assistance and capacity building by multilateral, regional, and bilateral development partners.

As of 2008, the WTO Working Party on Laos' accession had met four times, although "talks are still in their early stages" (WTO 2008d). Notwithstanding, the country has already enacted several regulations and laws compatible with WTO rules and supporting the overall Lao reform agenda (MPI 2008, 17). In Laos, the Foreign Trade Department of the Ministry of Industry and Commerce (MIC) is the focal point for accession negotiations and it is supported by an inter-ministerial steering committee (World Bank 2006b, 45, 49).

WTO agreements and their requirements

Joining the WTO means joining a rules-based trading system. But what rules must Laos accept? With regard to the focus of this study, what follows introduces only the Agreement on Agriculture (AoA) and the above-mentioned SPS Agreement.[39]

The AoA covers a wide range of basic agricultural products as well as processed agricultural products, beverages, and fibres derived from them. It does not include forestry and fishery products, which are relevant export commodities for Laos.[40] The AoA's major achievements are, first, the conversion of non-tariff barriers to bound tariffs (*tariffication*) and a schedule for their reduction, second, limitation of domestic support in favour of agricultural producers to those measures that have no or only minimal distorting effects on trade, and third, limitation and reduction of export subsidies. In most countries tariffs on agricultural goods are much higher than tariffs on industrial goods. This is a result of the conversion of non-tariff barriers (NTBs) into tariffs with the same impact on restricting imports. But tariffication has improved transparency, i.e. exporters can better calculate whether they will be competitive on the export market by adding the tariff margin to their costs of production and freight.

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39 For detailed information on all WTO agreements, including the AoA and SPS Agreement, see WTO (1994b). In principle, all WTO agreements apply to agriculture, but the AoA prevails if any conflict arises between the different agreements (WTO s. a. c).

40 Annex 1 of the AoA specifies the product coverage with reference to the harmonised system of product classification.

The SPS Agreement is closely linked to the AoA and ensures the right of WTO members to take sanitary and phytosanitary measures to protect human, animal, or plant life or health. WTO member countries are allowed to impose import restrictions if imported products do not comply with national SPS standards. However, these standards must be either in accordance with common international standards or based on scientific evidence of the need to introduce the standard.

Developing countries are given *special and differential treatment* to enable them to cope with the requirements of the AoA and the SPS Agreement as well as to ensure food security.[41] Special and differential treatment can range from acknowledgement of special needs to extension of transition periods, or even exemptions from reduction commitments. The AoA also includes *Special Safeguard Provisions* (Article 5) that allow all countries to protect their markets against huge import increases or dumping. It additionally allows developing countries to protect primary agricultural products that serve as their predominant staple (AoA Annex 5 Section B). The SPS Agreement provides for the provision of technical assistance, for example in the areas of processing technologies, research, infrastructure, advice, training, equipment, as well as financial support to handle necessary investments (Article 9).

In order to join the WTO and to make full use of trade possibilities, in particular regarding the export of agricultural products, Laos needs to fulfil many requirements. There are still some non-tariff import and export barriers, like licensing requirements, in force that need to be phased out or converted into tariffs (World Bank 2006b, 12–20). The government must tariffy all non-tariff restrictions and/or adapt them to the AoA, the SPS Agreement, the Agreement on Import Licensing Procedures etc. Like all WTO members, Laos has to bind all agricultural tariffs but, as an LDC, it will not be obliged to reduce them (WTO s. a. c).

In Article 9, the AoA stipulates that export subsidies must be reduced. Since '*Laos does not subsidise agricultural exports*' (Anderson 1999, 35), it probably will be asked to refrain from phasing in new export subsidies in the future. Laos is allowed to put in place trade-distorting product-

41 Food security is particularly addressed in the "Decision on Measures Concerning the Possible Negative Effects of the Reform Programme on Least-Developed and Net Food-Importing Countries" (WTO 1994a).

specific support measures if they do not exceed 10 % of the value of the agricultural production in question (*de minimis*). It is also possible to adopt measures that have no, or only minimal, trade-distorting effects (*green box*). The Lao government, e.g., will be allowed to indirectly support the agricultural sector through funding of agricultural research, rural infrastructure, pest and disease control, marketing and promotion services, public stockholding for food security etc.[42]

Import and export licences are required in Laos for many products.[43] WTO rules allow for import and export licenses as long as they are applied and administered in a neutral and fair manner and if they comply with WTO principles. While it is Laos' right to regulate and control imports and exports with regard to quality, safety etc., it should ensure – in its own interest – that import and export restrictions do not artificially reduce trade.

During the accession process, and as a WTO member, Laos will be required to provide information on trade-related policies. A single enquiry point must be established to facilitate access to information for other WTO members. Furthermore, all tariffs and trade-related measures must be notified to the WTO Secretariat and information on significant policy change-sand trade statistics must be provided (Anderson 1999, 12).

As regards the WTO Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), Laos is required to establish minimum levels of protection. For example, Laos has to prevent the misuse of geographical indications. [44] In return, Laos' own geographical indications would be protected by all WTO member countries (WTO 2007b, 39–41; Anderson 1999).

Finally – though this is not required by the WTO – it must be seen as in the interest of the Lao government to ensure policy coherence as well as consistency across sectors. In addition, it should ensure that domestic regulations improve Laos' competitiveness. Only then can Laos benefit from WTO accession.

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42 For a complete list of "green box" measures, see AoA Annex 2.

43 For more details on what products require import and export licences, how they are obtained, and how they partly hamper international trade, see World Bank (2006b, 13–20).

44 For further information on geographical indications, see Chapter 5.1.

Benefits of joining the WTO

In general, WTO membership should stimulate economic growth through a more efficient allocation of national resources, an inflow of FDI and new technologies, and improved capacity to cope with internal shocks via trade. It also provides access to the WTO Dispute Settlement Mechanism, which enables even the weakest member country to take a large trading nation to the 'WTO court', i.e. to bring a trade conflict to the dispute settlement procedure.[45] Furthermore, WTO membership counteracts trade diversion that could arise due to an ever higher difference in tariffs applied to AFTA member countries and the rest of the world.

Acceding to the WTO and complying with WTO rules will on the one hand impose discipline on the Lao government to adhere to sound economic policy-making. On the other hand, it will provide the government with a tool to promote its development agenda and to resist interest groups lobbying for protectionist policy measures. This will serve to boost the confidence of national and foreign investors.

Freedom of transit (GATT Article V) for products traded by a WTO member through the territory of another WTO member is especially relevant for landlocked Laos. First, Laos' export products are guaranteed transit without unnecessary delay or unreasonable customs duties. Second, Laos can improve its own role as a transit country in the GMS.

Since Laos is already economically open and its exports receive preferential or MFN treatment from many trading partners, the benefit of joining the WTO is not that export markets will open wider, but that market access will become more secure and less discriminatory. WTO trading partners, for example, may not unilaterally withdraw trade concessions, nor are they allowed to demand 'voluntary' export restrictions from the Lao government. With regard to SPS standards, unjustified import bans on Lao agricultural products are ruled out. If a WTO member claims that human, animal, or plant life or health in its country is threatened by Lao products, and therefore restricts Lao imports, Laos can appeal to the WTO dispute settlement body. The import-restricting country then has to prove scientifically that its more restrictive national standards are really necessary to

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45 WTO membership also entails the right to negotiate world trade rules in future trade rounds. However, Laos' influence will be rather limited.

prevent harm to its citizens. Otherwise such import restrictions not based on scientific evidence or justified by an internationally recognized standard have to be withdrawn.

Due to its LDC status, Laos can apply for expanded technical assistance during the accession process and thereafter. Technical assistance for bringing Laos' trade regulations and trade-related policies in conformity with WTO rules and agreements and for the necessary capacity development will make Laos ready for accession while simultaneously improving its economic competitiveness.

Leaving aside the political question whether or not Laos should seek to attain food self-sufficiency,[46] WTO accession is expected to enhance food security. First, cheaper inputs and better technology will contribute to increased agricultural output. And second, even if national production continues to be less efficient and not sufficient to feed the population, the country could import cheaper food.

With regard to trade-related government revenue, no clear-cut statement can be made. Due to AFTA tariff reductions, government revenue has decreased slightly.[47] WTO accession, however, will further increase the volume and value of trade. Improving customs administration and eliminating revenue leakage as well as tariffying non-tariff barriers may thus compensate for if not outweigh revenue loss (Anderson 1999, 48–49).

Risks, costs, and challenges of becoming a WTO member

The above-mentioned benefits unfortunately do not come without certain disadvantages. Further trade openness on Laos's part could increase its exposure to international shocks, while at the same time a diversification of trading partners due to WTO membership could ease its dependency on Thailand and Vietnam.

As regards SPS standards, "*there is a risk that expanding SPS controls would do more bad than good […]*" (World Bank 2006b, 86). Currently, public and private capacities in Laos for managing SPS standards are in-

46 The Lao government continues to emphasise national rice self-sufficiency. Since 2006, Laos has been self-sufficient in rice production, but some areas still suffer from supply shortages (MPI 2008, 12).

47 See Section 3.2.

sufficient to cope with a widening range of agricultural products as well as with an increasing trade volume. New SPS regulations might raise trading costs and lead to more illegal trade, further contributing to uncontrolled and potentially harmful imports and exports. However, if Laos wants to increase international trade – within or outside the WTO – it must build further SPS capacities and enforce stricter application and monitoring of SPS standards.

As far as domestic politics is concerned, the LPRP might be challenged by increasing resistance and criticism from former beneficiaries of protectionist policies. WTO information and notification requirements improve transparency, thus enabling consumers and exporters to form their own opinions and to demand policy changes.

The accession process will trigger a host of reforms which need to be designed and implemented. New institutions have to be created, government officials and public servants have to be trained, statistical and trade-related data have to be collected and disseminated. All of this entails huge costs that the Lao government will need the support of development partners to bear. On top of this, Laos may, on account of financial constraints, not be able to benefit from some of the opportunities provided by WTO membership (e.g. dispute settlement).[48]

Also, Laos will have to deal with social costs caused by reforms required for WTO accession. Ensuring equitable income distribution and poverty reduction – in other words designing a WTO-driven development beneficial to everyone – may prove to be the greatest challenge of all. Furthermore, trade liberalisation has to be shaped in such a manner as to minimise depletion of natural resources and environmental degradation (WTO Preamble).

Lessons learned from other LDCs that have joined the WTO

There are already two LDCs within the region, Cambodia and Nepal, that have joined the WTO. Both have been WTO members since 2004. A study commissioned by German Technical Cooperation (GTZ) analyses the

48 However, the Advisory Centre on WTO Law assists developing-country and LDC WTO members in legal matters. It provides free advice on WTO law and assists in defending interests in WTO dispute settlement proceedings for a modest fee. See www.acwl.ch.

accession process as well as the implementation of measures agreed upon during accession negotiations. There are several lessons that Laos can learn from Cambodia and Nepal (GTZ 2008, 16):

- WTO membership will not bring immediate and automatic benefits for the acceding country. A strategy is needed to reap the benefits of WTO membership, and this strategy should be reflected in the accession negotiations.
- Even after WTO accession, the knowledge and capacities built up during the accession process are needed to implement the measures negotiated. Both Cambodia and Nepal are lagging behind in adapting their legal and institutional frameworks because government officials who negotiated accession have been promoted to other positions or left for the private sector.
- Successful accession negotiations require a high level of coordination between the relevant ministries (especially justice, industry, commerce, and agriculture) as well as among donors supporting the accession process.

Having discussed the opportunities and challenges of WTO accession for Laos, the views of the interview partners on this issue will be presented now in order to set the stage for a further comparison of facts and personal perspectives. This is in parallel to the last subchapter on regional and bilateral trade integration.

Perceptions, opinions, and expectations of stakeholders

Private sector

While business associations and chambers of commerce have some knowledge on WTO rules and agreements, most private companies interviewed, let alone farmers, had little or no understanding of the multilateral trading system. One producer claimed to have heard of the WTO, but never to have "cooperated with them". This answer shows that there are misconceptions regarding the type of organisation and its purposes.

One advantage of WTO accession in the eyes of private actors is that it involves lowering tariffs and taxes. Furthermore, there is a vague expectation that WTO membership will open new market opportunities and facilitate exports. However, the wider spectrum of possible impacts of WTO accession is not clear to most private actors. Many companies noted the need to improve product quality before entering foreign markets. For lack of inputs, technologies, know-how, and skilled labour, most company owners do not feel ready to export to industrialised countries. Almost all private actors would be interested in obtaining more information and support from the government regarding the above-mentioned constraints.

Government

One provincial department official asked whether Laos needed to fulfil the same quality standards for WTO as for AFTA or the EU. Another official described the quality of Lao products as sufficient for the region but not for trade "with the WTO". Among similar statements were that to be able to "sell to WTO", the quality of Lao products needed to be improved, or that currently there were no studies on "exports to the WTO". Statements like these show that there are misconceptions regarding the implications of WTO membership, considering that the WTO is not a common market but a multilateral trade organisation in which the member states are the key players who continue to be able to impose different quality standards.

Overall, there is a lack of information on WTO issues within government institutions, especially at the provincial and district level. Although MIC and donors organise discussions and trainings for government staff, business people, and farmers, there is no clear understanding yet of WTO accession and its consequences among these stakeholders. One reason for this is that the Lao WTO Accession Secretariat within MIC has to allocate most of its efforts to the accession process itself and does not have enough time to share its knowledge and information with lower government levels and to convey it to the private sector.

Although MIC has official responsibility for the whole of the WTO accession process, the National Assembly has expressed a desire to become more involved in WTO-related discussions and decisions. As one delegate pointed out, inclusion of the National Assembly in the WTO negotiation team was recommended by experts from Vietnam – a country that has successfully joined the WTO and benefited immensely from it (Wiemann et al. 2006).

To the key question why Laos applied for WTO membership government officials provided a number of different answers that can be summarised as follows: In a globalised world, Laos cannot stay behind. Laos wants to be part of the global community and share the benefits of WTO membership instead of being left out as the only country in ASEAN that is not a WTO member. The main goal is not market access but to push forward reforms and bring laws and regulations into compliance with international standards in order to facilitate business development and trade. This in turn is expected to have a positive impact on Lao exports. Access to the WTO's dispute settlement procedure is seen as another advantage. And, last but not least, the technical and financial assistance associated with the accession process is regarded as an opportunity for Laos to learn from the international community in terms of capacity building.

In view of the global economic crisis, a high-level representative of MIC affirmed that despite the changing circumstances Laos would not relax either its efforts or pace in striving for WTO accession.

One specific advantage of WTO membership expected by many government officials is that Laos will have to abandon discriminatory policies such as giving preferences to state-owned enterprises and that it will have to further reduce tariffs and non-tariff barriers to trade. It would also be required to harmonise trade policies and regulations across different levels of government. These measures were already among the objectives of some ministries before the WTO accession process started and can now be structured and pushed forward in the context of WTO requirements. This mechanism of adopting new regulations and being under outside obligation to observe them is referred to by experts as 'locking in reforms'.

Despite the above-mentioned benefits, the government also sees a number of challenges and possible negative effects of WTO accession: Further tariff reductions will translate into revenue losses. A host of rules and regulations need to be adapted and technical standards implemented. A large number of different stakeholders need to be informed and involved. There is a fear that domestic prices of export products might rise after accession, harming consumers. Overall productivity in Laos is still relatively low. Farmers may not be either prepared in terms of production capacities or competitive with respect to quality and prices. There is no sufficient quality control and certification infrastructure in place in Laos. And care must be taken that poor people are not excluded from the benefits of WTO accession.

Overall, government officials frequently mentioned lack of the capacity and staff needed to push forward reforms and increase understanding of the role of the WTO. For central government staff, it is difficult to explain the linkages between the WTO and day-to-day work to institutions at the provincial and district level. There are workshops and trainings and there is a communication plan for provinces on MIC's activities regarding WTO accession, but this is not considered sufficient to raise awareness on WTO issues.

Several government officials noted that Laos lacks institutional capacity and thus fears that opening up the country without retaining the capacity to regulate may entail negative effects like those many countries are now experiencing due to the impact of the global economic and financial crisis. However, most government officials expect the net benefit of WTO accession to be positive. As summarised by one official, Laos has no market access problem, and there is no lack of donor support, either. The challenging question is how to shape WTO accession effectively to the optimal benefit of the country.

Donors

As regards the benefits and challenges of WTO accession, donors largely agree with the points mentioned by government officials. A specific benefit that experts mentioned in the context of geographical indication is the fact that WTO membership will allow Laos to protect its intellectual property rights under the TRIPS Agreement. Currently, Laos is unprotected and already faces problems bound up with foreign misuse of Lao geographical names. It is expected that WTO membership will help to fight this kind of piracy.

However, foreign experts were generally not as confident as Lao government officials regarding the positive impacts of WTO accession. While some insisted that Laos should not push the accession process too fast without being adequately prepared, others recommended that reforms be implemented more quickly in order to speed up negotiations and obtain a better bargaining position. Overall, donors agreed that WTO accession is far more demanding than further integration within ASEAN, and that Laos will benefit more from improved market access in the region than from WTO membership. The prerequisites for entering new markets in developed countries include quality standards, control, and certification, all of which are still lacking or insufficient in Laos. Most donors also emphasised the need for institutional changes and more capacity building and awareness raising measures at the local level.

The overall view of most foreign experts was summed up by an international non-governmental organisation (NGO) in the following metaphor: "*The WTO opens the door, but you have to walk through it by yourself. The door is open in two directions, so if you don't walk through, there will just be people coming in.*"

Images of this kind illustrate that the implications of trade integration for Laos are understood well by some actors and less so by others. Different stakeholder perceptions of WTO accession as well as varying stakeholder views on regional and bilateral trade relations presented in the previous subchapter show that some opportunities and challenges of trade integration are clearly recognised while others are not. This can be partly explained by the complexity of the subject as well as by the fact that different stakeholders obviously have different expectations and, accordingly, selective perceptions. However, the variety of responses makes it clear that there are still large information gaps regarding the implications of trade integration for Laos – both within and between policy levels and stakeholder groups. This calls for specific actions by the government and donors to ensure that information on trade integration is widely disseminated and enables stakeholders to take appropriate measures themselves.

Overall, Laos can take advantage of WTO accession despite the challenges involved if a strategy suitable to benefiting from trade integration is designed and implemented. As agriculture is the predominant economic sector in Laos, its potential for contributing to such a suitable strategy must be analysed. The following chapter will provide an overview of the agricultural sector in Laos.

4 Laos' agriculture

4.1 Structure of the agricultural sector

Agriculture represents the backbone of Laos' economy. Today, about 77 % of the Lao population lives in rural regions and around 80 % of the national labour force works in agriculture (MPI 2008, 12). The majority of the country's poor live in small farming households (Oraboune 2008, 75; Setboonsarng / Leung / Stefan 2008, 1).[49] Agricultural production has increased by an average of 3.9 % annually since 2005 / 2006. However, as other sectors have grown more rapidly, its share of GDP declined to an estimated 30 % in 2007 / 2008 (MPI 2008, 12).

After the foundation of the Lao PDR in 1975, the government introduced an agricultural cooperativisation programme. The aim was to strengthen the productivity of the agricultural sector through cooperatives and collectives. The programme collapsed in the late 1980s and early 1990s due to mismanagement, lack of incentives for farmers, and inflexibility of the economy (Anderson 1999, 17). Since the introduction of the New Economic Mechanism in 1986, the agricultural sector has improved considerably (Oraboune 2008, 75–76). The market economy is gradually developing along with integration into regional markets. Nevertheless, most agricultural production in Laos still is subsistence farming, especially in upland regions (Oraboune 2008, 91).

Agricultural production

Agricultural production in Laos is mainly based on small-scale and family farming. The number of agricultural food processing industries is limited. Furthermore, use of equipment, techniques, and know-how is still at a low level compared to neighbouring countries (UNIDO / UNDP 2008, 81).

49 In 2001, an estimated 90 % of the poor lived in agricultural households (Setboonsarng / Leung / Stefan 2008, 1).

Agricultural productivity varies significantly within the country. While average productivity in Laos (defined as gross revenue from agriculture) is 0.14 US$ per hour worked, there are large differences among the provinces, ranging from 0.09 US$ in Saravane to 0.26 US$ in Bokeo and Xayabury (Setboonsarng / Leung / Stefan 2008, 2; NSC 2004, 49). Productivity in the latter provinces is higher due to contract farming[50] and cross-border exports (World Bank 2006a, 8).

Laos' main agricultural product is rice, which accounts for an estimated 75 % of all agricultural production (World Bank 2006c, 7). Other major agricultural products are vegetables, meat, maize, starchy roots, sugarcane, tobacco, peanuts, and coffee.

Rice: Rice is grown on more than 80 % of the land under cultivation. The total area harvested increased by 26.2 % from 619,000 ha to 781,243 ha between 1986 and 2007 (NSC 2008, World Bank 2006a, 16). Rice production is split into three main systems: lowland rain-fed, lowland irrigated, and upland rain-fed. Dependency on rain-fed crops and on weather conditions has contributed to some fluctuation in output. Most of this rice is consumed by farming households themselves. Only 10 % of production is sold on markets (World Bank 2006a, 2). In 2008, the Lao government decided to establish a national rice bank to compensate for rice shortages and secure an appropriate supply for local consumption (EIU 2008a, 15).

Vegetables: The main vegetables cultivated in Laos are cucumbers, cabbage, cauliflower, Chinese cabbage, and mustard (World Bank 2006b, 87). In 2007, production was about 734,385 tons and the area harvested amounted to 84,355 ha (NSC 2008). Vegetables are grown in all provinces (World Bank 2006b, 87).

50 For more information on contract farming, see Section 5.2.

Table 2: Agricultural production in Laos (2007)

Commodity	Production in 1000 tons	Share of production by major regions / provinces
Rice	2,710	
Lowland rain-fed	2,087	Savannakhet: 21 % Champasak: 15 %
Upland rain-fed	379	Huaphanh: 14 % Luang Prabang:
Lowland irrigated	244	Savannakhet: 30% Vientiane: 30 %
Vegetables	734	Champasak: 18 % Vientiane: 16 %
Maize	691	Xayabury: 32 % Oudomxay: 16 %
Starchy roots	360	Luang Prabang: 17 % Saravane: 16 %
Sugarcane	324	Luang Namtha: 26 % Savannakhet: 26 %
Tobacco	42	Borikhamxay: 35 % Saravane: 18 %
Peanuts	35	Saravane: 41 % Xayabury: 12 %
Coffee	33	Champasak: 64 % Saravane: 25 %

Source: NSC (2008); World Bank (2006a)

Livestock: Livestock is essential for small farming households, and it basically serves to meet domestic demand. Buffalo and cattle are used in rice production for ploughing fields and distributing rice, and they represent an important source of organic fertiliser. Pigs, poultry, and goats generate household income (World Bank 2006b, 87). The rearing of farm animals has expanded continuously, as the government has established animal breeding stations. In 2004 and 2007, the outbreak of avian influenza heavily affected the poultry industry in the central and southern parts of Laos (EIU 2008b, 22).

In general, there is rising production of cash crops such as maize and rubber, which are mostly produced as monocultures on plantations.

Maize: In 2007, maize production amounted to 690,795 tons (NSC 2008). Production levels fluctuate with rainfall. In the western provinces, maize is grown under contract with Thai buyers. When sloping lands are cultivated, farmers are faced with problems of land erosion (EIU 2008b, 22).

Rubber: Rubber cultivation has been steadily expanded in the northern provinces, particularly in Luang Namtha, with strong involvement from China in contract farming. The long-term financial and ecological sustainability of rubber is disputable and the land and production rights of smallholders are quite limited (Setboonsarng / Leung / Stefan 2008, 4; UNDP 2006, 73)

Farming systems

As described in Chapter 2.1, only 15 % of the country's land area is cultivable (MAF 1999, 20). Currently, 6 % of total land is used for agriculture: Half of it is cultivated and half of it used as grazing land or for permanent pasture (World Bank 2006b, 87). Farmland is national property, but it is leased to farmers for long-term use (MAF 1999, 22). In recent years, the granting of land concessions for industrial crop plantations has increased significantly. These land concessions are promoted in order to attract foreign investors and to better utilise land (e.g. to eradicate shifting cultivation). The goal is to create revenue for the state and improve living conditions for local communities. However, there are increasing concerns about land concessions and the way in which they are granted. Especially, conflicts over existing land (use) rights and alienation of land from local communities were reported (Hanssen 2007, 21). In response to problems with the impact of large land concessions, the government in 2009 started to demand socio-economic impact assessments for the project proposals of potential investors.

In general, five farming systems can be identified in Laos: lowland rain-fed system, lowland irrigated farming, upland farming, plateau farming and highland farming.

Lowland rain-fed system (MAF 1999, 71): This system is characterised by production of lowland rain-fed rice during the wet season. The land is furthermore used for grazing. Farm animals are used in support of land preparation as well as for consumption and as a source of income. Many households suffer from rice shortages at the end of the dry season and from lack of inputs and cash.

Lowland irrigated farming (MAF 1999, 71–72): This system is dominated by supplemental irrigation for rice during the wet season and cultivation of a small share of rice and other crops during the dry season. Farmers use a large amount of inputs such as fertiliser, mainly during the dry season, and are less reliant on livestock. However, major problems include low yields of wet season rice and lack of water control and cash for inputs.

Upland farming system (MAF 1999, 72–73): Cultivation focuses on upland rice and in some regions on maize. Crops are mainly produced for self-consumption. Household income is generated from other sources, particularly livestock. The major concern of upland farmers is the general shortage of rice. Furthermore, lack of skills and absence of markets make the search for alternatives difficult.

Plateau farming system (MAF 1999, 73–74): This system is used in three areas: the Boloven Plateau and Xiengkhuang and Khammouane provinces. Plateau farming is dominated by cultivation of coffee and to a lesser degree tea and cardamom. Livestock serves as insurance. Cultivation of fruit and garden vegetables provide cash to buy rice from the lowlands. This farming system suffers from shortcomings in inputs, techniques, and management skills.

Highland farming system (MAF 1999, 74): Highland farms are mainly settled by Lao Soung (Hmong and Yao). The system is characterised by sloping land and the practice of slash and burn. Subsistence farming with little or no profit is a dominant feature of highland farming. Production is based on a variety of crops and cattle. Household income is mainly generated through the sale of livestock. In view of seasonal labour shortages, labour intensive production, especially weeding, is one of the main problems.

To sum up, agriculture in Laos is still dominated by subsistence farming. The agro-processing industry is small and in the early stages of development. Most companies are small-scale, employing 3–5 people. There is little processing of food. Farm produce is either sold unprocessed in the domestic market or sold to regional markets, where value is added. Processed food is mostly imported from Thailand (World Bank 2006b, 88).

Major constraints for commercial farming include geographic conditions, low productivity, lack of inputs and skills, as well as a limited focus on markets (ITC / MOC 2005a, 6).

Agricultural trade

Despite its importance for the domestic economy, the share of agriculture in Lao exports represented only 7.3 %[51] in 2004 / 2005.[52] The main export products include livestock, non-timber forest products (NTFPs),[53] coffee, and other agricultural products.

Only coffee exports are covered well in official statistics. Estimates by MAF and results of cross-border trade analyses indicate that 20 to 80 % of agricultural exports – except coffee – are informal.[54] UNDP estimates that total exports in 2004 / 2005 amounted to more than 60 million US$, exceeding net exports of garments and manufactured wood products combined (UNDP 2006, 70).

Most production for the market is located in lowland regions, plateaus, and border areas that allow access to cross-border trade with neighbouring countries. The number of workers in border districts producing for export is about 277,000, which represents 12 % of the agricultural work force (UNDP 2006, 71). The main trading partners for agricultural products are Thailand, the EU, Vietnam, China, and South Korea (WTO 2008a, 107).

51 This number includes estimates of informal exports (UNDP 2006, 70).

52 74 % of Lao exports consist of garments, wood, tourism and electricity (UNDP 2006, 23).

53 FAO (Food and Agriculture Organization of the United Nations) defines NTFPs as "*products of biological origin other than wood derived from forests, other wooded land and trees outside forests. They may be gathered from the wild, or produced in forest plantations, agroforestry schemes and from trees outside forests*" (FAO 2008a).

54 UNDP's estimates of informal trade are based on the assumption that 50 % of NTFP exports, 80 % of cattle exports, and 20 % of other exports are informal (UNDP 2006, 71).

Table 3: Value of agricultural exports 2004–2005: Formal trade and estimates of informal trade (in thousand US$)				
Export product	Formal trade	Estimates of informal trade	Totals	Share of total
Livestock	3,108	12,432	15,540	25 %
NTFPs[55]	5,878	5,878	11,756	19 %
Coffee	9,599	0	9,599	16 %
Other products	19,645	4,911	24,557	40 %
Totals	38,230	23,221	61,452	100 %
Source: UNDP (2006, 71)				

In 2004, imports of agricultural products amounted to 119.9 million US$, accounting for 23 % of total imports. Imports of agricultural products include beverages (31 %), food preparations (7.6 %), and milled rice (5.8 %) (FAO 2006, 1, 3). In particular, imports of alcoholic beverages (mainly from Singapore) and bottled water (from Thailand) have grown significantly in the past decade (World Bank 2006b, 22).

Many countries use tariffs to protect the agricultural sector. Laos' overall MFN tariffs are low compared to other countries in the region with similar income profiles. The average weighted tariff is 13 %. The corresponding figure in the agricultural sector is 7 %. Within the agricultural sector, the most highly protected subsector is fruits and vegetables, with an average tariff of 25 %. The duty rate for beverages and tobacco, two other protected subsectors, is 17.8 % (World Bank 2006b, 7–8).

As mentioned in Chapter 3.2, Laos announced a schedule for the Common Effective Preferential Tariff scheme with the other AFTA members. The rates are applicable to all imports except sensitive unprocessed agricultural products[56] and other products permanently excluded due to religion, morals, health, or public safety. For Laos, the Sensitive List of unprocessed

55 NTFP exports include rattan and bamboo.

56 The Sensitive List of unprocessed agricultural goods will be liberalised in 2015 (World Bank 2006b, 10).

agricultural products includes, among others, rice and pork carcasses (World Bank 2006b, 9–10).

Institutions

The Ministry of Agriculture and Forestry (MAF) was reorganised in 1992. Before that year, the provincial agricultural and forestry services operated independently of the central ministry. Now the ministry has a vertical function reaching down to the provinces (Provincial Department of Agriculture and Forestry, PDAF) and districts (District Agriculture and Forestry Office) (MAF 1999, 45). The ministry's policy is spelled out in the "Strategic Vision for the Agriculture Sector" (1999) and in the National Socio-Economic Development Plan (2006–2010). In 2006 and 2007, MAF laid out its main programmes and policy measures, with a focus on:

- Ensuring food security,
- commercialisation of agriculture,
- shifting cultivation stabilisation for poverty reduction,
- sustainable forest management.

In 1999, the National Agriculture and Forestry Research Institute (NAFRI) had been established to consolidate research on agriculture and forestry and develop a coordinated research system. NAFRI is part of MAF and has the status of a technical department. NAFRI is mandated to undertake integrated agriculture, forestry, and fisheries research in order to provide technical information, norms, and results useful in formulating strategies in accordance with government policies. NAFRI has four main functions: carrying out adaptive research; developing methods, tools, and information packages; providing policy feedback; coordinating and managing research. NAFRI consists of four administrative and management divisions, five commodity-based research centres (rice, horticulture, forestry, livestock, and living aquatic resources research centre), three non-commodity-based research centres (Agriculture and Forestry Policy Research Centre, Information Management Centre, Agriculture Land Research Centre) as well as two regional centres (Southern (SAFReC) and Northern (NAFReC) Agriculture and Forestry Research Centre) (NAFRI 2009a). SAFReC has recently been upgraded from a coffee research centre to a broader agriculture and forestry research centre. NAFReC focuses on carrying out applied upland agriculture and forestry research.

In addition to these institutions, MAF runs a decentralised extension service including the central, provincial, and district level: the National Agricultural and Forestry Extension Service (NAFES), the Provincial Agricultural and Forestry Extension Service (PAFES) and the extension section within the District Agriculture and Forestry Office, which operates in all 17 provinces and 141 districts. Furthermore, there is the Village Extension System on village level (NAFES 2009).

NAFES is the lead extension agency. The role of NAFES is to support the work of provincial and district extension services by developing extension strategies, organising staff training, and providing technical information. NAFES is equal in status to other departments under MAF. PAFES is a section within PDAF. It is responsible for coordinating support of the technical sections such as agriculture, fisheries etc. to extension staff at the district level (NAFES 2009). The district is the level at which the government extension service maintains direct contact with farmers. An extension, technology, and training section has been introduced within the District Agriculture and Forestry Office (NAFES 2005, 58). Its role is to support the Village Extension System. Furthermore, the section helps to create linkages between farmer groups and sources of expertise, inputs, and services available from other government agencies and the private sector. Information on problems that cannot be solved at the village or district level is fed back to PAFES. The Village Extension system involves village authorities who plan and manage extension activities as part of their own development plans. This system includes, second, production groups that are formed by villagers and, third, village extension workers who facilitate activities of production groups and help in extending information to other members of the community (NAFES 2009).

Until 2006, there were few linkages and no interaction in terms of sharing and exchanging information between NAFRI and NAFES. In 2006, the Agriculture Information Management working group was set up on an informal basis. After a year of initial collaborative activities, a formal plan was approved by both NAFRI and NAFES. The overall purpose of the working group is to improve access to information for extension agents and farmers. The group is currently working on five areas: information management; joint material production; improving information systems at province and district level; developing feedback mechanisms; and creating village development cluster levels (NAFRI 2009a).

4.2 SWOT analysis of Lao agriculture

The table below summarises the strengths and weaknesses of the agricultural sector in Laos as well as the opportunities of and threats faced by this sector.[57]

Table 4: SWOT analysis of the agricultural sector in Laos

STRENGTHS	WEAKNESSES
• relative abundance of land and water • high biodiversity → rich endowment in NTFPs • favourable climate conditions • good soil conditions • sufficient domestic energy supply • organic production is naturally predominant (as almost no chemical fertiliser or pesticides are used)	• landlocked country and small domestic market • weather dependency and lack of risk-coping capacity • strong regional divergence (lowlands versus highlands) • lack of skilled labour • lack of technology and inputs • low productivity • very little processing • limited access to financial services • lack of infrastructure → high transport costs • lack of quality control (institutions, standards, enforcement) • no market information system (demand, prices, standards, value chains) • fragmentation (no common national market)

57 This overview is based on ITC / MOC (2005a, 11), Oraboune (2008, 106), UNIDO / UNDP (2008, 26, 27), and Wienand (2008, 5).

Table 4 (continued): SWOT analysis of the agricultural sector in Laos	
OPPORTUNITIES	THREATS
• dynamic regional trade integration (AFTA, China) • cross-border infrastructure development (GMS) • sunset industries (e.g. from Thailand) • quality increase (adoption of international SPS standards) • development of Lao branding • processing of agricultural products • renewed donor attention to agriculture • rising FDI inflows through trade integration • growing demand and rising prices for high-value food products (Asia: growing demand due to shifting diet; Europe / USA: organic products)	• growing international competition (e.g. from more productive neighbouring countries) for imports and exports • Dutch Disease due to electricity and mineral exports • increasing risk of natural disasters (climate change) • risk of external economic shocks due to integration with world market • animal and plant diseases → health / export risk • decline in aid flows due to economic crisis • decline in foreign demand after economic crisis

5 Producing high-value agricultural exports: Background

As mentioned in the introduction to this study, Laos will have difficulties in making inroads into regional and global markets for standard food and agricultural commodities, i.e. it is heading for the "lowest price" option. Taking into account that high-value products and quality will become increasingly important, also from the demand side, developing high-value agricultural exports is a promising strategy for Laos to benefit from trade integration.[58] This chapter will present the conceptual background for producing high-value agricultural products as well as the general preconditions in Laos. Chapters six and seven will deal with the potential of Laos for developing high-value agricultural products, drawing on the interviews conducted.

5.1 Elements that determine high value

The concept of high-value agricultural products can be found in several studies on the prospects of farmers from developing countries with the capacity to supply both urban markets in their own countries and export markets with products that have the potential to sell at higher prices due to special properties and higher quality. However, there is no single and encompassing definition of high-value agricultural products. High value may be determined by one or several of the elements considered below: scarcity, high quality, processing, compliance with special standards – for example organic or fair-trade standards – and branding.

Scarcity

If a product is scarce in relation to market demand, it can be sold in the market for a higher price than abundant products. Scarcity is especially relevant for some NTFPs that have a high market price because they are

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58 High-value products can also be sold in the domestic market (e.g. high-quality silk products for tourists and products for high-end markets, including supermarkets, restaurants, or hotels). While customers of export markets prefer products (e.g. silk handicrafts) that are standardised in terms of size, patterns etc., tourists coming to Laos often favour unique specimens.

difficult to find. Moreover, it is also possible to keep secret, among a small number of (ethnic) collectors, specific know-how on where these products are found and how they are harvested and preserved. Another example of scarce products are fruits exported to other countries during their off-season.

High quality

High-quality agricultural products need and are given intensive treatment from seed to harvest. Quality inputs (e.g. seeds, fertiliser) are used; weeding, pruning, irrigation, pest control, and other crop quality improvement measures are carried out as far as possible without chemicals. Such products may require special harvesting techniques as well as measures designed to preserve post-harvest quality (so-called post-harvest handling, e.g. storage, grading, packaging). High-quality food products thus need intensive care by skilled workers, and they require research and extension work geared to adjusting product treatment to specific local weather and soil conditions.

Processing

Processing of agricultural products can add value and prevent quality losses and waste, especially when it comes to perishable products. Each processing stage can add value to the final product. Examples are drying, canning, pickling, or transformation of raw products into fruit juice, jam, wine etc. However, developing countries venturing into processing face several challenges. Machines and equipment for processing are expensive and the operation of processing factories requires minimum scales to be economically viable. A sufficient supply of raw inputs needs to be secured, as does access to markets. Global markets for processed food, however, are already highly competitive, and new entrants have to compete with well-established international companies (Humphrey / Oetero 2000, 3–4). Tariffs of industrialised countries are higher for processed food products (e.g. roasted coffee) than for unprocessed raw materials. The GATT Uruguay Round did not compress the spread of tariff rates between raw materials and processed products, and negotiations in the current

WTO Doha Round have yet to be completed.[59] However, preferential tariff schemes for LDCs, like the EBA initiative of the EU, also include processed food products (UNCTAD 2003, 40).

Compliance with special standards like organic or fair-trade standards

Producing according to standards deemed valuable by consumers in affluent countries makes it possible to set higher prices than for equivalent products not in compliance with these specific standards. The respective organic or fair-trade labels are issued by independent certification agencies. For traditional commodities like coffee in particular, product labelling can be a promising strategy to achieve higher (premium) prices. There are retailer chains and companies that specialise in niche market products and guarantee the compliance of their products and production processes with certain standards required by their specific brands. However, more and more specialty products can be found in ordinary supermarkets, sometimes on special shelves for organic and / or fair-trade products.

Consumers around the world are becoming increasingly aware of the harmful effects of chemical residues from fertilisers or pesticides in food to their health, and especially to the health of babies and children. Consequently, demand for organic food is rising. Trade in certified organic products in the EU, the US, Canada, and Asia amounted to 23.9 billion US$ in 2006 (World Bank 2007, 131). Organic agriculture can be described as a "*production system that sustains the health of soils, ecosystems and people. It relies on ecological processes, biodiversity and cycles adapted to local conditions, rather than the use of inputs with adverse effects. Organic agriculture combines tradition, innovation and science to benefit the shared environment and promote fair relationships and a good quality of life for all involved*" (IFOAM 2008b). In addition to the environmental benefits, organic farming also holds a potential for climate change mitigation (see box, below).

59 See, for example, FAO (2004, 35) for an overview on tariff escalation regarding fruits and vegetables.

Box 1: Organic agriculture and climate change

Looking Ahead – A Green Recovery of the World Economy?

With the global financial crisis leading to a worldwide recession, it is extremely difficult to predict the future of world agriculture and agribusiness. There is a rising awareness among governments, businesses, civil society, and academia around the world that the quick succession of the oil price crisis, the food crisis at the beginning of 2008, and the financial crisis since September 2008 must be seen as a wake-up call for a fundamental restructuring of the world economy in order to prevent another crisis from emerging from the exhaustion of fossil fuels and accelerating climate change. At the London Economic Summit on 2 April 2009, the Group of 20 leading industrial and emerging economies (G20) adopted the term *green recovery* in order to declare that the fiscal and monetary measures agreed upon at the summit must not stimulate a recovery of the old energy-intensive trajectory but should aim at a change of course towards a low-carbon economy.[60]

The agricultural sector will have to play its role in global conversion efforts towards a low-carbon economy. Agriculture is said to be responsible for at least 10 to 12 % of global greenhouse gas emissions, and the trend is rising (Smith et al. 2007; United Nations / United Nations Framework Convention on Climate Change 2008, 4).[61] Industrialised agriculture is a major contributor of greenhouse gases and reduces the carbon-sink capacity of soils through deep ploughing and chemical fertilisation. Therefore, there is a considerable potential for agriculture to mitigate climate change by using more moderate tilling techniques and returning organic matter to the soil post harvest.

The practice of organic agriculture is considered especially suitable to reaching these goals, as it not only uses fewer fossil fuels and oil-based chemicals but also makes use of tilling methods that enhance the carbon-sequestration capacity of soils (Niggli et al. 2009, 10; IFOAM, *International Federation of Organic Agriculture Movements*, 2008b). If the debate on the mitigation potential of alternative agricultural practices is taken seriously by governments and aid agencies, they will have to change agricultural policies and subsidies from

60 "*We, the Leaders of the Group of Twenty, (...) have today therefore pledged to do whatever is necessary to: (...) promote global trade and investment and reject protectionism, to underpin prosperity; and build an inclusive, green, and sustainable recovery.*" (G 20 2009).

61 The climate impact of agriculture is even higher if we take into account the climate impact of deforestation for agricultural land use and the degradation of soils. There are estimates of overall agricultural climate impact of 25 % or more (ITC / FiBL 2007).

support for quantitative production towards support for low-carbon food and agricultural production. The advocates of a shift towards organic farming already claim that organic agriculture should be credited for its climate-change mitigation potential by receiving transfers from carbon emissions trading or other climate-mitigation funds. Organic agriculture would then no longer depend on affluent niche markets consumers in developed and emerging countries. It would, in the long run, become the mainstream practice of farming both in developed and developing countries.

The debate is now gaining momentum on how agriculture's impact on climate change (both positive and negative) can be taken account of in the WTO negotiations and the negotiations on a new global climate agreement (Blandford/ Josling 2009, IFPRI 2009). The Lao government, donors and civil society should study this debate carefully and identify what implications it will have for Lao agriculture and its export potential.

Farmers in developing countries may have a comparative advantage in organic production if chemical inputs are not affordable or not available and production is "organic by default". The challenge, however, is to cultivate crops without using chemical fertiliser or pesticides and to maintain product quality and soil fertility at the same time. This requires considerable skills and know-how on the part of farmers (FAO 2004, 71). However, research on organic practices has thus far largely been neglected (UNCTAD / UNEP 2008, 31). Moreover, certain requirements, for example with regard to documentation or certification, can be very demanding for smallholders (UNCTAD / UNEP 2008, 19).

Organic products can be sold at higher prices as long as consumers have confidence in the guarantees given by various bio and organic labels. At the international level, the International Federation of Organic Agriculture Movements (IFOAM) is working to unify national standards for organic production and certification. Both the IFOAM Basic Standards and the guidelines adopted by the Codex Alimentarius Commission are frequently used as reference documents at the international level.[62] Since 1991, the EU has had a community regulation on organic food setting out the basic criteria that should be met by all products labelled "organic" or "bio" under any of the private labelling schemes. Developing countries that are able to meet the same criteria for organic products and have the capacity to

62 See IFOAM (2006) and Codex Alimentarius Commission (1999).

monitor the production process and certify their products according to EU criteria can be recognised by the EU as reliable suppliers of organic food, which means that their exports need not be checked again by European agents for organic certification.[63]

Fair trade is a concept that provides for selling at a pre-defined fair-trade minimum price which is usually higher than the market price and supposed to reflect real production costs. In addition to the minimum price, buyers pay a premium that should be used to improve business, the community, and / or the environment. Companies certified under fair-trade labels signal that they contribute to greater equality in international trade by offering better market prices and working conditions to producers. Producer and farmer groups can obtain the right to label their products with a fair-trade mark if their production meets certain requirements. Depending on the certifier, these requirements comprise standards regarding production, employment, the environment etc. Since 1997, several national fair-trade initiatives from Europe, Canada, Japan, and the US have been organised under the umbrella of the Fairtrade Labelling Organizations (FLO) International.[64]

Though still a small niche market compared to overall trade in agricultural products, the market for fair-trade products is expanding rapidly, at a growth rate of around 20 % in fair-trade sales each year. Trade in certified fair-trade products amounted to 1.4 billion US$ in 2005, with bananas and coffee dominating fair trade (Farnworth / Goodman 2006, 3–4). However, fair trade faces increasing scepticism concerning the concept's sustainability. The high minimum prices paid are said to lead to a structural oversupply in the fair-trade market. Some certified producers can only sell part of their produce under the fair-trade label, and the remainder has to be sold in the conventional market without a price premium (FAO 2004, 68; Farnworth / Goodman 2006, 13). However, detailed evaluations are missing and it remains to be seen whether demand will increase sufficiently to outpace growth in the supply of fair-trade products.

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63 The new Council Regulation (EC) No 834/2007 of 28 June 2007 on organic production and labelling of organic products replaced the old regulation of 1991. The regulation is available online: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uriOJ:L:2007:189:0001: 0023:EN:PDF.

64 See http://www.fairtrade.net/.

Branding

Another way to add value to products is to step up marketing efforts and create a special brand identity or brand promise around quality features that are recognised by buyers. Compliance with special standards like organic or fair-trade standards can also be used for branding. To be successful in the sense of developing higher-value products, branded products must show consistent higher quality and reliability of supply in order to make buyers and consumers interested in purchasing the branded goods again, in this way building up brand loyalty. One subcategory of branding is *geographical indication*: The name of a town, region, or country is associated with special quality features that are common to all products originating from this geographical region and leads consumers to recognise and pay (more) for these high-quality products (e.g. "Champagne" for sparkling wine from the Champagne region in France). Geographical characteristics are based, for example, on local know-how or specific agro-ecological conditions (World Bank 2007, 132). This strategy requires all producers of the region using the geographical indication to maintain the quality standards associated with the name of the region. Compliance with quality standards must be monitored by a public agency or an association of producers that certify products which meet the quality standard set by the public agency or association. Geographical indications or similar trademarks can be protected by national laws which must conform to the WTO TRIPS Agreement.[65]

Overall, production and export of high-value agricultural goods is affected by several trends in global agricultural markets. Among the most important trends is the growing importance of value chains and standards.

65 However, geographical indications are under heated debate in the current Doha Round: While the EU proposes stricter rules and more types of products for eligibility for protection, major food exporting countries like the US, Australia, or Canada reject the proposal (Babcock / Clemens 2004, 1; Evans / Blakeney 2006, 577–578).

5.2 The importance of value chains and standards for high-value production

Increasing concerns of consumers with food safety force governments and private businesses to introduce stringent standards and controls

With the globalisation of agribusiness, consumers are increasingly worried about the quality and safety of food from distant sources or processed food containing components that are difficult to trace back. Special attention is paid to whether these components are produced in less developed countries with less strict quality and safety standards and insufficient enforcement capacities, even though some of the worst food scandals – like mad cow disease – have occurred and continue to occur in the developed world. As described in the previous chapter, an increasing number of consumers is going one step further, looking not only for high-quality food in general but for compliance with broader social, environmental, or ethical standards. Examples of such standards are organic food or fair-trade products. Farmers in developing countries, food processors, and exporters can gain a share in the organic market of developed countries if they are able to meet the stringent criteria for organic production and can prove compliance through independent and internationally recognised (accredited) certification agents.

Food scandals and the rising interest of consumers in high-quality and safe food have forced governments, agribusiness, and supermarkets in countries of the Organisation for Economic Cooperation and Development (OECD) to introduce ever stricter health regulations and SPS standards for food products. The most common public standards usually include requirements that a phytosanitary certificate be provided by the exporter and that standards on maximum residue levels for pesticides in food products be met (FAO 2004, 56–57). These standards are set by government or agreed upon in international regulations like those set by the Codex Alimentarius Commission, the World Organisation for Animal Health or the International Plant Protection Convention (IPPC). Some of these standards have become effective barriers to entry for imports, especially from developing countries that lack the capacity to effectively control and certify their food exports.

The WTO SPS Agreement was negotiated in the Uruguay Round of the GATT in order to avoid negative trade effects, but the SPS Agreement does not prevent WTO member states from introducing higher standards and more rigorous inspections of imports in response to new food scandals or reports of harmful effects of new chemicals used as fertilisers and pesticides. The SPS Agreement only obliges WTO members to apply their standards on a non-discriminatory basis to domestic and imported products alike, and in cases involving conflict with another WTO member that sees its exports discriminated against by a new SPS measure, the need for the standard has to be proven scientifically. However, there will always be some degree of discrimination between imports from countries that share the same or at least similar food safety standards and other countries that have no such standards and a – possibly – bad record of contaminated food exports.[66] But public concern with food safety is not confined to developed countries. Recently, China has had its fair share of food scandals (the most recent: melamine-contaminated milk and milk products), and Chinese citizens are worried about the criminal energy of some food producers and the negligence of the authorities. Sooner or later, this will have an effect on China's SPS controls of imported food.

Agribusiness and supermarkets are responding to growing concerns over food safety by selecting their food suppliers more carefully and by monitoring their performance more thoroughly.[67] This can have a detrimental impact on those food producers who are not prepared or do not have the capacity to comply with the standards of export markets and requirements of their buyers abroad. On the other hand, responsible producers have the opportunity to establish long-term relations with certain buyers who are willing to share information and provide technical assistance to their suppliers to help them upgrade their products and production processes. There is a heated debate on whether the multitude of public and private standards being introduced in the developed world are barriers to or catalysts for trade in high-value food products.[68] Pessimists view the introduction of standards as a deliberate measure to prevent developing-country food exporters from enjoying broader market access to the markets of developed countries. This wider market access is provided on the basis of tariff

66 These issues are not limited to developing countries: Some of the deepest conflicts in this area loom between the EU and the US, for example over hormone-treated beef and genetically modified organisms (GMO).

67 See, for example, Humphrey (2006) and Shepherd (2005).

68 See, for example, Jaffee / Henson (2004) and Humphrey (2006).

reductions and dismantling of quotas on agricultural goods resulting from GATT and WTO negotiations and agreements or trade preferences offered to developing countries in general and to LDCs in particular.[69] However, the increasing number and stringency of private standards introduced by agribusiness and supermarkets in the developed countries shows that the driving force for developing new and raising existing standards is not government actions to protect domestic agriculture but consumers' concerns with food safety and environmental and social conditions of food and agricultural production in developing countries. Examples of relevant private standards include the demand for a Hazard Analysis and Critical Control Point System (HACCP)[70] or certification according to the Euro-Retailer Produce Working Group for Good Agricultural Practice (EUREPGAP, now: GLOBALGAP).[71] Exporters from developing countries should be aware that private standards do not fall under WTO jurisdiction. In such cases, private parties cannot be taken to the WTO dispute settlement body, only government trade measures are subject to WTO discipline.

Therefore, developing-country governments should not attempt to negotiate with developed WTO members on a reduction of food standards in the same way they had negotiated the reduction of tariffs and the phasing out of quantitative restrictions on imports. Instead, embracing the global trend towards improving food safety through strict standards and rigorous inspection may be a promising strategy – not only for preparing exports from developing countries for marketing in the developed world but also for increasing food safety standards in developing countries for the sake of

69 Like, for example, the EU's EBA Initiative, which gives LDCs tariff- and quota-free access to the EU, with only a few exceptions (see Chapter 3.2).

70 HACCP is a preventive control system used to identify potential food safety hazards along the whole process of food production. Based on a hazard analysis, key measures, so called critical control points, can be implemented to address or prevent these hazards. See US FDA (2001).

71 EUREPGAP is a private-sector quality-control system of producers and retailers that designs harmonised voluntary standards for the certification of agricultural products worldwide to ensure responsible agricultural production with respect to food safety, the environment, animal health, and social matters. These standards comprise general regulations, control points, and compliance criteria as well as checklists. Benchmarking is used for the accreditation of equivalent national control systems (EUREPGAP 2005; GLOBALGAP 2007). In 2007, EUREPGAP changed its name to GLOBALGAP.

their own citizens. Once developing-country governments have assumed responsibility for improving food safety, they may demand technical assistance from donors for their efforts to introduce stringent SPS regulations and to improve their capacity to monitor the compliance of food producers with standards. Moreover, awareness of the health risks posed by contaminated food needs to be raised among the population in developing countries to increase domestic demand for safe and healthy food.[72] The WTO SPS Agreement obliges developed countries to offer technical assistance to developing countries to establish and improve their SPS capacities. Developing countries joining the WTO in particular should insist on getting all support necessary to make their SPS systems fit for global integration of their agricultural sectors which set to gain a comparative advantage in international trade.

New forms of vertical coordination between producers, processors, traders, and retailers along the value chain

With demand rising for high-quality food in compliance with stringent SPS standards, there is a need for closer communication and coordination between retailers, traders, food processors, and farmers along the value chain.[73] The spectrum of governance forms for global value chains is wide, with differing degrees of vertical coordination, i.e. between the actors along the value chain. In one extreme, transactions along the value chain are only coordinated by the price mechanism. They take place on different spot markets, with, for example, food processors buying products from farmers on a spot market, traders buying processed products from food processors on a spot market, etc. The other extreme is hierarchical integration, with transactions along the value chain taking place within one multinational company (e.g. cultivation, processing, and trading within the

72 A good introduction to the food safety complex in international trade is IFPRI (2003).

73 Every production process that comprises several stages of processing, from raw materials and other inputs to more or less sophisticated intermediate or final products, can be described as a *value chain*, i.e. a continuous chain of activities that add value to the product in process. This chain of processing activities has always taken place in factories. However, it was only when companies started to outsource parts of their design, processing, or marketing activities to subsidiaries or independent companies that the different forms of coordination of value chains binding together several companies or even crossing international borders became a subject of intensive research by economists and political scientists (Gereffi / Humphrey / Sturgeon 2005).

same company). In between, vertical coordination may consist of various forms of more or less close and contract-based relations between independent companies (Gereffi / Humphrey / Sturgeon 2005).

Traditional spot markets are still predominant for trading agricultural commodities, i.e. non-perishable standardised mass-produced goods like coffee, tea, rice, wheat or maize. Among the advantages of spot markets are the speed of transactions and low transaction costs in the case of standardised products – once quality is measured against certain grades set by governments or by the organisers of spot markets, buyers and sellers need only to agree on the price. However, the decentralised system of spot markets is not suitable for high-value products involving specific consumer requirements that have to be transmitted from retailers through international traders down to farmers in developing countries.

The other extreme in the spectrum of possible vertical coordination is the full integration of all stages from 'farm to fork' in one agribusiness firm with its own plantations, which allows plantation managers to instruct hired labour to produce according to the requirements of the firm and the final market.[74] The advantage of the full integration model is that there are no transaction costs (no need to search for reliable suppliers, no need to negotiate complicated contracts) and, ideally, no information gaps between different stages of the value chain. The disadvantage, however, is that huge investments in land and processing capacities are required and that costs of oversight for hired labour are high.[75] Small family farms may have higher productivity than plantations, especially with regard to high-value crops that require constant care and treatment, for example weeding and avoidance of pests that undermine the quality of crops. What is more, the impact on poverty reduction will be bigger if a larger number of small farmers can be linked to markets, although this is a rather challenging matter, especially with regard to export markets with high requirements for quality and reliability of delivery.

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74 See Hayami (2003) for a discussion of the different systems of production (family farms vs. plantations).

75 Plantations are economically more viable for standard products with economies of scale for certain stages of planting and processing, as well as for converting virgin land for commercial agricultural production, including provision of infrastructure by the company involved (Hayami 2003).

In between the two extremes of vertical coordination along the food value chain, there is wide room for experimentation with new arrangements for linking farmers to markets and providing them with the information and economic incentives necessary to produce high-quality food products (and other agriculture-based products like silk). *Contract farming* in particular has been introduced in many countries and for a wide range of crops during the past decades. Contract farming is a flexible form of supply chain governance that offers companies secure access to raw materials and agricultural products with specified quality, quantity, and delivery schedules:

> *"Contract farming can be defined as an agreement between farmers and processing and/or marketing firms for the production and supply of agricultural products under forward agreements, frequently at predetermined prices. The arrangement also invariably involves the purchaser in providing a degree of production support through, for example, the supply of inputs and the provision of technical advice. The basis of such arrangements is a commitment on the part of the farmer to provide a specific commodity in quantities and at quality standards determined by the purchaser and a commitment on the part of the company to support the farmer's production and to purchase the commodity."*(Eaton / Shepherd 2001, 2).

There is a vast body of literature on the advantages and disadvantages of contract farming, based on case studies in many developing countries.[76] Developing-country governments see the promotion of contract farming as a strategy for attracting small and subsistence farmers to commercial production of food and other crops, which could help alleviate poverty. Critics point to the potential for exploitation of poor and uninformed farmers by contracting agribusiness firms that monopolise all information on market requirements, seeds, fertiliser, and production methods for high-quality crops. There is no easy solution to the dilemma that family farmers will not be able to access (export) markets for sophisticated and high-quality products without support from agribusiness firms which have information on the demand and quality requirements of these markets. Furthermore, it seems to be quite common for each party to cheat the other when the market price diverges from the price agreed upon in the contract – the farmer will sell part of his produce to other traders if they offer a higher price, and

76 See, for example, da Silva (2005); Simmons (2002); Minot (2007).

the contracting firm will seek to push the agreed price down in the case of falling market prices by refusing to accept the quality provided or by threatening to buy from other sources.

The best way out of this dilemma would be to educate farmers better so that they can obtain market information themselves as well as to form groups and associations of farmers to give them more bargaining power vis-à-vis agribusiness firms. In addition, it would be important to invite more than one firm in one region and one product range to bid on a contract, in this way stimulating competition and giving farmers the option to choose among several contractors in cases of conflict over terms of contract. Recurrent contracting is needed to develop trust between the parties to a contract, enabling both sides to gain an interest not in cheating but in benefiting from long-term business relations. Products with shorter production cycles (like silk) tend to have an advantage in establishing this kind of relationship, as the benefits of such contracts materialise more quickly and interaction takes place more frequently. Another option to prevent cheating would be to require the contracting company to deposit a certain amount of money in a specially designated bank account. In cases of contract default, this money could be used to compensate farmers for their losses.

The above-mentioned problems involved in contract farming require experimentation regarding the form and content of contracts, with institutional arrangements for arbitration included for the case of conflicts between farmers and contractors, and with third-party involvement to ensure that both sides benefit from the contractual relationship. Only then will production and export of high-value agricultural products be possible with smallholders at the lower end of the value chain.

After this general background on the production of high-value agricultural products, the following subchapter outlines the general preconditions for producing high-value agricultural products in Laos. Chapter six will apply the elements of high value to the products analysed during the empirical research in Laos.

5.3 Producing high-value agricultural exports in Laos

This subchapter presents current activities in Laos as regards organic and fair-trade production and certification, certification of origin, as well as the status quo of SPS standards in Laos. It furthermore discusses the relevance of contract farming for Laos. As regards processing and branding, some relevant activities are described in the chapter on product examples. Although the degree of processing activities in Laos differs between the products we focus on, only a marginal number of products are processed for export. In terms of branding agricultural products from Laos, only a small number of companies have strong product branding. There are initiatives designed to implement geographical indications in Laos.

Organic production and certification

Like many other developing countries, Laos has a comparative advantage in producing 'organically by default', as chemical fertilisers and pesticides are not affordable for poor farmers or simply not available in many areas.[77] However, in comparison with Vietnam and Thailand, the share of Lao organic agricultural products in international markets is very small, as trade promotion of organic products has started only recently. Laos has an Organic Product Strategy as part of its National Export Strategy, covering the years 2007 to 2009. One of the most important goals is to meet international demand and standards in terms of quantity and quality (MIC 2006, 2).

One of the most visible activities in support of organic agriculture is the project for *Promotion of Organic Farming and Marketing in Laos* (PROFIL), a collaboration between the Swiss NGO Helvetas and MAF. A national organic standard has been developed in the context of this project; it is based on the standards of IFOAM. Although traditional farming in Laos does not apply chemical fertiliser and pesticides – or applies only very small amounts of these chemicals and is in general consistent with these standards, there is not yet any working mechanism in place to certify organic production. To overcome this impediment, the Department of Agriculture of MAF established, in 2008, the Clean Agriculture Development Centre (CADC). It focuses on information, technical development, inspec-

77 However, Laos' status as a country producing organically by default is currently threatened for several reasons. As the government is, rightly, trying to replace the practice of slash and burn, less agricultural land is available, resulting in an intensification of production and an increasing risk of the use of chemicals. Furthermore, the increasing production of monocultures such as maize and rubber can increase the risk of inflows of chemical fertiliser and pesticides from neighbouring countries.

tion-certification, and food processing. It has a mandate to cover four agricultural systems, one of which is organic agriculture.[78] CADC does not yet offer certification services, even though a Laos Certification Body was established in CADC in the same year. In addition to PROFIL, capacity development is provided to CADC by the Certification Alliance – a regional collaborative platform of nine Asian organic certification bodies, including the Laos Certification Body. Even if the certification body was working, it would still require international accreditation. Currently, there are only a few foreign organic certification bodies that offer their services in Laos. All of them are based in Thailand (Panyakul 2009, 11).

Helvetas also assisted MAF in developing a national organic seal to indicate what organic production has been certified according to the Lao standard. This seal was registered by the Science Technology Environment Agency in 2008. It is not being used, though, as MAF is still developing a policy on and procedures for seal use (Panyakul 2009, 11).

Despite the above-mentioned shortcomings in applying the organic standard as well as a lack of certification, there are a few further impediments to the export of organic products which are relevant for all of the following product examples and therefore presented here:

- There is a lack of comprehensive studies on regional and international organic product value chains that need to be carried out in order to integrate Lao organic production in these chains. At present, there appears to be no specific research on organic value chains by researchers from NAFRI or the National University of Laos. However, the university plans to integrate aspects of organic agriculture in its curricula.
- There is a lack of knowledge on organic fertilisers and pesticides at all levels in Laos. The first steps towards overcoming this impediment would include the establishment of organic fertiliser factories and the option for farmers to obtain organic fertiliser from CADC.

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78 The others are safe conventional agriculture, pesticide-free agriculture (for which the government has decided to select three zones that must remain free of pesticides and chemicals: the Boloven Plateau, the area of Vang Vieng, and the province of Luang Prabang), and good agricultural practice (i.e. practices that address environmental, economic, and social sustainability for on-farm processes and result in safe and quality food and non-food agricultural products) (FAO 2003).

- There is a lack of awareness of the benefits of organic production, of the meaning of standards and certification, and of the relationship between quality and price in exporting organic products. The formulation, by MIC, of an Organic Product Strategy as well as activities of different donor organisations geared to raising awareness are a first step toward further promotion of organic agriculture.
- There is a lack of information on consumer expectations in terms of organic agricultural products. The organic market in Vientiane is a good way to foster an understanding of consumer needs and a trading structure which may pave the way to exporting organic products.[79]

Fair-trade standards and certification

Looking at a variety of agricultural products, one gains the impression that the concept of fair trade is not well-known in Laos. Currently, there are no Lao certifiers for fair-trade standards, which makes the process of certifying quite costly. Nevertheless, there is an institutionalised group of companies involved in fair-trade activities, and it currently plans to convert its status to become a fair-trade association.

Certification of origin

Many countries demand a certificate of origin for imported products. The reasons for this are either that they want to apply trade restrictions or preferences for products from specific countries (e.g. LDCs) or that consumers want to know about the origin of a particular product. In general, it is possible to obtain a certificate of origin in Laos. However, the certificate cannot be issued unless producers / processors can prove the origin of their products. Current donor activities aimed at developing tracking tools may help to overcome this difficulty.

79 In 2006, Helvetas organised an organic spot market in Vientiane. The market is expanding significantly in terms of the number of farmers participating, the range of products, market frequency, and sales volume. It currently takes place twice a week.

Sanitary and phytosanitary standards

Due to its integration in regional groupings such as GMS and ASEAN, and in view of the WTO accession process (which includes the SPS Agreement), the Lao government is obliged to implement SPS standards. In addition, other countries, like China, require data on the pest situation in Laos. However, the capacities needed to provide this data have not yet been developed. As a consequence, trade with China is confined to small volumes of crops for border trade under special licenses. Thailand and Vietnam have similar legal requirements, but since the pest situation in Laos is considered similar to that in Thailand and Vietnam, the requirements are often waived. However, any calamities could trigger enforcement by neighbouring countries of SPS requirements on short notice. The World Bank states that the amount of work needed to establish an adequate SPS system in Laos goes far beyond the government agenda for WTO accession. Moreover, government funding for the operation of an effective SPS system is considered insufficient (World Bank 2009, ix). Therefore, the World Bank has provided support for developing an Action Plan for Capacity Building in SPS Management.

Contract farming

During the past five years there has been a rapid increase in contract farming activities in Laos (Setboonsarng / Leung / Stefan 2008, 1). The government promotes contract farming as the main strategy to connect local farmers to domestic and foreign markets. Through contract farming, companies can provide farmers with the inputs and know-how they need to meet requirements and standards for high-value production. Contracts range from simple verbal agreements to written contracts that describe in detail the obligations of each party. In Laos, however, most agreements between farmers and contracting firms are informal and outside legal boundaries. Recently, a number of investors, mainly from China, Vietnam, and Thailand, have concluded contracts with smallholders in Laos (Setboonsarng / Leung / Stefan 2008, 3).

There is a heated debate underway over the positive and negative effects of contract farming among government institutions, the local population, and international development organisations. In 2007, in response to conflicts over land involving the allocation of land concessions, Prime Minister Bouasone Bouphavanh announced that contract farming would be the preferred alternative to concessions and plantations. He emphasised that his government would strongly promote the "2+3" policy, which has the objective of dividing benefits between investors and villagers (Vientiane Times, 9th March 2007, cited in Fullbrook 2007, 6). The term "2+3" describes the division of responsibilities between the contracting parties: farmers contribute land and labour, while investors contribute inputs, technical advice, and access to markets.[80] However, the "2+3" model often breaks down into concession-type arrangements ("1+4"), where companies are responsible for the entirety of plantation management (including labour) and villagers contribute only land (Shi 2008, 3).

Contract farming in Laos typically involves farmers in areas that are well endowed with roads and often close to major markets or processors in Thailand and China, such as the provinces of Luang Namtha, Vientiane, and Champasak. Despite living in economically dynamic regions, farmers often have a low level of education and find it difficult to understand the contracts. Thus, traders and investors have an advantage in negotiating contracts that may not be beneficial to the farmers. Another difficulty is enforcement of contracts. There are plenty of examples where (foreign) traders or government officials have persuaded farmers to cultivate a certain product (maize, tomatoes) that was scarce at that time and held promise of high prices. In the following season, farmers produced larger quantities of the product in question, but the market situation had changed and prices dropped. Traders refused to buy the produce for the agreed price or did not appear at all. On the other hand, in times of rising prices farmers tend to cheat their contractors and sell to other traders if they offer better prices at the time of harvest. Additionally, there is still confusion and divergence among and between farmers, traders, and officials in different provinces over what constitutes contract farming (Fullbrook 2007, 51). One example of donor support in this field is the mediation activities of the NGO German Agro Action (DWHH), in Phongsaly Province, which facilitates discussions between the contracting parties and government officials.

80 In practice, though, there are often more than two parties involved. Parallel to individual farmers and large investors, these may be village heads, district officials, small traders, banks, and staff of development organisations. The responsibilities of each party vary from contract to contract (Fullbrook 2007, 6).

6 Developing high-value agricultural exports in Laos: Product examples

6.1 Selection of products

Criteria

Based on the present study's focus on high-value agricultural exports, a range of agricultural products with high export potential are examined which at the same time yield the potential for high-value production. An additional selection criterion was the products' likely positive impact on human development in terms of poverty reduction and promotion of gender equality. Furthermore, consideration was restricted to products consistent with (or at least not harmful to) the goal of environmental sustainability.

Selection and relevance

The agricultural products selected according to the above criteria are fruits and vegetables, coffee, tea, silk, and non-timber forest products (NTFPs).

Fruits and vegetables are in great demand and have the potential for high-quality, in part off-season production and processing in Laos. Coffee is one of the country's most important agricultural export goods and global demand for speciality coffee is growing. Tea is not widely grown in Laos, but due to growing world demand there is a high export potential for it. High-quality silk weaving has a long tradition in Laos and there is considerable potential to increase the domestic production of raw silk. The vast variety of NTFPs in Laos contribute strongly to rural cash incomes. Furthermore, NTFPs are in great demand in foreign niche markets due to their high intrinsic value.

Structure

The following subchapters begin with an overview of the particular product and its relevance for export development in Laos. This is followed by a number of suggestions regarding the possibilities available for adding value to the product and a presentation of current activities to explore this potential. Specific impediments to value-adding are then discussed, along with current activities designed to overcome these impediments. Finally, specific recommendations are given for each product.

If not indicated otherwise, the information regarding impediments and activities was obtained through interviews with different stakeholders (producers, processors, traders, government officials, researchers, and donors). A complete list of provinces visited and persons interviewed is included in Annex 1.

6.2 Fruits and vegetables

6.2.1 Production and exports

Global trade in fruits and vegetables increased from 14.5 billion US$ in 1992 to 21.4 billion US$ in 2001, with 59 % of exports coming from developing countries, compared to 56 % in 1992 (FAO 2004, 3–4). A wide range of fruits and vegetables are cultivated in Laos, and production is spread across the country, most of it on small family farms. Examples of fruits cultivated in Laos are bananas, watermelons, oranges, mangos, pineapples, and rambutan. Vegetables are extensively grown in all provinces; the range includes tomatoes, chilli, beans (soybean, mungbean, yardlong bean), cucumbers, cabbage, cauliflower, eggplants, mustard, garlic, babycorn, cassava, and sweet potatoes (World Bank 2006b, 87). In line with international trends,[81] production in Laos has increased mainly through expansion of arable land, which has an annual growth rate of 18 %, and only to a lesser degree through productivity enhancement, which has shown an annual growth rate of 4 % since economic liberalisation in the late 1980s (Genova et al. 2006, 1).[82]

Overall, there is high and continuously growing demand for fresh and processed fruits and vegetables in both neighbouring countries and the developed world. The total export value of fruits and vegetables increased

81 Production can be increased by expanding the land cultivated or raising the yields of current production. So far, area expansion has been more important for increasing production worldwide, leaving room for further increases based on rising productivity if the necessary research is undertaken (Weinberger / Lumpkin 2007, 1466).

82 According to Siphandouang / Wu / Sanatem (2002, 80–81), there has even been a period with declining yields.

from 1.6 million US$ in 2001 to 7.4 million US$ in 2006. The share of fruits and vegetables in (formal) exports of food and live animals rose from 3 % in 2001 to almost 18 % in 2006 (World Bank 2009, 57), with the ASEAN Integrated System of Preferences being one major reason for the sharp increase (UNDP 2006, 75).[83] The main destination for fruit and vegetable exports is Thailand, although it, in turn, is the main supplier of imported fruits and vegetables to Laos as well (World Bank 2009, 3).

6.2.2 Opportunities for developing high-value production and exports

High-quality and off-season production of fresh fruits and vegetables

In contrast to major traditional crops like coffee, tea, cocoa, rubber, tobacco, cotton, and sugar, demand for fresh exotic fruits and vegetables as well as for off-season and organic products still exceeds supply, and this means considerable export opportunities for Laos. In particular, the Boloven Plateau is characterised by abundant land and good weather conditions that enable year-round cultivation of fruits and vegetables. Exports of cabbage from Champasak Province to Thailand rose from 12 metric tons in 2001 to 11,236 metric tons in 2006 (World Bank 2009, 58), with the export value highest during the Thai off-season, as the interview partners confirmed. Also in the north of Laos, farmers have started to grow cabbage, tomatoes, and other vegetables in the off-season under the Lao-Swedish Upland Agriculture and Forestry Research Programme implemented by NAFRI (Vientiane Times 2009a). Besides traditional distribution channels like fresh markets and wholesalers, a growing share of fresh produce is demanded by supermarket chains around the world, with the requirement that strict quality standards be complied with. As there are no significant economies of scale compared to cereals production, the production of fresh fruits and vegetables is in principle suitable for smallholders (Weinberger / Lumpkin 2007, 1472; Humphrey / Oetero 2000, 26). Contract farming agreements can provide farmers with the necessary inputs and know-how to meet the respective requirements and standards for high-

83 According to UNDP (2006, 75), *"(...) potato exports more than doubled, other vegetable exports increased 13-fold, and maize exports (for animal feed) increased 40-fold"* between 2002 and 2005.

value production, including e.g. *Good Agricultural Practice* or organic and fair-trade standards.

Organic fruits and vegetables, branding and fair trade

Demand for organic products is growing worldwide. For fruits and vegetables, organic production is especially important, as consumers are increasingly aware of pesticide residues in fresh products, for which the use of chemicals tends to be higher than for staple crops due to their higher vulnerability to pests and insects (Weinberger / Lumpkin 2007, 1474). As mentioned above, production in Laos is largely 'organic by default'. This could be turned into a comparative advantage to supply the organic niche market. Helvetas is supporting farmer groups in organic production, mainly vegetable farmers in Vientiane Province. The organic market in Vientiane already provides a valuable marketing and distribution channel for organic farmers in the province. Awareness of organic farming and its advantages is spreading to other provinces, and many PDAFs (Provincial Department of Agriculture and Forestry) expressed their intention to promote organic farming, including fruits and vegetables.

The quality of organically produced fruits and vegetables from Laos could be indicated by special brands and certificates. Farmers in Champasak Province already reported that Thai consumers prefer Lao cabbage because they know it is free of chemicals. Fair trade is still rather unknown in Laos. We encountered almost no one in the fruits and vegetables sector who was familiar with this concept. One exception is Lao Farmers Products, an agro-processing company that exports – for example – fair-trade jam to Europe. Lao Farmers Products is FLO-certified and also sells organic tea.

Adding value through processing

Another possibility to maintain or add value is processing of fresh produce. Shipment of processed food, for example, is usually much easier and less prone to quality losses than is the case with fresh products. One illustrative example is the Organic Farm in Vang Vieng, where bananas are sun-dried. Banana chips can be stored for up to six months and are easier to transport to markets than fresh fruits. If they are not sold within six months, they can even be further processed into liquor.

However, the potential for appropriate post-harvest treatment and processing in Laos is still largely untapped. Less than 0.1 % of the country's fruit and vegetable production is processed (World Bank 2006b, 88). Lao Farmers Products buys raw inputs from farmers that are then processed into jam, fruit juice, fruit pastes, sweets, wine etc. and exported, among other places, to the EU under a fair-trade label. Another example is the Lao Agro Industry Company, a Thai-Lao joint venture. The company exports canned fruits (e.g. palm seeds, mango) and vegetables (baby corn) to the EU, Thailand, and Vietnam. Lao Agro Industry Company is one of the few companies producing according to certain private international quality standards. The company already meets the requirements of HACCP and is certified under Good Manufacturing Practice. Currently, it is working on implementing the British Retail Consortium Standard (BRC Standard) as well.

6.2.3 Impediments to high-value production and exports and activities to overcome them

Access to inputs and financial services

Although fruits and vegetables offer higher profits than staple foods, their yields and prices are more volatile than those for staple crops. Production is more expensive, too, as more inputs (good-quality seeds, fertiliser, pesticides etc.) are needed and labour requirements are higher (weeding, pruning, monitoring etc. as well as post-harvest activities like transport, packaging, or grading) (Weinberger / Lumpkin 2007, 1474). Consequently, farmers need access to capital to buy inputs and to balance income volatility. According to responses received during the empirical research phase, however, seeds, fertiliser etc. are mostly imported and access to the financial services (credit, insurance) needed to finance inputs and to compensate for crop failures is virtually non-existent for farmers. Additionally, a shortage of labour prevents any increase in production, at least in the South.

Research and Extension

To engage in high-quality production, farmers must have good know-how concerning weeding, pruning, pesticides, insect control, harvesting techniques, and post-harvest treatment. Throughout the country, organic farmers expressed their need for additional information on organic fertiliser and pesticides in order to increase yields and quality of production. Extension services for fruit and vegetable production, including organic fertiliser and pesticides, are already provided by some local extension centres, for example in Luang Prabang Province. Some research on seeds, technologies, and off-season production is undertaken by NAFRI's regional research centres NAFReC and SAFReC as well as by the Horticulture Research Centre in Vientiane, which is mandated to conduct research on new varieties of vegetables and fruit trees, seeds and seedling multiplication, and related techniques (NAFRI 2009b). According to experts from these institutes, seeds for fruits and vegetables can be provided if there is demand. However, research and extension services for high-quality and organic production of fruits and vegetables are not yet sufficient in Laos.

Access to markets – infrastructure and market information

As fruits and vegetables are highly perishable, fast delivery to the consumer or measures to preserve their freshness and value are required, for example cooling or processing. Farmers need information on potential buyers, prices, and demand-side requirements as well as reliable infrastructure to deliver their products in time to consumers or processors. For off-season production, information on harvesting seasons in other countries is required in addition to adequate storage facilities. However, storage facilities are not yet in place and market information, especially on foreign markets, is not readily accessible for farmers. Infrastructure has improved, but not many farmers have access to an all-weather road. These problems make farmers dependent on single buyers. Farmers are vulnerable to exploitation when they have no alternative buyers and need to sell their produce before it perishes.

In Champasak Province, a wholesale market – mainly for vegetables – has been established to reduce transaction costs for Lao farmers and Thai traders. Transactions have increased, mostly under contract arrangements. Despite many problems (especially contract enforcement, as described below), farmers, government officials, and traders are learning from each other and improving step by step.[84] In other provinces as well, there are markets or collection centres emerging, most of them supported by donors.

Farmers in border regions often have ties to the neighbouring countries, either through family members working abroad or through ethnic ties. These connections can ease access to export markets significantly,[85] either through trade relations or simply through provision of information on prices via mobile phone or other means of communication, as was reported by several interviewed farmers.

Understanding of markets and contract enforcement

Contract farming, as an alternative source of inputs, information, and financial services from (foreign) companies and as a link to the market, is spreading, but contracts are often poorly negotiated and enforcement often proves difficult. Many farmers have only recently moved out of subsistence production and do to not yet fully understand the functioning of markets. Champasak Province and neighbouring Ubon Ratchathani Province in Thailand have been experimenting for some years with an agreement regarding trade in certain fruits and vegetables with fixed prices and volumes. Representatives of provincial government departments as well as farmers see contract enforcement as the biggest problem in dealing with Thai cabbage buyers. Thai companies often push down prices below previously agreed levels, and yet Lao farmers have to sell their produce as there are no storage facilities or alternative buyers available.

Despite problems with enforcement and information asymmetries, contract farming is considered beneficial to the development of Lao agriculture, especially in the case of fruits and vegetables, as production requires more inputs and uncertainty about markets is higher. Demand for fresh products, for example from food processors, is high and there are positive examples of companies, like Lao Farmers Products or traders, that provide inputs, seeds, information, and / or a secure market for the farmers.[86] Provincial

84 The market apparently also attracts farmers from the neighbouring provinces Sekong and Saravane (Vientiane Times 2009b).

85 See, for example, Fullbrook (2007, 30-32) for a case study on water melon exports from Luang Namtha Province to China.

86 See also Fullbrook (2007) for several illustrative case studies on contract farming in Laos.

Departments of Industry and Commerce (PDICs) and of Agriculture and Forestry (PDAFs) are increasingly confronted with problems of contract enforcement and are trying to find their role as conflict intermediaries. Negative experiences with contract farming, together with capacity building by donors, have made farmers more cautious before they enter into a contract, and increasing awareness and first steps towards regulation at the national level can now be observed.

Standards, quality perception and quality control

Fruits and vegetables are considered to be of high SPS sensitivity, and buyers pay special attention to quality and standards (World Bank 2009, 3). A common perception revealed during interviews was that WTO membership will entail quality standards higher than those required by ASEAN or other regional markets. This perception is misleading, as quality standards and SPS measures are set nationally by each country and standards are upgraded worldwide, including Laos' main export markets China, Thailand, and Vietnam. As these countries increase their exports to OECD countries, they implement more demanding standards and controls to prevent spill-over risks (pests, diseases, or simply low quality) from neighbouring countries (World Bank 2009, 40). Exports of fruits and vegetables to China are already restricted due to insufficient data on pests and diseases in Laos as well as due to the lack of appropriate testing capacities (World Bank 2009, 33). Other trading partners could ban imports at any time, pointing to insufficient SPS and quality requirements.[87] Lao exporters of fresh produce therefore face high uncertainty.

A study by the World Vegetable Center (AVRDC) on vegetable supply chains in Vientiane Capital and Vientiane Province indicates that farmers, collectors, retailers, and wholesalers alike rate appearance (freshness, size, colour) as the most important quality feature. On the other hand, certification, pesticide and fertiliser residues etc. were ranked as not important at all by farmers and among the least important by retailers (Genova et al. 2006, 13). With growing concerns over food safety and standards world-

87 According to our interview partners, there was already a case in 2008 where Thailand banned all maize imports from Laos, probably due to declining prices in world markets. As such trade restrictions are not allowed under ASEAN rules, Thailand had to lift the ban, but it was replaced with a new claim that Lao maize did not comply with Thailand's quality standards.

wide, this lack of understanding concerning demand-side requirements could lead to serious problems for high-value exports, especially as pesticide use tends to be higher for fruits and vegetables than for staple crops.[88] Nevertheless, there seems to be a – slowly – growing awareness of the use of chemicals and quality control, not least because of increasing efforts by donors and the government to promote organic farming.

Smallholder involvement

In Malaysia, Thailand, the Philippines, and China, supermarkets are gaining importance as buyers of fresh fruits and vegetables (Shepherd 2005, 3). On the one hand, this process, though still in its incipient phase, will lead to rising demand for fresh produce. On the other hand, small farmers tend to be excluded from these value chains by centralised procurement and higher standards for suppliers, if no actions are taken to support efforts of smallholders to comply with these requirements (Shepherd 2005, 10). The number of suppliers is decreasing, with bigger suppliers enjoying competitive advantages in terms of access to capital as well as of rapid and reliable delivery of required quantities (Weinberger / Lumpkin 2007, 1576; FAO 2004, 55). Laos' agriculture is dominated by smallholders. Therefore, the government, together with donors and the private sector, need to ensure that small family farms can keep up with the above-mentioned requirements and are able to connect to these value chains.

Farmer groups are on the rise, especially those associated with donor projects like PROFIL. Such groups are important for fruit and vegetable farmers, as groups are better able to implement standards and increase quality, share information, knowledge and risks, or pool savings to make investments and help out in emergencies.

88 In 1999, pesticide use in Laos was ca. 1 kg / ha for vegetables and only 0.05 kg / ha for cereals (Siphandouang / Wu / Sanatem 2002, 91).

Domestic marketing of organic produce and certification for exports

Awareness of the advantages of organic products is not yet widespread among Lao consumers, and the largest share of organic vegetables still has to be sold on the normal market without a premium. An increasing number of hotels and restaurants are buying organic fruits and vegetables, but the quantities they demand are too large for individual smallholders. Thus, measures have to be taken on both the demand and the supply side to further develop the domestic market for organic products.

Certification of organic production is indispensable for exports. Despite the widespread practice of organic production (and increasingly also organic labelling), very few farmers are monitored and certified. International certification is too expensive and the country lacks a national control system as well as an operational certification body. This should be changed without delay, since without certification it is difficult to export products at a premium price. Moreover, with trade and contract farming arrangements on the increase, the risk of heavy pesticide use is growing, as foreign companies frequently deliver chemical inputs as part of their agreements with farmers.

Post-harvest losses

As fresh fruits and vegetables are highly perishable, the largest part of produce is sold immediately after harvest. Seasonal supply peaks lead to considerable seasonal price drops.[89] Produce that cannot be sold immediately has to be sold at a price discount, or is spoiled. The main reasons for post-harvest losses are transport-induced damage, disease infections, hot temperatures, and poor packaging.[90] Spoilage, post-harvest losses, and price volatility could be addressed by developing cool storage facilities

89 In Laos, the price of tomatoes during peak seasons, for example, is 35 % of the price during low production periods. The respective figures for cucumbers (44 %), chillies (54 %), and yardlong beans (67 %) are less extreme but still considerable (Genova et al. 2006, 13).

90 Depending on the product, farmers (e.g. of yardlong beans and chillies) or retailers (of tomatoes, cucumbers, and chillies) are most affected by the losses. According to Genova et al. (2006, 16, 23, 29, 35), along the supply chain 17.5 % of tomato production was lost, as were 12.3 % of yardlong beans, 10.6 % of chillies, and 8.7 % of cucumbers. Post-harvest losses are estimated to be as high as 42.5 million US$ for the whole of vegetable production in Laos (Genova et al. 2006, 41).

that make it possible to hedge prices or through improvements in post-harvest treatment (e.g. harvesting techniques, packaging).

Inputs for processing

The majority of products are exported in raw form to Thailand, Vietnam, and China, where value is added through grading, sorting, packaging, or processing. Due to a lack of raw inputs, the few food-processing factories in Laos operate far below capacity. The reasons for the insufficient supply of inputs are the still limited volume of production of fruits and vegetables, huge post-harvest losses, and competition from foreign processors or traders, who often pay higher prices to farmers than local processing companies. The seasonality of fruits and vegetables is a problem frequently mentioned, and an impediment to further processing activities in Laos. The problem makes it more complicated to manage a processing company because a combination of fruits and vegetables with different harvesting seasons are needed to ensure machines operate at or near capacity. Accurate data on production volumes and harvesting periods in different provinces would also be needed, but is not yet available.

6.2.4 Recommendations

Promote integrated farming systems

Diversifying from staple crops to fruit and vegetable production can increase income and employment of farmers significantly.[91] In mountainous areas, cultivation of fruits and vegetables can provide cash to buy rice from the lowlands.[92] In Luang Namtha and Luang Prabang Province, for example, we encountered farmers cultivating rice, fruits and vegetables, as well as raising livestock on the same land and collecting NTFPs. They are in this way successfully diversifying their income sources and increasing

91 Returns of farmers in Laos producing fruits and vegetables are more than four times higher per hectare than those of farmers with staple production only. While the cultivation, management, harvesting, and marketing of cereals in Laos require 101 labour days per hectare on average, one hectare of vegetables requires 227 labour days (Siphandouang / Wu / Sanatem 2002, 92–96, data are from a survey in 1999, ibid. 78).

92 However, in some mountainous areas there are special difficulties in cultivating fruits and vegetables, as irrigation systems are difficult or impossible to build. Consequently, cultivation is only possible during the rainy season.

their cash income and food security. Donors and provincial extension centres have provided the necessary inputs and knowledge.[93] Thus, increased efforts to encourage such diversification into high-value products could contribute to the government's goals of increasing food security and poverty reduction by providing alternative income sources and higher cash incomes for farmers. These efforts could also strengthen the commercialisation of the agricultural sector in Laos (Weinberger / Lumpkin 2007, 1471).[94]

Further develop research and extension based on farmers' needs

Government and donors alike could do more to encourage research on fruit and vegetable value chains. Market studies, off-season production, high-quality seeds, organic fertiliser and pesticides, as well as post-harvest and processing technologies based on the needs of farmers should be included in the research priorities of NAFRI and its research centres as well as in the curricula of the country's universities and agricultural schools. Fruits and vegetables with short gestation periods and / or combinations of products suitable for year-round production should be promoted, as (upland) farmers need quick and constant income.

Improve market access through infrastructure development, regional integration and readily accessible information on a diversified range of export markets

Access to markets should be a key priority of the government and donors. Areas with good access to all-weather roads and border crossings have an advantage for exporting fresh produce. The fruits and vegetables sector would benefit massively from further cross-border infrastructure development under the GMS as well as from further tariff reductions within AFTA. Warehouses for storing and cooling fruits and vegetables would be an additional option to mitigate the pressure to sell all produce right after it is harvested.

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93 One project, for example, was funded by the Asian Development Bank and implemented by the German NGO Deutsche Welthungerhilfe (German Agro Action). One extension centre was initially supported by the EC, later by the Thailand International Development Cooperation Agency, and is now operated by the provincial government.

94 According to Siphandouang / Wu / Sanatem (2002, 93), 99 % of vegetable production in Laos is marketed, whereas only 23 % of cereals enters the market.

Further integration into the region can also reduce dependency on Thai buyers as alternative export markets emerge. Information on these new markets, however, has to be made available to farmers through information centres within district or provincial offices of the government, mobile-phone-based services, radio, TV, or websites. In addition, business associations could participate in international trade fairs (e.g. Asia Fruit Logistica) as representatives of member firms, thus saving marketing costs for individual companies and bringing benefits to all members.

Support the establishment of a domestic processing industry

In the short or medium term, Laos will not be able to build up the entire cooling chain (including temperature-controlled transport etc.) and the sophisticated logistics necessary to export fresh produce to overseas markets. It should therefore focus on neighbouring markets as far as fresh fruits and vegetables are concerned.[95] As regards overseas markets, there are opportunities to export more processed food if current constraints in production capacities and quality are addressed. Information on possible products and production capacities should be collected across the country to analyse the potential for providing inputs for global value chains. Access to credit appears to be a major constraint preventing the market entry of processing companies in Laos. Special support (e.g. credit lines) for value-adding activities like processing could be an option. Once production capacities are upgraded and quality control is in place, export markets can be explored further and branding could become a strategy for promoting Lao fruits and vegetables at international trade fairs.

Make contract farming work by improving education and training of farmers and by providing model contracts

In order to make contract farming work and to improve enforcement, farmers need a better understanding of the contract concept, and bargaining capacities need to be upgraded through education, trainings, and support of farmer groups by government and donors. Better informed farmers

95 If one day Lao farmers should produce sufficient quantities of exportable fruits and vegetables, even air freight could become viable. Fresh products from land-locked African countries are not shipped to Europe but sent by air freight. With air freight, Laos' geographical disadvantage would no longer be relevant.

will be more cautious before entering into a contract. The government should provide model contracts to reduce transaction costs for farmers. These contracts should include provisions on contract enforcement, for example naming institutions or organisations that can serve as conflict intermediaries in case of disputes (e.g. Provincial Departments or Chambers of Commerce and Industry).

The fruit and vegetable sector offers many opportunities to develop high-value agricultural exports and to contribute to poverty reduction, increasing food security, and the commercialisation of Lao agriculture. However, the market for fruits and vegetables is more demanding than that for traditional exports and requires orientation not only on supply-side constraints but on the whole value chain, including a special focus on quality requirements. Laos still has a long way to go to successfully supply the market for high-value fruits and vegetables, but the potential is large and should be mobilised step by step.

6.3 Coffee

6.3.1 Product overview

Coffee is one of Laos' most important agricultural export commodities. According to data on official trade, coffee accounts for nearly 80% of the country's agricultural exports (World Bank 2006b, 151–152). However, if estimates of informal trade are considered, exports of livestock and NTFPs account for a higher share of exports than coffee (UNDP 2006, 71). Total coffee production in 2007 is estimated at about 23,000 tons, of which 70% is Robusta, 20% Arabica, and 10% Catimor (NSC 2008; World Bank 2006b, 153). More than 80 % of Lao coffee exports goes to Europe, the remainder is directed to Asian countries, mostly Vietnam. Laos accounts for less than 0.5% of world coffee production (World Bank 2006b, 154).

Lao coffee is cultivated almost exclusively on the Boloven Plateau, with its volcanic soils and altitudes varying from 600 to 1,300 meters above sea level. It encloses parts of the provinces of Champasak, Saravane, Sekong, and Attapeu. Lately, coffee production has been introduced in some northern provinces of Laos (Winston et al. 2005, Chapter 1). Coffee is produced by a large number of smallholding farmers (around 1–3 hectares), a smaller number of medium-size farmers (< 10 hectares), and a few large plantations (up to 350 hectares). Most coffee companies interviewed plan to expand or are already expanding their coffee-growing and -trading activities. Additionally, some companies interviewed, which are currently only growing and/or trading vegetables, are interested in starting to grow coffee. Most planned expansions will be realised by growing coffee on plantations.

Since coffee is harvested once a year, coffee farmers seek to secure a steady income throughout the year by cultivating fruits, vegetables and rice and by raising livestock. Nevertheless, most farmers earn a major share of their income from coffee. Half of the households on the Boloven Plateau earn 50 % to 90 % of their yearly income from coffee, another third of households even more than 90 % (Groupe de Travail Café 2007, 29).

6.3.2 Adding value to coffee production and exports

Higher value for Lao coffee production and exports can be achieved by increasing quality, by processing, obtaining fair-trade and/or organic certification, and by branding. These activities as well as current activities to support these measures by the government, donors, companies etc. are presented in the following

Increasing and ensuring quality

Due to insufficient quality, some Lao coffee exporters can only sell their coffee on the international market for a price lower than the international standard price (Groupe de Travail Café 2007). Therefore, achieving higher quality for Lao coffee is a first measure needed to obtain a higher market price. The Southern Agriculture and Forestry Research Centre is working on improving quality along all steps of coffee production and processing in cooperation with FAO and the governmental Programme of Capitalisation in Support to Rural Development – Implementation Point Boloven Plateau (PCADR-PAB), which is supported by the French development agency (AFD).

Processing

As of 2009, almost all Lao coffee is exported as green coffee beans. Aside from pulping, washing, fermenting, drying, and rough grading, no processing of standard export coffee takes place. In contrast, coffee designated for the domestic market is roasted and in part further processed into instant coffee. Thus, roasting and packaging of export coffee is a second measure to needed to add further value to Lao coffee exports. At present, the company Lao Mountain Coffee sells 20 % of its roasted and packaged coffee abroad and Mr Sinouk exports about 10 % of his coffee, all of it roasted and packaged.

Fair-trade and organic certification

The world coffee market is characterised by over-supply and decreasing prices. However, demand for high-end, differentiated products is increasing. From 2003 to 2006, worldwide sales of organic coffee grew by about 56 % and sales of fair-trade coffee increased by about 73 % (OTA 2009; FLO International 2009).

Table 5: World coffee production, worldwide fair-trade and organic coffee sales, and Lao coffee production

	World coffee production (in metric tons)[96]	Fair-trade coffee sales, worldwide (in metric tons)	Organic coffee sales, worldwide (in metric tons)	Lao coffee production (in metric tons)
2006	7,609,200	52,614	67,000	
2007	6,973,260	62,219		23,000
2008	8,049,780			

Sources: FLO International (2009); OTA (2009); World Bank (2006b, 153).

96 Own calculation based on data provided by the International Coffee Organization (www.ico.org).

The growing markets for fair-trade and organic coffee offer a unique opportunity for Laos.[97] Therefore, a third measure to achieve higher value for coffee exports is to obtain fair-trade and / or organic certification. So far, only about 100 metric tons of Lao coffee is sold annually on fair-trade and organic niche markets (Groupe de Travail Café 2007, 13). Lao companies and farmer groups engaged in fair-trade and / or organic coffee growing and exporting are Lao Mountain Coffee, Sinouk Coffee (supported by Helvetas), Jhai Coffee Farmers Cooperative (JCFC, initially supported by a US NGO), the Boloven Plateau Coffee Producers Group Association and its 53 producer groups (supported by AFD), and the coffee producer group from Katouad village (supported by Oxfam Australia and the Producer Group Association).[98] [99]

Branding

A fourth measure that would serve to raise the value of coffee exports is to create a Lao coffee brand and strong individual company brands. Branding should signal the unique taste of Lao coffee and the image of Laos. Of course, branding good and unique coffee quality is closely linked to producing and ensuring high quality. Currently, AFD in cooperation with the Lao government is working on the geographical indication of Lao coffee from the Boloven Plateau. Furthermore, some companies are already promoting their coffee with images of Laos, its scenery, and its people.

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97 In addition to fair-trade and organic production, promotion of Lao coffee through other certification schemes combining social and environmental standards - like the Rainforest Alliance - might be an option. As impediments to other social and environmental certification schemes are very similar to those associated with fair-trade and organic standards, and as they are currently not applied in Laos, they are not discussed here. For more information on coffee certification schemes, see Daviron / Ponte (2005, Chapter 5).

98 According to Groupe de Travail Café (2007, 42), Oxfam supports two villages, Katouad and Vang Gnao. In our interviews, however, we obtained information only on the producer group in Katouad village.

99 According to the Northern Agriculture and Forestry Research Centre, there is also a Hmong village in Luang Prabang Province that grows organic coffee.

6.3.3 Impediments to developing high-value coffee production and exports

Having looked at measures and current activities aimed at achieving higher value of coffee production and exports, we now turn to impediments hampering the development of high-value Lao coffee production and exports.

Lack of Quality, Standards, and Quality Control

Laos has no quality standards for coffee exportation (Groupe de Travail Café 2007, 11). Harvesting as well as post-harvest handling is done without much consideration for their impact on the quality of coffee beans. Most coffee buyers and traders do not pay a premium for good quality, either. Only recently have Lao stakeholders become aware of the need to increase quality.

Due to the lack of quality standards in Laos, coffee buyers usually check for quality (e.g. size, colour, humidity of beans) themselves. While this may work well for the buyer, the costs for these quality-ensuring activities are deducted from the price coffee farmers could obtain if a quality system were in place. To export, coffee traders need to obtain, among other things, a phytosanitary certificate issued by PDAF and a quality control certificate issued by the Provincial Technology and Environmental Office. Since there is no Lao quality standard for coffee exports, obtaining these certificates is more a bureaucratic requirement than a measure designed to ensure quality.[100] While fair-trade and organically certified producer groups and companies are regularly inspected, fair-trade and organic standards say nothing about the quality of the product.[101]

Although Laos could export processed (e.g. roasted) coffee duty- and quota-free to the EU as well as to the US, Laos will hardly be able to internationally market processed standard coffee as long as the quality of Lao processed coffee cannot be proven according to international stan-

100 One interview partner stated that these certificates can be bought; another interview partner said that the process of obtaining the certificates can be speeded up by paying more money.

101 However, organic standards prohibit the use of chemical fertiliser and pesticides, thus ensuring "natural" quality.

dards. In addition, processing would require capital, e.g. for roasting and packaging machines. Packaging material such as bags with degassing valves needs to be imported.

Low volume production

Another impediment to high-value coffee exports are the minimum quantities required by overseas buyers. To enter and serve the fair-trade and organic coffee market, a minimum production volume of 18 metric tons of green sorted beans is required to fill at least one shipping container. However, expanding fair-trade and organic production takes time, as requirements for certification have to be fulfilled. Then there are natural constraints applying to the coffee sector as a whole. Depending on the type of coffee tree concerned, it takes three to five years before the first coffee can be harvested. Even though there is still enough land on the Boloven Plateau that can be used for coffee cultivation, some of this unused land may be contaminated with unexploded ordnance. In addition, bauxite mining on the Boloven Plateau would reduce the land available for growing coffee. Finally, depending on the weather, the volume of coffee harvested can vary strongly, making it even harder for smallholder coffee producers to achieve minimum export quantities.[102]

Lack of national certification and control

Since there is as yet no functional Lao certification body, certification of production and processing has to be done by international certifiers, who send their inspectors to Laos. This makes international certification expensive and is an obstacle especially for small producers.

This is particularly unfortunate when it comes to organic certification. Since most smallholder coffee farmers produce ‘organically by default’, they could easily obtain certification and reap higher prices. However, due to an increase in coffee plantations using chemical fertilisers and pesticides as well as due to easier access to chemical inputs, Laos could soon lose its advantage as a natural organic coffee producer. If, e.g., chemicals have been used on fields adjacent to coffee trees, organic certification for

102 The coffee exports of the producer group in Katouad village dropped from 13.6 metric tons in 2005 / 2006 to 4.4 metric tons in 2006 / 2007 due to bad weather conditions.

the coffee can only be obtained after a period of at least three years during which no chemicals have been used in the vicinity.

Despite the fact that it has its own organic standard, no institution in Laos controls for whether coffee labelled as organic is actually produced organically. This undermines consumer confidence. In addition, there is no incentive for companies and coffee producers to obtain official organic certification as long as every producer can label his or her coffee as organic. Furthermore, Laos currently has no means to stop foreign companies from branding their products as e.g. “Boloven Coffee”.

Lack of education and know-how

Many smallholder coffee farmers have difficulties in reading and arithmetic, and this hampers their ability to understand contracts, to calculate prices for bigger volumes etc. They also lack the know-how needed to improve and maintain the quality of their coffee. With regard to organic coffee, they do not know, for example, how to carry out organic pest control. As far as working according to fair-trade and organic standards and obtaining certification are concerned, smallholder coffee farmers rely on people from outside, often from international NGOs or donor projects. Without such facilitators they would not be able to get in contact with foreign coffee buyers.

Limited access to financial services

While a few large coffee-exporting companies have access to credit, most small coffee growers and traders depend on private assets and have difficulties in obtaining credits for machinery. Since smallholder farmers have no land titles they could use as collateral, they have no access to credit from commercial banks. Only moneylenders and traders offer loans to smallholders, which can be paid back either in cash (at an interest rate of 15–25 %) or in kind (for a coffee price below the average market price) (Groupe de Travail Café 2007, 13). It was mentioned several times during the interviews that no bank would be willing to provide a loan to obtain organic or fair-trade certification.

Lack of labour

Additional labour is needed to expand overall coffee production, introduce more labour-intensive coffee types (e.g. Catimor), production forms (e.g. organic), or organisational forms of production (e.g. plantations), as well as to engage in more coffee processing. At present, smallholding farmers as well as coffee traders / exporters are able to satisfy their demand for additional labour during high season by hiring people from provinces around the Boloven Plateau. However, as coffee plantations grow in number and size, more (foreign) labour will be needed.

Missing coffee sector strategy

While Lao coffee traders and exporters are required to be members of the Lao Coffee Association, smallholder coffee producers have only recently begun to organise, for example in forming the Boloven Plateau Coffee Producers Group Association. The relationship between members of the two organisations is dominated by mistrust and miscommunication, obviously rooted in uneven and changing power relations. However, all coffee stakeholders have to communicate with each other in order to decide on important strategic issues such as national brands, promotion of (certified) organic coffee production, creation of a quality system etc.

Many impediments to developing high-value coffee exports have been identified. A number of them are already being addressed by several actors. The next section will present the activities they are undertaking to overcome some of the above-mentioned impediments.

6.3.4 Activities to overcome impediments to developing high-value coffee production and exports

Increasing quality

The Southern Agriculture and Forestry Research Centre (SAFReC) does research on coffee varieties and shade trees, provides quality seeds, disseminates information on how to achieve higher quality as well as information on standards, and conducts training of trainers (e.g. on methods used to produce organic fertiliser). In addition, it offers cup tasting for potential buyers. In cooperation with PCADR-PAB, cup tasting is also offered for coffee producers, traders, and processors in order to raise awareness of coffee quality. Furthermore, SAFReC supports geographical indication, which is promoted by AFD, PCADR-PAB, and the Lao government as a measure to increase and ensure high-quality coffee production on the Boloven Plateau. Geographical indication does not impose standards of the kind set by fair-trade or organic certification, but standards have to be defined and agreed upon by all stakeholders. Those stakeholders have an interest of their own in maintaining a high level of quality, because the value of their geographical brand (e.g. Boloven Coffee) depends on it. However, geographical indication is only valuable if it can be protected or, in other words, if its misuse can be prevented or ruled out. Joining the WTO and the TRIPS Agreement will provide the government with a setting to prevent the misuse of Lao geographical indication. Currently, the Lao government is preparing a new law on intellectual property rights as another step on its way to WTO membership.

Coffee producer groups

PCADR–PAB, supervised by MAF and supported by AFD, as well as JCFC (Jhai Coffee Farmers Cooperative) are active in building coffee producer groups. PCADR-PAB also supports the Boloven Plateau Coffee Producers Group Association, which was established in 2007. Producer groups help to overcome several impediments to high-value coffee exports. First, it is possible for a group of smallholder coffee producers to obtain fair-trade and / or organic certification.[103] Only as a group can they produce sufficient volume for exportation and afford the certification process. PCADR-PAB and JCFC have supported and continue to support producer groups in obtaining fair-trade and organic certification. Second, as a group farmers have easier access to credit and are thus able to make investments in e.g. pulping machines.[104] Third, both PCARD-PAB and JCFC also assist groups in improving the quality of their coffee. They have told farmer groups e.g. to pick only the red cherries and taught them wet-processing techniques. In particular, fair-trade certification requires

103 Group certification is not included in most organic regulations and thus not yet formally accepted. However, for smallholders from developing countries there appears to be at least a de facto recognition of group certification (UNCTAD / UNEP 2008, 25).

104 The coffee producers of JCFC can obtain loans from JCFC, which itself receives loans from the Rabobank (for more information on this food and agribusiness bank, see www.rabobank.com).

the development of group structures that have been supported by PCARD-PAB and JCFC. Fourth, JCFC and the Producer Group Association provide market information to the groups and establish contacts to buyers. Similarly, the formation of the producer group in Katouad village (Thevada Café) was supported by Oxfam Australia, which also established the contact to a Japanese buyer. The Katouad village producer group is part of the Boloven Plateau Coffee Producers Group Association, which also provides assistance in running the group and marketing their coffee. The Japanese buyer financed machinery, making it possible for some processing (washing, grading) to be carried out by coffee producers. At present, all coffee producer groups mentioned here depend heavily on outside facilitators to market and export their coffee.

Since members of producer groups have been receiving above-average prices and a premium for their community, their income has increased and their living conditions improved. However, sometimes there are problems, like individual coffee producers selling to other coffee buyers when they are in urgent need of cash or because the fixed price (including the premium) is too close to the market price. JCFC has therefore increased its efforts to explain to coffee producers the benefits of fair trade (e.g. higher and stable prices plus premium) and to create closer links between producers and JCFC.

One aspect of fair-trade coffee is to obtain higher prices for coffee producers by establishing direct links between producers and buyers, thereby excluding middlemen. However, as producer groups are not (yet) capable of establishing and managing buyer relations themselves, they depend on outside assistance. Private middlemen and traders are thus replaced by international NGOs or donors, and dependency persists. [105]

Certification

While PCARD-PAB is supporting producer groups in obtaining fair-trade and / or organic certification, JCFC (supported by a New Zealand buyer) and Sinouk Coffee (supported by Helvetas) are having their coffee certified as organic. To be able to supply a large enough quantity of organically

105 PCARD-PAB is working on a follow-up project (2010–2014) that would provide capacity building for the Boloven Plateau Coffee Producers Group Association in order to enable them to carry out their marketing and exporting independently of PCARD-PAB.

certified coffee, Sinouk Coffee works with smallholder coffee producers in the vicinity of the plantation and supports them in obtaining certification for organic coffee production. As president of the Lao Coffee Association, Sinouk Sisombath also promotes Lao organic coffee. In the absence of a national certification body, all certifications have to be obtained from international certifiers. In addition, SAFReC provides quality certificates for coffee if they are requested and paid for by a buyer (e.g. the Japanese buyer of the Katouad village coffee producer group).

Lao coffee sector forum

Today, the Lao Coffee Association brings together coffee traders, processors, and exporters. Some of them also produce their own coffee on large plantations. The Lao Coffee Association's president would like to bring in smallholder producers to create an association comprising the entire coffee value chain. As an alternative, AFD, through PCARD-PAB and with the support of the Lao government, is trying to establish a Lao Coffee Board where all stakeholders would be represented. The Lao Coffee Board would be a dialogue forum, enabling the smallholder coffee producers to have their say on an equal footing. However, both initiatives seem far from achieving a unified Lao coffee sector forum.

6.3.5 Recommendations

In the past, exporting coffee was instrumental for earning the foreign exchange needed to import goods not available in Laos. There was no incentive to improve the quality of coffee. Today, Lao coffee producers and exporters have to rethink their strategic positioning. Producing less than 0.5 % of world coffee production, Laos needs to find niche markets for its coffee. To enter niche markets, production of high-quality coffee is the most important requirement.

Improve and ensure coffee quality

Laos needs to adopt standards for the production, processing, and export of coffee. These standards should be in conformity with those of the International Coffee Organization.[106] The task of setting and monitoring standards should preferably be carried out by a non-state organisation supported by all coffee sector stakeholders. If Laos became a member of the International Coffee Organization, the Lao government would have to commit to ensuring some minimum standards. In addition, SAFReC, in cooperation with extension services, should provide further training on producing high quality coffee.

Expand coffee producer group formation

Coffee producer groups help individual coffee growers to overcome impediments to participating in high-value coffee exports and strengthen their negotiating power. As a group, smallholder coffee producers will be able to obtain higher prices when selling to middlemen or coffee exporters. Due to their high dependency on coffee, obtaining higher prices would immediately improve their overall income situation. Donors and government should support the formation of producer groups. Providing coffee producer groups with market information, possibly through the Boloven Plateau Coffee Producers Group Association, would further strengthen their position within the Lao coffee value chain.

Promote organic coffee production and a national organic certification body

MIC has already developed an organic agriculture product strategy as part of Laos' national export strategy (MIC 2006). Organic coffee could be a pilot product within the overall organic agriculture strategy. The national organic certification body – preferably with an office on the Boloven Plateau – should be further supported to make it functional as soon as possible. Simultaneously, a monitoring system should be set up.[107] MAF should assume responsibility for both activities. Scepticism on the side of coffee traders and exporters should be addressed, but without losing sight of the growing competition in the organic coffee market.

106 For more information on standards set by the International Coffee Organization, see Winston et al. (2005, Chapter 8) or see www.ico.org.

107 One interview partner recommended that a list of all producer groups and companies whose production and products are certified as organic should be regularly published (e.g. in a newspaper). This would serve to allow consumers to verify the authenticity of the organic label and to prevent false labelling.

Create a Lao coffee sector forum

A Lao coffee sector forum representing all coffee stakeholders should develop a strategy for Lao coffee, preferably high-quality and organic.[108] Furthermore, this forum could provide information on coffee production (e.g. seeds, techniques), coffee prices, and markets. The existing Lao Coffee Association can hardly be transformed into such an organisation, as smallholder coffee producers have no trust in it. On the other hand, since PCARD-PAB is quite active in organising producer groups and a producer group association, it would not be not the best broker for establishing a sector-wide forum, either. The government, possibly MAF (maybe supported by an "impartial" donor), should thus initiate the Lao coffee sector forum. However, a forum of this kind will depend on the ownership and interest of its stakeholders.

Summing up, growing and exporting coffee is already well established in Laos. Now, the focus has to be on value-adding activities and improved stakeholder participation in order to increase overall benefits and ensure competitiveness on the world market.

6.4 Tea

6.4.1 Production and exports

Lao tea production is very small in volume compared to that of major tea-producing countries. The domestic market for tea is small as Laos is not traditionally a tea-drinking country. Consequently, Laos cannot rely on the domestic tea market but has to focus on exports. In 2004, Laos produced only 180 metric tons compared to Vietnam's 97,000 metric tons (ITC 2005, 72). The main tea products are green tea and mulberry tea. The latter is often a by-product of silk production. Most of tea is produced in Phongsaly and on the Boloven Plateau. Phongsaly has a long tea tradition, with 200–300-year-old, wild-growing tea trees in major demand from China.

108 If this coffee sector forum came to the conclusion that membership of the International Coffee Organization is crucial for promoting Lao coffee, it should support the government in joining the International Coffee Organization.

Lao tea production has remained stable over the past years. However, international demand is dynamic, particularly in Middle Eastern countries. The export performance of Lao tea has been remarkable, with an average increase of export earnings of more than 90 % per year between 1999 and 2003, and volumes growing by 6 % (ITC 2005, 11). Thus, tea has a high potential for exports as regards its export performance and global market conditions. Currently, the main export markets for Lao tea are China, France, Germany, and Belgium. Laos faces the same market access conditions as most of its competitors. Morocco and Japan apply relatively high tariffs (33–40 % and 9–17 %). Lao tea has free access to the EU and Kuwait. The markets adjacent to Laos apply a wide range of tariffs. In Cambodia, Lao tea faces tariffs of 7 %, in China of 18 %, in Thailand of 30 %, and in Vietnam there is a preferential ASEAN rate of 20 % (in comparison to the normal 50 %) (ITC 2005, 73).

6.4.2 Adding value to tea

Organic production

Laos has a competitive advantage, as tea is traditionally grown organically here. In view of the country's small-scale tea production, the focus has to be on niche markets. Certification is important for capturing markets for organic tea and obtaining premium prices. All our interview partners grow organic tea. However, only Paksong Tea Product (PTP) is already certified as organic. The other interview partners lack certification. The owner of the Vang Vieng Organic Farm has worked together with PROFIL on establishing an organic certification body in Laos.

Fair trade

Fair trade would be another niche market strategy for Lao tea. Fair trade increases the income of farmers and reduces some of the negative impacts caused by declining global prices for commodities such as tea and coffee (Humphrey / Memedovic 2006, 51). PTP is certified by FLO-Cert. However, only a portion of the country's tea is sold as fair-trade tea. According to FLO, in 2002 only 37 out of 49 certified fair-trade producer organisations were able to sell their tea under the fair-trade label due to oversupply (FAO 2004, 68). Against this background, fair trade represents only an additional option to other value-adding strategies.

Branding

As Lao tea is not yet well recognised internationally, creating brand value is critical for it to compete in international markets. There is a potential to develop brand value by drawing on the country's long tradition of tea production and the uniqueness of natural conditions on the Boloven Plateau and in Phongsaly. One option would be to develop a Lao tea brand as well as to offer assistance to firms for trade-marking (World Bank 2006b, 160). As the country's two main tea producing regions differ in their natural conditions and history of tea production, geographical indication would be another viable option for both regions. AFD, together with SAFReC, is currently promoting geographical indication and thinking about supporting geographical indication for tea from Paksong (Boloven Plateau). However, before a brand is introduced, due consideration should be given to the need to ensure consistent product quality and availability (World Bank 2006b, 160).

6.4.3 Impediments to high-value tea exports and activities to overcome them

Lack of access to financial services

For lack of access to financial services, most tea producers are unable to invest in tea-processing machinery and thus are not able to export larger volumes. Most tea processing is therefore done by hand and productivity is very low compared to foreign competitors.

Lack of know-how and quality

To enter niche markets like fair-trade and organic products markets, one has to fulfil certain quality standards. Tea often comes in bad quality from farmers and quality is not reliable. To overcome this problem, some tea producers have helped the farmers organise a farmer group and trained them in cultivating, harvesting, and post-harvest treatment in keeping with certain quality standards. Furthermore, some tea producers and buyers inspect the quality of the tea themselves.

Lack of certification for organic tea

To enter organic markets, product certification is required. All of our interview partners produce organic tea, but so far only PTP has been certified as organic. International certification is considered as too expensive by our interview partners, and national certification is not yet available.

Lack of market information and marketing capacities

Most tea producers in Laos have no information on world tea markets, on how to market their products, and on how to access export markets. Furthermore, tea producers face stiff international competition, especially in the fair-trade market niche. PTP receives information on markets from a trader, Cha Do, who buys and exports his products. Cha Do supports the company in finding new markets. The Vang Vieng Organic Farm searches the Internet for information on markets and prices.

Lack of market orientation

Most tea farmers in Laos do not produce for buyers and markets that require certain quality standards. They mostly export their tea informally to neighbouring countries like China without considering quality aspects. It is difficult to convince farmers to form groups and to produce according to the requirements of fair-trade and organic markets.

6.4.4 Recommendations

Formation of farmer groups

To overcome the lack of quality, know-how, and marketing capacities, farmers should form groups to enable them to market their products together and share information on production techniques, post-harvest treatment, and quality standards. One independent party should be responsible for quality control, to ensure that production meets the quality standards of certain buyers and markets like the fair-trade and organic products markets. To improve the quality of tea, private businesses should support farmers' efforts to form groups and train the groups in cultivation, harvesting, and post-harvest treatment in keeping with certain standards, including e.g. organic and fair-trade standards.

Improve know-how and market information

To overcome the lack of know-how and market information, tea producers and traders should introduce institutionalised meetings to share information on production techniques and markets. To improve the understanding of markets, the government should build up capacity in market research in the Trade Promotion Centre (at MIC) and improve cooperation and communication between the Centre, MIC, and the private sector.

Improve research and extension

To improve the quality of tea, research on tea cultivation, harvesting, and post-harvest treatment should be carried out by NAFRI and provincial agriculture and forestry departments. Information on techniques should be disseminated by provincial and district extension services. Donors should support the government in developing the capacities needed for research institutes and extension services to cover tea as well.

Quality standards and certification

Tea producers should develop a common Lao tea standard in accordance with international standards. A quality control system, including testing laboratories and equipment, needs to be established to assure quality. To verify that production complies with certain standards, such as organic standards, the government, donors, and the private sector should continue their efforts to develop a national organic certification body.

Improve marketing capacities and branding

To improve marketing, private companies should participate in international trade fairs and exhibitions as well as trainings for marketing with a view to preparing them to brand their products. The Lao National Chamber of Commerce and Industry should therefore offer trainings for tea producers and promote their participation in international trade fairs and exhibitions. In order to get in contact with international buyers, tea producers should cooperate with the Trade Promotion Centre. Donors should support the branding of Lao tea, either by establishing a national brand for Lao tea or through geographical indication. As regards geographical indication for the Boloven Plateau and Phongsaly, government and donors need to bear in mind the need not to place tea producers in other regions at a disadvantage.

6.5 Silk

6.5.1 Production and exports

The silk handicraft sector has a long tradition in Laos and continues to play an important role in the national economy. There is huge demand for raw silk by domestic weavers of silk textiles (Somphong 2007, 1). Additionally, the naturally dyed silk yarns and hand-woven handicrafts produced reflect Lao culture and have a significant potential for sale on global markets (World Bank 2006b, 169). As a result, exports of Lao silk textiles have been increasing steadily. In 2004, exports of silk handicrafts from Laos amounted to 13 million US$, representing 1.6 % of the country‘s total export earnings (UNDP 2006, 60).[109] Between 1999 and 2004, the total value of production grew on average about 13 % per year (ITC / MOC 2005b, 9). The silk handicrafts sector has expanded mainly due to trade liberalisation and significant growth in tourism in Laos (Somphong 2007, 1). The main export markets for Lao silk handicrafts are Japan, Singapore, the EU (especially France), Thailand, the US, Canada, Australia, and Korea. The EU is the largest market for Lao silk textiles, but there are no official figures, as these exports consist mainly in sales to international tourists (ITC / MOC 2005b, 9).

Despite the importance of silk handicraft production for the Lao economy, only a small portion of raw silk is produced in Laos. There are no official figures on quantities of raw silk production, but it is estimated that Laos produces only about 10–50 % of the raw silk needed to produce silk fabrics domestically (ITC / MOC 2005b, 6).[110]

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109 According to UNDP, the total value of exports could be higher, as many silk handicrafts are exported informally to neighbouring countries. Furthermore, sales to international tourists as well as sales on the Internet are not included (UNDP 2006, 60).

110 Raw silk production is called “sericulture” and includes the production of silk yarns. Sericulture means “the rearing of domesticated silkworms to the cocoon stage” (Lao Sericulture Company). The first requirement is that mulberry trees be cultivated (also called moriculture). The silkworms are then raised from eggs in a 25-day cycle during which they are fed mulberry leaves. Once the cocoons are formed, the silk must be un-

Table 6: Supply of and demand for raw silk in Laos (2002/2003)		
	2002	2003
Cultivation area (ha)	644	805
Raw silk production in Laos (tons)	6.5	9
Average domestic demand for raw silk production (tons per year)	140 (including 20 tons for chemical silk production)	
Source: Saphangthong (2006); Somphong (2007, 4)		

In 2003, the area used to cultivate mulberry trees grew from 644 to 805 hectares, with an estimated production of 9 tons of silk (2002: 6.5 tons).[111] During 2002 / 2003, average demand for raw silk for Lao silk handicraft production amounted to about 140 tons (Saphangthong 2006; Somphong 2007, 4). These estimates explain the current need to import raw silk from countries like China and Vietnam (Somphong 2007, 4). Given this situation, the current value chain of the Lao silk sector can be illustrated as follows:

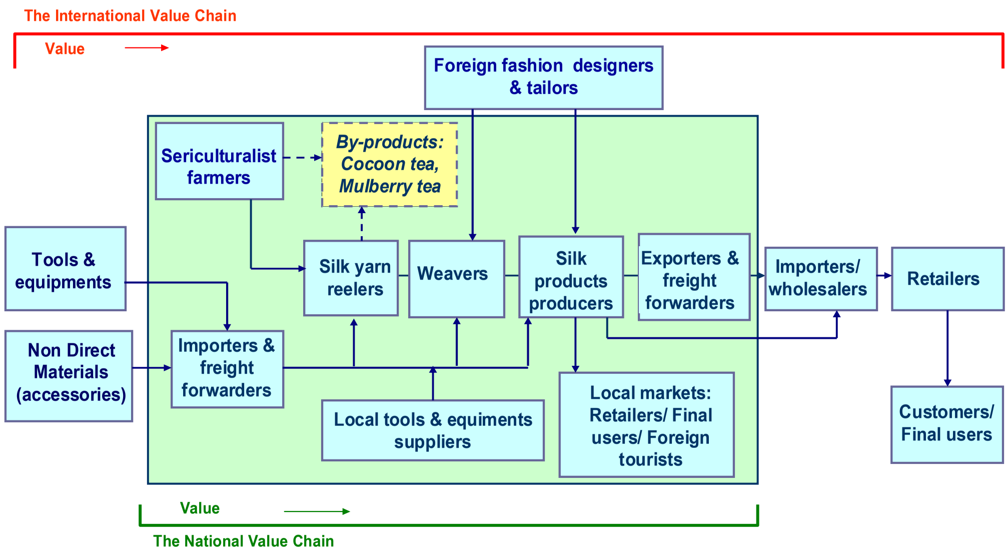
Importance of raw silk production for developing high-value silk exports

The government and donors consider the short supply of domestic silk as one of the major constraints to exporting silk products (ITC / MOC 2005b, 6; Somphong 2007, 2). For this reason, interviews were conducted mainly with silk farmers and silk handicraft producers who practice sericulture or obtain their inputs from the domestic market. The following will outline the importance of raw silk production in Laos for developing exports of high-value silk products.

wound. This is done by using boiling water to loosen the silk fibres so that they can be reeled off. Each cocoon produces a single silk fibre about 800 meters long. Depending on the thickness of the fibre, 30 to 50 fibres are wound together to produce a silk thread. After cleaning and softening, the silk is dyed (Vang Vieng Organic Farm 2009; Lao Sericulture Company s. a.).

111 In 2002, most raw silk production took place in Huaphanh (37 %), Xiengkhuang (31 %), Vientiane Province (12 %), and Luang Namtha Province (10 %).

Figure 2: The current value chain of the Lao silk sector



Source: ITC / MOC (2005b, 11)

- *Lao branding:* There is a significant risk that if the sector continues to import raw silk, Lao silk products will lose their reputation in international markets, making it difficult to develop a Lao brand (Somphong 2007, 4, 6–7).
- *Quality:* High-quality – there is significant external demand for traditionally made Lao silk handicrafts. As regards the development of high-value silk production in Laos, it is difficult to monitor quality and to assure production according to fair-trade and organic requirements, as the major share of raw silk is imported to Laos (Somphong 2007, 6–7).
- *Rules of origin:* The use of imported silk yarn could cause country-of-origin problems for exports (UNDP 2006, 89), preventing Laos from enjoying the benefits of special trade preferences as an LDC.
- *Poverty impact:* Domestic silk production creates new jobs and gives Lao farmers the opportunity to gain additional income by producing mulberry leaves, cocoons, and raw silk threads (ITC / MOC 2005b, 6).

To address the problem of increasing raw silk imports from neighbouring countries, GTZ has entered into a public private partnership with a private company, Mai Savanh Lao. The aim of this pilot project is to improve techniques and quality by introducing new production schemes and standards. Furthermore, village banks are being set up to ensure that raw silk production will continue to expand after the pilot project has been phased out.

To sum up, sericulture, as an element of agricultural production, is an important requirement for adding value to silk.

6.5.2 Adding value to raw silk production and developing high-value silk handicraft exports

Organic production

As countries like China and Thailand are the leading exporters of silk handicrafts in terms of quantity and quality, Laos may be well advised to concentrate on the niche market for organic silk products, which shows increasing demand for naturally dyed silk textiles. In this context, organic means cultivating organic mulberry leaves and/or producing naturally dyed silk yarns. The majority of the private companies interviewed already produce or buy organic raw silk and are trying to promote this concept among other producers. None of the silk producers is certified as organic yet.

Fair trade

As regards the worldwide growth in fair-trade sales in silk handicrafts and the provision of several services for silk producers and artisans by the International Federation of Alternative Trade (IFAT) – since February 2009 World Fair Trade Organization (WFTO) – fair trade can add value to the whole silk value chain. IFAT (International Federation for Alternative Trade) / WFTO (World Fair Trade Organization) provides assistance in quality control, pricing, marketing, and exporting as well as linkages to new buyers (World Bank 2006b, 171–172). The Phontong Cooperative was only one of our interview partners registered with WFTO as yet. Mai Savanh Lao is waiting for fair-trade certification. These two companies, together with fair-trade companies from other sectors, are currently establishing a fair-trade association to build a national network. Most of the remaining interview partners have heard of fair trade, and showed interest in the concept, whereas most Lao customers are not aware of fair-trade silk.

Branding

High-quality, traditionally made silk handicrafts are considered as premium niche products that are in significant international demand. Building brand value in this high-value sector is critical for competing in international markets (World Bank 2006b, 160). This process requires that the identity and uniqueness of the product be created at the point of origin and maintained along the whole value chain (Humphrey / Memedovic 2006, 5). In this respect, it is crucial that the raw silk be produced in Laos in order to increase the value of the Lao brand. Furthermore, it is important to implement quality standards, to assure consistent high quality for the whole value chain, and to certify the high quality of the product. Organic production of silk and fair trade can additionally increase the value of the Lao brand. Currently, private sector, donors and the Lao government are engaged in several activities aimed at establishing a high-quality silk brand:

- The Japan External Trade Organization, together with the Lao Handicraft Association, has been promoting the "Chao Lao brand" for the Japanese market by setting quality standards that reflect the characteristics of the Japanese market (Somphong 2007, 7). This concept has already been successful in increasing the value of Lao silk abroad (World Bank 2006b, 151).
- The Asian Handicraft Promotion and Development Association, in cooperation with the United Nations Educational, Scientific and Cultural Organization (UNESCO), awards a "Seal of Excellence" for handicrafts which demonstrate excellent quality according to high quality standards developed within ASEAN. Since 2002, six handicraft producers from Laos, including the Phontong Cooperative, have received awards and thus contributed to improving the Lao brand image and to guaranteeing the quality of their products (World Bank 2006b, 176).
- In 1957, Japan developed the "Good Design Award" (G-Mark), an award for excellent quality and design products for Japanese and international markets. There are many Lao traditional textiles that have been awarded the G-Mark, in this way improving the reputation of Lao silk as regards quality and design (ITC / MOC 2005b, 28).

6.5.3 Impediments to raw silk production and high-value exports and activities to overcome these impediments

Lack of access to financial services

High interest rates and lack of access to long-term loans are preventing the expansion of raw silk production by hindering investments in new machinery, technologies, and the employment of additional labour. To overcome this impediment, the Phontong Cooperative provides members with micro-loans.

Limited knowledge of sericulture and lack of techniques

Many farmers lack the knowledge and technical skills to plant mulberry trees and raise silk worms to produce cocoons by themselves. Among others, Mai Savanh Lao, the Vang Vieng Organic Farm, and the Phontong Cooperative train their farmers in producing raw silk.

Lack of quality, standards and quality control

Some of our interview partners were unable to enter export markets due to problems with product quality. Due to the poor quality of Lao silk yarns, the ITC project on export-led poverty reduction, which tries to link local silk weavers to local and export markets, imports most of its raw silk from Vietnam. According to ITC, Lao silk threads are not as regular as threads from Vietnam and China. In addition, the village weavers of the ITC project produce traditional patterns that are unique and vary considerably from piece to piece. This is a problem for exports because retailers prefer certain quantities of silk products that look exactly the same in order to have them available once they have been presented in catalogues, at fairs etc. The project is therefore seeking to persuade farmers to weave according to technical sheets in order to obtain standard sizes and patterns for export. Furthermore, private businesses, cooperatives, government, and donors have often provided money for trainings or trained farmers in quality aspects. To assure quality control, the Phontong Cooperative has trained the village head in quality control, and Mai Savanh Lao monitors product the quality itself.

Lack of certification for organic and high-value production

Certification of products and production processes is important to capture markets and obtain premium prices. Most of our interview partners produce organic silk, but none of them has obtained certification. Furthermore, high-quality silk production has, as yet, not been certified as such. Currently, there is no certification body that provides certification for organic or high-quality products. International certification could be provided by Thai certifying agents, but most of our interview partners regard this procedure as too expensive.

Lack of research and market information

Farmers and companies often do not have access to information on quality and technical requirements, demand, and potential markets. As promotion of silk production is the task not of MAF but of the Ministry of Industry and Handicrafts, sericulture is not integrated into the research and extension infrastructure of MAF (NAFRI, NAFES etc.). At the moment, there is only one local sericulture promotion centre in Laos, the Hatsaiphong Sericulture Research and Extension Centre, which is under the administration of Vientiane. Consequently, sericulture lacks research and extension services that provide farmers with information on markets. In many cases, NGOs, donor projects, or private businesses link the farmers to markets and support them in designing products.

Lack of market orientation

Farmers often produce not for markets but for subsistence. It is difficult to motivate them to change their production habits and to take up silk production. Mai Savanh Lao supported a "model" family in raw silk production in order to demonstrate to other farmers the advantages of entering into sericulture.

Dependency on donors

Most silk producers and silk textile companies rely on assistance from donors, especially for loans, technical assistance, and identification of market opportunities. This, however, creates dependency and problems of financial sustainability for these enterprises. To reduce dependency, the owner of Mai Savanh Lao turned part of an NGO project into a private business.

6.5.4 Recommendations

Promote farmer group formation

The establishment of farmer and artisan groups helps to overcome a number of impediments. Within a group, farmers and artisans can share information on production techniques, quality etc. Furthermore, they can market and promote their products together. The establishment of a quality control system within the group reduces quality problems in sericulture and silk weaving. An independent party should be in charge of quality control. Once they have contracts with silk farmers and farmer groups, private companies could provide the groups with micro-loans, training in skills and techniques, and information on standards, quality, market trends, and design. In this way, private companies would have secure access to quality silk and silk products. Private companies should encourage farmers to establish a quality control system within the group. To improve the marketing capacities of farmers, donors should support the establishment of farmer and artisans groups and provide technical assistance in group management.

Improve access to financial services

Establishment of group funds and provision of micro-loans are needed to make investments in machinery and expansion of silk production. In order to mobilise investments in sericulture and weaving, the government should establish micro-finance institutes and banks for small and medium-size enterprises (SME) that offer long-term loans and adequate interest rates.

Improve research and extension

The government should integrate sericulture within the existing research structure and extension services (Hatsaiphong Sericulture Research and Extension Centre, NAFRI, NAFES, and its institutions at provincial and district level) to enable them to carry out research on sericulture techniques, disseminate this information, and link private enterprises and producer groups.

Develop quality standards and certification

Silk producers and weavers should develop a Lao standard for sericulture and weaving according to international standards. The Lao Handicraft Association and LNCCI should develop training programmes to promote sericulture and encourage their members to improve production and processing quality, to consider natural dyeing techniques, and to ensure quality certification to make silk products more competitive and help producers meet international standards. To overcome the lack of certification, the government and donors should continue their efforts to make the Laos Certification Body operational.

Improve marketing and branding

To improve access to potential export markets, private companies should promote their products by participating in national and international trade fairs and exhibitions. Participation in regional and international contests and competitions (for example G-Mark and Seal of Excellence) can contribute to increasing the recognition of Lao brands and to assuring the quality of the product. The Handicraft Association should promote the participation of Lao enterprises in these international trade fairs and exhibitions. Donors should continue to provide support for establishing Lao silk branding. Furthermore, private businesses should improve communication and cooperation with the Trade Promotion Centre at MIC.

Improve market information

To improve market information, the existing market and trade information centres (Lao Handicraft Association, Trade Promotion Centre, and the Department of Handicrafts within the Ministry of Industry and Handicrafts), together with the private sector, should improve their cooperation and build up capacity in market research.

6.6 Non-timber forest products

6.6.1 Overview of NTFPs in Laos

Definition and importance of NTFPs

NTFPs can be defined as products “encompassing all biological materials other than timber which are extracted from forests for human use” (De Beer / Mc Dermott 1989, cited in NAFRI / NUoL / SNV 2007, 4). The variety of such forest resources comprises fish, wild animals and honey, as well as bamboo, rattan, medicinal herbs and spices, tree barks, nuts, mushrooms, flowers, and many other products that are either directly used for consumption and household needs, sold domestically, or exported to foreign markets. NTFPs are important for developing countries in three respects: (1) protecting the environment (through forest conservation), (2) improving rural livelihoods (by contributing to food security), and (3) fostering economic development (by generating cash income and export revenues). On a global scale, the market for NTFPs has grown annually by almost 20 % during the first years of the 21st century (Wilkinson 2004, cited in NAFRI / NUoL / SNV 2007, 7).

NTFPs in Laos

Overall, there are more than 700 different species of NTFPs in Laos (Foppes / Ketphanh 2005, 10, 132). About 50 % of them are consumed as food, the rest used as medicine or material for housing construction and handicraft production. Although the potential for commercial processing remains largely untapped, the NTFPs produced in Laos are equivalent to an estimated value of 7–8 million US$ per year, and small processing companies are developing (NAFRI / NUoL / SNV 2007; iii). The main export destinations of Lao NTFPs are China, Thailand and Vietnam. Especially in China there is strong demand for Lao herbs and spices, which are used to produce traditional medicines (UNDP 2006, 71). On average, exports and local sales of NTFPs provide 40 % of rural villages' cash incomes (Foppes / Ketphanh 2005, 10). Collection of NTFPs thus contributes directly and indirectly to food security. It also has a special gender relevance and is considered as beneficial to human development: "*NTFPs are harvested mainly by women and girls and provide income that women control. This income is likely to be used to improve the health, education, and future opportunities for children.*" (UNDP 2006, 71–72). As the diversity of wild and cultivated species constitutes a significant income base for traditional NTFP collectors, they have an incentive to manage forest resources in a sustainable manner, thus protecting the environment. However, rising market demand and high prices for certain NTFPs have led in part to excessive and unsustainable harvesting practices. Population growth, slash-and-burn agriculture, and illegal logging have equally led to forest depletion,[112] diminishing the natural habitat of NTFP species in Laos. Therefore, protection, regulation, and sustainable management of NTFPs have to be taken into account when formulating strategies to increase export competitiveness. However, as this study focuses on high value and value-adding for agricultural export products, environmental aspects of NTFP harvesting will not be discussed in detail.

Of the vast variety of NTFPs found in Laos, nine specific products (or product groups) were mentioned most frequently during the interviews. They will be presented briefly before we turn to the question of how value can be added to NTFP exports from Laos.[113]

112 The International Union for the Conservation of Nature estimates that the forest cover of Laos has declined from 70 % to around 40 % of the country's total surface area within the last ten years.

113 A comprehensive and detailed presentation of the following nine NTFPs – as well as 91 others – in Laos can be found in the manual issued by NAFRI / NUoL / SNV (2007).

Bamboo (bambusoideae)

In Laos, there are 52 documented species of bamboo, most of which are found in the mountainous areas in the North (NAFRI / NUoL / SNV 2007, 271). Bamboo is a multi-use material from which a variety of end products can be derived. The focus here is on bamboo cane (used for housing construction, furniture, and handicraft production) and bamboo shoots (consumed as food). While the cane is usually cut by men, the shoots are collected by women and children. There have been problems of over-harvesting in the forest. However, as the roots are not cut and bamboo is a fast-growing species, sustainability is not considered to be in jeopardy. Cultivation of bamboo through seeds and stumps is possible and practiced on a small scale, mostly in the form of smallholder plantations. The advantage of bamboo plantations is that they require less labour input than other agricultural products and generate relatively good returns. On the other hand, bamboo needs certain soil and climate conditions and cannot grow everywhere. The export market for bamboo shoots in countries like China, Thailand, and Taiwan is expanding (NAFRI / NUoL / SNV 2007, 274). Experts also consider bamboo shoots to have good potential for organic production and labelling, as no chemical fertilisers are needed. Bamboo cane is at present only processed for the domestic market (mostly by women), and there is potential for further developing the value chain and exporting processed products.

Rattan (calamus spp.)

There are at least 51 species of rattan in Laos, 13 of which are classified as the highest- quality species in the world (WWF 2008, 2). Rattan can be used for a variety of purposes. As with bamboo, the focus here is on rattan cane (cut by men and used to produce tools and furniture) and rattan shoots (collected by women and consumed as food). Selling rattan provides direct income for poor people dependent on NTFPs. The problem with rattan is that, unlike bamboo, it grows very slowly and sometimes does not grow back at all. As a result, over-harvesting has led to considerable depletion of natural rattan resources in Laos. There is thus a strong need to promote sustainable harvesting practices and domestication[114] of

114 Domestication of NTFPs means that they are deliberately planted, using seedlings, either in the forest or on agricultural land.

rattan. At present, rattan is not widely cultivated in Laos. Like bamboo, it needs certain soil and climate conditions and cannot grow everywhere. The rattan harvested in Laos is of high quality, and there is much potential for further development of a domestic rattan-processing industry (NAFRI / NUoL / SNV 2007, 306). According to experts, rattan shoots also have potential for organic production and rattan cane products have potential for fair trade. There is a large export market for rattan products in Europe, the US, China, and Vietnam, and Laos has the comparative advantage of being endowed with as many different rattan species as just about any other country in the world.

Paper mulberry (broussonetia papyrifera)

The bark of paper mulberry trees is used to extract raw fibres for the production of paper. Usually, separation of the bark involves cutting down the tree. However, this is not considered as a major problem because the roots are not cut and paper mulberry trees grow fast and multiply quickly, ensuring a sufficient supply. Moreover, paper mulberry trees are domesticated successfully by planting them in upland rice fields or in combination with fruit, teak, or coffee plantations (NAFRI / NUoL / SNV 2007, 293, 295). The bark of paper mulberry trees is mainly harvested in the provinces of Luang Namtha and Oudomxay. From there, a large part is exported raw and semi-processed (in the form of fibres) to Thailand and Vietnam. A smaller part is processed in Laos, mainly in Luang Prabang Province, and sold on the domestic market in the form of paper products (lampions, cards, books, paintings, umbrellas, bags, boxes). The processing is done almost exclusively by women. Customers are mainly tourists and expatriates, but also Lao households. In general, experts consider paper mulberry to be an NTFP with high potential for being processed more in Laos and then exported in the form of value-added paper products, which yield higher returns than raw bark and fibres. The market for raw, semi-processed, and processed paper mulberry products is considered stable. At present, paper mulberry trees are not treated with chemical pesticides or fertilisers, the raw bark and fibres could therefore be considered as organic. Some experts also consider paper mulberry products to have good potential for fair-trade production.

Malva nuts (scaphium macropodum)

Malva nuts are in fact not nuts but fruits that grow on very tall trees. They are found mainly in the evergreen forests of Southern Laos, where they generate large amounts of income for the rural population, and hence provide a strong incentive to conserve the forests. The fruiting patterns of malva nut trees are very irregular, with large yields in one year and none in other years. There have been problems with unsustainable harvesting behaviour (e.g. cutting down trees), but fruit collection generally has no impact on the trees' regeneration. Soaked in water, malva nuts are used to produce a variety of traditional medicines (e.g. against stomach problems, sore throats, and coughs - and they are therefore popular among opera singers). Most malva nuts are sold directly to local traders who resell them to companies which then export them to China and Thailand, where demand is very high. Post-harvest treatment of malva nuts (including immediate dry storage) is essential to maintain their quality. If soaked prematurely by rain, the fruits burst and lose their value (NAFRI / NUoL / SNV 2007, 229). Overall, there is much potential for improving quality control and marketing in order to obtain higher export prices.

Honey (from wild bees, superfamily apoidea)

In Southern Laos, hives of wild bees are collected from forest trees by villagers who then extract honey and beeswax from them. The wax is used to make candles, whereas the honey is partly consumed and partly sold on the domestic market via traders. Formation of village groups has proven to be a successful mechanism for marketing honey and obtaining fairer prices. The honey is bought by shops in the region as well as by restaurants and a small food-processing company in Vientiane. So far, there has been no export of honey. Experts consider wild honey from Laos to have potential for organic certification, geographical / ethnic branding, and possibly also for fair-trade marketing.

Cardamom (amomum spp.)

Cardamom fruits are an ingredient for various Chinese medicines and a popular spice in many countries. They grow in forests throughout Laos and can be purified to a high degree when planted in gardens with regular maintenance (e.g. weeding). For this reason, there is increasing cultivation in Laos. Almost all harvested fruits are sold to foreign markets, making cardamom the country's second-most important agricultural export good after coffee (Baird / Bounphasy 2003, 19). The price for planted cardamom is much higher than for wild cardamom, a fact due to its higher quality. Although prices for cardamom have fallen to some extent, market demand seems to be growing, and there is potential for improving post-harvest storage and for developing domestic processing (e.g. distillation of cardamom oil) (NAFRI / NUoL / SNV 2007, 238).

Broom grass (thysanolaena maxima)

As the common name suggests, the stems and flowers of this plant are mainly used to make brooms and paint brushes. Shoots and seeds are sometimes eaten, and the grass is also used as animal feed. Broom grass grows mostly in Northern Laos. It is not in danger of being depleted because its fast growth makes up for destructive harvesting. It is also easy to domesticate. The markets for broom grass in Thailand, China, and Japan are very large, making broom grass the second-most important NTFP export from Laos (NAFRI / NUoL / SNV 2007, 269). The problem is that much higher values could be achieved by processing broom grass before it is exported. However, at present broom grass is mostly exported unprocessed. The prices for processed products like brooms are higher, and there is much potential for domestic processing and value-added exports of broom grass from Laos.

Pheuak meuak (boehmeria malabarica)

This plant grows mostly in Northern Laos and is one of the area's most important NTFP export products. Harvesting its bark may be destructive when all the stems are cut. *Pheuak meuak* is planted in forest and home gardens, a measure necessary to ensure regeneration and sustainability. The fibres of *pheuak meuak* are sold to China and Thailand, where they are used to make incense sticks, glue, and mosquito repellents. These markets are considered to be stable. The sap of *pheuak meuak* is also used by Lao villagers as an ingredient for a stomach medicine. Currently, no processing is done in Laos (NAFRI / NUoL / SNV 2007, 361–363).

Galangal (alpinia spp.)

Fruits and various other parts of this plant (e.g. seeds, stems) are used as a sweet spice, eaten as vegetables, or used to produce traditional medicines. Galangal is found in evergreen forests throughout Laos, and the harvesting of its fruits and stems does not destroy the plant. Galangal is sometimes planted in gardens, and its sustainability in the forest is not in danger. The different parts of the plant have to be processed quickly to maintain their quality. Seeds are exported to China and the Netherlands, whereas other parts are sold on the domestic market (NAFRI / NUoL / SNV 2007, 215–218). The global market for galangal is considered to be relatively stable.

6.6.2 Benefiting from the intrinsic high value of NTFPs in exports

Promising strategies for capitalising on the natural value of Lao NTFPs in exports are described in the following. For each of the strategies, it is noted who presently contributes what measures to implementing them.

Sharing market information and linking collectors / producers to markets

Market information needs to be gathered and disseminated within Laos to create a shared knowledge of demand, prices, and means of establishing contacts to domestic and foreign NTFP buyers. Among others, the Netherlands Development Organisation (SNV), the United Nations Industrial Development Organization (UNIDO), and the British NGO Prosperity Initiative work with the value-chain approach to developing NTFP marketing in Laos. Their work contains an analysis of the whole of NTFP value chains from the producer to the consumer. Their main focus lies on overcoming key constraints to linking different steps of the value chain. Prosperity Initiative, for example, develops value chains at pilot scale and plans to prepare brochures to identify investors and establish contacts between them and collectors / producers. In Xayabury, SNV used information on prices, market demand etc. from the Thai side to prepare a fact sheet for villagers.

The Lao government and various projects supported by donors are organising clusters of upland communities to cooperate with the private sector in setting up more efficient and profitable marketing systems (Foppes /

Phommasane 2005, 1). However, as the example of the Danlao rattan company in Vientiane shows, it is also possible to establish market contacts and export without government and donor support. Danlao currently exports 40% of its annual production to the US. Lao customers in the US introduced the company to the American market via family relations. Danlao also advertises on the Internet in order to find new buyers for its products.

Forming groups of stakeholders

The main objectives of group formation are to reduce transaction costs, better adapt to new markets, and to articulate views and experiences vis-à-vis government institutions. Organised in groups, NTFP collectors / producers are better able to negotiate prices and communicate with buyers. One focus of MIC and its line agencies on different policy levels is to get collectors / producers and traders organised in groups. Related activities are usually carried out using resources provided by donors, sometimes in collaboration with the Lao National Chamber of Commerce and Industry (LNCCI) at the central level or Chambers of Commerce and Industry (CCIs) at the provincial level. One example of a donor institution active in group formation is the German NGO German Agro Action (DWHH).

Promoting NTFP enterprises

Currently, there are only a few NTFP enterprises[115] in Laos, and when promoting SME, government and donors rarely think of NTFPs. At the central level, the SME Promotion and Development Office (SMEPDO) helps, on behalf of MIC, to create an enabling business environment for SME. Among government agencies at the provincial level, PDAF and PDIC are responsible for supporting NTFP enterprises. While PDAF is responsible for monitoring and controlling natural resources, PDIC manages and promotes trade and investment. Their understanding of the challenges and potential related to NTFP enterprises is as important as coordination between different departments and between district, provincial, and national level. Overall, transparent, efficient, consistent, and supportive trade regulations and tax policies are needed to promote NTFP enterprises.

115 In this study, NTFP enterprises are defined as companies that are engaged in the commercial plantation, processing, or trading of NTFPs.

In September 2008, SMEPDO and the Thai SME Promotion Office signed a memorandum of understanding with the goal of establishing an SME network to find business partners and develop business operations in many sectors, including tourism, industry, and handicrafts. The handicrafts sector includes paper mulberry products (EDC 2008, 15). Forest Connect – an initiative supported by the Program on Forests (PROFOR), a US-based multi-donor partnership, and FAO – is developing a toolkit for supporting NTFP enterprises in eight countries. For the Lao side, Enterprise and Development Consultants, a private consulting company, has described the current status of NTFP enterprises in Laos, particularly focusing on bamboo, rattan, and paper mulberry (EDC 2008).

Establishing contract farming and attracting FDI

Arrangements for contract farming could be one solution for villagers to obtain inputs and technical information on the domestication of NTFPs and to get to know specific demand patterns. Currently, domestication is supported by donors. SNV, for example, promotes the domestication of rattan.

As for FDI, Prosperity Initiative seeks to attract investors as part of their value chain approach on bamboo. Sometimes, NTFP enterprises are also contacted directly by foreign investors. A paper mulberry factory in Luang Prabang, for example, was contacted by Korean investors willing to set up a large contract for dried paper mulberry bark. There have also been investors showing interest in joining the Danlao rattan company in Vientiane. Until now, their offers have been declined by the owner, who is interested in keeping the company independent. Nevertheless, it is not out of the question for Danlao to cooperate with investors in the future.

6.6.3 Adding value to NTFPs

Prices for processed products are usually higher than for the corresponding raw materials. Furthermore, taking into account possible negative effects of NTFP harvesting on the environment, it is a promising strategy not to increase the volume of NTFP collection and exports but rather to add value to the different products in order to obtain higher export revenues. In the following, possible strategies and current activities for adding value are presented in the order of their position in the value chain: domestication, organic production, production according to fair-trade standards, post-harvest handling, improving and monitoring quality, standardisation and certification, processing, product development and branding, and packaging of NTFPs.

Domestication

Cultivation of NTFPs is one way to increase the amount available and enhance quality. The potential for the latter is especially high for cardamom. Local communities have great knowledge on biodiversity and NTFPs. This knowledge is used to domesticate certain NTFP species at the community level. Paper mulberry in Luang Prabang, for example, was first domesticated more than ten years ago and today is sold as an agricultural product. On the donor side, DWHH supports the domestication of galangal in Luang Namtha Province and UNIDO promotes broom grass domestication in Oudomxay Province. SNV is working on developing seedlings for the cultivation of rattan.

Standards and certification

Due to the high intrinsic value of and high market demand for NTFPs, standards and certification are less relevant for expanding NTFP exports than for obtaining higher prices. One exception is processed rattan and bamboo products, which need certificates of origin to be exported to high-end markets. Currently, there is no certification of origin for raw rattan and bamboo in Laos. SNV and Worldwide Fund for Nature (WWF) are therefore working on establishing a certification system.

Production according to organic and fair-trade standards

Increasing market demand for organic products serves to create great opportunities to gain higher incomes from NTFPs, which in most cases grow naturally or are produced ‘organically by default’ (EDC 2008, 17). However, to benefit from these opportunities in terms of exports, organic production needs to be certified. In 2005, Helvetas identified several products which have the potential to be produced organically and marketed as such, e.g. bamboo shoots, rattan, paper mulberry, and cardamom. SNV and Helvetas support the sale of rattan shoots at the organic market in Vientiane. Paper mulberry trees in Luang Prabang are also grown without chemical fertiliser or pesticides. The dried bark, which is sold for paper production, could therefore be considered as organic. Natural dyes can be used to colour the paper, a practice already engaged in by some companies in Luang Prabang. A rattan processing company that currently uses chemicals to paint its rattan stated that switching to organic production might be an interesting option for the future.

At present there is not much knowledge on fair-trade production of NTFPs and there are no discussions on any noteworthy impact that fair-trade standards might have on NTFP exports. Nevertheless, experts consider certain processed NTFPs (mulberry paper products, rattan and bamboo products, and honey) to have potential for fair-trade production in Laos.

Post-harvest handling, packaging and quality control

Adequate handling of NTFPs, including storage, is necessary to maintain their quality and value. This is especially important for products like malva nuts, which lose their value when not stored in a dry and clean place.

With packaging, a further step can be added to value chains for certain NTFPs. In the case of honey, the Global Association for People and the Environment (GAPE) assists farmers in filling honey in bottles and other labelled containers in order to sell it to restaurants and supermarkets in Vientiane and Pakse. There are plans to enable honey collectors to do the filling and labelling themselves.

Since the quality of mulberry paper from Thailand, for example, is very high, Laos can only compete if it reaches a similar level of quality. For honey, GAPE assisted collectors in filtering out all impurities and checking the quality of their products with simple methods that enable them to satisfy customer demands and secure the confidence of buyers in the quality of their product.

Processing

Processing NTFPs is one way to add value and obtain higher export prices. In many cases, women are involved in the processing of NTFPs. Overall, the potential for NTFP processing in Laos is largely untapped. There are, however, some interesting activities. The Gender Development Group, a Lao NGO working under the umbrella of the international NGO Concern Worldwide, has set a up a project in Sangthong District in Vientiane Province to promote income generation based on the production and sale of bamboo handicrafts. Mekong Bamboo, an organisation that is implementing a bamboo project together with Prosperity Initiative, identified bamboo flooring as the most promising product evolving from the processing of bamboo. This opens up a completely different market, the wood market, which is multiple times bigger than the market for NTFPs. Even though there is as yet no knowledge in Laos on the techniques used to produce bamboo flooring, it might be an interesting option for export development in the future.

With a view to promoting the addition of value in Laos, government policy prohibits the export of rattan as raw material. Currently, many companies are undermining this policy by exporting dried rattan, under the category of semi-processed products (EDC 2008, 7). Nevertheless, the government and WWF are promoting further processing. For both rattan and bamboo products, improved processing in Laos is crucial for increasing export competitiveness and obtaining higher prices.

Thus far, there are three rattan-processing companies in Laos. They buy raw rattan cane from villagers and sell processed and semi-processed rattan products. The Danlao rattan company in Vientiane, for example, produces furniture, decorations, and souvenirs made from rattan. Overall, it produces 300–400 different products. It also plans to combine rattan and bamboo in producing furniture. 40 % of its annual production is exported to the US, 60 % sold on the domestic market. Danlao wants to expand its exports of processed rattan products to China and Korea and increase the share of exports to 80 % of its yearly production. 70 % of Danlao's employees are women. In general it is not only important to expand processing, the efficiency of processing needs to be improved as well. As for rattan, studies have shown that 30–50 % of rattan is wasted along the value chain. WWF is working on minimising these kinds of losses.

Rattan shoots from Savannakhet Province and Vientiane are dried and sold on the domestic and Vietnamese markets. In addition, dried rattan shoots are exported informally to Lao families living in Europe or the US, where they are traded to other Asian citizens (EDC 2008, 8). SNV supports the efforts of experts to further develop the processing (drying and canning) of rattan shoots and to find new markets where processed rattan shoots could be sold.

One NTFP that is already being processed on a larger scale in Laos is paper mulberry. One company producing mulberry paper said that farmers could add value to the bark by adding the step of cooking before drying and selling it. Currently, only a small portion of dried paper mulberry bark (100 tons out of 3,000–4,000 tons) is processed into finished products for the domestic market (e.g. the tourism industry in Luang Prabang) (EDC 2008, 9). One processing company in Luang Prabang has recently started exporting mulberry paper bags to Germany. However, the largest part of paper mulberry is exported raw (in the form of bark) to Thailand and Vietnam or exported semi-processed (in the form of fibres), and in small quantities, to Vietnam. One of the most critical issues involved in selling paper products is design and know-how on trends and specific demands.

A further example of processing can be found for broom grass. The Productivity Marketing Centre of UNIDO promotes the sale of processed broom grass products from Oudomxay Province and is seeking to stop exports of raw broom grass to China and Japan.

Product development and branding

Developing new forms of the NTFPs currently exported and promotion of branding are possible strategies for adding value to NTFPs and obtaining higher prices. One component of SNV's work on NTFPs is technical assistance for developing new designs for processed bamboo products designated for export to Japan, the US, and the EU. In this case, SNV cooperates closely with the Bamboo Trader Association. In terms of branding, experts say that Lao NTFPs should be linked to certain characteristics like organic production, when applicable. In the case of honey, it was proposed to link marketing to the ethnic groups and the villages producing honey. In addition, the source of honey, i.e. the plant from which the honey is collected (e.g. malva nut), should be identified and indicated on the label to increase its value. SNV promotes rattan shoots as a unique product of the districts of Savannakhet and Champhone. UNIDO plans to support the establishment of a Lao label that states that a certain product is, e.g., from Oudomxay Province.

6.6.4 Impediments to capitalising on the high intrinsic value of NTFPs in exports and to adding value as well as activities to overcome these impediments

Missing market information

Knowledge on price trends, demand patterns, quality standards, potential buyers, and export markets is crucial for NTFP collectors / producers, traders, and processors in order to benefit from the high value of NTFPs and to obtain higher revenues. Market information is also necessary to determine which kinds of value-adding are promising for what NTFP species. Currently, there are information gaps between NTFP collectors / producers and traders as well as between NTFP processors and foreign markets and between different government levels. These information gaps prevent NTFP stakeholders in Laos from realising the full potential of the market.

In 2005, a number of donors and Lao institutions organised a workshop on developing a market information system for NTFPs in Laos, but so far no such system has been established. A number of donors are individually collecting market information and distributing it to villagers and companies, e.g. WWF (for sustainable rattan management and processing), the International Union for the Conservation of Nature (IUCN), for malva nuts, Prosperity Initiative (for bamboo), and SNV (for various NTFPs).

Lack of market orientation, skills and a long-term perspective

In order to capitalise on the high intrinsic value of NTFPs and / or to add value to NTFPs, collectors / producers and processing companies need to respond to market demand and requirements in terms of product quality, size etc. Additionally, they need the skills to incorporate these requirements into their own production and marketing. Such market orientation and skills are missing in Laos, preventing the country from exploring the potential of its NTFP sector. GAPE, for example, is working on this issue by explaining to honey collectors the importance of product purity, teaching them how to test quality and fill honey into containers adequate for selling. GAPE also took honey collectors on a study tour to Vientiane to enable them to meet potential buyers and learn about their expectations.

Many NTFP collectors / producers have a preference for earning money quickly. Therefore, they do not negotiate much about the price and give no consideration to the option of processing their products, or at least improving post-harvest treatment and storage to achieve a better price. This short-term perspective is an impediment to adding value to NTFPs.

Dependency

Rural NTFP collectors, and especially women, know little about price trends, calculation, and marketing and are easily cheated by traders who buy their products. Traders often bargain for drastic price reductions for NTFPs, and collectors may not have the choice of selling to another person or company if there are no other traders in the local market.

One way to reduce this dependency is to systematically foster competition between traders by giving licenses to several traders instead of just one. Another strategy is the formation of collector groups who then sell their products in one place at the same time to increase the volume, obtain a better bargaining position, and achieve higher prices. A common place to collect and sell the NTFPs from one village was, for example, established at a village development centre in Vieng Phouka District in Luang Namtha Province by DWHH. The formation of NTFP groups is supported by various donors in Laos, e.g. GAPE (for honey) and IUCN (for malva nuts).

Lack of coordination and cooperation

In addition to the above-mentioned information gaps between NTFP collectors / producers, traders, and processing companies, the cooperation of these different stakeholders with each other and with the government has considerable room for improvement. There is also a lack of coordination within the government sector regarding the NTFP activities and policies of different institutions and levels.

In the case of rattan, WWF is seeking to facilitate cooperation between stakeholders by creating a platform for discussion and organising meetings. SNV is active in linking collectors to private companies and coordinating local NTFP activities with national government policy. Last year, IUCN organised a meeting at the central level for forest inspectors, police, customs officers, and other stakeholders to discuss NTFP issues. In Luang Prabang Province, the PDIC organises conferences and meetings on a regular basis in an attempt to reconcile the different interests of NTFP producers, local companies, and foreign traders.

Lack of access to financial services

It is difficult for NTFP collectors / producers who have neither land nor other collateral to obtain credit from commercial banks, because the latter require collateral as a guarantee for loans. Moreover, in many rural areas there are simply no banks available for villagers to consult. As a result, NTFP collectors / producers may face times of acute cash shortages which force them so sell their products raw and at very low prices. If they had access to financial services, they could bridge such periods, process their products, and wait until prices rise again. Lack of credit is also a problem for NTFP enterprises that would like to expand their processing activities but do not have the financial means to pay for the necessary investments (e.g. machines). Therefore, lack of access to financial services prevents the NTFP sector from realising its full potential for value-adding.

One way to overcome this problem is to create village revolving funds which can be used by NTFP collectors / producers to finance investments (e.g. tools for harvesting) and to bridge periods of cash shortages. German Agro Action (DWHH), e.g., is working with a village group for galangal and *pheuak meuak* in the Nga District of Oudomxay Province. This village group has set up a special revolving fund for women to increase their participation in financial decisions. Women can obtain credits from the fund to finance production and trade activities and to cover emergency needs. The United Nations Office on Drugs and Crime (UNODC) is planning to set up a rural microfinance programme in Oudomxay Province to achieve a situation where poor villagers are no longer in need of cash incomes from selling raw NTFPs but can focus on processing instead. For the same reasons, GAPE helped create village funds for their honey groups in Champasak Province.

Lack of input, know-how and technologies

The addition of value to NTFPs, for example through better post-harvest treatment and storage, processing and certification, requires a variety of inputs (including adequate tools and qualified labour) as well as specific knowledge and techniques.

Rural NTFP collectors generally have low levels of education and sometimes belong to ethnic minorities who do not speak Lao. This makes it difficult and time-consuming to work with them in terms of market information and capacity development. GAPE, for example, uses self-produced video materials and picture books to cope with this difficulty. There is a shortage of skilled workers for NTFP processing, and this requires processing companies to invest time and resources to train their employees from the very start. Knowledge of the possibility to produce NTFPs organically or to process them according to fair-trade standards is almost non-existent. To change this, WWF, for example, has provided the Danlao rattan company with information on the benefits of organic production in terms of new markets. Within government institutions, knowledge of value-adding for NTFPs is limited or, where available, not made use of due to insufficient financial and human resources.

Inappropriate government regulations

In Laos, there are harvesting quotas for some NTFPs and none for others. Trade licenses are allocated at the provincial and district level, and the process through which authorities determine how many and which traders will receive a license is not always transparent. The fees for trading NTFPs are considered by some experts as too high. Compared to Vietnam, the taxes that the government imposes on bamboo exports are excessive, and export procedures are complicated. In addition, communication between different government levels on new regulations for the NTFP trade is sometimes delayed. The Bamboo Trader Association, for example, pays a 20 % provincial fee on NTFP exports to Thailand, whereas, according to new national law, it should pay only 4.5 %. Therefore, SNV plans to organise a stakeholder workshop to deal with this issue and improve transparency and coordination regarding government regulations for NTFPs.

Lax enforcement of regulations

Generally, enforcement of NTFP regulations is rather weak because there is a lack of funds, staff, and managerial capacities at the provincial and district level. NTFP collectors and traders do not keep to certain rules, either. Although there is, for example, a national law that prohibits the export of raw rattan cane from Laos, there is a lot of informal trade of raw rattan to Vietnam, where value is then added through processing. In some cases, traders also circumvent the law by declaring their raw rattan as semi-processed. Both the Lao government and the private sector should have an interest in restricting these informal exports of raw rattan, because they prevent Laos from realising the potential of achieving higher prices by processing rattan within the country.

Risks in domestication

Concentrated planting of certain NTFP species (e.g. cardamom) increases the risk of pest infestation. In one case, one area of the plantation of *pheuak meuak* attracted too many insects for the farmers to be able to continue cultivation. Furthermore, focussing on the domestication of one NTFP species instead of collecting a variety of NTFPs in the forest makes producers more vulnerable to changing prices and demand patterns. Risk diversification by planting several products at the same time is certainly a more recommendable strategy than just relying on the income from one NTFP only.

Another risk involved in domestication may be uncertainty over land allocation and concessions. Government institutions at different levels may allocate concessions to farmers for NTFP domestication and then take them away again if a more profitable opportunity arises for use of the land (e.g. giving the concession to a foreign company) or because there is no inter-institutional exchange of information concerning previous allocation of land concessions. Secure land titles are therefore an important issue when promoting the domestication of NTFPs.

Lack of infrastructure

As a landlocked country, Laos is disadvantaged in terms of trade infrastructure. Even though the road system is improving, it is insufficient and partly in bad condition. Since most of the minor roads are not paved, there are many areas which can hardly be accessed during the rainy season. Therefore, transport costs are high and entrepreneurs are discouraged from investing in Laos' NTFP sector. In Houaphan Province, a bamboo processing company invested in the construction of roads as well as in the development of an electricity grid. Even though this is a good example of private sector initiative, it shows that private sector investments in infrastructure are sometimes needed before a business is set up. Despite increasing mobile phone coverage in Laos, especially remote areas, where NTFPs play an important role, remain without service. This makes it difficult for traders to communicate with collectors / producers of NTFPs. Another difficulty for NTFP trade is that villagers often do not have bank accounts for money transfers. Even though it is becoming easier to open a bank account, rural people have no experience in using bank accounts and in dealing with banks. Due to the absence of radio and TV in many rural areas, it is also difficult to disseminate information on markets or possible trade opportunities for NTFPs.

As a result of the construction of Road No. 3 (a well paved road through the North of Laos connecting Thailand to China), an increase in NTFP traders has been noted by villagers along the road in Luang Namtha Province. A larger number of traders interested in buying NTFPs enhances competition between them, which may in turn lead to a better position for collectors / producers of NTFPs when it comes to negotiating prices.

Export systems are needed to export processed mulberry paper products on a large scale. In Thailand, there is a well-established export system for mulberry paper, whereas Laos lacks a system of this kind. Nevertheless, there is a small-scale, mail-order export of mulberry paper products from Luang Prabang to Germany, for example. A further impediment to adding value to NTFPs is the lack of infrastructure for storage of agricultural goods. This means that perishable NTFPs have to be exported very quickly.

Lack of research and insufficient exchange of experiences

Research on marketing possibilities and adding value represents an important part of all the research needed on the large variety of NTFPs in Laos. SNV, for example, supports the domestication of rattan through research on seedlings. Furthermore, SNV supports the research of NAFRI on various aspects of NTFPs.

Sharing experience on NTFP trading and value-adding in general is difficult because NTFPs are highly contextualised. Nevertheless, stakeholder discussions about specific products or the trading situation in a certain district may help collectors / producers as well as traders and processors to learn from each other. The current exchange of experiences and ideas in the NTFP sector still leaves room for improvement. UNIDO plans to create community centres where people from different villages can come together. Room for such meetings is already available in a village development centre in Vieng Phouka District in Luang Namtha Province. The development of this centre was supported by German Agro Action (DWHH).

Donor workshops and trainings might also be occasions where an exchange of experiences can take place. However, donor organisations have had difficulties reaching women because it is normally the role of men to attend official meetings. The imbalance between men and women joining discussions even increases when travel is required. This can be seen as an impediment to exchanging experiences because women are strongly involved in collecting and processing NTFPs.

Lack of quality control

For certain NTFPs, quality is crucial to obtain higher prices. For exporting, quality issues are especially important, because in many cases foreign customers are more concerned with quality than Lao buyers. Paper mulberry bark is currently exported from Laos to neighbouring countries without any quality control because it is used directly for processing in the importing countries. For bamboo, WWF is seeking to harmonise quality standards of Laos, Vietnam, and Cambodia by seeking orientation in the quality standards of the international furniture company Ikea, which are basically international quality standards. To enhance the quality of honey, GAPE trains collectors to use simple methods of quality control.

Lack of certification

As described in Section 6.6.3, certification of certain NTFPs is one strategy for obtaining higher prices. In addition to this, certification of origin is a requirement for processed rattan and bamboo products entering markets like the EU or the US. Since the origin of rattan and bamboo cannot yet be certified in Laos, the potential for entering high-end markets remains largely untapped. Problems due to missing certification were felt in Laos when the US refused to buy 10.000 pieces of rattan furniture because there was no certification of the location at which the raw material was collected. To overcome this impediment, WWF is developing a chain of custody which includes a tracking tool to determine the origin of raw rattan cane.

In addition to the absence of certification of origin, there is no organic or fair-trade certification for NTFPs in Laos yet. Potential is seen by UNIDO to certify mulberry paper and broom grass as organic.

One reason for the lack of formal certification systems is a lack of financial resources from the government side, as well as a lack of understanding of the advantages certification may have. However, not all countries demand certification for all NTFP exports. China and Thailand, for example, have no interest in certificates for raw NTFP imports from Laos, because the intrinsic value of NTFPs is already high and prices are relatively low.

6.6.5 Recommendations

Raise awareness of the importance of NTFPs and of the potential for value-adding

Awareness of the importance of NTFPs for agricultural export development in Laos should be increased at all levels of government institutions. NTFP enterprises should take into consideration that a significant potential for value-adding and income-generation remains unused when raw NTFPs are exported instead of processed goods. However, to enter into and benefit from value-adding for NTFPs, private actors need to be aware that a longer-term perspective is necessary.

Disseminate knowledge of value-adding

Donors should help in building up knowledge on NTFP value-adding and trade in relevant government institutions. Extension workers and private companies should distribute information on value-adding possibilities to the village level in order to give collectors / producers the choice of engaging in processing, for example. Information on more effective post-harvest treatment and storage of NTFPs should also be disseminated more widely in order to reduce loss of value.

Establish a comprehensive inventory and carry out further research

The government should undertake a comprehensive inventory of NTFP resources in forests in order to determine the species for which there is potential for increasing exports and for which species exports might have to be restricted in order to ensure environmental sustainability. Donors should support further research on new processing techniques for NTFPs and on the possibilities for and the impact of domesticating more NTFP species.

Collect and disseminate market information

Institutions at the central, provincial, and district level should become more pro-active in gathering information on price trends, demand patterns, quality standards, potential buyers, and export markets for NTFPs. Extension workers should then distribute the information to NTFP stakeholders (collectors / producers, traders, and processors). Donors should disseminate information on the possibility of exporting NTFPs with an organic or fair-trade label as a means of entering niche markets. With this information, processors and traders would be able to decide themselves whether or not they want to go in this direction.

Institutionalise stakeholder cooperation

The government should help institutionalise stakeholder meetings by setting an official framework that allows regular exchanges of information and best practices. NTFP collectors / producers should continue to form groups in order to reduce their dependency on traders, obtain a better bargaining position, and exchange techniques and ideas. An association of Lao NTFP enterprises should be created to facilitate the exchange of market information and experiences and to enable NTFP stakeholders to articulate their interests within CCIs and LNCCI as well as vis-à-vis government institutions.

Improve government regulations and create an enabling business environment

The process of allocating licenses and quotas for trading in NTFPs should be transparent, efficient, and consistent across districts and provinces. Ideally, licenses should be given to a number of different traders to foster competition and avoid monopoly-like situations. Taxes should be moderate and not hinder trade. Informal exports of raw and processed NTFPs should be more strictly controlled to reduce losses of tariff revenues. An enabling business environment for NTFP enterprises should be created, for example by offering incentives to Lao or foreign companies or investors that are willing to enter into the processing of NTFPs.

7 Overarching opportunities, challenges, and recommendations

The previous chapter presented and discussed product examples, pointing out several options for developing high-value agricultural exports in Laos. The focus was on product-specific impediments and recommendations. In contrast, the current chapter presents opportunities, challenges, and recommendations that apply, to a greater or lesser extent, to all products in our study and are therefore relevant in general for a high-value agriculture export strategy.[116]

7.1 Opportunities

Benefiting from Laos' favourable natural conditions, Lao agriculture is not only the backbone of the economy but could also become a driver of sustainable economic development. Naturally better endowed regions like the Boloven Plateau or the lowlands are already today centres of dynamic economic development. The unique and valuable circumstance that almost all Lao agricultural production is organic by default could become *the* comparative advantage of Laos.

Located in the most dynamic region of the world economy, Laos should profit from increasing regional investment in agriculture, but also from investment in cross-border infrastructure. Furthermore, demand for high-value agricultural products is rising in Asia as well as worldwide. Further trade integration and accession to the WTO will stimulate additional investment, as accession requires Lao laws, regulations, and the business environment in general to be reformed to make them more favourable to foreign and domestic investors. Finally, the recent worldwide shift of attention towards agriculture as the most crucial sector for poverty alleviation that will be negatively affected by climate change, but could also contribute to reducing greenhouse gas emissions through climate friendly crop patterns, production techniques and livestock management will en-

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[116] Some of the overarching challenges and recommendations are not only relevant for high-value agricultural exports but also apply to the agricultural sector in general. As one participant of our workshop pointed out, our recommendations are thus useful for overcoming impediments to other agricultural export products like maize, cassava etc. as well.

hance support from international donors to Laos' agricultural development.

Even though the framework for developing and diversifying agricultural exports is promising, a strategic approach is required to mobilise this potential. A strategic approach for developing high-value products for niche markets is already in the making and being tested in a number of projects. However, there are still many challenges to be addressed and impediments to overcome. While most of the following challenges are relevant for development of the Lao economy in general, they are even more relevant for the successful implementation of a high-value agricultural export strategy.

7.2 Challenges

Long-term perspective

When deciding to adopt a high-value agriculture-based export strategy, all stakeholders have to keep in mind that this requires a long-term commitment and perspective in order to unfold its potential benefits. For example, while Lao farmers are currently producing 'organically by default', the increasing – uncontrolled – influx of chemical fertilisers and pesticides could soon undermine this comparative advantage. Similarly, if a Lao branding is developed to valorise Lao products, it would take only a few shipments of bad quality or a scandal over environmental degradation or miserable working conditions to spoil Laos' image for a long time to come. Furthermore, high-value agricultural production requires investment in quality seeds and other inputs, training, land etc. Insecure land titles and frequently changing regulations, however, hinder long-term activities.

Infrastructure

Producing, post-harvest handling, processing, and exporting of high-value agricultural goods requires well-developed infrastructure. If NTFPs or fruits and vegetables are not stored appropriately, post-harvest quality losses reduce potential earnings drastically. At present, Laos lacks sufficient and appropriate storage and cooling facilities. Fast and easy transport from the field to the processing facility, to the border and further on, is also crucial for ensuring high quality.

Access to Financial Services

Be it for seeds, machines, or certification, throughout all our interviews, farmers, processors, and companies alike complained about the non-availability of credits, restrictive credit policies, and high interest rates. Furthermore, farmers have no possibility to hedge their risk regarding partial or total loss of their crop. In addition, as farmers are unable to obtain short-term loans to bridge the time until they receive money for their crop, they often become indebted with moneylenders or have to sell assets, thus reducing their overall production capacity and, in particular, curtailing their capacity to fulfil long-term contracts. Although the Nayoby Bank and the Agriculture Promotion Bank offer financial services to the agricultural sector, their services still appear to be insufficient and not adequately targeted to the needs of farmers, processors, and traders.

Lack of skilled labour

Currently, there are labour shortages in certain regions (mostly in the South of Laos) and during peak season. Skilled labour is scarce everywhere. In the future, local labour may not be sufficient if additional land is used for farming and if processing of agricultural goods increases. However, increasing productivity, e.g. by using more machinery, could substitute for some additional labour.

Education and know-how

Although our empirical research was not focused on education, we became aware that education is a bottleneck for producing, marketing, and exporting high-value agricultural goods. Illiterate farmers cannot read contracts or written instructions provided by extension services on, e.g., how to grow organically. For NTFP collectors, for example, it is difficult to demand the correct price if they cannot calculate how much the trader should pay them. Without basic education, it is difficult to learn and obtain additional know-how. Furthermore, lack of foreign language skills, English in particular, limits access to information. This is a severe constraint, since increasing and maintaining quality, domesticating NTFPs, or producing according to organic and fair-trade standards require constant learning and (international) exchange of research findings and best practices.

Research and extension

Current research in the field of agriculture as well as agricultural extension services in Laos seem to be insufficient. Mostly driven by projects, research is limited to specific subjects, does not take into account the overall changing context (e.g. climate change, plantations versus family farms, monoculture cash crop production like maize and rubber), and is reactive rather than seeking pro-actively to shape agricultural development. Especially with regard to organic production, research and extension lag behind farmers' needs.

Inputs and technology

Most farmers and collectors as well as processors complain about insufficient inputs like seeds, fertiliser, pesticides, adequate tools, and machinery. The majority of these inputs have to be imported and are expensive, for example due to high import taxes. Farmers also lack adequate techniques for (organic) cultivation, harvesting, post-harvest handling, and processing. In other words, they lack know-how on how to produce high-value agriculture products.

Market information

In order to be able to decide which crops to grow, which NTFPs to collect, or which agricultural produce to process, farmers, collectors, and companies need information on price trends, demand patterns, quality standards, the amount of produce available for processing, potential buyers, and export markets. At present, this information is either not or not readily available in Laos. Furthermore, market information available at one government institution is sometimes not shared with and distributed to other government institutions, let alone producers. In many cases, exports depend on personal ties abroad or on foreign facilitators rather than on informed business decisions. There is hardly any familiarity with ASEAN and other international trade agreements, and even less with their relevance for exports of agricultural goods.

Market orientation, marketing skills and capacities

As a result of lack of market information and experience with a market system, producers, processors, and exporters tend to neglect demand-side requirements. In other words, they do not consider requirements of customers in terms of product quality, size, quantity etc. In particular, smallholder producers lack the skills to market their products and to ensure that buyer requirements are fulfilled in their production process. Overall, market mechanisms are not well understood.

Government capacities

In general, government institutions seem to be understaffed, salaries are low and capacities limited. Basic infrastructure like telephone, computer, and Internet are not available everywhere. This is especially the case at provincial and district level. Thus, important information on market trends or new production techniques cannot be readily communicated. In addition, enforcement of regulations and laws is rather weak. With regard to ASEAN, lack of government capacities contributed to a late reaction to trade restrictions imposed by ASEAN members.

Quality standards, control, and certification

Standards for production, products, and quality are often missing in Laos. Also, there is insufficient data on pests and diseases. Furthermore, due to a lack of testing laboratories and equipment as well as trained personnel, hardly any quality control takes place. Similarly, almost no risk assessment of imported goods is carried out at border checkpoints. While certification of origin is issued for some agricultural products (e.g. coffee), for others (e.g. bamboo, rattan) such certification is not available. Certification of quality is usually limited to very basic characteristics (e.g. level of humidity) and is little more than a bureaucratic requirement without any effect on product quality. A certification body for organic production has been established but is not yet functional.

Cooperation and coordination

Cooperation between government institutions across different sectors (planning and investment, industry and commerce, agriculture and forestry) and across district, provincial, and national levels (e.g. with regard to information sharing) leaves room for improvement. Cooperation and exchange of information between producers, collectors, processors, and traders – that is, along the value chain – could also be enhanced. The same is true for coordination among donors, between the government and donors, between the government and the private sector and so on. Due to this lack of cooperation, there is also a lack of coordination, and this results in inefficient work and prevents available capacities from being used in the best way.

In certain ways, many challenges influence and reinforce each other. The following two challenges in particular are the result of a combination of several of the above-mentioned challenges:

Production capacity

Due to limited access to capital, lack of infrastructure, lack of know-how and technology, as well as limited marketing capacities, amongst others, production capacity in Laos is rather low. However, to process agricultural goods and to export high-value agricultural products, certain minimum quantities are required (e.g. enough produce to keep processing during the entire year, one container for shipping, etc.).

Dependency

Since smallholder producers lack education, market information, and marketing capacities, they depend on traders or government institutions to market their products. Some farmers receive support from donor-funded projects. In many cases, they would not be capable of carrying out certain activities without this kind of support. As the government restricts the number of NTFP traders or promotes contracts with just one foreign company or government, there is a lack of competition. Thus producers cannot compare prices and contract conditions and cannot chose between different traders. Furthermore, insufficient infrastructure (e.g. roads, border crossings) can limit the number of potential trading partners and increase dependency. Finally, the Lao government depends on financial and technical support from donors.

In view of these challenges, we will now present a number of recommendations that would support a high-value agriculture export strategy. This list of recommendations reflects our theoretical and empirical findings, but is of course not all-encompassing.

7.3 Overarching recommendations

Expand and Improve Primary Education and Adapt Higher Education to Market Needs

As mentioned above, education was not a focus of our research. However, a basic understanding of market mechanisms (supply, demand, price finding) is important in a market economy and reduces the risk of farmers being cheated and exploited. In general, education enables farmers to better articulate their interests vis-à-vis government institutions and private companies. Learning foreign languages (English in particular) is also recommended as a means of enabling public servants, company staff, researchers, and extension workers to benefit from the vast information available on the Internet (e.g. research findings, market information).

Promote research, extension and technology development

Participants in the workshop held at the end of the research phase in Laos highlighted skill development and training as the most important issues for the successful development of a high-value agricultural export strategy. Above all, government and donor activities regarding research, extension, and technology should focus on farmers' needs. In addition, it is the responsibility of public institutions to assess social, environmental, and economic developments and address negative impacts. Farmers should receive support and advice on contract farming and on how to produce high-value products (e.g. organic, high-quality goods). Extension services could, for example, promote basic marketing skills by offering trainings in reading and understanding contracts and negotiating prices. Private companies should contribute their share to extension services and technology for producing high-value niche products.

In addition, education, research, and extension need to be better coordinated. For example, if there is a strategic decision on organic farming, then "producing organically" should be integrated in all three areas. Similarly, promoting high-value products can only be successful if research and extension cover the entire line of production and processing, e.g. through support of post-harvest treatment and processing technologies. Although implementing these recommendations will not be easy, the government could use knowledge and experiences from international research and extension services, e.g. supported by donors and / or private companies.

Develop quality standards, control and certification

Quality standards, their implementation and control, as well as certification are prerequisites of an export strategy for high-value agricultural products. This finding was strongly supported by the participants of our workshop. Laos should implement its own quality standards in line with international standards. Furthermore, an internationally accredited certification and quality control system should be developed. The organic certification body already established needs to be made operational as soon as possible. If these certification and quality control systems are to work, investment is needed in laboratories and equipment for testing. The latter should be supported by donors, as they have thus far mostly focused their activities on (necessary) human capacity building and regulation. As long as there is no functioning national certification system, donors could support emerging activities, e.g. in organic production and fair trade, by facilitating certification by international certifiers.

Improve access to financial services

We recommend the implementation of microfinance structures that offer adequate and tailored financial services to farmers and small enterprises. Risk mitigation instruments (e.g. crop insurance) should be available to farmers. As processing of agricultural produce is crucial for adding value, processing companies should be granted special support (e.g. credits to buy machines). With regard to FDI, consideration should be given to how proposed activities fit into the overall strategy for agricultural development and high-value exports. For example, if vegetables are to be produced on large plantations using chemical inputs, precautions have to be taken that organic production in the vicinity is not affected.

Develop necessary infrastructure

Especially for perishable high-value agricultural goods, but also to reduce transport costs, it is important to continue the construction of all-weather roads, to improve feeder roads, and to ensure road maintenance. Exporting depends very much on the ease and speed with which borders can be crossed, and thus more border crossings should be established and equipped in order to avoid delays at customs offices. Storage and cooling facilities should be developed to allow processing and to obtain higher prices through price hedging. As market information is crucial for all business decisions and supporting government activities, communication via mobile phones and land lines as well as Internet access should be improved. In particular, all government institutions should have the hard- and software necessary to use these communication instruments in order to facilitate inter-institutional communication and speed up the flow of information.

Collect and disseminate reliable market information

Market information should include prices, supply and demand trends for domestic and export markets, as well as requirements for different products, and it should be available for all agricultural goods, not only for staple crops. Timely, cheap, and accessible market information can be provided by an SMS-based market information system. In addition, it would be possible to set up market information centres at the local level. At provincial and national level, market information can be disseminated through newspapers, radio, TV etc. A national database on agricultural production volumes could be created in order to provide information for potential processors. Awareness and exchange of data could be increased through exchange of staff dealing with market information between ministries (agriculture and forestry, industry and commerce, planning and investment) and across different levels, as well as through regular inter-ministerial meetings. The Trade Promotion Centre at MIC could be developed into a focal point of market information for private companies, business associations, and government staff.[117] Overall, government institutions should be more pro-active in gathering market information, with a particular focus on international trade information. Better market information can play a key role in diversifying trade partners and reducing economic dependency. Private companies and / or business associations should regularly participate in special trade fairs that address high-value agricultural producers, processors, and exporters (e.g. Asia Fruit Logistica, BioFach – World Organic Trade Fair).

117 For more information on export promotion agencies, their activities and their economic justification, see Lederman / Olarreaga / Payton (2007).

Box 2: Market information: Results from the discussion group in Vientiane, 30 April 2009

The following examples were collected during the discussion:

What kind of market information is needed?	*How could this information be obtained and disseminated?*	*Who could be responsible for it?*
General information (e.g. supply and demand)	e.g. market surveys, research, existing publications	e.g. business groups and associations, CCIs (also abroad), government
Consumer preferences (e.g. quality, design)	e.g. traders, surveys, pilot projects, consumer organisations	e.g. farmers, business groups and associations, foreign companies (contract farming)
Prices	e.g. traders, markets, statistical data, media (newspaper, radio, Internet, TV etc.)	e.g. farmers, government, business groups and associations
Regulatory and legal framework	e.g. books and other publications, media, interviews	e.g. government, CCIs (also abroad), business groups and associations
Competitors	e.g. surveys, media, CCIs	e.g. business groups and associations, CCIs, government, companies

In addition to these examples, the following points were stressed by participants:

- It is important to create awareness of existing market information and of the fact that it is important to look for market information as a basis for decision-making.
- Plenty of market information is already available (Internet, existing publications etc.). Thus, before undertaking efforts to gather market information (especially on foreign markets), existing information should be screened.
- The way market information is provided has to be adjusted to the target group. For example, information on prices relevant for farmers should be made available via radio, mobile phones, or other means of communication that are easily accessible and understandable for farmers.

- Even if market information is available, it has to be used wisely and the functioning of markets needs to be understood. For example, information on high prices for a particular crop should not automatically be taken as a signal to cultivate this crop. If all farmers decide to expand production at the same time due to high prices, there will be an oversupply at harvest time and prices will drop.

Information should not be centralised and disseminated by one single institution. Several sources of market information (public and private) should be readily accessible for those interested in obtaining the information

Increase knowledge of trade integration

As the different perceptions of stakeholders presented in Chapters 3.2 and 3.3 have shown, the implications of WTO accession and regional trade integration within ASEAN are sometimes misconceived or not well understood due to lack of information. This is a problem because it prevents farmers, private companies, associations, and government representatives from adapting to changing circumstances and taking specific measures to benefit from trade integration. Therefore, government institutions (especially MIC), in cooperation with donors and informed private actors, should increase their efforts in disseminating knowledge of trade integration more widely. The goal should be to ensure that relevant information is disseminated to all stakeholders who need it. This could be achieved through workshops, discussions, trainings, websites, and extension services, all of which are especially important at the provincial and district level, where information gaps are the largest.

Support producer groups

Workshop participants strongly emphasised the importance of further group formation. We recommend that farmers and collectors continue to form groups which facilitate the sharing of market information, training in new production forms and techniques, marketing of agricultural produce (e.g. larger production quantities), and help to reduce certification costs. Participation in such groups enable farmers and collectors to gain a better bargaining position and reduce their dependency on traders and companies. Quality trainings within groups can help to improve product quality. However, quality control should be carried out by independent inspectors. The voluntary formation of producer groups should be supported by the government and donors. Private companies may also have an interest in supporting producer groups that facilitate the collection of larger volumes at one time and in informing and training farmers regarding product quality.

Create and strengthen associations

Stakeholder meetings should be institutionalised, for example by forming associations, in this way ensuring a regular exchange of information and best practices. In addition, institutionalised stakeholders are better able to articulate their interests within CCIs and LNCCI as well as vis-à-vis government institutions. Associations, CCIs, and LNCCI should also promote a high-value agriculture export strategy and offer trainings in this direction. To reduce costs, associations instead of single entrepreneurs could represent Lao business interests at international trade fairs. Donors should support the formation of associations and strengthen CCIs and LNCCI as important institutions for promoting private sector development.

Enhance government cooperation, coordination, and regulation

Decision-making processes should be made more transparent, predictable, efficient, and consistent across districts, provinces, and the national level. At provincial and district level in particular, rules should be simple and clear enough to be understood and followed as well as enforced without too much room for discretion. Quotas and licences should be distributed or auctioned in a transparent manner, if possible avoiding monopolisation. Across all government levels, cooperation between MAF (which is responsible for agricultural production) and MIC (which is responsible for marketing and export promotion) needs to be intensified and improved. For example, MAF should be included in the decision making on an updated Organic Product Strategy. There should be a clear and transparent division of responsibilities between different levels of government and between ministries. For example, extension services (NAFES) and research (NAFRI) should each have a clear mandate and overlapping responsibilities should be avoided. Just as with regard to the sharing of market information, staff exchanges and regular inter-ministerial meetings could increase cooperation and coordination. As regards land concessions, the government should provide model contracts to farmers and make impact assessments obligatory before large land concessions are allocated to investors. Furthermore, participatory land use planning should be strengthened, possibly including chemical-free zones. Capacities for representing Laos in international trade organisations should be improved. Overall, the Lao government should focus on facilitation, regulation, and enforcement rather than on planning and controlling. Instead of telling farmers what products to cultivate, the government should provide farmers with education and market information to empower them to make their own decisions based on their personal judgement of production capacities, market opportunities etc. Participants in our workshop pointed out that a high-value agricultural export strategy requires a number of different measures, many of which call for government initiative. In implementing them, however, the government should cooperate with the private sector and other actors such as research institutions, NGOs, and donors.

Improve sustainability of donor activities and foster government ownership

In contrast to many verbal and written statements, the sustainability of donor activities continues to be problematic. We thus recommend that a sustainability check be carried out prior to every project or programme. Several government officials interviewed had the impression that their ideas and requests had not been taken notice of. Government ownership and close cooperation with Lao partner institutions should be prerequisites from the very start. While operating within existing government structures, government capacities should be further developed. Donor activities should be designed in such a way that they can be continued by government staff after the phasing out of projects and programmes. This is especially relevant for the funding of staff and activities. Furthermore, coordination among donors should be improved through institutionalised meetings that go beyond a mere exchange of information and result in an actual coordination of activities.

Looking ahead

In this chapter, we have summarised overall opportunities and challenges for a high-value agriculture export strategy and proposed a number of measures that could be taken to make the strategy work. We are aware that many of the activities recommended above require additional funding. However, it is not the aim of this study to propose additional sources of government revenues. Nevertheless, we see that the government needs to broaden its tax base (e.g. through a value-added tax, taxes on minerals and hydropower, fees for concessions) and to ensure that government resources are used transparently. In addition, we would like to highlight that the recommendations made above require support by donors as well as increasing engagement on the part of the national and international private sector.

It remains for the Lao government, the National Assembly, chambers of commerce and industry, associations, traders, processors, and farmers to decide which agricultural export strategy to pursue and which recommendations to adopt. However, we want to emphasis that a pro-active and long-term approach is required to reap the greatest benefits from trade integration for the Lao people. As there are so many challenges to address, it is highly recommendable that government activities be strategically prioritised. With regard to organic agriculture in particular, it is evident that Laos is at a crossroads and that timely decisions need to be taken. Efforts to improve the business climate and give more room to private initiatives and private enterprise are necessary to attract private investment, for example building processing facilities and increasing production quality through improved techniques. Private companies are essential for the development of high-value agricultural production and exports in Laos.

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Annexes

Annex 1: List of interview partners

Interview period: 18 February 2009–9 April 2009	
Government institutions	
Vientiane Province	Ministry of Industry and Commerce
	Ministry of Agriculture and Forestry
	Ministry of Planning and Investment
	National Assembly
Champasak Province	Provincial Department of Industry and Commerce
	Provincial Department of Agriculture and Forestry
	Provincial Department of Planning and Investment
Luang Prabang Province	Provincial Department of Industry and Commerce
	Provincial Department of Agriculture and Forestry
	District Agriculture and Forestry Office Xieng Nguen
Oudomxay Province	Provincial Department of Industry and Commerce
	Provincial Department of Agriculture and Forestry
	Provincial Department of Planning and Investment
Luang Namtha Province	Provincial Department of Agriculture and Forestry

Research and extension institutions	
Vientiane Province	AVRDC – The World Vegetable Center
	ERIT (Economic Research Institute for Trade)
	NAFRI (National Agriculture and Forestry Research Institute)
	National University of Laos
Champasak Province	SAFReC (Southern Agriculture and Forestry Research Centre)
Luang Prabang Province	NAFReC (Northern Agriculture and Forestry Research Centre)
	Nam Thuam Agicultural Extension Centre, Nam Bak District
Private Sector	
Vientiane Province	LNCCI (Lao National Chamber of Commerce and Industry)
	Champa Lao Co. Ltd.
	Danlao Co. Ltd.
	Lao Agriculture 2000
	Lao Agro Industry Co. Ltd.
	Lao Farmers Products
	Lao Mountain Coffee
	Lao Sericulture Company (Camacrafts / Phonthong Cooperative)

Vientiane Province	Mai Savanh Lao Co. Ltd. (Company)
	Organic Farmers
	Phimphone Supermarket
	Sinouk Café Lao Ltd.
	Vang Vieng Organic Farm
Champasak Province	Provincial Chamber of Commerce and Industry
	Agro Lao Import Export Ltd.
	Dao Heuang Trading Co. Ltd.
	Delta Agriculture Industry Co. Ltd.
	JCFC (Jhai Coffee Farmers Cooperative)
	Lao Coffee Association
	Paksong Development Enterprise Export-Import
	Paksong Middle Market
	Paksong Tea Product
	Sengathid Development Company Export-Import
	Thevada Café
	Varitha Centre for Handicrafts
Sekong Province	Mai Savanh Lao Co. Ltd. (Silk Farm)
	Sinouk Café Lao Ltd.
Luang Prabang Province	Provincial Chamber of Commerce and Industry
	Fruits and Vegetable Farmers
	Lao Organic Food Company
	Nayoby Bank

Luang Prabang Province	Organic Fruits and Vegetable Farm
	Sai Namkhan Po Sa Paper Company
	Silk and Mulberry Farmers
	Simone Saa Handicrafts
Oudomxay Province	Farmers
Luang Namtha Province	Farmers
International governmental and non-governmental development organisations	
Vientiane Province	ADB (Asian Development Bank)
	AFD (Agence Française de Développement, French Development Agency)
	AusAid (The Australian Government's Overseas Aid Program)
	CIM (Centrum für Internationale Migration, German Technical Cooperation)
	DED (Deutscher Entwicklungsdienst, German Development Service)
	European Commission
	GTZ (Deutsche Gesellschaft für Technische Zusammenarbeit, German Technical Cooperation)
	Helvetas (Swiss Association for International Cooperation)
	ITC (International Trade Centre)
	IUCN (International Union for the Conservation of Nature)

Vientiane Province	JICA (Japan International Cooperation Agency)
	Prosperity Initiative
	SNV (Netherlands Development Organisation)
	World Bank
	WWF (World Wide Fund for Nature / World Wildlife Fund)
Champasak Province	ADB (Asian Development Bank)
	GAPE (Global Association for People and the Environment)
	ITC (International Trade Centre)
	IUCN (International Union for the Conservation of Nature)
	JICA (Japan International Cooperation Agency)
Savannakhet Province	SNV (Netherlands Development Organisation)
Luang Prabang Province	JICA (Japan International Cooperation Agency)
Oudomxay Province	DWHH (Deutsche Welthungerhilfe, German Agro Action)
	UNIDO (United Nations Industrial Development Organization)
Luang Namtha Province	DWHH (Deutsche Welthungerhilfe, German Agro Action)

Others	
Vientiane Province	Embassy of the Federal Republic of Germany
	GDG (Gender and Development Group)
	MRC (Mekong River Commission)
Champasak Province	PCADR–PAB (Programme de Capitalisation en Appui à la Politique de Développement Rural – Point d'Application Bolovens, Programme of Capitalisation in Support to Rural Development – Implementation Point Boloven Plateau)

Annex 2 : Maps

Figure 3: Map – Relief and transportation network

Source: Messerli et al. (2008, 7)

Figure 4 : Map – administrative division

Source : Messerli et al. (2008, 5)

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