

Planted Forests and Trees Working Papers

Proceedings of the regional workshop "Towards Sustainable Management of Planted Forests"



by Linda M. Rosengren February 2008





Forest Resources Development Service
Forest Management Division
Forestry Department

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The purpose of these papers is to provide early information on on-going activities and programmes, and to stimulate discussion.

Comments and feedback are welcome.

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1. Background

Recognizing the economic, social, cultural and environmental importance of planted forests, Governments and other stakeholders asked the United Nations Food and Agriculture Organization (FAO) to prepare, together with collaborating partners, a set of principles, guidelines and key considerations in support of the policy, legal, regulatory and technical enabling conditions for planted forests management. An official request from the FAO Member States was made at 17th COFO in 2005. The Voluntary Guidelines for Responsible Management of Planted Forests were derived through an extensive multi-stakeholder process coordinated by FAO over a period of two years. Experts in planted forests from Governments, the private sector (corporate and smallholder), non-governmental (social and environmental) and intergovernmental organizations and academics were involved in the process.

The 18th COFO in 2007 commended FAO for facilitating the multi-stakeholder process to develop the Voluntary Guidelines on Responsible Management of Planted Forests and recommended that FAO work with Members and partners, including the private sector, forest owners and environmental NGOs towards the implementation of these Voluntary Guidelines.

The Voluntary Guidelines for Responsible Management of Planted Forests is a tool for improving planning, management and monitoring of planted forests and to help in balancing the trade offs between institutional, economic, political, social, cultural and environmental aspirations and values.

The scope of the guidelines is global: they may be adapted and applied to planted forests in all ecogeographical zones and to countries, regions and landscapes in all stages of socio-economic development. Acceptance and implementation of the Voluntary Guidelines is not legally binding.

The Voluntary Guidelines do not replace existing national or international laws, commitments, treaties or agreements. Rather, they establish a framework supporting dialogue in the formulation of policies, laws, regulations and strategic and management plans that, in turn, will help improve enabling conditions and enhance capacity and capability in planted forests management.

The objectives of the Voluntary Guidelines are to:

- Promote the positive contribution that planted forests can make to meeting people's livelihood needs, including food security, the production of wood and the safeguarding of environmental values;
- Codify generally accepted principles for strengthening the policy, legal and institutional enabling framework for sound investment in and management of planted forests, including the economic, cultural, social and environmental dimensions of sustainable forest management; and
- Contribute to an improved understanding of planted forests, in order to aid the formulation and implementation of national and sub-national planted forests policies and programmes.

The Voluntary Guidelines for Responsible Management of Planted Forests can be viewed on the following FAO websites:

- About the Process: http://www.fao.org/forestry/site/plantedforestsguide/en/
- Voluntary Guidelines Document: http://www.fao.org/docrep/009/j9256e/j9256e00.htm

2. Activities

The regional multi-stakeholder workshop "Towards Responsible Management of Planted Forest" was carried out in Chiang Mai, Thailand 21st to 24th January 2008. The workshop was the second phase of the preparation for implementation of the Voluntary Guidelines for Responsible Management of Planted Forests. The first phase of the process was a multi-stakeholder process at country level that sensitized the persons attending the regional multi-stakeholder workshop on the Planted Forest Voluntary Guidelines. The workshop gathered multi-stakeholder representatives from four countries, China, Lao PDR, Thailand and Vietnam. Each country formed a delegation consisting of representatives from the government (central and provincial), the industry (smallholder and corporate), NGOs (social and environmental) and the scientific and academic sectors. The full list of participants is appended as Annex II.

The workshop was carried out by FAO HQ/Forestry Department (FOMR/NFP-facility) in collaboration with FAO Asian-Pacific Regional office. The Asia Pacific Association of Forestry Research Institutions (APAFRI) co-ordinated the administrative and logistical arrangements prior to and during the workshop.

The workshop documents are to be found at the following URL-address: http://www.fao.org/forestry/webview/pageview.jsp?pageId=53832&geoId=-1&langId=1

3. Objectives

The objective of the workshop was to: i) orient/sensitize different stakeholders to the principles and applications of the voluntary guidelines as a planning, management and monitoring tool in policy, legal and technical work; ii) discuss the institutional, economic, social and cultural, environmental and landscape dimensions and how to balance the trade-offs between the different contexts; iii) analyse problems requiring attention; iv) identify priority areas that need to be addressed v) prepare log frames to detail impacts, outcomes, outputs, activities, stakeholders, indicators and assumptions; vi) and review follow-up actions and funding to develop a programme or project to strengthen planted forests development.

4. Outcomes

The anticipated outcomes to be worked upon by the participants on their return to their countries were to achieve: i) greater stakeholder participation; ii) more clear and consistent planted forest policy, legal and regulatory frameworks; iii) more balanced planning to take into account all dimensions of planted forests; iv) improved field practices; v) enhanced contribution of planted forests on the wider landscape.

5. Outputs

The workshop provided three main outputs for each participating country; i) a synthesis, ii) an action framework and iii) a logical framework. The process and the results are described below.

5.1. The country syntheses

Prior to the workshop the participants filled in a questionnaire about their view of the planted forests sector. The questionnaire was based on the framework of the principles and the guidelines listed in the Planted Forest Voluntary Guidelines. Following a multi-stakeholder process in country each of the four participating countries prepared a synthesis outlining the main results of a questionnaire highlighting the perceived strengths, weaknesses, threats, recommended action and potential sources of funding. The country syntheses are to be found in Annex III.

Each country presented their synthesis on the first day of the workshop. In the boxes below a summary of each of the four countries' syntheses is presented.

Even though the planted forest sectors in the four participating countries are very different with regard to forest tenure, investment structure, political engagement etc. there are, however, a number of strengths, weaknesses and threats that the four countries have in common.

Common weaknesses:

- lack of land use and concession planning;
- inconsistent and unclear policies, laws and regulations;
- inadequate transfer and application of scientific and technical knowledge;
- inadequate delivery of social and cultural, environmental and economic benefits;
- limited range of species and poor site/species matching;
- incentives not always successful;
- insufficient stakeholder respect and trust;
- lack of codes or guidelines for planted forest management;
- poor quality genetic stock;
- insufficient recognition of NWFPs and environmental and social services from planted forests;
- insufficient consideration of markets that translated into low returns;
- dependence on short rotation (fastwood) planting;
- lack of resources (credit, knowledge) among smallholders.

Common strengths:

- mobilization of smallholders to plant trees (particularly in China and Vietnam);
- planted forests are a priority in Government strategic and policy frameworks and programmes;
- increased international donor commitment;
- reform of land and crop tenure rights and obligations (particularly in China);
- increased acceptance of participatory approaches involving stakeholders (particularly communities):
- dynamic smallholder sectors (primary and secondary industry);
- the smallholder sector contributes directly to sustainable livelihoods and poverty alleviation;
- emerging corporate private sector investment (improved genetic stock, knowledge and technology);
- vibrant industries based upon planted forest raw material supplies;

- Planted forest contributes to rehabilitation of degraded lands, protection of soil and water, combating desertification and functions as carbon sinks;
- increased market acceptance of planted forest products;
- improved outreach through networking and media.

Common threats:

- soil degradation and loss in nutrients from the planted forest lands;
- susceptibility of monocultures to pests and diseases;
- susceptibility to forest fires;
- poor silviculture;
- insufficient investment returns and insufficient social and environmental benefits;
- lack of receptiveness to landscape approach;
- lack of investment in research and development;
- short versus long rotations;
- exotic species versus native;
- woodchips/fibre versus saw logs.

Box 1. – China résumé of synthesis

Background - China has the world's largest planted forest area (70 Million ha according to FRA2005). The major part of the planted forest tenure is managed by collectives; a fifth is directly owned and managed by the state. The Chinese planted forest market is mainly dominated by domestic investors. China has a strong productive planted forest sector but also an important area of protective planted forest (rehabilitation of degraded land and combating desertification).

China had pinpointed the high afforestation and reforestation rate and mobilization of smallholders and agro forestry as China's **strength** in the planted forest sector.

China pinpointed the following issues as the main **weaknesses** in their planted forest sector:

- Lack of scientific planning and transfer of knowledge and technology, especially concerning land-use planning (recognition ecological zones, soil type, topography, purpose etc.);
- Competition between land-use rights is resulting in conflicts between forestry and agriculture, smallholders and large investors, natural forest and planted forests;
- Production techniques are considered as poor, which has led to low productivity due to poorly or over stocked areas;
- A high proportion of broad leaved species are being planted in comparison with coniferous forest;
- Lack of trust and communication between groups is fuelled by the fact that participatory approaches are difficult to implement in China.

China pinpointed the following issues as the main **threats** in their planted forest sector:

- Poor management of natural resources i.e. i) degradation of forest soils, ii) disease and pests, iii) forest fires, iv) environmental pollution, v) loss in water resources, vi) reduction in biodiversity as a consequence from planting too homogenous stands.
- Until know economic benefits have been over emphasised on the costs of environment and social aspects.
- The services of the larger landscape have not been recognized.

Box 2. - Lao PDR résumé of synthesis

Background – Lao PDR is experiencing a third tree plantation boom. Lao PDR reported on 224,000 ha of plantations in FRA2005. The area has, however, expanded significantly (ca. 50,000 ha) since 2005.

The planted forest market is mainly driven by foreign trans-national investors establishing eucalyptus plantations. Also local farmers are planting trees but mainly rubber and teak. The land is owned by the government who gives out concessions. Requested land area investment proposals with the intention to establish plantations are now close to 2 Million ha. The Government has temporarily suspended new concessions meanwhile the Government is reviewing the concession approval process and field activities of the existing concessions. There is concern that the Government is not well prepared or equipped to manage and control investment in plantations. Rules and regulations concerning investment appraisal, selection of land for concessions including consultation with local villages, monitoring of actual investment are not fully developed or enforced. Consequently there are many cases of conversion of rich forest or village forest land, no replanting activities after logging/clearing and very low concession fees.

Lao PDR has a number of features suitable for investment i.e. suitable climate and sites, low population density, availability of forestry area that can be used for planting trees, flat or undulating terrain, an existing road infrastructure that is gradually being upgraded, closeness to large markets in neighbouring countries, low costs for land lease, competitive cost for labour and inputs.

Lao PDR pinpointed the following issues as the main **strengths** in their planted forest sector:

- Well managed planted forests contribute to i) improved local community livelihoods, ii) assisted degrade land rehabilitation, and iii) replacing naturally occurring teak;
- Private sector intellectual property has boosted technical knowledge in Lao PDR;
- The increased planted forest area has contributed to a i) increased forest cover and ii) an
 improved local infrastructure and community facilities i.e. schools and community
 centres.

Lao PDR pinpointed the following issues as the main **weaknesses** in their planted forest sector:

- Poor long term performance and misguided concessions as a consequence of
 - i) lack of consideration of environmental impacts,
 - ii) species and site selection not adequately addressed,
 - iii) lack of understanding of genetic improvement,
 - iv) lack of understanding of international markets
 - v) lack of community consultations,
 - vi) NTFP not integrated in the planning and management. Over half of rural communities are below the poverty line, which makes NTFP very important.

Lao PDR pinpointed the following issue as the main **threat** in the planted forest sector:

• Inadequate R&D especially concerning diseases and fire spread due to more eucalypts being planted.

Box 3. – Thailand résumé of synthesis

Background – Thailand has an area of 3 Million ha of plantations (FRA2005) and another 2 Million ha of rubber plantations. Plantations were originally established by the Government. Recently, farmers and private investors have started to plant forests. All forests in Thailand are owned by the State whereas trees established on private lands are private property. Since logging in natural forests is banned, timber production in Thailand has shifted from natural forests to planted forests, particularly teak and rubber.

The planted forest investment sector is mainly domestic. The sector has progressed slowly due to a series of constraints. Most farmers are poor and indebted and therefore, they have to obtain quick returns, which make planted forest an unsuitable crop. Farmers hesitate in investing in timber plantations because of the following reasons: (a) no proper credit facility is available, (b) forestry species are competing with other cash crops such as cassava and sugar cane, (c) the registration problem of reserved species at the time of harvesting represents a source of uncertainty, and (d) some species such as neem have limited markets.

Thailand pinpointed the following issues as the main **opportunities** in the planted forest sector:

- The potential of the planted forest sector in the contribution to poverty alleviation;
- The potential of using marginalized land;
- Expansion of non timber products both for domestic and international markets;
- The planted forest sector can enhance environmental services through payment mechanisms to growers and managers.

Thailand pinpointed the following issues as the main **weaknesses** in the planted forest sector:

- The main constraint was found in the institutional setting in the form of:
 - i) lack of regulatory framework;
 - ii) lack of coherence between public policies combined with;
 - iii) institutional uncertainty related to public forest administration.
- The second main constraint was found to be in information and education in the form of
 - i) lack of coherent support to communities and private forest sector to manage forest resources;
 - ii) lack of systematic strategies for human resource development and extension concerning management techniques.

Box 4. – Vietnam résumé of synthesis

Background – The forests of Vietnam have dramatically decreased during the last 60 years. The forest covered area is however recently increasing. Vietnam had 2,7 Million ha of planted forest in 2005 (FRA2005), occupying around 20% of the current forests. In 1998, the "Five Million ha Reforestation Program" was launched with a target to plant 5 million ha of forests by 2010, restoring the forest cover to 43% (Forestry Department 2001). The program aims not only to reforest, but also to protect existing native forests.

The planted forests in Vietnam are distributed unequally throughout the country, with the most area in North-East Region, the Northern Central Region, and the Coastal Plains Region. In these areas, the wood processing sector has been developed, and made a great contribution to the local economy. By 2005 half of the planted forests area was under the management of the Government while the other half was under the management of mostly smallholder farmers and some private companies.

The wood and NTFP market are becoming increasingly important to the Vietnamese economy. Both the domestic use and the export are increasing. There is a high competition between wood chip and paper production with the furniture industry.

Vietnam pinpointed the following issues as the main **strengths** in the planted forest sector:

- The Government has paid efforts to develop planted forests in the country i.e. the new "Five Million ha Reforestation Program" and the "Forest Development Strategy 2006-2020", in which planted forest development will play a very important role;
- Innovation of good species using new techniques;
- The media network is developing in order for the local communities to learn how to apply new knowledge and techniques;
- The market for planted forest products has accelerated recently;
- Many foreign and private companies and enterprises are interested in finding suitable forest land for establishing new plantations. Many international customers are now requiring that products from planted forest should have international certificates, which functions as an incentive for the central and provincial government and larger forestry companies to pay attention to policy and efforts to improve their forest management.

Vietnam pinpointed the following issues as the main **weaknesses** in the planted forest sector:

- The investment for planted forests is low, especially the money to protect forests;
- Too short rotations due to a need for quick returns and the very high loan rate from the bank;
- There is a lack of information on management techniques and the market intelligence (domestic and export), especially in more remote rural areas.

Vietnam pinpointed the following issues as the main **threats** in the planted forest sector:

- The exotic species and even age planted forests can attract diseases and pests;
- Insufficient environmental protection can lead to soil erosion and land degradation.

5.2. Action frameworks and logical frameworks

The four country groups developed two main outputs during the workshop; an action framework and a logical framework. The participants prioritized problems critical to achieving sustainable planted forests sector in their countries by brain storming and discussions in breakaway country groups. After agreeing on priority areas the groups developed actions and logical frameworks for these priority areas. These frameworks will form the basis for future implementation in the form of 3-5 years project, programme and strategic proposals upon the participants' return to their countries.

Even though the planted forest sectors in the four participating countries are very different with regard to the planted forest area, forest tenure, investment structure, political engagement etc. there were common areas that the four countries pinpointed as most important to address. Especially good governance, effective organization capacity, recognition of the market, recognition of social and cultural values and services, improved transfer of knowledge, capacity building in sustainable management of planted forest, stronger multi-stakeholder participation, recognition of the landscape approach and a need of planted forest guidelines were pinpointed to be crucial to address in order to achieve a more sustainable planted forest sector.

The action and logical frameworks are detailed in Annexes IV and V.

6. Follow-up activities

The importance of the following-up activities was stressed during the last day of the workshop. The workshop was only the beginning of the implementation process that will continue during the coming months and years. The participants were given guidance in funding opportunities for technical support. Even though FAO is mainly a knowledge based organization FAO offers some funding possibilities (TCP, GCP and UTF proposals, NFP Facility). The countries were however advised to also pursue opportunities with;

- government programmes (central/national, sub-national),
- international agencies (FAO, IFAD, Asian Development Bank, the World Bank),
- bilateral donors (Austria, Italy, Germany, Korea, France, Netherlands, Finland, USA, European Union, Sweden, Norway, Japan etc.),
- the private sector (international and national investors)
- NGO's (WWF, IUCN, CARE, OXFAM, Winrock, Ford Foundation, CIDSE, Rainforest Alliance etc.)

In order to support the countries in the implementation process of the Planted Forest Voluntary Guidelines a follow-up workshop will be arranged in April 2008 in Hanoi, Vietnam, in connection with the Forestry Week at the Asian-Pacific Forestry Commission.

7. Conclusions

The first step of the implementation process of the Planted Forest Voluntary Guidelines in China, Lao PDR, Thailand and Vietnam was taken during the workshop "Towards Responsible Management of Planted Forests". The participants outlined a detailed plan on how to address priority areas in order to balance trade-offs between institutional, economic, social and cultural, environment and landscape dimensions as well as how to strengthen sustainable livelihoods and land-use. good governance, effective organization capacity, recognition of the market, recognition of social and cultural values and services, improved transfer of knowledge, capacity building in sustainable management of planted forest, stronger multi-stakeholder participation, recognition of the landscape approach and a need of planted forest guidelines were pinpointed to be crucial to address in order to achieve a more sustainable planted forest sector.

The anticipated outcomes to be worked upon by the participants on their return were to achieve: i) greater stakeholder participation; ii) more clear and consistent planted forest policy, legal and regulatory frameworks; iii) more balanced planning to take into account all dimensions of planted forests; iv) improved field practices; v) enhanced contribution of planted forests on the wider landscape.

According to the evaluation of the workshop the workshop was perceived as beneficial to the participants work. 90% of the participants found the workshop content excellent or very good. The main results of the evaluation are presented in Annex VI.

The workshop provided a neutral meeting point for the participants from the four countries to learn and exchange knowledge. A need of a stronger cooperation between the countries was recognized in order to avoid reinventing the wheel. The possibility for study tours between the countries to stimulate the transfer of knowledge and technology was emphasized.

The ball is now in the hands of the participants to pursue the implementation of the Planted Forest Voluntary Guidelines. It is strongly suggested that the countries request support from FAO and other donor agencies for technical support and funding opportunities.

Annex I. Agenda

"Towards Responsible Management of Planted Forests" Chiang Mai, Thailand, 21-24 January 2008

Monday 21^{st} January 2008 - Introduction

8:30 - 9:00	Enrolment in Crystal room
	Dr. Sim Heok-Choh & Ms Syuqiyah Abdul Hamid
9:00 – 9:15	Opening of Workshop
	Patrick Durst
9:15 – 9:30	Presentation of participants
	Patrick Durst
9:30-10:00	Setting the wider scene and objectives & discussion
	Jim Carle
10:00 - 10:15	Overview and outlook of the planted forest sector in the region
	Patrick Durst
10:15 – 10:25	Administrational & logistical issues
	Dr. Sim
10:25 - 10:45	Break
10:45 - 11:00	The program of the week
	Linda Rosengren
11:00 – 12:00	Voluntary Guidelines for Responsible Management of Planted Forests
	Linda Rosengren
12:00 – 13:00	Lunch in the hotel restaurant
13:00 – 13:30	Presentation of synthesis of the results of the questionnaire
	- China
	Session chaired by Patrick Durst
13:30 – 14:00	Presentation of synthesis of the results of the questionnaire
	- Lao PDR
14:00 – 14:15	Break
14:15 – 14:45	Presentation of synthesis of the results of the questionnaire
	- Thailand
14:45 – 15:15	Presentation of synthesis of the results of the questionnaire
	- Vietnam
15:15 – 15:45	General discussion and questions
	Chaired by Patrick Durst
19:30 →	Welcome dinner

Tuesday 22nd January 2008 – Analysis phase

8:30 - 8:40	Opening of the day		
	Ms. Fan		
8:40 - 8:50	Summary of syntheses		
	Jim Carle		
8:50 – 9:15	The principles		
	Jim Carle		
9:15 – 9:45	Analysis phase		
	Linda Rosengren		
9:45 – 10:00	Break		
10:00 -12:00	Group work		
	Facilitated by: Jim Carle, Pat Durst, Fan, Dr. Sim, Linda Rosengren		
12:00 - 13:00	Lunch in hotel restaurant		
13:00 – 15:00	Group work		
15:00 – 15:15	Break		
15:15 – 16:15	Group work		
16:15 – 16:30	Group presentation of the day's work: China		
	Session chaired by Ms. Fan		
16:30 – 16:45	Group presentation of the day's work: Thailand		
17:15 – 17:30	Conclusions of the day and discussion		
	Chaired by Ms. Fan		

Wednesday 23rd January 2008 – Proposing action – Logframe

8:30 - 8:45	Opening of the day
	Jim Carle
8:45 – 9:15	Group presentation of the day's work: Vietnam
9:15 – 9:45	Group presentation of the day's work: Lao PDR
9:45 - 10:10	Farm Forestry Toolbox – Help for managing trees
	Andy Warner
10:10 - 10:30	Logframe
	Linda Rosengren
10:30 - 10:40	Break
10:40 - 12:00	Group work
	Facilitated by: Jim Carle, Fan, Dr. Sim, Linda Rosengren
12:00 - 13:00	Lunch
13:00 – 15:00	Group work
15:00 – 15:15	Break
15:15 – 17:00	Group work
17:00 – 17:15	Conclusions of the day and discussion
	Chaired by Jim Carle

Thursday 24th January 2008 – Presentation of Logframes & Follow-up

8:30 - 8:40	Opening of the last day
	Jim Carle
8:40 – 9:00	Group presentations – China
9:00 - 9:30	Group presentations - Lao PDR
9:30 - 10:00	Group presentations – Thailand
10:00 - 10:15	Break
10:15 - 10:45	Group presentations - Vietnam
10:45 – 11:15	Follow-up actions & Funding opportunities
	Jim Carle
11:15 – 11:45	NFP Facility
	Ms. Fan
11:45 – 11:55	Evaluation
11:55 – 12:00	Closing
12:00 - 13:00	Lunch in the hotel restaurant

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Annex III. Syntheses

1. Synthesis of results of the questionnaire in China

On Nov. 14th, 2007, on the basis of accepting the invitation from FAO the national multi-stakeholder group of planted forest was established. The members of the multi-stakeholder group are Dr. Liu Daoping (Chief in Quality Management Office of Afforestation Department under The State Forestry Administration, P.R.China), Dr. Qin Yongsheng (Programme manager, Beijing forestry and parks department of international cooperation), Mr. Xu Zhijiang (Director, International Cooperation Office in Yunnan Provincial Forestry Bureau), Wu Shengfu (General Manager / Director, Green Panel Consulting/Marketing Dept. of China National Forest Products Industry Association), Dr. He Youjun (Deputy Director, Research Department of Forestry Policy from Chinese Academy of Forestry), Mr. Zhou Zhifeng (Department of Resources Inventory and Planning, SFA) and Dr. Wang Lianchun (Beijing Forestry University).

On Dec. 22th, 2007, the multi-stakeholder meeting was hold in Jinglin Plaza, Beijing. In the meeting, Mr. Liu Daoping (from State Forestry Administration) was elected as the national focal point.

Overview of planted forest in China

In the past decades, the planted forest area has rapidly expanded and has been a priority of the Chinese government. The results of the sixth national forest inventory (1999 - 2003) show that the total forest areas had reached 175 million ha and the stocking volume 12.456 billion m³. The forest coverage had increased from 8.6% during the time of the foundation of People's Republic of China to 18.21% in 2003.

- Planted forest areas: China has the largest area of planted forest in the world with the area of 70 Million ha, taking up 31.5% of the forested land, and the stocking volume of 1.5 billion m³. China has doubled both the forest area and the stock volume during the last 20 years.
- Tenure: 8.9 million ha of the planted forest *lands* are owned by the state (taking up 16.7% of total planted forest area), and 44.63 million ha by collectives (83.3% of total planted forest area); in terms of *forest and tree tenure*, 8.9 million ha of planted forest owned by the state, 22.35 million ha by collectives and 22.01 million ha by non-state. Planted forest is mainly owned by collectives and non-state.
- Forest category: timber forest of 23.18 million ha, protective forest of 8.12 million ha, commercial forest of 19.31 million ha, bamboo forest of 1.65 million ha, fuelwood forest of 0.48 million ha and special-purposed forest of 0.51 million ha. There is a predominance of timber forest and commercial forest in planted forests.
- Distribution: 19.81 million ha, taking up 37.2% of the national total planted forest area is situated in South Collective Forest Region, in Guangxi, Guangdong, Hunan, Fujian and Sichuan. This area contain 630 million m³ which corresponds to 41.8 % of the total stocking.

Perceived strengths in planted forest management

- High afforestation rate, large planted forest area, and an important contribution to forest vegetation recovery worldwide.
 - i) The total forest plantation area in the world is up to 186.73 million ha, while the area in China is up to 53.26 million ha, taking up 28.52% of total area in the world.
 - ii) Between 2000 and 2005, the average annual increased forest plantation area of the world was 2.8 million ha, while China increased 1.297 million ha annually.
- Push the development of forest plantation through the activity of voluntary planting in the whole country. In the past twenty years, 49.2 billion trees had been planted by 10.4 billion people.
- As the largest plantation countries in the world, China has implemented a series of important policies and nationwide afforestation and reforestation programs since 1970s.
 - i) The Three North (Northwest, Northeast and North China) Shelterbelt Forests Program (Since 1978) has afforested a total area of 23.74 million ha.
 - ii) The national plain greenery program started since 1988 has afforested an area of 7.1 million ha.
 - iii) The Yangtze River basin shelterbelt forest construction program (Since 1989) has afforested an area of 8.32 million ha.
 - iv) The costal shelterbelt forest system construction program launched in 1991 has afforested an area of 3.864 million ha.
 - v) The conversion of sloping lands program launched in 1999 has afforested an area of 24.27 million ha.
 - vi) In August, 2007, a decision on continuing the slopping lands program was taken by Chinese government (ca. 430 billion yean is allocated for the program).
 - vii) 4.9 million has of plantation has been established in the framework of a fast growing and high-yield forest plantations program.
- land tenure reform in various types of forests, including collective forest, state forest and state forest farm, and the implementation of Protocol of Property Law are aiming to clarify the ownerships, rights and obligations of these forests
- The sector is following the existing national and international laws, commitments, treaties and agreements.
- Participatory approaches are being encouraged.
- Economic, social and cultural value is being considered in the planted forest management.

Perceived weaknesses in planted forest management

- Lack of scientific and reasonable development planning for planted forest land-use planning to identify the most suitable areas and species in terms of the ecological zones, soils, topography, purpose, mechanism of growing etc. This is currently determined by the market.
- Low planted forest quality and productivity, due to too high or too low density and pure stand still exist. For example, stocking volume of forest is 84.73 m³/ ha at whole country, however, the stocking volume of planted forest is 46.59 m³/ ha.

Item	Area (10 ⁴ ha)	Proportion	Stocking volume (10 ⁹ m ³)	Proportion	Stocking volume in unit area (m³/
Nature	11576	68.5%	105.9	87.6%	95.87
forest					
Planted	5326	31.5%	15	12.4%	46.59
forest					

- Simplified tree species composition and structure, limited distribution,
- Overweight of proportion of planted broad-leaved forest than planted coniferous forest;
- Forest management schemes are difficult to implement;
- Incentive mechanism for sustainable management of planted forest not fully established;
- Competition for land-use rights is resulting in conflicts between forestry and agriculture, smallholder and large investors and national and foreign companies, native and planted forest;
- Participation approaches have been introduced in planted forest management schemes, but is difficult to implement in practice in China;
- Transfer of knowledge and technology in planning, management and monitoring of planted forests are needed particularly, particularly improved genetic stock, nursery practices, silviculture and market intelligence for farmers, village/community plantings and national companies;
- The majority of land ownership are farmers and smallholders with low growth and yield, which is a problem in an area where land is a scarce resource;
- Lack of platforms for communication, in order to achieve understanding and trust among different multi-stakeholder groups;
- Lack of voluntary guidelines of responsible management of planted forests at regional, provincial and county level.

Potential threats in planted forest management

- Soil degradation in forest land;
- Forest stands are seriously haunted by pests, diseases and forest fires;
- Reduced biodiversity caused by homogeneous stands;
- Ability of plantation to adapt to environment pollution and climate change become weak because of the fragility of planted forest ecosystem.
- A tendency to consider more economic benefits than environment and social benefits when developing planted forest.
- Insufficient recognition of landscape elements and landscape effectiveness in planted forests developments.

Recommended actions for follow-up (what, where, how, by whom)

- Increasing contribution to science research, especially in key technology (silviculture, monitoring, assessment and management): Department of Afforestation in SFA suggest the Research Institute of Forestry Policy and Information, CAF, together with forestry university and research institute, write proposal to MOST and implement in whole country.
- Develop a certification system for the planted forest sector: Scientific certification centre suggest the Research Institute of Forestry Policy and Information, CAF, together with related forestry enterprise, to make a primary study in southern tropical planted forest region.
- Establishing networks on planning, management and monitoring. Department of Afforestation in SFA suggest the Research Institute of Forestry Policy and Information, CAF, together with Department of Resources Inventory and Planning, SFA, organize and implement in whole country.
- Developing guidelines and technical code on planted forest management in China:
- As an existing partner, pursue nfp Facility support for short term stakeholder participation to develop a National Guideline for Planted Forests in China, adapted to suit the Chinese context. Department of Afforestation in SFA and FAO suggest the Research Institute of Forestry Policy and Information, CAF, together with various provincial bureaus, organize and implement in whole country, especially in four selected case sites: Hunan Province, Guang Xi Zhuang Autonomous Region and Inner Mongolia Autonomous Region.
- Prepare a TCP Project proposal "Guidelines for Planted Forests Development in China"; to transfer Scientific Knowledge and Technology. Department of Afforestation in SFA and FAO suggest the Research Institute of Forestry Policy and Information, CAF, together with forestry university and research institute, under the support by SFA, FAO and various provincial bureaus, organize and implement in whole country. (In the Southern Collective Forests region)

Potential sources of funds

- Chinese government (SFA, MOST, The Ministry of Commerce, etc.) and potential forest enterprises.
- Foreign government and related enterprises.
- International organization, such as FAO, WB, IFAD, ADB other multi-lateral and bilateral.
- NGO: WWF, GEF, GEI, etc.

2. Synthesis of results of the questionnaire in Lao PDR

Snapshot on planted forest sector in Lao PDR

- Some 146.600 ha of commercial plantations have been established.
- Plantation establishment 05/06 and 06/07 was some 35.000 ha and 25.800 ha respectively.
- Lao PDR is now experiencing its 3rd tree plantation boom.
- 3rd boom is much larger in scale and more diverse in species than the past two booms in the early 90s and 2000 respectively.
- Not only large foreign and domestic investors but also farmers converting their fallow land to rubber, Agarwood and teak plantations.
- Trans-national companies are establishing and / or looking for land for fast-growing mostly Eucalyptus plantations to feed their mills in Asia.
- Commercial plantations are a priority area for promotion of foreign investments however there is concern that the Government of Lao is not well prepared or equipped to manage and control investment in plantations.
- Rules and regulations concerning investment appraisal, selection of land for concessions including consultation with local villages, monitoring of actual investment are not fully developed or enforced.
- Consequently there are many cases of conversion of rich forest or village forest land, no replanting activities after logging/clearing and very low concession fees.
- Government of Lao is conducting a concession review of which the outcome will be a more detailed and comprehensive legal framework concerning crop/tree plantations.
- Government of Lao is also promoting and studying investment forms which benefit local people including the 2+3 system (ability to provide farmer side labour and land investment side expertise, funds and market) and has commenced integration with new regulatory framework.
- Department of Forestry created a land and forest zoning method with focus on degraded forest land for conversion with use of high-resolution satellite images.
- Actual yield from plantations is low, however increasing year by year as plantations reach maturity.
- In view of strong demand for certified teak products in the US and Europe and maturing resources in provinces, FSC group certification of small holder teak plantation has commenced.
- Trees are planted by various private entities i.e. farmers, individuals, domestic companies and multi-national companies.
- Lao Tree Plantation and Cash Crop Owners Association has been formed and will play a key role in provision of technical/market information exchange and promotion of good management practice through internal rules and dissemination of Government of Lao laws and regulations.
- Multi-national companies are expected to demonstrate technical, social and environmental performances of international standard to be models for other investors.
- Requested land area of investment proposals in plantations at the central level is now close to 2 million ha. Conflicts related to land use and concessions have been reported.
- Government of Lao has temporarily suspended new concessions, reviewing approval process and field activities of all existing concessions.

Laos Working Group Representation

- Department of Forestry;
- National Agriculture and Forestry Research Centre;
- Water Resources and Environment Administration;
- Faculty of Forestry, National University of Laos;
- National Agriculture and Forestry Extension Service;
- Land Management and Development Administration;
- Ministry of Industry and Commerce Department of Production and Trade;
- Lao Tree Plantation Association;
- WWF Greater Mekong.

Summary of the Lao Opinion Performance Analysis

Principle	Area	Adequately addressed	Needs attention	Needs substantial attention	N/A
1	Good governance	20%	35%	42%	4%
2	Integrated decision-making and multi-stakeholder approaches	24%	14%	52%	10%
3	Effective organizational capacity	19%	36%	43%	1%
4	Recognition of the value of goods and services	22%	31%	46%	0%
5	Enabling environment for investment	26%	31%	37%	6%
6	Recognition of the role of the market	24%	18%	58%	0%
7	Recognition of social and cultural values	13%	18%	69%	0%
8	Maintenance of social and cultural services	24%	28%	48%	0%
9	Maintenance and conservation of environmental services	12%	33%	47%	7%
10	Conservation of biological diversity	11%	28%	58%	3%
11	Maintenance of forest health and productivity	8%	25%	65%	2%
12	Management of landscapes for social, economic and environmental benefits	13%	28%	60%	0%

Perceived Strengths in Planted Forest Management

- Well managed plantation projects have demonstrated that they can contribute to improved local community livelihoods in Lao;
- Plantations have assisted regeneration of degraded land;
- Teak plantations in Northern Lao are providing a sustainable alternative to naturally occurring teak;
- Provides an alternative source of income to villagers and the Government of Lao;
- Private sector IP investment has boosted enhanced technical know-how;
- Improved forest cover directly contributing to FS 2020;
- Plantation development has resulted in improved infrastructure i.e. better roads, all weather access;
- International investors have also contributed to local community facilities i.e. schools and community centres.

Plantation Investment Incentives in Lao

- Climate and site condition suitable for growing of trees;
- Low population density;
- Availability of degraded forest areas that can be used for tree plantations;
- Flat or undulating terrain;
- An existing road infrastructure that is gradually being upgraded;
- Closeness to large markets in neighbouring countries;
- Low costs for land lease;
- Competitive costs for labour and inputs.

Perceived weakness in Planted Forest Management

- Lack of national guideline for sustainable plantation development;
- Misguided land concessions have had numerous negative impacts:
- Plantation establishment is not adequately managed from the perspective of environmental impacts;
- A lack of plantation monitoring and evaluation post plant has resulted in poor long term performance;
- Species site selection has not been adequately addressed;
- Lack of understanding of improved genetics and seed sources;
- Lack of community consultation;
- Plantation development has not adequately addressed the integration of NTFPs.
- A lack of understanding of international markets as resulted in a low sale price for raw material.

Potential Threats in Planted Forest Management

- Inadequate plantation R&D and lack of sound silvicultural practices has resulted in poorly formed stands with limited marketability;
- The threat of fire to plantations is significant with the expansion of Eucalyptus plantations increasing the risk of serious fire events;
- Limited scientific expertise means that attack from Pathogens and disease poses a real threat;
- Hydro dam proposals have negatively impacted on existing plantations. Both directly via inundation and indirectly via increased pressure from relocated villagers seeking timber products.

Recommended actions - what, how, where?

- Need to develop a National Plantation Code of Practice;
- Collaboration with all stakeholders including the Government of Lao;
- Develop a comprehensive Code of Practice that addresses the key requirements of all stakeholders;
- Decide on an appropriate site to commence trials;
- Conduct a detailed consultation and information dissemination/gathering exercise with targeted workshops for key stakeholders;
- National, District & Provincial levels with linkage to a working trial.

Who?

- Private plantation companies;
- Lao Tree Plantation Associations;
- Provincial and district authorities;
- Village forestry organisations;
- Farmers:
- NGOs.

Potential source of funds

- Private Plantation Companies;
- Government of Lao;
- International Organisations/NGOs;
- World Bank / ADB;
- Forestry Resource Development Fund;
- Environmental Protection Fund;
- Agriculture Promotion Bank;
- Hydro Power Investment Companies;
- Mining Investment Companies.

3. Synthesis of results of the questionnaire in Thailand

Overview of Planted Forests in Thailand

The Diagnostic Mission of ITTO reported in 2006 on a total estimated area of planted forests 2.81 mill. ha in 2000 and 2 mill. ha of rubber plantations. The main planted timber species are teak, eucalyptus, acacia and pine. No reliable statistics on wood production exist.

Plantations were originally established by the Government. In the 1990s various plantation programs with government financing were implemented. More recently, farmers and private investors have started to plant forests. All forests in Thailand are owned by the State whereas all trees established on private lands are private property. Since logging in natural forests is banned, timber production in Thailand has shifted from natural forests to planted forests, particularly teak and rubber wood and nonforest sources supplemented by imports. But planting of timber species has progressed slowly due to a series of constraints. Most farmers are poor and indebted and therefore, they have to obtain quick returns. Even a five-year rotation with eucalyptus is often too long. Many farmers apply only 3-4-year rotations with loss of timber yield as a result. Thus, they prefer to raise agricultural crops for seasonal regular revenue and tree crops are usually complementary to these sources of income. Only wealthy and large-scale farmers can wait for the returns until the timber has reach maturity. Farmers hesitate to invest in tree plantations because of the following additional reasons: (a) no proper credit facility is available, (b) forestry species are competing with other cash crops such as cassava and sugar cane etc. which are being actively promoted, (c) the registration problem of reserved species at the time of harvesting represents a source of uncertainty as it might be hard to prove that the wood is from a planted tree and not from a natural forest from where it is banned to log, and (d) some species such as neem have only a limited market.

The main results of questionnaire

Five persons from Thailand filled in the questionnaire about the stakeholders' perception of the planted forest sector performance. According to the Figure 1., the economic and social/cultural principles were perceived as weakest and the environmental principles the strongest.

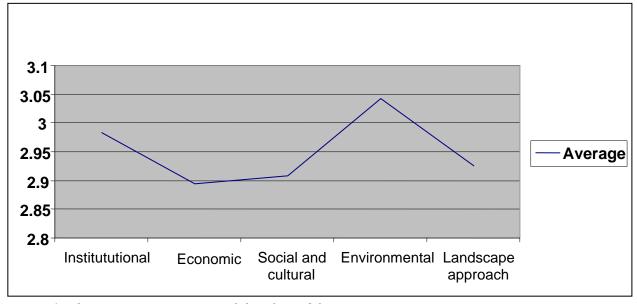


Figure 1. The average perception of the planted forest sectors.

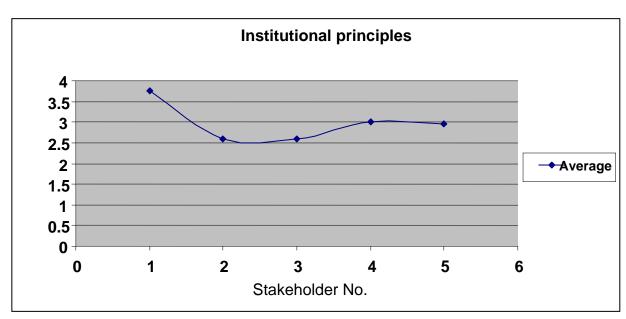


Figure 2. Perception of the stakeholders on the Institutional principles.

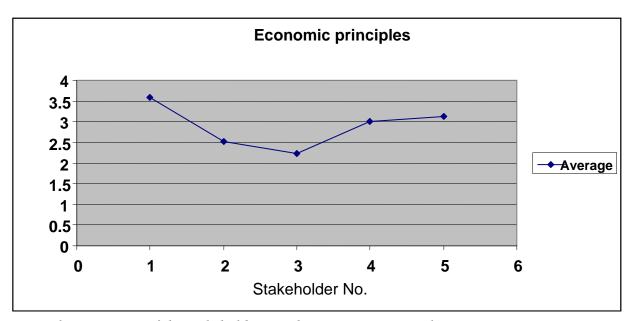


Figure 3. Perception of the stakeholders on the Economic principles.

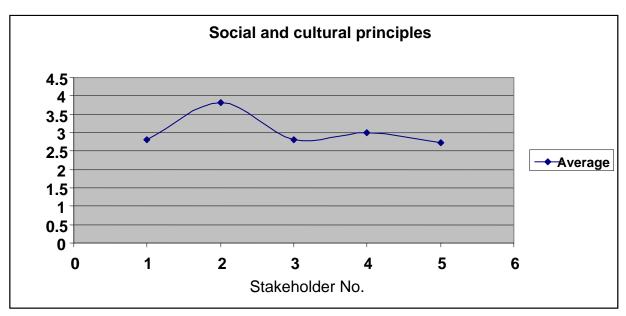


Figure 4. Perception of the stakeholders on the Social and Cultural principles

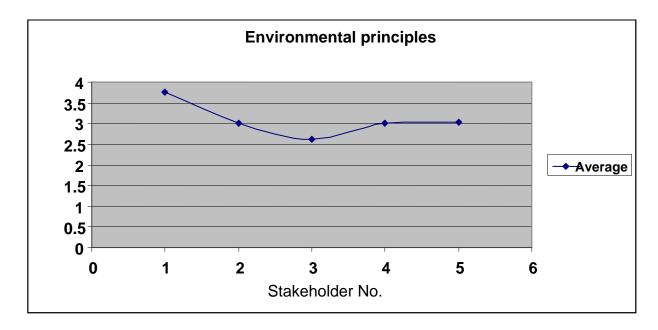


Figure 5. Perception of the stakeholders on the Environmental principles

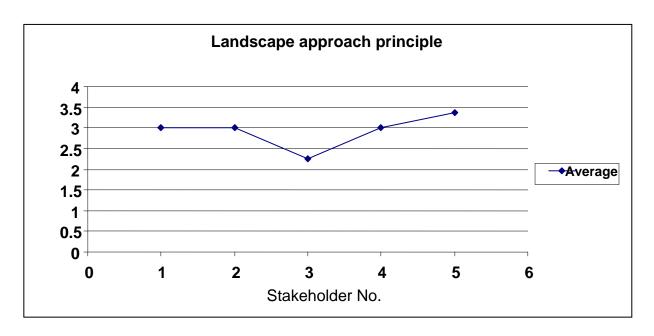


Figure 6. Perception of the stakeholders on the Landscape approach principle.

Future Vision

The following elements could constitute possible elements for the future strategic vision of planted forest management in Thailand:

- Community forests established with a secured usufruct/tenure rights; most industrial wood obtained from plantations and less dependence on rubber wood;
- Efficient forest product market with adequate transparency;
- Bamboo and rattan resources brought under systematic management and sustainably utilized;
- Planted forest environmental services for mitigation of climate change, biodiversity, soil and water conservation enhanced and, as appropriate, remunerated;
- A firmly grounded forest policy process in place based on NFP principles;
- Decision-making based on adequate information;
- Forest communities and forest owners effectively organized;
- Civil society well organized and educated on forestry;
- Royal Forest Department should take a more active role to promote strengthened coordination between the agencies involved in rubber planting and utilization of latex and rubber wood;
- The obligation of transit permit should be removed from teak logs from thinnings in areas outside forest reserves. At a later date, regulation of harvesting mature planted trees could be reconsidered in the light of then prevailing enforcement situation;
- Wood measurement practices should be further developed and promoted to protect sellers' interests;
- The Government's role in mitigating market risks related to private sector plantation investment should be focused to the following measures: (i) arranging adequate credit facilities, (ii) improving market transparency, (iii) promoting diversification of outputs, (iv) developing measurement and grading systems for timber, (v) supporting organization of producers, and (vi) promoting of landowner-industry partnerships.
- A government-backed minimum price scheme should not be put in place;
- Feasibility of establishing a special forest fund for community forestry and smallholder plantations development using the existing banking institutions should be studied.

Main Constraints

- the bottlenecks of the regulatory framework;
- lack of coherence between public policies;
- lack of coherent support to communities and the private sector to manage forest resources;
- institutional uncertainty related to public forest administration;
- deficient information systems;
- lack of systematic strategies for human resource development and extension (including processing industries).

Opportunities

- the potential of community forestry to contribute to poverty alleviation;
- major expansion of commercial tree planting on marginal lands thanks to Thailand's competitive advantage;
- enhancing forest-based environmental services through payment mechanisms to forest managers and owners;
- expansion of the production of non-timber forest products in high demand both in the domestic and export markets;
- public awareness on the possibilities to use planted forests for carbon sequestration.

4. Synthesis of results of the questionnaire in Vietnam

Trends in forest resources in Vietnam

The forests in Vietnam have dramatically decreased during the last 60 years. The forest area is, however, increasing recently (Table 1). Before 1945, when Vietnam was under French Colonial Rule, forests were heavily harvested for timber, pole, rubber and coffee production (Dang et al. 2001). At this time the forest area was still high and covered around 43% of the country (Table 1). From 1954 to 1975, the forests of Vietnam were severely damaged by the long war with the USA, by overexploitation and by shifting cultivation. By 1976, the total area of forests had been reduced to 11.2 million ha (forest cover 33.8%), of this area only 10% was intact forests (Lung 2001, Nhat 2001). Sine 1976, the deforestation and degradation of forests have continued due to overexploitation, shifting cultivation and expansion of agricultural land. As a result, the forest cover declined to an estimated 30% in 1985, and further to 28% in 1995 (Lung 2001).

In 1998, the "Five Million Hectare Reforestation Program" was launched with a target to plant five million ha forest by 2010, restoring the forest cover to 43% (Forestry Department 2001). The program aims not only to reforest, but also to protect existing natural forests. As a result, the forest cover of Vietnam has gradually increased. In 2006, the forest area of Vietnam was 12,874,000 ha, of which 10,410,000 ha were natural forests and 2,464 ha were planted forests, resulting in a forest cover of 38% (MARD 2007).

Table 1. Trends in forest resources in Vietnam. Unit: 1000 ha

Source: MARD 2006; 2007

Time	Natural	Planted	Forest area	Forest cover
	forests	forests	ha	(%)
1943	14,300	-	14,300	43.0
1976	11,077	92	11,169	33.0
1980	10,486	422	10,608	32.1
1985	9,308	584	9,892	30.0
1990	8,430	745	9,175	27.0
1995	8,252	1,050	9,305	28.0
1999	9,444	1,471	10,916	33.2
2002	9,865	1,919	11,785	35.0
2003	10,005	2,090	12,095	36.1
2004	10,088	2,218	12,306	36.7
2005	10,283	2,333	12,616	37.0
2006	10,410	2,464	12,874	38.0

By 2006, Vietnam had 2,463,710 ha planted forests, occupying around 20% of the current forests of the country (Table 2). The planted forests in Vietnam are unequally distributed throughout the country. The Red River Delta Region and Central Highlands plant less forest compared with other regions of the country. The North-eastern Region, the Northern Central Region, and the Coastal plains Region have planted a great deal of forests. In these areas, a wood processing sector has been developed, which is making a great contribution to the local economy.

Table 2. Planted forests in comparison with natural forests in Vietnam in 2006. Unit: 1000 ha.

Source: MARD 2007

	Region	Total	Forest area	Natural	Planted	Forest
		natural		forests	forests	cover
		land area				(%)
1	North-western region	3.741.188	1.508.740	1.399.167	109.573	40,3
2	North-eastern region	6.603.223	3.164.873	2.270.803	894.070	47,9
3	Red River Delta	1.260.856	95.819	47.299	48.520	7,6
	region					
4	Northern central	5.148.156	2.611.525	2.076.940	534.585	50,7
	region					
5	Coastal plains region	4.377.281	1.775.770	1.444.856	330.914	40,5
6	Central highlands	5.446.592	2.976.951	2.824.837	152.114	54,6
7	South-eastern region	2.361.266	431.135	286.192	144.943	18,3
8	South-western region	4.034.176	309.037	60.045	248.991	76,6
	Total	32.972.738	12.873.851	10.410.141	2.463.710	38,0

Forest protection

By the year of 2003, Vietnam had established 128 protected areas, covering 2,228,149 ha, equalling to 11.7% of total forest land, and 6,7% of total natural land area of the country (VN Government 2003).

Apart from the protected areas, Vietnam has established a lot of programs and projects to conserve valuable and threaten species of fauna and flora that located outside protected areas. This includes the establishment of botanic gardens, and ex situ (Nghia 2005). Recently, Vietnam has developed the watershed protection regime for several important basins, which may help protect forests, biodiversity and environment in those areas (Taylor & Wright 2001).

Table 3: System of protected areas in Vietnam (Forest Department 2004)

Category	Amount	Area (ha)
I. National Park	28	966.127
II. Nature Reserve Area	62	1.114.128
a) Nature Preserve Area	50	
b) Species/habitat management	12	
protected area		
III. Protected landscape or seascape area	38	147.894
Total	128	2.228.149

Planted forest ownership

By 2005, Vietnam had 2,333,526 ha of planted forests of which 1,223,646 ha (ca. 52%) was under the management of the Government. The rest of the area (1,109,880 ha) was under the management of farmers and the private sector. In the coming years the planted forest area is continuously being increased as the Government has implemented a policy of forest and forest land allocation in the whole country. According to the Ministry of Resources and Environment (2006), by the time of 2005 January, Vietnam had 1,180,465 stakeholders using forest land, of which 1,173,829 were households, 1,245 stakeholders at commune level, 1,365 economical organizations, and 3,105 other organizations.

Exported value of forest products

The exported value of wood products and NTFPs has gratefully developed during the last years. Vietnam received only 60 Million USD for forest products exports in 1996. Eleven years later, in 2007, this number was more than 2 billions USD. Vietnam is exporting forest products into 120 markets in the word, mainly in USA, EU and Japan. The forest sector is a very potential and rapidly developing industry. The industry requires, however, a great amount of wood, especially from planted forests in the coming decades (Wood and Forest Products Association of Vietnam 2007).

Table 4: Exported value of wood and NTFPs of Vietnam (1996 -2007)

Year	1996	1998	2000	2001	2002	2003	2004	2005	2006	2007
Mil USD	60,5	108,1	219,3	334	435	567	1054	1570	1970	2300

Domestic market of forest products

In 2005, Vietnam used a great amount of forest products for the domestic market. The requirement for round wood, particularly for saw logs, is in recent years increasing substantially (Table 5). The increasing demand of wood provides an excellent opportunity for planted forest sector. The emerging role of forest products provides an opportunity for communities to improve their living standards of and contribute to poverty alleviation in the country.

Table 5. Demand of forest products in 2003 and 2005 in Vietnam Source: Wood and Forest Products Association of Vietnam 2007

	Forest products	2003	2005
1	Wood for domestic uses (1000 m3)	7,420	10,063
1.1	Saw logs for industry and daily requirement	4,561	5,373
1.2	Small round wood for producing board and woodchip	1,649	2,032
1.3	Small wood for producing pulp power	1,150	2,568
1.4	Pole for mine	60	90
2	Exported value (Mil USD)		
2.1	Wood product	567	1,500
2.2	NTFPs	154	200
3	Firewood (mil m3)	25	25

Perceived strengths in planted forest management

The Government has paid great concern and efforts to develop planted forests in the country, of which the "Five Million Hectare Reforestation Program" is an important and ambitious program aiming to plant five million ha of forests by 2010. Recently, the Government has introduced the "Forest Development Strategy" for the period from 2006-2020, in which planted forest development will play an important (MARD 2007). Apart from these, the Government has launched a number of programs and projects aiming to increase planted forests on a national level, and to improve living standards and infrastructure in rural areas for local communities. Planted forests play an important role in terms of protecting environment and improving livelihoods in the rural areas. There are innovations emerging in silviculture providing improved species and techniques. The media network is developing, which will enable transfer of knowledge to more remote areas. The market for planted forest products is

currently developing rapidly and will require a great effort from the development of planted forests in the coming years.

Many foreign and private enterprises are interested in finding suitable forest lands for establishing new plantations. Many international customers are now requiring international recognized certification of planted forests. This makes central and provincial governments and larger forestry companies who own planted forest paying more attention to policies and efforts to improve their forest management in order to meet international standards.

Perceived weaknesses in planted forest management

- The investment in planted forests silviculture practices is low (develop proper seedling selection, thinning/pruning). Especially investment in protected forests is low.
- The minimum rotation lengths needed to receive an appropriate yield is more than eight years in order to be able to use 25-30% of the logs for sawn log for furniture. Due to the financial set up, normally the plantation owners, who mainly are local farmers, are harvesting earlier to get a return on their investment because high loan rate from the bank and for daily subsistence. The farmers cannot afford to keep the stands longer even though they realize that they would receive better returns if prolonging the rotation. Young timber with a small diameter is only suitable for pulp and paper production. The Government have little control on planted forest management activities both in terms of areas, species and the harvest time. There is little information and poor reporting at provincial level on the planted forest area owned by local peoples, species composition, what yield a year, harvest volumes per ha.
- There is a limited understanding, especially among smallholder, on the stand density and thinning practises for different purposes (protective, productive and commercial use or landscape restoration).
- There is a lack of information on the market both for domestic and export purposes, especially for local farmers who live in the rural areas with no access to useful information.
- The rotation length required is normally long, particularly for saw log production. It takes long for smallholders to get returns on their investment. This is especially difficult for the poor as they have to pay loans and other expenditures. In many areas, such as the south-eastern region, planted forests are competing with other high valuable industrial species such as rubber and pepper. In these cases the planted forest sector could not developed without suitable policies from the Government.

Potential threats in planted forest management

- As partly mentioned above, there is a high competition between wood chip and paper production
 with furniture industry in the country. Only few species from planted forest have market demand
 such as acacia, eucalyptus and pine. Native species such as Styrax, manglietia plantation area are
 now gradually being replaced by acacia mostly in the northern provinces of Vietnam due to less
 demand from the market and price;
- The increasing stands of even aged, exotic species stands will run the risk of diseases and pests. Because of the rapid development of planted forests, the owners do not pay sufficient attention to protect the environment, which can lead to soil erosion and degraded land.

Recommended actions and follow-up (who, what, how and by whom, where)

Vietnam should establish a responsible group from related fields, in which the Forest Department (under MARD) would take the lead. This group would be in charge of establishing the Voluntary Guidelines for Responsible Management of Planted Forests in Vietnam. These Guidelines should be widely disseminated through training and technical transfer to local people. It is necessary that Vietnam would monitor and evaluate the progress annually.

Potential sources of funds

Vietnam can get funds from the Government, from companies and associations both in Vietnam and from international organizations. At present, funding are made available from the Government of Vietnam, notably stated in the newly approved Forestry Development Strategy and in the past few years funding for "Five Million Hectare Programme". Many ODA funded projects focusing on plantation forest from various sources such as the WB, ADB, GTZ, KFW, Japan etc. have been implementing in Vietnam. Foreign companies operating in Vietnam and Vietnamese owned wood processing companies have interest in establishing plantation in order to secure long term supply of raw material to equilibrate investments for the processing machines and equipments.

Vietnam will need help in both in technical backstopping and funding from FAO in order to establish, implement and disseminate the Guideline in Vietnam.

Annex IV. Action framework

1. Action framework of China

Principle 1: Good governance

Principle 3: Effective organization capacity

Principle 4: Recognition of the value of goods and services Principle 6: Recognition of the role of the market

Principle 8: Maintenance of social and cultural services

Principle 9: Maintenance and conservation of environmental services

Principle	Problem	Outcome	Output	Action	Stakeholders
Principle 1: Good governance	Insufficient scientific evidence being used to weigh the risks, opportunities, costs and benefits of planted forests in relation to conservation and sustainable development	Balance planted forest development based on sound scientific knowledge	A database based on codes & evidences; Market driven industry; Effective and functioned M&E system.	Prepare the database Develop the Code Review R&D on priority problems Market analyze Build monitoring and evaluation system	1. SFA, CAF 2. Local Gov. Corp. 3. Team (Gov.+ Experts) 4. Association

Principle	Problem	Outcome	Output	Action	Stakeholders
Principle 3: Effective organizational capacity	No support services tailored to the needs of corporate (large-scale) and smallholder (small- scale) investors provided.	Better service to the corporate (large-scale) and smallholder (small-scale) investors	 gap analyze; provide practical knowledge & support; technical support& guidance 	find problems & solutions	1. SFA 2.CAF 3.Association 4. Corp.

Principle	Problem	Outcome	Output	Action	Stakeholders
Principle 4: Recognition of the value of goods and services	Inadequate decision- making support tools being developed to help in planning and monitoring the provisions of goods and services from planted forests, spatially & temporally	Deliver more timely info relating to trees, products and market.	Management and market support on technology, products development, and training	1. M&E 2. training 3. product development	1. SFA 2. Experts 3. Association 4. University
Principle	Problem	Outcome	Output	Action	Stakeholders
Principle 6: Recognition of the role of the market	Unrecognized emerging carbon trade markets and inadequate understanding on the role of afforestation /reforestation in providing carbon sinks to mitigate climate change	International approval and acceptance of the value of carbon in planted forests	Carbon credit standards and mechanisms 2.Promotion and marketing	Set up a calibration system Improve methodologies Training and capacity building	1. SFA 2. Experts 3. Association 4. University 5. Int'l organizations
Principle	Problem	Outcome	Output	Action	Stakeholders
Principle 8: Maintenance of social and cultural services	Incomplete socio- economic baselines and long-term impact assessment & monitoring mechanism on planted forests	Participation of multi- stakeholders in the process of sustainable development	Promoting participatory approach	1.Publicity 2. Training 3. Management	1. SFA 2. Experts 3. Association 4. University
Principle	Problem	Outcome	Output	Action	Stakeholders
Principle 9: Maintenance and conservation of environmental services	The voluntary certification programmes yet to be fully considered as an acceptable mechanism in addressing environmental issues	Certification may help to address the environmental issues and achieve related targets	Implementing, monitoring and evaluating the process	Certification Body (CB) shall take the full responsibility on top of the certification and training	1.CB 2.Client 3.Gov.

2. Action framework of Lao PDR

Principle 1: Good governance
Principle 6: Recognition of the role of the market
Principle 7: Recognition of social and cultural values

Principle	Problem	Outcome	Output	Action
Principle 1: Good governance	Land concessions and poor land-use planning has stalled	Concessions and land-use planning approaches are redrafted to incorporate	National and international laws, commitments, treaties and agreements are being followed.	
	the plantation sector expansion in the Lao PDR.	community and environmental aspects with effective plantation	2. Transparency, participation and recognition of the roles of non-governmental stakeholders in decision-making encouraged without coercion.	
		management principals.	3. Are current, consistent and clear enabling policies, laws, regulations, plans and processes, as well as appropriate monitoring and evaluation systems being formulated?	
			4. Guidelines for responsible management of planted forests are being formulated and implemented?	
			5. Scientific evidence is being used to weigh the risks, opportunities, costs and benefits of planted forests in relation to conservation and sustainable development.	
			6. Are enabling conditions and procedures provided in order to reward sustainable management and responsible practices.	
			7. Land tenure is recognised for land and crop tenure, access for investors (both corporate and smallholder), traditional owners, indigenous peoples, local communities and ethnic minorities recognized.	
			8. Are benefits distributed on an equitable basis to relevant stakeholders.	
			9 Are the rights of workers recognized to organize and to negotiate salaries and conditions to meet their fundamental needs.	

Principle	Problem	Outcome	Output	Action	Stakeholder
Principle 6: Recognition of the role of the market	A lack of understanding of international markets has resulted in a low sale price for raw material and a general lack of commitment from both investors and the GOL.	Competitive International market prices apply for planted forest products coming out of Lao.	1. Market Info available and intelligence monitored. 2. Economic and regulatory policies, legislative regimes, guidelines and practices created that provide for fair competition and acceptable rates of return for investors, workers and local economies (economic, competitive & fair) 3. Emerging carbon trade markets recognized and the role of afforestation and reforestation in providing carbon sinks to mitigate climate change increasingly understood 4. Recognized that the marketplace may not account for all the values that society may enjoy in planted forests	1. Determine available information sources, seek expert input, discuss with neighbouring countries, build on existing market knowledge, establishment of marketing working group, talk to Stora Enso, Burapha, Birla-Lao & Oji regarding developments of markets in Asia, Search for and understand existing market reports; consult with Lao Trade Committee, Ministry of Industry, Commerce & MAF. 2. Review the existing Forestry and Trade Laws to determine their completeness against required output, develop a Lao based planted forest cost of production data set that will provide base information for economic viability and fair trading, develop a set of guiding principals for economic viable planted forest, ensure that regulatory policies incorporate the probity principals of equity, transparency, accountability. 3. Presentation provided to key stakeholders based on recent Carbon Trading Workshop held in Vientiane. Link the planted forest guideline development with the current work on emerging Carbon Markets in Asia. How will carbon markets assist the development of a viable planted forest sector in Lao. What are the carbon market opportunities for planted forest development (afforestation / reforestation). Investigate planted forest site selection criteria against maximised carbon market potential. National acceptance of the carbon market potential. National aguidelines implemented. 4. Develop a list of planted forest benefits and associated nominal values in dollar terms based on community consultation, incorporate the secondary planted forest values into the guidelines to allow integration of society values with commercial focus, where possible.	Planted forest Investors (Stora Enso, Burapha, Oji), Lao Trade Committee, Ministry of Industry and Commerce, MAF, DOF, External Marketing Experts, Timber Processing Industries (sawmills, manufacturers), local communities/land owners, Forest Managers, NGOs

Principle	Problem	Outcome	Output	Action	Stakeholder
Principle 7: Recognition of social and cultural values	Lack of community consultation has resulted in negative community impacts and a damaged Planted Forest sector.	Planted forest development in Lao successfully integrates community values with land-use planning and ensures that concessions meet internationally responsible Planted Forest management principals.	 Local community values recognized in areas targeted for Planted Forests investments. Opportunities and capacity increased for local communities and smallholder investors to benefit through adequate planning, management and use of Planted Forests. The needs of smallholder Planted Forest investors are to be recognised in terms of tenurial rights, training, extension, research, access to markets and benefit-sharing. Planted Forest investors are required by law to provide locally engaged community personnel with training, PPE & employment conditions that meet with Internationally recognised sound labour practices for promoting good practices. Strengthen education, health care and other social services in areas adjoining Planted Forests. 	Identify community values (i.e. traditional knowledge, religious values and customary rights) and their application to Planted Forest development. Map the community values and apply these to geographical areas within Lao. Develop a GIS coverage that overlays Planted Forest priority areas with known community values as a tool for Planted Forest development. The GOL should provide opportunity for local communities to invest in smallholder forest investments and associated businesses. Determine what opportunities exist for local communities and smallholder investors. Establish a working group to conduct two way training of local communities and smallholder investors with a view to increasing capacity and integration with Planted Forest management. Consult with smallholder investors to understand their requirements. Identify appropriate expertise and capacity to conduct the consultation. Select target areas. Provide smallholders with the knowledge to operate on a commercially sound basis. Provide the smallholders with the necessary tools to operate on an independent basis. The GOL needs to secure the tenure rights of smallholders to provide them the necessary security to operate a business. Seek an expert opinion to guide, H and S, PPE & employment conditions. The GOL should review the Lao Labour Laws to determine if they meet appropriate standards. Identify short-comings in current practices. Consult with communities that have been involved with Planted Forest development (poor past practice). Planted Forest investors to provide funding towards community services as a pre-condition to Planted Forest establishment. Investors are to provide a clear management plan to undertake this work.	Planted forest Investors, MAF, DOF, External Marketing Experts, Timber Processing Industries (sawmills, manufacturers), local communities/land owners, Forest Managers, NGOs.

3. Action framework of Thailand

Principle 1. Good Governance

Principle 1: Good Governance
Principle 2: Decision Making
Principle 3: Organisational Capacity
Principle 7 & 8. Social and Cultural,
Principle 9. Environmental Services,
Principle 12. Landscape

Principle	Problem	Outcome	Output	Action	Stakeholder
Principle 1. Good Governance	Policy emphasises regulation and control and not encouragement	Clarify additional policy on encouragement - Protection separate from Promotion	Have Separate regulation for 1. Conservation and 2. Promotion	Set up Committee of Stakeholders to develop amendments to the current law so Conservation and Promotion are Separated	RFD, ALRO, Land Development Dept., NGO - Community Development, Parliament Committee, Industry, Political Party, Local Govt.

Principle	Problem	Outcome	Output	Action	Stakeholder
Principle 2: Decision Making	Lack of Co-ordination between government and Industry	Effective co-ordination and communication between Govt and Industry	Include Joint Committee and its role in the Promotion Act	Specify the membership and the role and functions of the coordinating Committee	Industry and government representatives
				2. Include formal recognition of the committee and its Functions in the Promotion Law	Industry and government representatives
		Set up a Public Organisation (PO)			

Principle	Problem	Outcome	Output	Action	Stakeholder
Principle 3: Organisational Capacity	Inadequate and out of date information - planted area, yr planted, species, regimes etc	Efficient and effective 1. data and information capture, 2. use & dissemination and 3. updating	Efficient and effective system/centre for 1. data and information capture, 2. use & dissemination and 3. updating	Set up workshop to identify 1. data required, 2. process (including updating and feedback) and the 3. budget	RFD, SPK, Dept of Agriculture, NGO - Community Development, National Stats office, Industry, Local Govt, academics, inventory consultants
	Inadequate and out of date information - technical advice for small holders and 2. Inadequate process for effective information transfer via network	Successful distribution of consistent and up to date information on silviculture, inventory and management to all stakeholders - especially small holders	Extension group with regional representatives and recommended processes to distribute up to date information on silviculture, inventory and management to all stakeholders - especially small holders	1. Set up workshop to identify i) staffing levels required and procedures to get information to all stakeholders (especially small holders) ii) type of information - field day, information sheets, demonstration areas, technical data and the iii) budget	RFD, Local Govt, Academics, tree farmers, consultant
				2. RFD to establish policy and process for a licencing system for forestry extension staff - so consistent information provided	RFD, Local Govt, Academics, tree farmers, consultant
				3. Training on a regular basis for licensed forestry extension staff - so consistent information provided	RFD, Local Govt, Academics, tree farmers, consultant

Principle	Problem	Outcome	Output	Action	Stakeholder
Principle 7 & 8. Social and Cultural, Principle 9. Environmental Services, Principle 12. Landscape	No land zoning and process to identify priority planting or forest management areas	Adoption of zoning map for tree planting with local acceptance and involvement in process	Tree planting zone Map and gazetted list of land titles in the zone	 Identify the tree planting zone and the titles for the land in the zone Identify the suitable species for regions in the zone 	RFD, ALRO, Land Development Dept., Land Dept., NGO - Community Development, Local Govt.
	Ineffective law enforcement of land use due to multi- agency responsibility	Efficient system of monitoring and penalties for non compliance	Clear criteria and measurable indicators to determine compliance	Set up Committee and Workshop to develop Criteria and Indicators and incorporate into legislation	Ministry of Natural Resource and Environment, Ministry of Interior, Land Dept., SPK,
	Lack of land owner knowledge of where to plant trees as part of appropriate sustainable land use	Successful location of trees in the landscape within the tree planting zone	Understanding by land owners of their role in the process and the suitability of species for their land	Training sessions for landowners and development of suitable information for landowners	Academics, landowner representatives, local administration, RFD
				2. Plant according to an approved plan	
				3. Monitoring to determine that suitable planting is occurring (arrow shows link to related output/action)	
	Lack of participatory planning involving local people	Strategic management plan	Involvement of all stakeholders in the development of a strategic management plan	Develop a strategic management plan for plantation establishment involving people at each level of plan (master, regional and operational plan)	National govt (cabinet), forestry planning agencies, local government, landowners at local level

Principle	Problem	Outcome	Output	Action	Stakeholder
Principle 4, 5 and 6 - Economic	Lack of funds for maintaining longer term sustainable levels of establishment of planted forests	Sustainable "revolving" fund	Long term fund	Set up committee to establish and operate fund and consider processes to develop fund	RFD, National social and economic development council, Ministry of Finance, Ministry of Natural Resources
	Negative public attitude to the use of wood products and ignorance of non wood benefits	Increasing market demand for wood products	General acceptance of wood as a desirable and sustainable resource with many applications	Develop a promotion of "wood is good" campaign with budget for approval by cabinet	RFD, Dept of Public Relations, Ministry of Education (students), Min of NRE, National Policy, Planning and Environment Office
	Confusing and inconsistent system of incentives for planted forests	Clarification of incentives and disincentives	Clear rules and regulations for the incentive system	Develop a set of clear rules and regulations for the incentive system	RFD
	Limited and counterproductive inter and intra agency co-operation	More co-operative and facilitative approach both in and between agencies	A more "level playing field" for all stakeholders and greater trust between agencies	Formalise importance of co-operation and information sharing.	RFD, Min Naturel Ressources & Environnent
				2. Establish regular workshops with senior interagency representation on mutually relevant topics	
	No clear agency responsibility for accessing and administering international funds	Effective system and administering of funds	Process to deliver successfully operating system	Set up project to develop an operational plan to successfully access and implementing international funding	RFD

4. Action framework of Vietnam

Principle 3: Effective organization capacity

Principle 5: Enabling environment for investment
Principle 6: Recognition of the role of the market
Principle 11: Maintenance of forest health and productivity

Principle	Problem	Outcome	Output	Action	Stakeholders
Principle 3: Effective organizational capacity	Improper stakeholder consultation process on decision making Dissemination/application results of research Lack of competent staff at various level Lack of effective organisation/ capacity at the local level Incompliance implementation against regulations	Improved management capacity	Proper decentralization regulation Capacity building improved Transparency in law/policy/ regulation enforcement at all levels	Review existing policy and regulation / recommendation and revise Training / workshop in management capacity	DoF Forestry legal Department Private sectors Provinces Forestry associations Farmer
Principle	Problem	Outcome	Output	Action	Stakeholder
Principle 5: Enabling environment for investment	Complicated land allocation procedure for private and foreign investors;	To encourage a better investment environment	A long-term plan on planted forest development;	Review and revise existing forest land allocation policy;	DoF Forestry legal Department
	Unstable existing policy for investors		Stable and incentive policy for investors; Speed up land allocation	Review and revise investment policy on forestry sector;	Private sectors Provinces
	Unequal competition between local and foreign investors		for investors	Establishing a long-term action plan on planted forest development;	Forestry associations Farmer

Principle	Problem	Outcome	Output	Action	Stakeholder
Principle 6: Recognition of the role of the market	Unstable market for forest products Lack of information on market (prices, commercial species) Insufficient study on raw material market Limited accessibility to market information (particularly small householders) Inconsistent regulation for auction-	Supply chain from planted forest growers to the market improved-	Provide access to available information channel for forest grower; Consistent policy and regulation for timber auction	Research on forest product market, not limited to products, timber prices, market demand, etc. Information network on market created Strengthen current policy on regulation for auction	Department of Forestry Research Institutes Companies Farmers NGOs Ministry of Trade

Principle	Problem	Outcome	Output	Action	Stakeholder
Principle 11: Maintenance of forest health and productivity	Low awareness among forest growers on forest health and productivity Insufficient research on planted forest health and productivity (silviculture practices, tree breeding, soil management and use, etc);	Health and productivity of planted forest maintained	Awareness on suitable silviculture practices and species for forest health and productivity among forest growers improved; Sufficient results from research on planted forest health and productivity available for use;	Conduct research on soil management/ silvicultural practices and tree breeding; Training / workshop on technical transfer to forest grower;	Department of Forestry Forest science institute of VN- Forestry universities Private sectors Provinces Forestry association

Annex V. Logical frameworks

1. Logical framework of China

	Design summary	Indicators	Data	Assumptions
Impact	Sustainable planted forest management			
Outcome	 Balance the institutional, economic, social/cultural, environmental and landscape dimensions of the planted forest management, Enhance the sustainable development of planted forest in China within 5 years 			- Chinese Gov., the public and private sector have a common wish to formulate, accept and implement the National Guidelines on Responsible Management of Planted
Outputs	National Guidelines on Responsible Management of Planted Forests	 National guidelines been formulated; Workshops at national and regional level be held 	-Baseline analysis, -Users' evaluations, -National guidelines, -Two participate list of workshop	T. Adapt
	Awareness education and capacity building on responsible planted forest management Pilot Projects in northern, middle and southern part of China	 3. Training courses involving multi-stakeholders be held 4. Totally 1800 ha demo site established (500 ha Protective PFs, 600 ha agro-forestry and 700 ha commercial forest) 5. Technical proposal on extension of RPFM throughout the country 	-Two documentary on workshop -Three participate list of training courses -Three documentary on training courses -Database and website on the M&E of PFM - Database of demonstrative area on social, economic and natural resources -1800 ha experimental plot	

Actions	1.1. Complete an analysis report on the planted forest management status and trends 1.2 Develop and finalize National Guidelines on Responsible Management of Planted Forest	 The draft guidelines Feedbacks of stakeholders The final guideline Documentation of national and regional workshop with 100 participants involved 	
	2.1 Organize two workshops 2.2. Organize three training courses	- Organize three training courses with over 300 multi-stakeholders	
	3.4 M&E	 Feasibility study reports be provided; Participatory forest management plan be completed 1800 ha planted forests managed according to guidelines of RPFM Progress reports on the implementation Monitoring and evaluation reports Product development and market study Develop the code of models The codes could be approved by SFA and FAO 	
	3.5 Project impacts evaluation 3.6 Models formulation	Conclusive technical proposals on extension	

2. Logical framework of Lao PDR

	Design summary	Indicators	Timeframe	Data sources	Assumptions
Impact	Sustainable Planted Forest Management	Planted forest managed sustainable	31-Dec-11	Many	The GOL gives sustainable planted forest management a priority. Funding is available.
Outcome	Concessions and landuse planning approaches are redrafted to incorporate community and environmental aspects with effective plantation management principals.	Redrafted concession and landuse planning approaches integrating effective community and environmental management into sustainable planted forest management are completed and accepted by the GOL	31-Dec-08	"GOL, WG & SC for planted forests, local community, planted forest sector, NGOs"	The GOL gives sustainable planted forest management a priority. Funding is available.
Output	"Transparency, participation and recognition of the roles of non-governmental stakeholders in decision-making encouraged without coercion."	NGS provide input to the planted forest guidelines without coercion.	Continued commitment by the WG & SC.	Surveys of stakeholders.	"Gov,t support."
	"All aspects of land concessions and land titling are reviewed by the DOF, NLMA & MAF to enable responsible planted forest expansion with concession being monitored to maintain access for local communities whilst plantation sites are appropriate and tied to land use zoning."	Redrafted concession and landuse planning approaches integrating effective community and environmental management into sustainable planted forest management are completed and accepted by the GOL	31-Dec-08	"GOL, WG & SC for planted forests, local community, planted forest sector, NGOs"	The GOL gives sustainable planted forest management a priority. Funding is available.
	Guidelines for responsible management of planted forests are being formulated.	WG provide bi monthly updates on progress	bimonthly	All stakeholders guided by the WG & SC	GOL supports the formulation of guidelines
	"Scientific evidence is being used to weigh the risks, opportunities, costs and benefits of planted forests in relation to conservation and sustainable development."	Robust scientific methods are incorporated into the guidelines and planted forest sector.	31-Dec-08	"GOL, Forest experts, WG & SC, consultants, planted forest sector."	Scientific information is available and relevant to the situation in Laos.
	National laws and agreements are comprehensive and being followed.	WG & SC undertake a field inspection to determine if national laws and agreed procedures are being adhered to at the district and village level.	Continued commitment by the WG & SC.	Surveys of stakeholders.	National laws and agreements are sufficiently constructed to allow

Action	Through the existing INGO network the WG distribute a one page summary of the Chaingmai planted forest workshop	"Summary delivered to the INGO by, meeting time agreed, ppt display given "	08-Feb-08	Working group	WG can complete the summary and has the time. Work in CM is important and supported by the GOL
	Seek input from NGOs.	The NGOs provide comment on the papers presented and have provided preliminary input.	14-Feb-08	NGOs	NGOs have time available and are interested in the project.
	Lao Tree Planting Association to consult with NGS as per the NGOs.	The LTPA has the necessary framework from the WG supported by the SC to conduct the consultation with the NGS. By end of August 2008	31 July 08 & 31 August 08	"LTPA, NGS & NGOs"	NGOs have time available and are interested in the project.
	A single point of contact.	The SC nominates a single point of contact	08-Feb-08	WG & SC	Point of contact supported
	"Consensus reached between the Gov't agencies at all levels concerning concessions and land use (How the concessions should be granted, who to, what size area, over what land classification, who shall manage the process, who grants the concessions etc) and a document produced on the consensus for distribution. Gov,t encouraged to consults with investors and other stakeholders. "	The SC produces a document listing the consensus view of the GOL in relation to land concessions.	30-Jun-09	"SC & GOL through NLMA, MAF & DOF"	That the GOL has the capacity to reach a consensus
	and district authorities has an improved capacity to monitor, manage and enforce the concession agreement. "	Evaluation	30-Jun-09	"Department of Land Management,"	
	Ensure that appropriate funding is available to conduct the work.	Donor found		Donor	
	The Lao Planted Forest Working Group makes a detailed presentation of the Log frame to the Lao PF Steering committee.	Steering committee understands the log frame.	08-Feb-08	WG & SC	SC available to meet.
	The steering committee be requested to give comment and direction as to proposed future actions and endorsement of the framework by 22 February 2008.	SC give appropriate guidance to the WG and endorses the framework or makes appropriate changes.	22-Feb-08	WG & SC	SC available to meet.

The WG and SC determine what	Funding sources are determined	22-Feb-08	WG & SC	Funding will be available
funding is available to progress the				
guideline development and				
implement a clear process to seek				
the funding				
Key stakeholders outside of the	Comments received.	31-Aug-08	All stakeholder	That the other stakeholders are
WG and SC be given the				willing to support the process
opportunity to comment on				
proposed action/s.				
"The working group find out what	A comprehensive set papers are	31-Mar-08	"Internet, existing	That Forestry related data will be
data sources are available in terms	collected and available to guide the		publications,	readily available and relevant to
of scientific support for planted	process.		consultants,	operations in Lao.
forest development (seek Internet			experts, forest	
sources, talk to FAO, review FAO			managers."	
documents, "				
" Talk to the DOF and review the	DOF is clear on how they want to	31-Mar-08	Report	That the GOL wants to act on the
detailed report compiled in 2007	progress the findings within the			findings of the report.
on the state of planted forest in	detailed report and provide a summary			
Lao ""Stephen Midgley report for	of actions.			
DOF""). "				
Plantation investors be made to	The WG guided by the SC is able	31-Aug-08	Many	Criteria are clear and supported
complete detailed feasibility	prepare an outline feasibility study			by the GOL
studies for submission an	criteria that will be the basis for			
consideration by the GOL prior to	plantation investment and endorsed by			
planted forest investment.	the GOL			
"Revise the Law and Regulations	WG with the guidance of the SC is	31-Dec-08	WG & SC	GOL can complete the review in
relevant to planted forests (labour	able to review relevant laws and			a reasonable timeframe.
law, land concession decree,	compile a report that highlights areas			
environmental impact assessment	that may need further attention. GOL			
decree, environmental protection	act on recommendations.			
law) to check consistency against				
the proposed planted forest				
guiding principals."				

3. Logical framework of Thailand

	Desig	Indicators	Data sources	Assumptions
Impact	Sustainable Development of Planted Forest (consider Social, Environmental, Economic)	Decreasing wood imports and increasing use of domestic plantation products and contribution of forestry sector to GDP increase by 1°k. Environmental indicators improve.	National Social and Economic Development Council Report	Need participation from industrial sector in using wood within Thailand. Public and other industries to contribute positively to environmental improvement.
Outcome	Increased planted forest in suitable zones for wood production, with associated environmental and social benefits	0.5 M ha within 5 years	Research Report of the research project on forest monitoring	Assume fire protection systems are efficient and effective
Output	1. Improved land use Suitable Tree Planting zone map approved by policy makers	Production of zoning map 1M rai/year	Report of committee on zoning	Assume stable government and adoption of proposal by parliament. Agreement and support by local communities.
	2. Efficient Management Systems	Achieving indicator goals as listed for each sub outcome		Approval of budget with sufficient funds to fully implement.
	3. Successful Tree plantations	0.5 M ha within 5 years		Sufficient budget funds, land, seedlings and labour to fully implement plan.
	4. Improved Rural Socio- Economic conditions	Use the area planted as a surrogate indicator		Availability of suitable labour supply in each region.

Action	1.1 Develop Zoning Map for tree planting	Production of zoning map- 1 M rai/year		Co-operation and support from coral community and budget approval.
	1.1.1 Feasibility study to develop concept and process for producing tree planting zone map			
	1.2.1 Workshop to obtain stakeholder support for adoption of zoning and revision			
	1.3.1 Parliamentary approval of zoning process.			
	1.4.1 Gazettal of approval and process and public relations to promote process			
	1.5.1 Setting up zoning project			
	2.1 Develop improved legislation	Gazettal of legislation within 3 years	Project Report	Support for workshop and parliamentary approval for outcomes to be made law within time frame.
	2.1.1 Workshop to detail the approach for improved forestry law			
	2.1.2 Set up committee to implement Workshop outputs and produce amended legislation			
	2.2 Establish Tree Planting organization (PO)	Set up PO within 2 years	Project Report	Stable govt, so Cabinet approval in time. RFD support
	2.2.1 Conduct a series of national seminars to obtain public support for PO			
	2.2.2 Setting up Committee to launch process for the establishment of PO			
	2.2.3 Propose plan for cabinet			
	2.2.4 Enact by gazettal			
	2.3 Establish the office/process of private forest extension (NGO)	Set up within 2 years	Project Report	Stable govt, so Cabinet approval in time. RFD support

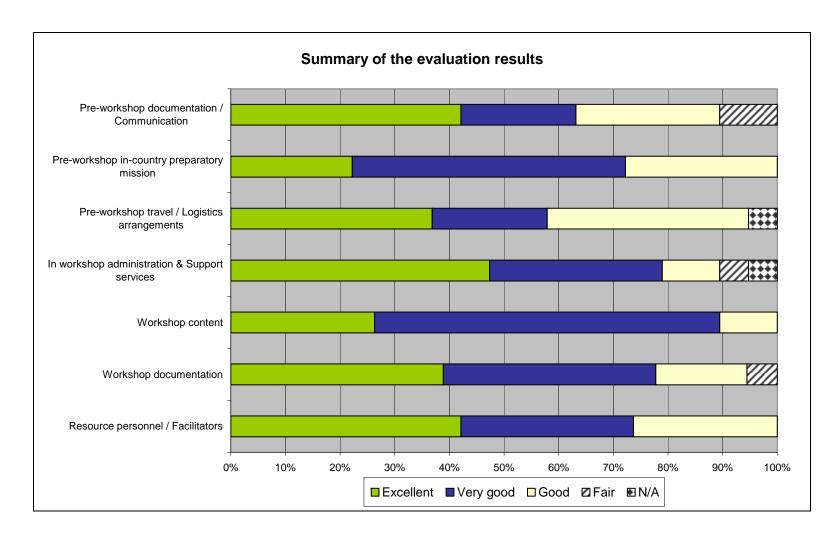
4. Logical framework of Vietnam

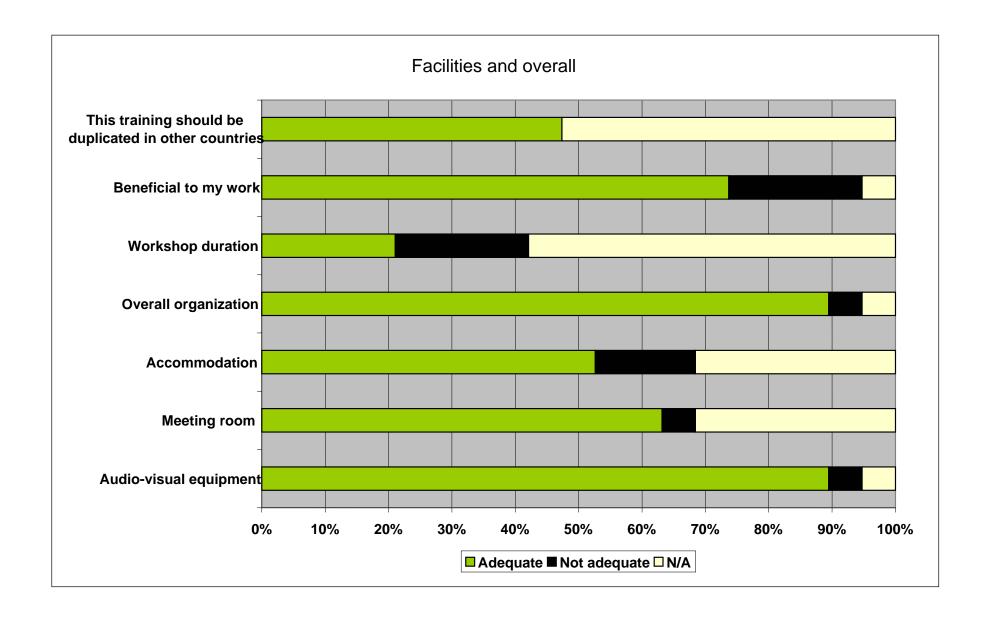
	Design summary	Indicators	Data source	Assumptions
Impact	Sustainable planted forest management and poverty alleviation in Vietnam	Forest cover and quality increased poverty rate reduced		Supported by MARD
Outcome	Effective management and development of planted forests	- Management capacity improved - Productivity and health of planted forests improved		- Good collaboration among related partners - Funding secured
Output	1. Capacity building for related staff improved; 2. Accelerated land allocation for all investors by improved GIS planning tool; 3. Knowledge on suitable silvicuture practices for forest health and productivity among forest growers improved; 4. Forest grower access to market info improved	- Capacity of National, 2 pilot eco zones' staff are improved - 80 % of forest land allocated in 2010 - Report/manual on soil management/silvicutural practices and tree breeding - Research result transferred to forest growers in 2 eco-zones - Forest growers in 2 eco-zones access market info (website, reports, manual, booklet)		

Actions	Training/ workshop in management capacity 2. Improved GIS database on available land for forest plantation;	Report on training needed assessment - 1 training course annually - Introductory workshop - Final workshop - Forestry land data collected and analyzed - Database available - 1 workshop conducted	- Ministry of Agriculture and Rural Development (MARD) - Afforestation projects - Ministry of Natural Resource and Environment (MoNRE) - Department of forestry and Department of Natural Resource and Environment at provincial level - National and international scientific publications - Department of Forestry, Forest Science Institute of VN, Forestry University of VN, Department of Forestry at provincial level	- related org. willing to cooperate - Funding secured - Permission by MARD, MoNRE - Funding secured
	3. Research and application 3.1 Conduct research on soil management/ silvicutural practices and tree breeding; 3.2 Training / workshop/ technical transfer to forest growers and technical staff;	Report/manual on soil management/silvicultural practices and tree breeding - 1 workshop on research results - 1 training course for Gov. staff - 5 training courses for forest growers	- Min of trade - MARD - Related projects, companies, traders, forest growers - International websites: WTO, FAO, NTFP, ITTO, etc	- Gov staffs and forest growers interested - Funding secured
	4. Market development 4.1 Research on forest product market, not limited to products, timber prices, market demand, etc. 4.2 Information network on market created;	 Report/publications on market trend of planted forest product Website on timber market Booklet, newsletter 1 workshop 		Free market accepted by GOV - Related research institutions willing to take the major role - Funding secured

Annex VI. Workshop evaluation

The overall results of the evaluation were very positive. 90% of the workshop participants found the workshop content and overall organization excellent or very good. Over 70% of the participants found that the workshop was beneficiary to the participant's work. Issues to be considered in future workshop arrangements are the standard of accommodation and the workshop duration.





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