

Guidelines and Recommendations for Participatory, Sustainable Forest Use and Management



Institute for Global Environmental Strategies
Kanagawa, Japan.

Guidelines and Recommendations for Participatory, Sustainable Forest Use and Management

All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopy, recording, or any information storage and retrieval system, without permission in writing from the publisher.

Copyright © IGES

Credit:

(Left)—Swidden land and paddy field, Luang Phanang Province, Laos
Photo: Hyakumura, Kimihiko

(Upper Right)—Willow forest in the Bira River Valley, Yevreyskaya Autonomous Oblast in the Russian Far East, Russia.
Photo: Natalia Antonova.

(Lower Right)—Banana garden in Kutai National Park, Indonesia
Photo: Martinus Nanang

Published by Institute for Global Environmental Strategies (IGES). 2004
Printed by Sato Printing Co. Ltd., Yokohama, JAPAN

Institute for Global Environmental Strategies

2108-11 Kamiyamaguchi, Hayama, Miura,
Kanagawa, 240-0115, JAPAN
Tel: +81-468-55-3700
Fax: +81-468-55-3709
E-mail: iges@iges.or.jp
Web-site: <http://www.iges.or.jp>

Forest Conservation Project

Tel: +81-468-55-3830
Fax: +81-468-55-3809

Disclaimer: The opinions expressed herein are personal and do not necessarily reflect the views of the publisher, the editors or the organizations the authors represents. IGES makes no representations or warranties of any kind, expressed or implied, as to the opinions expressed herein. Authors assume full responsibility and liability for all statements of facts or opinions in their papers.

Table of Contents

Foreword	i
Summary	iii
Introduction: Objectives and Methodology	1
Part 1: Guidelines for Indonesia	5
Part 2: Guidelines for Lao P.D.R. (Laos).....	27
Part 3: Guidelines for Far East Russia	61
Part 4: National Policy Recommendations	90
Part 5: Differences and Commonalities of Studies on Local Participatory Forest Management in Indonesia, Laos, and Russia	108

FOREWORD

The second phase strategic research programme of the Forest Conservation Project (FC Project) of the Institute for Global Environmental Strategies (IGES) was completed at the end of March 2004, and this is its final report for that phase. Its research objectives, methodology, and foreign research partners are detailed in the introduction. The third phase project (FY2004–FY2006) was started in April 2004.

Two commercial books were published in the second phase (FY2001–FY2003):

- Makoto Inoue and Hiroji Isozaki, eds. 2003. *People and forest: Policy and local reality in Southeast Asia, the Russian Far East, and Japan*. Kluwer Academic Publishers, 358 pp.
- Makoto Inoue, ed. 2003. *Deforestation and forest conservation in Asia* (in Japanese). Chuuhouhouki Publishers, 324 pp.

In addition, the FC Project published a series of policy trend reports (PTR) that contain reports written by individual collaborators from several Asian countries, including Bangladesh, Bhutan, Cambodia, China, India, Indonesia, Japan, Laos, Malaysia, Mongolia, Nepal, the Philippines, Sri Lanka, Thailand, and Vietnam. It also published analyses of discussions at the United Nations Forum on Forests (UNFF) and standards from the International Organization for Standardization (ISO) in the field of forest management and related industries.

The project also published country reports, which contained the main research reports of this project from the three target countries (Indonesia, Laos, and Far East Russia). Guidelines in each national language were also published. All of these reports are listed below:

- IGES Forest Conservation Project. 2002. *Policy trend report 2001*. IGES, 104 pp.
- IGES Forest Conservation Project. 2002. *Russia country report 2001*. IGES, 103 pp.
- IGES Forest Conservation Project. 2002. *Report to the Ministry of Environment: Scale and mechanism of illegal logging* (in Japanese). IGES, 80 pp.
- IGES Forest Conservation Project. 2003. *Policy trend report 2001/2002*. IGES, 149 pp.
- IGES Forest Conservation Project. 2003. *Russia country report 2002/2003*. IGES, 134 pp.
- IGES Forest Conservation Project. 2004. *Indonesian country report 2003: Local People in Forest Management and the Politics of Participation*. IGES, 150 pp.
- IGES Forest Conservation Project. 2004. *Towards participatory forest management in Laos—Laos country report 2003*. IGES, 54 pp.
- IGES Forest Conservation Project. 2004. *Policy trend report 2003*. IGES.
- Economic Research Institute (Far Eastern Division, Russian Academy of Sciences) and IGES Forest Conservation Project. 2004. *Comprehensive guidelines for local population participation in forest management in the southern part of Khabarovskiy Krai* (in Russian). ERI and IGES.
- IGES Forest Conservation Project, Center for Social Forestry, and West Kutai District Forest Service. 2004. *West Kutai District: Guidelines for enhancing community participation in forest management* (in Indonesian). 80 pp.
- IGES Forest Conservation Project and Faculty of Forestry, National University of Laos. 2004. *Guidelines for local forest management in Savannakhet and Oudomxay Provinces, Laos* (in Lao). IGES.

I was very happy to carry out joint research with the following project members and other research collaborators and partners:

Research Fellows: NANANG, Martinus (Project Manager, Coordinator for study in Indonesia)
TACHIBANA, Satoshi (Staff for international approach)

Research Associates: ANTONOVA, Natalia (Sub-coordinator for study in Russia)
HYAKUMURA, Kimihiko (Coordinator for study in Laos)
KOMATSU, Kiyoshi (Staff for international approach)
HARADA, Kazuhiro (Staff for local approach)

Visiting Researchers: ISOZAKI, Hiroji, Professor, Iwate University
(Leader for international approach)
KAKIZAWA, Hiroaki, Associate Professor, Hokkaido University
(Coordinator for study in Russia)
NAGATA, Shin, Professor, The University of Tokyo
(Advisor for international approach)
OKAMOTO, Sachie, Vice President, Japan NGO Network for Indonesia (JANNI) (Advisor for study in Indonesia)
MATSUMOTO, Satoru, President, Mekong Watch Japan
(Advisor for study in Laos)

Secretaries: MORIGUCHI, Saho; FUJIMORI, Soko; EGAMI, Katsumi;
SEGAWA Kanaru

Any comments or suggestions on this report or requests for the reports listed above are welcome. Please contact the following person by post, facsimile, or e-mail: Bishnu Bhandari, Ph.D.: Principal Research Fellow/Project Manager; Tel: +81-46-855-3834; Fax: +81-46-855-3809; E-mail: bhandari@iges.or.jp

May 2004

Makoto INOUE, Ph.D.
Project Leader
Forest Conservation Project, IGES
(Associate Professor of Forest Policy,
The University of Tokyo)

Summary of the guidelines and recommendations

Makoto Inoue

Project Leader

1. Guidelines for Indonesia

1-1. Village action guidelines (VAG)

The guidelines were drafted to overcome issues of local forest management in five East Kalimantan villages: Muara Jawa', Tanjung Jaan, Engkuni-Pasek, Batu Majang, and dan Mataliba'. These VAGs are aimed at helping village communities to develop and enhance their role in the management of local forest in each community.

These guidelines are useful for village decision-makers to develop village policies, programmes, and action plans. They can be used by a district government to develop policy and programmes, such as drafting technical guidelines, to support the participation of local people in forest management. For supporting groups such as NGOs, research organisations, universities, and private companies, the guidelines offer useful references to develop collaboration and facilitation plans.

The VAGs describe the village situation socially, ecologically, and economically, and elaborate problems related to the management of local forest. They also draw the direction and necessary measures to deal with the problems. The guidelines do not provide a detailed action plan, which ideally should be developed by each village community themselves.

The substance of the VAGs was developed from the actual situation in research sites. The following are the four main issues in local forest management:

- forest and land
- forest-related village economy
- village institution
- government policy

Any efforts to improve local forest management (LFM) should deal with these issues. Otherwise, it will not be successful.

In the guidelines, several “problems” in each issue area were listed, and in order to tackle them “proposed measures” and “expected actors,” consisting of main actors and supporting actors, were proposed. Some examples of VAGs are listed below.

Village institutions

- Problems:
 - Contested customary laws due to changes in ecological and socio-economic conditions: in some cases people cannot rely on customary law, while new village rules do not exist.
 - Lack of organised activities: many village authorities do not have the capacity to organise their people.
 - Lack of participation of women in community decision-making.

- Suggested measures:
 - Review the customary law and develop new rules if necessary.
 - Organise the community and improve village leadership and management capability.
 - Develop a mechanism for settling internal village conflicts.
 - Coordinate with neighboring villagers.

Government policy

- Problems:
 - Restriction of villagers' access to forest due to concession for companies.
 - No formal recognition of the existing customary forest management practices.
 - Rapid and frequent change in policy on small-scale logging that caused confusion among villagers.
 - Lack of facilitation from the administration to solve boundary disputes among villages.
 - Lack of information dissemination of government policy.
- Suggested measures:
 - Propose that the concessionaires let the people have land-use access within the concession area.
 - Propose that the people be pro-active in communicating with the government.
 - Make a proposal to the government to get recognition of the customary forest management.
 - Improve the village information system.

1-2. District policy guidelines (DPG)

The DPGs were developed as a support system to implement the VAGs. In particular they have aided the government of West Kutai District, especially the district forestry service, in developing policies and implementation programmes that support the activities of the community at the basic level, in this case, the villagers. These guidelines are also a supporting product for implementing the District Regulation on Community Forestry.

The DPGs are also intended to help the district government, who has the authority to carry out the coordinative function, to supervise the third parties, for example, business enterprises, NGOs, or academics, in supporting the forest management activities in the village.

The ultimate goal of forest management is forest sustainability and supporting the improvement of the economy of the community members, both those whose lives are directly related to the forest (the forest community) and the general public. The development vision of West Kutai formulated this matter as “sustainable forest management, acknowledging the rights of the local community for the prosperity of all West Kutai communities.”

For this purpose, West Kutai District launched the following seven strategic forestry programmes:

1. Management and preservation forests
2. Policy development
3. Human resources quality improvement
4. Education and training infrastructure
5. Development of institution for forest governance
6. Law enforcement
7. Customary rights acknowledgement and empowerment

By referring to the strategic programmes, it was agreed that seven important issues were to be tackled by the district government in its efforts to support community participation at the village level. The issues, elaborated in the DPGs in order to support the villagers' participation in forest management, are as follows:

1. recognition of customary rights and culture
2. social capital and community organising
3. community access to information
4. value and critical education
5. social control and law enforcement
6. conflict prevention and resolution
7. village economy empowerment

In the guidelines, several "problems" in each issue were listed, and "proposed measures" and expected "actors," consisting of main actors and supporting actors, were proposed in order to tackle the problems. Some examples of DPGs are listed below:

Recognition of customary rights and culture

- Problems:
 - Insecure access, control, and ownership of the villagers of forest resources, especially in the potential conflict areas such as in areas rich in coal mines and potential areas for plantation.
 - The commonly-held view among government officials and other parties that local people are ignorant and backward, and need to be taught and developed.
- Suggested measures:
 - Find the way to secure people's access and ownership of forest under the district ordinance, involve them in decisions that will have impacts on them, and mediate for them in negotiating with the central government.
 - Strengthen peoples' rights to forest in any ordinance issued by the district.

Village economy empowerment

- Problems:
 - Unequal benefits from timber: particular groups in the community (individual traders and loggers) get more, while most of the community members only get a little.
 - A tendency that the community members become more exploitative in the use of forest resources, focusing more on the economic profits rather than forest resources conservation.
 - The community has not overcome the dilemma between the immediate need for subsistence and the demand for long-term reforestation.
 - Forest management is not seen as a major economic activity (except for those involved in exploitative logging activities) because most of the community members earn their living from farming and plantations.
- Suggested measures:
 - Formulate regulations to allow equal opportunities for all villagers to benefit from the forest products and resources.

- Introduce incentives in the form of sufficient long-term funding for replanting and reforestation activities to villages that are institutionally capable to manage the funds in a responsible way.
- Find the ways to exercise inexpensive replanting and reforestation activities, manageable by the community members, without having to wait for external funds.
- Promote efforts to increase the use of non-timber forest products.
- Support the integration of farming activities and forest management.
- Secure the long-term rights of the community to forest and community land, particularly the assurance that a particular right will not be spoiled by other economic activities, such as land overlapping allocation for a certain large enterprise's activity.

2. Guidelines for Laos

2-1. Village action guidelines (VAG)

We selected three villages in the Phou Xang Hae Protected Area in Savannakhet Province (south part of Laos) and four villages in a degraded forest area in Oudomxay Province (north part of Laos), because the guidelines for a rich forest area might be different from those for a degraded forest area.

The main objective of the VAGs is to support the village authority in enhancing their role regarding forest management at the village level, and they are useful to decision-makers at the village level for improving the implementation of forest-related activities. VAGs can be applied by the district agricultural and forestry office (DAFO), which intends to improve the policy to support the participation of local people in forest management. VAGs are also useful for supporting organisations such as foreign donors and NGOs to develop collaboration.

The substance of the village action guidelines was developed from the actual situation in research sites, and in doing so found that there are four main issues in local forest management, as follows:

1. land category and demarcation
2. livelihood
3. institutions (regulation, management system, decision-making)
4. human relations (or social capital)

Any efforts to improve local forest management (LFM) should deal with these issues; otherwise they will not be successful.

In the guidelines, several issues consisting of specific problems and good examples of each issue were listed. The internal and external factors that caused the issues were identified; principles, as fundamental rules for accelerating sustainable forest management by the local people, were clarified; and actions to overcome the issues, based on the principles and local reality, were proposed. Some examples of VAGs are listed below.

Land category and demarcation

- Issues (problems and good examples):
 - Villagers designated their spirit forest and protected forests spontaneously even before the establishment of the government-designated conservation area.
- Principles:
 - Customary rules for the use of spiritual forest are kept by the local people, and the forests are protected.
- Actions:
 - Transform the religious events to village regulations in statutory form to enable the local people to restrict the use of the spiritual forest.
 - Recognise the concept of forest conservation through the events related to the spiritual forests.

Human relations (or social capital)

- Issues (problems and good examples):
 - Only rich villagers or village élites were able to participate in the programmes supported by external do-

nors and governments.

- Ethnic groups living in the protected areas are classified as midland Lao, a minority group in Laos. They have customs to worship a spirit and follow an original lifestyle and culture, which are different from the lowland Lao, the majority of people in Laos.
- Principles:
 - All ethnic groups and all villagers have rights to receive administrative service impartially.
- Actions:
 - Inform the local people of the detailed project plan, especially poor villagers and villages where minorities reside.
 - Build good relationships and mutual trust between villagers and DAFO staff.

2-2. Local policy guidelines (LPG)

The main objective of the LPGs is to support the local authorities in conducting sustainable forest management using the participatory method. LPGs are useful for local government decision-makers to develop local governance. In addition, they can be applied by the district agricultural and forestry office (DAFO) to implement policy to support the participation of local people in forest management.

The same items as in the village action guidelines were identified and proposed in the LPGs. Some examples of LPGs are listed below.

Livelihood

- Issues (problems and good examples):
 - Regardless of the village territory, the people are allowed to collect non-timber forest products (NTFPs) for household consumption, while cross-border collection of NTFPs for sale is prohibited.
- Principle:
 - Customary rules for the use of marketable forest products are upheld.
- Actions:
 - Make an agreement on forest management among relevant villages, as well as support the local people's customs.
 - Integrate the agreement into the land-use plan in each village.

Institutions

- Issues:
 - Villagers established customary rules and taboos to avoid disturbing a spirit. These rules included regulations on the use of forest resources such as a ban on felling rattan stems, burning for swidden agriculture, and logging large trees. These rules are applied to the rainy season, when plants and trees grow most.
- Principle:
 - Management and collection of forest products in accordance with the local custom during the rainy season is maintained.
- Action:

- Recognise the customary use of forest products in the rainy season, and approve its use as a useful forest management system.

3. Guidelines for Far East Russia

In the case of Far East Russia, comprehensive guidelines were drafted instead of village action guidelines and local policy guidelines, because village action guidelines were regarded as ineffective for changing and improving the state of participatory forest management under the present socio-political situation and the long-term traditions of forest management in Russia.

The structure of the guidelines includes the following:

- an introduction (issue formulation)
- the socio-economic situation related to forest use in the research sites
- population classification in the southern part of Khabarovskiy krai according to the opportunity for its involvement in forest management
- obstacles to the local population's involvement in forest management
- links with *krai* (provincial) laws, official, and public programmes
- recommended measures for involving the local population in forest management
- conclusion

The working hypothesis of the guidelines is based on the recognition that local residents know and understand the state of their own forest ecosystem and its reaction to anthropogenic pressures. They are directly interested in sustainable forest resource use, so they are able and willing to support correct decisions, or oppose wrong ones. Therefore, their involvement in forest management could promote the transition to sustainable forest use.

Research sites were chosen in three levels such as (a) Khabarovskiy krai as a whole, (2) Lazo raion (district), and (c) two rural municipal formations (RMF) of the *raion*—Sita as a depressive case and Sukpai as a progressive case. An indigenous Udege village was also used additionally at the lowest level.

Classification of the population

The guidelines contain two types of classification of population: demographic and social classifications.

Demographic classification based on three population sets

- The first set (residents of large and average towns with populations over 50,000 people), typified by the following characteristics:
 - professionals working directly in the forest sector
 - scientific workers researching forests and the forest sector (can be activated for participatory approach)
 - universities, schools teachers, and students (prospective for participatory approach)
 - members of ecological and partially ecological NGOs (prospective for participatory approach)
 - residents using the forest for recreation (prospective for participatory approach)
 - the rest of the population, which is practically inert from the point of view of the participatory approach

- The second set (residents of small towns and large settlements with populations from 5,000 to 50,000); includes practically the same target groups as in the first set.
- The third set (residents of settlements and villages with populations of 5,000 and less) consists of residents of settlements that live:
 - on the banks of big rivers or sea-side, based on fishing and servicing water transport
 - at small industrial units
 - near a railway, mainly transport workers
 - in agricultural areas
 - with dead or dying forest industry activities; surrounded by depleted forests; depressive settlements (prospective for participatory approach)
 - with active and even developing forest industry activities; surrounded by prospective forests (prospective for participatory approach)
 - with a high share of aboriginals (prospective for participatory approach)
 - with prevailing work using intangible forest benefits especially recreation and tourism (prospective for participatory approach)

Social classification of population

This classification, developed for the third set as the main object for the guidelines, is divided by the following nine types of community people based on their readiness to participate in forest management:

- forest workers (not high)
- businessmen (medium)
- managers (high)
- office workers (not high)
- retired people (medium)
- housewives (not high)
- students of universities and colleges (not high)
- school children (medium)
- unemployed (not high)

Obstacles to involvement of the local population in forest management

- Legal aspects: lack of legal basis for participation of the local population in forest management
- Institutional aspects: lack of rights on the municipal level, lack of specific mechanisms, alienation of people, loss of control, discrepancy of methods and market, etc.
- Financial aspects: lack of finance on the municipal level, lack of financing of the participatory approach
- Communication aspects: undeveloped road network, lack of communication means
- Informational aspects: insufficient and distorted information
- Social aspects: public passiveness, social dependence, outdated thinking, lack of feeling of ownership, low priority of forestry, antagonism between stakeholders, loss of aboriginal skills

We should note that a number of *krai* laws as well as official and public *krai* programmes envisage, directly or indirectly, involvement of the local population in forest management.

Recommended measures

Recommended measures for involving local populations in forest management are described by the parameters of target type of population, executor, term of execution, and financing source. They form the next groups:

- legal (3 measures)
- institutional (2 measures)
- financial-economic (2 measures)
- informational (2 measures)
- social (9 measures)
- raising educational level (6 measures)

The proposed measures are distributed according to the competence level of their executors in the following way: *krai* (province) level; *raion* (district) level; level of rural municipal formation; level of parties, other NGOs, enterprises, and institutions.

Some examples of the comprehensive guidelines are listed below.

- Social obstacles:
 - public passiveness of the population, which is caused first of all by loss of trust in authorities;
 - preserving of outdated thinking under new socio-economic and ecological conditions;
 - population alienation from forest management over many years caused people not considering forest resources as their own; and
 - complicated relations among forest users and forest holders, among big and small firms, as well as among firms and the population.
- Measures:
 - Develop special programmes to involve the population in forest management, including forming constant activities for local population and city-dwellers to participate in forest management.
 - Organise public hearings on projects related to the use of forest resources and control the public hearings conducted.
 - Carry out public environmental assessment of developed projects with the purpose of using its results for the state assessment.
 - Conclude “agreements of social responsibility” with forest firms and associations with municipal administrations simultaneously that permit use of local forest resources.
 - Establish working groups of local population and organise their dialogue with forest users, the *krai*, and federal forestry officials.

The conclusion states that the recommendations cannot be implemented only within the frames of the forest sector. It depends on the level of the population’s public-political activity, change of natural resources property rights, the degree of democracy, maintenance of law and order, etc. Citizens should be assured that their efforts for forest management will be fruitful. Only in this case will the population’s participation in forest management become active and permanent.

4. National policy recommendations (NPR) for three countries

Considering the measures suggested in the results of the first phase of research, in particular those related to ensuring the participation of local people, in the second phase we developed national policy recommendations for each target country.

The research identified several elements:

- access to information
- ensuring opportunity of making comments, opinions, and objections
- ensuring equitable sharing of benefits, in particular local people
- prior informed consent

These elements can be realised by employing supporting measures, which are classified into legislative measures, administrative measures, judicial measures, and others. Legislative measures provide a basis of participation by stipulating elements as rights or a duty of the government, while administrative measures develop policies, provide support to local people, and disseminate information for the purpose of ensuring the rights authorised by the legislative measures. Then the rights of participation need a judicial mechanism for protection from violation of the rights. Research on the target countries clarify the necessity of elaboration for effective implementation of the system related to participation, because people don't use rights to participate, even though, these rights are ensured in the laws.

The results of the second phase indicated nineteen detailed measures for ensuring the participation of local people, such as authorisation of local people's rights to forest and an environmental impact assessment (EIA) system. Moreover, they indicated the necessity of coordination among relevant ministries and departments for ensuring participation, and they also pointed out the importance of making and showing clear instructions or directions for the process of participation. Finally, they emphasised the importance of a dispute settlement mechanism for ensuring the rights of local people.

Introduction: Objectives and Methodology

Makoto Inoue
Project Leader

1. Background

In its first phase (FY1998–2000), the IGES Forest Conservation Project aimed to identify principles or elements of sustainable forest management based on experiences in the Asia-Pacific region, which account for an important portion of the strategy for forest conservation. The research was carried out by four interrelated sub-teams: (1) the sub-team on structural analysis of forest destruction (ST sub-team), to provide basic information to the other sub-teams; (2) the sub-team on participatory forest management policy (PM sub-team), to make recommendations covering local and national levels; (3) the sub-team on timber trade policy (TT sub-team), to make recommendations covering national and international levels; and (4) the sub-team on legal/administrative measures for forest conservation (LA sub-team), to elaborate principles/elements for sustainable forest management as a final outcome of the project. Target countries were Indonesia, Thailand, the Philippines, Lao P.D.R., Vietnam, China, Russia, and other Asia-Pacific countries.

The ST sub-team reconfirmed such leading root causes of forest destruction as “an insufficient base of local participation and community rights” and the “impacts of market forces,” as well as a “forest development paradigm with an industrial emphasis” and “economic/political challenges.” The PM sub-team analysed and compared existing participatory forest management systems in Southeast Asian countries, aiming to clarify their characteristics, and categorised them into several types based on their main actors, legal status of forest land, and activities. Then the sub-team made policy recommendations through an examination of internal and external constraints on participation. The TT sub-team mainly conducted time-series economic analyses (TEA) of the timber trade in both export and import countries in the Asian region as well as data collection for space equivalent analysis (SEA) of the timber trade. The LA sub-team focused on international legal measures related to forest conservation, international processes of policy dialogue on forest issues, and domestic legal/administrative measures related to participatory forest management. The sub-team elaborated the principles and elements for sustainable forest management in cooperation with the other sub-teams.

The project successfully constructed a valuable network with researchers, non-governmental organisations (NGOs), local people, and government officials in the Asia-Pacific region in the first phase. These interpersonal

relations with project members were utilised and evolved into inter-organisational relations with IGES in the second phase.

As a logical consequence of the fact that the major outcome of the project was a set of principles or elements of sustainable forest management, the main target groups in the first phase were governmental authorities. However, although we invited governmental officials to a series of regional workshops held in Jakarta, Vientiane, and Khabarovsk to discuss and examine our draft strategies, including policy recommendations, it did not seem to be enough for the project to have an influence on the national forest policies of any of these countries.

Regarding the broad coverage of the project plan in the first phase, the IGES Board of Directors and the Trustees, the members of the Research Advisory Committee (RAC), and outside experts suggested that the FC Project should limit its theme to the participation of local people, focus on a few countries, and integrate its approaches in the second phase (FY2001–2003).

2. Objectives

The goal of the Forest Conservation Project was to develop strategies for forest conservation and sustainable forest management. Although many approaches should be taken into consideration to achieve this goal, we aimed to develop the following guidelines and recommendations to promote the participation of local people in forest management, an approach expected to achieve both poverty alleviation and sustainable forest management at the same time:

- Village action guidelines (VAG) for villagers and other stakeholders at the village level.
- Local policy guidelines (LPG) for local (provincial or district) governments and other stakeholders at the local level.
- National policy recommendations (NPR), which were produced to ensure the effective application of international treaties on local participation in forest management at the national level. Local government and stakeholders at local and national levels can make full use of these recommendations in order to promote the process of decentralisation.

3. Approaches and methodologies

The research was carried out using two interrelated approaches (Figure 1). One is the “local approach,” used to elaborate the village action guidelines (VAG), in which the analysis starts at the village level, and then the

perspective expands to the local and national government levels. We applied a methodology called participatory action research (PAR), which is a process of inquiry through which the local people work together on issues they consider relevant to bring about an improvement (see Section 4). A series of small workshops at the village and district level is also an important method to use. The other approach employed was the “international approach,” used to elaborate national policy recommendations (NPR), in which the analysis starts at the international level, and then considers the national and local government levels. These two approaches were com-

bined and synthesised in discussions at the local government level, especially in the process of elaborating local policy guidelines (LPG).

The activities of local forest management and local policymaking processes will be improved by applying the village action guidelines (VAG) and local policy guidelines (LPG) because of the advantage of the methodologies applied. There is every possibility for the local people and local governments to apply the guidelines, because the local people, local NGOs, and local government, as well as local researchers, would be considerably involved in the research process from the beginning.

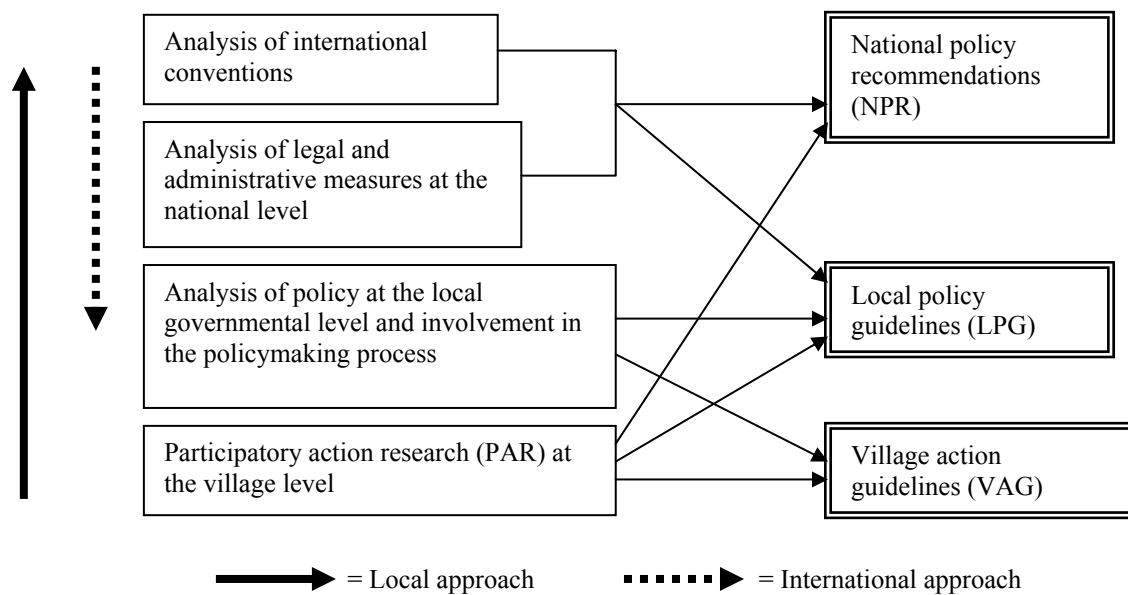


Figure 1. Overall process to develop the three outputs of the FC Project.

4. Framework of participatory action research (PAR) in the process of developing village action guidelines

The implementation of *participatory action research* contributes to the larger context of village development. It is clear that the involvement of local people in making guidelines will be considered as part of the long process of *participatory learning and action* (Project PLA 2000), in which the role of the outsider is limited to facilitation of the process in order to create a new institution and sustainable action, with the local people regarded as leading actors.

The long process of participatory action research can be conceptualized in five phases: (1) the initiation phase, which includes preparation and investigation to understand the present situation and identify problems; (2) the planning phase, including negotiation and preparation for action; (3) the implementation phase, in which the local people take action; (4) the monitoring and evaluation phase (M and E), in which the actions related to forest management are examined; and (5) the observation and

reflection phase, which is carried out in connection with all the other phases (Figure 2).

The local people and researchers implement most of the activities in each phase to establish and improve participatory forest management jointly at the local level. The researchers then identify points to pay attention to when elaborating the *village action guidelines* in cooperation with the local people.

Key concepts of *participatory learning and action* (Project PLA 2000) are applied as with that of *participatory action research*, as follows:

- Local knowledge and the reality perceived by the people
- Various stakeholders such as the local people, local government, NGOs, and academics
- Learning process where the stakeholders construct a relationship of mutual trust
- Flexible use and application of appropriate tools (see Figure 2)
- Facilitation to create an opportunity to build and realise consensus

- Trust and partnership between the people and facilitators
- Cyclical and dialogical process of verification and reflection
- Optimal ignorance and multi-sectoral viewpoint
- Triangulation to ensure the diversity of viewpoints
- Visualization to allow more people participate in participatory action research more easily

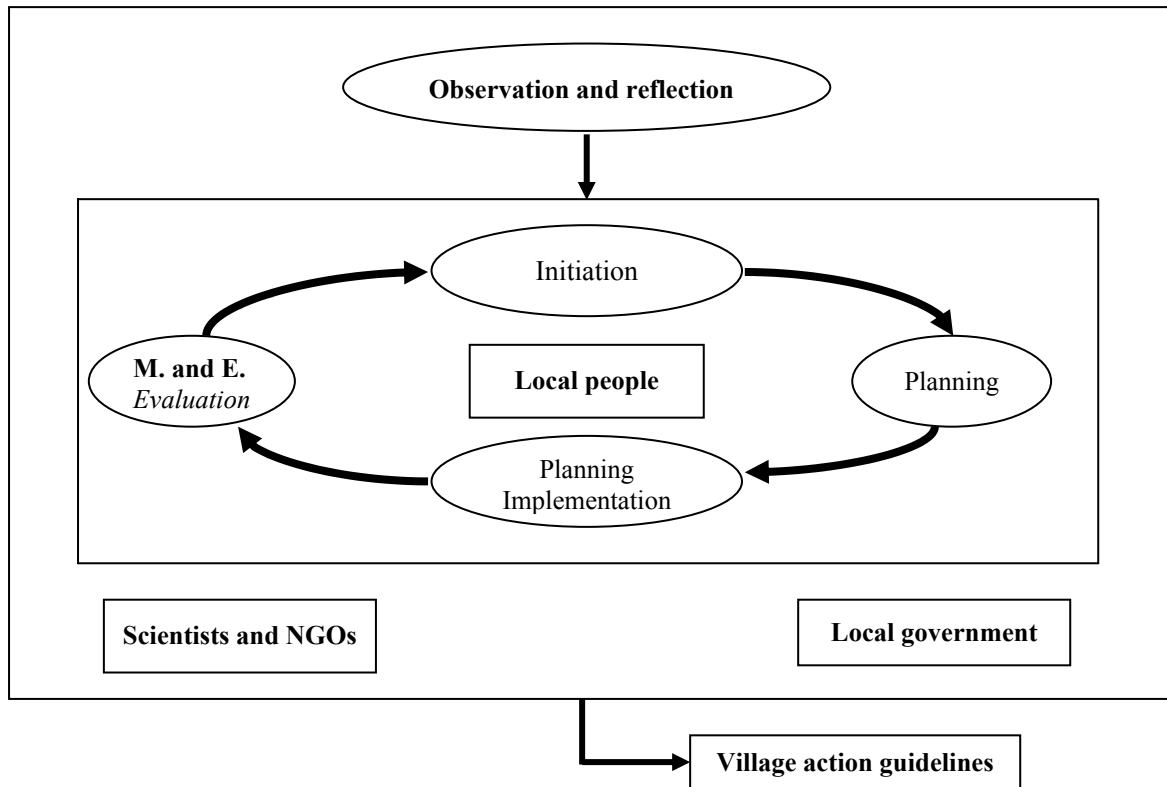


Figure 2. Conceptual framework of PAR and the guidelines

Source : Inoue 2003

5. Target countries

In the second phase the study targeted three countries: Indonesia, Laos, and Far East Russia. The significance of the strategic policy studies for the three countries lies in the political characteristics of each country and the actual state of their forests and forest management. There appears to be a relatively high possibility for our research outputs to be applied in these three countries.

Indonesia is a country in transition to democracy, as well as one of the most important countries in the world in terms of biodiversity conservation. Specific features concerning the forestry sector are (1) reforms of forest policy in accordance with the concepts of participation and decentralisation, (2) chaos as a result of drastic decentralisation, and (3) rapid deforestation and degradation of the forest due to various factors such as forest fires, large-scale plantations, logging, and slash-and-burn agriculture.

Laos is a country in transition to a market economy. Specific features concerning the forestry sector are (1) insufficient measures/mechanisms to implement new forest law, and (2) the recent reaction to and trend of efforts to transfer the responsibility of forest management

to local people.

Russia has undergone some reforms in national policy, but this country is also in transition to a market economy. Moreover, the Russian boreal forest offers a unique approach compared with the tropical forests of Indonesia and Laos in the mode of participation. Specific features concerning the forestry sector are (1) the dynamic reform of forest policy, (2) the strong impact of Asian countries on the management of local forests, and (3) changes in local forest management along with changes in the national economic system.

6. Target groups

We categorised various target stakeholders into two groups: main target groups and supporting target groups. “Main target groups” are the groups targeted by the guidelines and the expected main users of the guidelines. These are policymakers as well as local communities. Their roles are indispensable to the success of forest management.

“Supporting target groups” may use or support the use of the guidelines, but they are less likely to be involved in their direct implementation. These are local NGOs,

people's organisations, small business corporations, and universities at the local level; large NGOs and large business corporations at the national level; and the United Nations Forum on Forests (UNFF), Environment Congress for Asia and the Pacific (ECO ASIA), etc., at the international level.

7. Collaborative organisations

In order to have certain policy impacts, mentioned above, we closely collaborated with relevant organisations, listed below, by means of concluding a memorandum of understanding (MOU) with each to strengthen inter-organisational relations.

(1) Indonesia

- The Center for Social Forestry of Mulawarman University (CSF) in Samarinda, East Kalimantan, is a member of the forum on national forestry reform and a member of the working group of local forest policy in West Kutai District. It has access to influence policy formation at the local and national levels. We can collaborate with local NGOs, local governments, and local people through the good offices of the CSF.
- The Indonesian Institute of Sciences (LIPI) in Jakarta is a national government-run science institute and has been very influential in the country. Collaborating with LIPI may bring about influence on decision-makers and the public.
- West Kutai District (and its local forestry service) is one of the leading local governments in Indonesia that has tried to manage forest resources in a sustainable way by means of the multi-stakeholder approach. Our guidelines are expected to be applied in the district.

(2) Laos

- The Faculty of Forestry of the National Uni-

versity of Lao P.D.R. (NUOL) in Vientiane is run by the government of Lao P.D.R., and considerable influence can be expected from it. We can collaborate with other research institutes, local governments, NGOs, and local people through the good offices of NUOL.

- Relevant district agricultural and forestry offices (DAFO) and provincial agricultural and forestry offices (PAFO).
- Department of Forestry and foreign donors, including the Japan International Cooperation Agency (JICA), Food and Agriculture Organization of the United Nations (FAO), and the Swedish International Development Cooperation Agency (SIDA).

(3) Far East Russia

- The Economic Research Institute (ERI) of the Far Eastern Division of Russian Academy of Sciences in Khabarovsk is capable of influencing decision-makers in Far East Russia because of its outstanding position. We can collaborate with provincial and district governments, other organisations, and local people through the good offices of ERI.
- Territorial office of the Ministry of Natural Resources, Lazo District government, heads of communities, and NGOs.

References

- Inoue, M. 2003. Sustainable forest management through local participation: Procedures and priority perspectives. In: Makoto Inoue and Hiroji Isozaki (eds.), *People and forest: policy and local reality in Southeast Asia, the Russian Far East, and Japan*. Kluwer Academic Publishers. pp. 337–356.
- Project PLA. 2000. *Introduction to social development: Participatory learning and action* (in Japanese). International Development Journal.

Part 1: Guidelines for Indonesia

Edited by

Martinus Nanang and G. Simon Devung

I. Introduction

1. General information

Since its establishment in 1999, West Kutai District in East Kalimantan has actively established milestones in managing its forests. Some of the milestones, among others, include the formation of the Working Group for the District Forestry Programs (*Kelompok Kerja Program Kehutanan Daerah*, or *KK-PKD*); the issuance of the Portrait of West Kutai Forestry and development of the Programs for West Kutai Forestry; development of the District Regulations for the District Forestry and for the Community Forestry Programs; and preparation of the District Forestry Database.

As a part of the forestry reform process, the Institute for Global Environment Strategies (IGES), Japan, together with the Center for Social Forestry Mulawarman University (CSF-UNMUL), the Indonesian Institute of Science (*Lembaga Ilmu Pengetahuan Indonesia*, or *LIPI*) in Jakarta, and the West Kutai District Forestry Service (Dishut Kubar), have added two new milestones to support community participation in managing the forest: Guidelines for Forest Management in the Village (VAG) and the Guidelines for Community Participation in Forest Management at the District Level (DPG).

The subjects of the VAGs are the villagers and the main subject of the DPGs is the district government, supported by a number of stakeholders comprised of non-government organizations (NGOs), academics, and business enterprises. The VAGs and DPGs are closely related to each other in the sense that the DPGs support the activities designed in the VAGs.

The two sets of guidelines are the yields of research conducted from 2001 to 2002. The research on the role of local people in forest management applied a *participatory action research* (PAR) methodology. PAR leads to

real action by local villagers through a circular process comprised of observation, planning, and evaluation. Each village formed a PAR team that worked together with external researchers from the Center for Social Forestry (CSF) of Mulawarman University and the Institute for Global Environmental Strategies (IGES). The size of the PAR team varied among villages—ranging from 8 to 22 people—depending on the village conditions. The VAGs were developed based on the results of the PAR studies and a series of discussions.

The DPGs were developed based on the PAR field studies, research done by LIPI at the national level, and input from several discussions—one of which was the Working Group Discussion in Samarinda July 13–24, 2003, attended by staff from the West Kutai District Forest Service (DFS), KK-PKD, the CSF, and IGES. These discussions also enriched the substance of the VAGs. In Sendawar on 31 July, a workshop was held by the CSF, IGES, and the DFS to discuss the content of the VAGs and DPGs. Workshop participants were from the district parliament, the DFS, KK-PKD, CSF, IGES, NGOs, and village representatives.

After this process the guidelines were re-drafted and revised several times by the teams of experts from CSF and IGES, as follows: from CSF—G. Simon Devung, Ndan Imang, Rujehan, Setiawati, Fadjar Fambudhi, Mustofa Agung Sarjono, and Paulus Matius; and Martinus Nanang from IGES. Finally, the guidelines were refined and then edited by Martinus Nanang and G. Simon Devung.

As such, the process of developing the VAGs and DPGs is considered to have sufficiently involved the relevant stakeholders. Of course, there is a weakness in the process—the short process of discussions and the limited number of case studies.

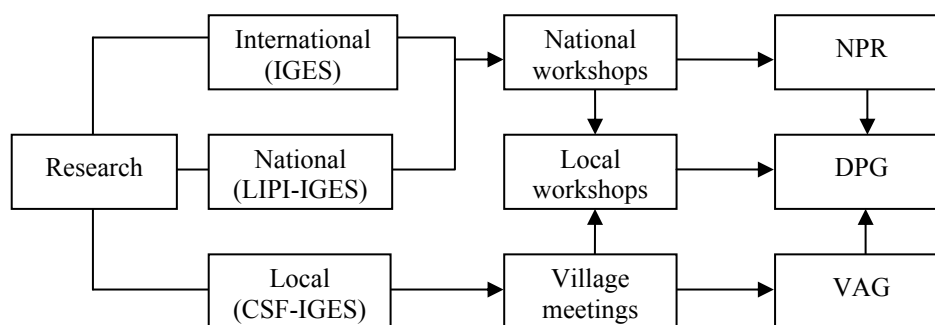


Figure 1. Process and input of VAGs and DPGs for Indonesia.

2. Village Action Guidelines

2.1. Objectives

These guidelines are focused on the issue of local forest management in five East Kalimantan villages: Muara Jawa', Tanjung Jan, Engkuni-Pasek, Batu Majang, and dan Mataliba'. They are intended to help village communities develop and enhance their role in the management of the local forest in each community.

They describe the village situation socially, ecologically, and economically, and elaborate problems related to the management of the local forest. They also outline the direction and necessary measures to deal with the problems. The guidelines do not provide a detailed action plan, which, ideally, should be developed by each village community.

The guidelines are useful to village decision-makers for developing village policies, programs, and action plans. They can also be used by the district government

to develop policies and programs, such as developing technical guidelines to support the participation of the local people in forest management. For supporting groups such as NGOs, research organizations, universities, and private companies, the guidelines offer useful references for developing collaboration and facilitation plans.

2.2. Framework of the VAGs

The substance of the VAGs is found in the fourth section, below, which is developed from the actual situation at each research site. These are called the "Four main issues in local forest management," which are the issues of forest and land, the village forest-related economy, the village institution, and government policy. Any efforts to improve local forest management (LFM) should deal with these issues; otherwise the LFM will not be successful.

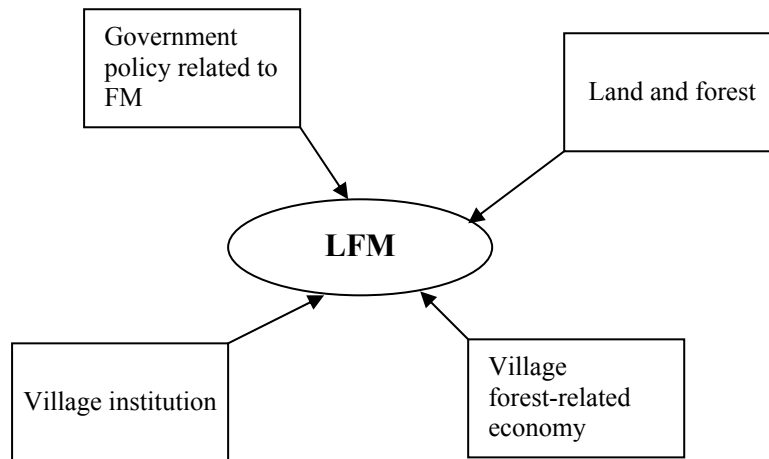


Figure 2. Core issues in local forest management discussed in Indonesia's VAGs.

3. District Policy Guidelines

3.1. Objectives of the DPGs

The DPGs were developed as a support system to implement the VAGs. In particular, they support the government of West Kutai District, especially the District Forestry Service, in developing its policies and implementation programs, which are meant to support the activities of the community at the basic level, in this case, the villagers. These guidelines are also a supporting product for implementing the District Regulation on Community Forestry.

The DPGs are also intended to aid the district government—which has the authority to carry out the coordinative function—and to supervise third parties, such as business enterprises, NGOs, or academics, in order to support the forest management activities in the village. These objectives can be summarized as follows:

1. To guide the district government in supporting the implementation of the VAGs, promoting commu-

nity participation.

2. To give input to the third parties to support the implementation of the VAGs, either directly, or indirectly by supporting the district government.
3. To support the district government in realizing its Forestry Development Vision and exercising its Strategic Forestry Programs.

3.2. Framework of the DPGs

The ultimate goal of forest management is sustainable forest use and supporting the improvement of the economy of the community members, both those whose lives are directly related to the forest (the forest community) and the general public. The development vision of West Kutai District formulated this matter as "sustainable forest management, acknowledging the rights of the local (*adat*) community for the prosperity of all West Kutai communities" (KK-PKD 2001a).

For this purpose, West Kutai District launched the following seven strategic forestry programs:

1. Management and preservation of forests
2. Policy development
3. Human resources quality improvement
4. Education and training infrastructure
5. Forestry governance institutions
6. Law enforcement
7. Local (*adat*) community rights acknowledgement and empowerment

By referring to the strategic program and six indicators of participation (listed below), it was agreed that seven important issues are to be tackled by the district government in its efforts to support community participation at the village level. The issues are elaborated in the DPGs in order to support the villagers' participation in forest management. The seven issues are as follows:

1. Acknowledgement of local (*adat*) community rights and culture
2. Social capital and community organizing
3. Community access to information
4. Value and critical education
5. Social control and law enforcement
6. Conflict prevention and resolution
7. Village economy empowerment

The underlying concept for those seven related components is that if the seven issues are properly tackled in carrying out the seven strategic forestry programs elaborated, it would be most likely that the six indicators of community participation in local forest management will be concretely materialized, allowing expected high levels of community participation.

4. The meaning of "forest management"

"Forest management" refers to any effort intentionally targeted at maintaining or enhancing the forest ecosystem and its productivity. Management action includes the preservation and utilization of forest.

II. Village action guidelines for Batu Majang

1. General village profile

The population of the village of Batu Majang is 866 and consists of the Lepo' Tukung and the Uma' Baka' of the Kenyah ethnic group. The original population was the Lepo' Timai people, who lived together there since the formation of the village, but they have since moved to the sub-district of Tabang in the Kutai Kartanegara district.

Located on the banks of the major Mahakam River, it is about 500 kilometers upriver from the capital city of Samarinda. Its landscape is mostly mountainous, with a plains area of only about five percent. Its elevation is 200 meters, and it has high rainfalls, with temperatures ranging from 24 degrees Celsius (°C) to 30°C.

The village encompasses a relatively large territory in comparison with the size of its population. Its exact area is not known because there have been no efforts to measure it, but it spreads along the Alan River up to Air

Menitis. It is fortunate that the fires of 1982 and 1997/98 didn't destroy the existing forest. The village still has a large, intact forest of which a part is protected under the local customary law. The protected forest is called *tana' ulen*. The amount of degraded forest is relatively small, being concentrated in areas cleared for swidden agriculture and logged-over forest from small-scale logging (HPHH) and large-scale logging activities (HPH). One logging company, PT. Sumalindo Lestari Jaya (SLJ), has a base camp in the village. The village forest is under a concession of the SLJ and two HPHH concessions owned by the community.

The village economy is better off than most, as can be seen from housing conditions and the number of electronic devices such as TVs and VCDs powered by household-owned generators. The main sources of income are agriculture (swidden), gardening, paid labor, and others. In forest-related activities, the community benefits from working at SLJ, collecting non-timber forest products (NTFPs) such as bird's nests and game, HPHH, and *banjir kap*, as long as they are permitted.

The agricultural land is quite fertile for rice and vegetables and is irrigated by a system established by SLJ. The company's Village Community Development Program (VCDP, or *Bina Desa*) actively supports and provides technical assistance for agricultural activities, and also provides a market for the produce grown, which is collected by the local cooperative, *Udip Mading Alan Mening*, and sold entirely to SLJ. The local people earn enough for their livelihood from agriculture owing to this system.

Since a group of the Kenyah people from Sungai Barang and Long Marung started residing in this area in 1971, there have been three successions of village chiefs, each of which managed the village democratically. It is one of the characteristics of the Kenyah people to always place importance on *gotong royong*, or cooperation. However, decision-making is still reserved for male members, especially in decisions concerning *adat*. Actually, women are not prohibited from taking part in decision-making, but cultural tradition has made it less likely that women will participate.

2. The community's expectations about the forest and environment in Batu Majang

It is expected by the community that the existing intact forest will be well conserved and that no new forest-clearing will be allowed. This optimum condition can be achieved if the market for agricultural produce to SLJ can be maintained or expanded and the agriculture activities can be intensified or expanded. The market guarantees that the people will not be dependent on forest products, especially timber, and thus reduces human pressure on the forest. The preservation of the forest is also important in conserving the game population (boar, deer, fish, and others) that is useful for the community's diet.

3. The goal of forest management in Batu Majang

There are two goals of forest management in Batu Majang:

1. To sustain the forest and the environment, for forest is important for producing not only timber but also NTFPs that can benefit the people in the long term, such as boar, deer, fuel wood, craft materials, and medicinal plants.
2. To increase the community's income from agriculture, plantations, and forestry, as these activities can be integrated without hampering the forest, which has traditionally supported the people's lives.

4. Problems in forest management and suggested measures to solve them

4.1. Forest and forest land

4.1.1. The problems

- a. The boundary between Batu Majang and Long Bagun Ulu is under dispute, although it was agreed upon by the two villages 20 years ago. However, Long Bagun Ulu wants the return of the territory that was given to Batu Majang. If the area is returned, then Batu Majang will lose most of the agricultural areas along kilometer 13 to 21 along the main road. As a result, the Batu Majang community will clear new forest, and this will certainly accelerate the loss of primary forest.
- b. The *tana' ulen* protection forest is not yet clearly mapped and has no boundary markers, because the community does not have the ability or the funds. The absence of clear boundary markers may allow for encroachment in the *tana' ulen* area by people from outside who do not know that the area is protected.
- c. Aside from the *tana' ulen*, there is no regulation on the use of forest products (*ba'i*). So far, everyone can freely take any products (including wood for personal use) from the forest, which is actually a common pool resource (CPR). If this practice is not sufficiently controlled, the disappearance of forest resources will accelerate.

4.1.2. Suggested measures

- a. The leaders of Batu Majang need to resume talks about the boundary conflict with Long Bagun Ulu. For that purpose it is also necessary to map the area in a participatory way and mark the boundary line. Mapping support should be requested from the district's multi-stakeholder mapping team (MMT), called *Tim Pemetaan Peta Pihak*.
- b. In an effort to get formal recognition of the *tana' ulen*, it is necessary for the community to discuss the issue of its recognition with SLJ, and, together with the company, map its area, draw a clear boundary line, and discuss within the community

the best way to manage it.

- c. The village needs to hold community consultations (*pemung adung*) to develop regulations on how to utilize the forest (*ba'i*), including how to maintain and replant the forest, as well as how to prevent forest fires from ravaging the area. The rights and duties of the logging companies and workers (including local ones) over the forest and to the rest of the community need to be defined in a regulation.

4.1.3. Support needed

- a. Active mediation by the district administration, including the district office of the National Land Agency, and the sub-district administration of Long Bagun is necessary to solve the boundary dispute. Also, the community can submit the issue to the district parliament through their parliamentary representative.
- b. SLJ's VCDP and the district's MMT are needed for mapping the *tana' ulen*.
- c. The District Forest Service (DFS) and District Service for Community Empowerment (DSCE) are especially expected to give information or explanation to the community about the regulations regarding the village, community forestry, and land rehabilitation.

4.2. Village economy related to forest utilization

4.2.1. The problems

- a. Even though agriculture in the area shows good productivity, the community is still quite dependent on SLJ for its market. Since SLJ will not be there forever, long-term economic sustainability is at risk.
- b. Forest management has not been focused and well organized enough to boost the economy, because most people make a living from agriculture, not primarily from the forest.

4.2.2. Suggested measures

- a. The logging company needs to help seek or open up a new market other than SLJ for the community's agricultural produce.
- b. Diversification of agricultural activities and products needs to be done by the community in order to be less dependent on SLJ to market its vegetables. Cocoa and coffee can be developed, because SLJ has promised assistance with land clearing and marketing.
- c. It is also necessary to seek new economic opportunities such as running transportation services to transport staple foods to the sub-district of Sungai Boh.
- d. Sustaining the game animals is also important and could be initiated by developing hunting and fishing regulations to include both village members

- and outsiders.
- e. Fish ponds, in particular, need to be developed to improve the economy because the market has promising potential.
- f. A fishery can also be developed and may have a sufficient market.
- g. Diversification in forestry and agricultural activities, called *wanatani*, needs to be initiated soon to ensure long-term benefits from the forest.

4.2.3. Support needed

- a. SLJ's VCDP can provide support for the agriculture programme.
- b. The District Agricultural Service (DAS) can provide support in the field of agriculture and plantation.
- c. Small credit provision (*kredit usaha kecil*, or KUK) from *Bank Rakyat Indonesia* is also needed, and cooperation with other relevant enterprises is necessary for marketing agricultural produce.

4.3. Village institution

4.3.1. The problems

- a. Village governance bodies, such as the village government under the village head, the village parliament (*Badan Perwakilan Kampung*, or BPK), and the customary council (*Lembaga Adat*), have not given sufficient attention to the sustaining and management of the forest. Also, there is no particular organization or group tasked with managing the forest. In reality, this authority is reserved for the village head and customary leader, but there are some overlaps between the authorities of the two.
- b. Small-scale logging activities, such as the HPHH and the *banjir kap*, have not been regulated by *adat*, or the *adat* laws are no longer appropriate for the new activities. There is no rule regarding the authority over such activities at the village level. In practice, however, the village head retains a dominant role.
- c. Women are generally less active than men in the community decision-making process, and even though there is no prohibition for them to take part, they prefer to keep a low profile.
- d. The community has not developed the tradition of making good and clear planning procedures for their activities. Usually, the activities are carried out incidentally as a response to sudden or urgent needs without careful planning.

4.3.2. Suggested measures

- a. Village governance bodies should define the authority, duties, and responsibilities of each body with regards to forest utilization and the management of forest land, in order to avoid overlaps and to be able to support each other.

- b. Organizations in the village need to arrange and regulate the management of the village territory and forest as an integrated part of the village's land-use plan, regulate the utilization mechanisms, and preserve and protect the forest, including the *tana' ulen*.
- c. Villagers and the village leaders should arrange forest management as an integrated part of village territorial management in the context of the village land-use plan.
- d. Women should make an effort to organize themselves by holding coordination meetings among women's organizations, such as the family welfare education program (*Pendidikan Kesejahteraan Keluarga*, or PKK), the *Perkawan* (women's church group), and other women, to discuss how to encourage women to be more proactive in the community's decision-making processes.
- e. Villagers, especially the leaders, should begin to learn how to execute good program, planning, with clearly defined targets, steps, distribution of roles, and mechanisms to be carried out by the villagers.

4.3.3. External support needed

- a. Support and facilitation from the DFS, DSCE, sub-district administration, and NGOs are necessary in defining the authority, duties, and responsibilities of village governance bodies.
- b. The DFS, NGOs, and universities are needed to facilitate the process of developing regulations on forest management at the village level.
- c. The district development planning body (BAP-PEDA), the DSCE, NGOs, and universities are potential supporters in developing the village's land-use plan.
- d. The DSCE, NGOs, and universities can support women's groups in their efforts to increase their participation in decision-making.
- e. Facilitation from the DSCE, NGOs, and universities is also necessary to help the community make appropriate planning and action plans for the village.

4.4. Government policy

4.4.1. The problems

- a. The traditional protection forest (*tana' ulen*), which the people are proud of, has not received formal recognition from the government. So far, the recognition is only from the logging company, SLJ, which has graciously excluded the *tana' ulen* area from its logging operations. The community does not know how to pursue gaining recognition from the government.
- b. The government's reforestation fund scheme has not yet reached the community, whereas the people are eager to start reforestation on the old log-

- ging roads using the fund.
- c. The government's policy regarding issuing logging permits to the local community such as *banjir kap*, HPHH, and IUPHHK is considered inconsistent and confusing. *Banjir kap* activities, for instance, are sometimes allowed and sometimes prohibited.
 - d. Government policy regarding the village boundary is also not very clear, and therefore boundary disputes, such as the one between the Batu Majang and the Long Bagun Ulu, cannot be solved smoothly by the disputants alone.

4.4.2. Suggested solutions

- a. The village head needs to consult with SLJ on how separate the *tana' ulen* from SLJ's concession, based on the rules of SLJ and the Ministry of Forestry. After that the village leader can submit a proposal to the Ministry of Forestry for the recognition of the *tana' ulen* through the DFS.
- b. The village head or other villagers can directly ask the DFS about the reforestation fund policy and then submit proposals accordingly.
- c. The village head or other villagers can directly ask the DFS about logging permit regulation and the way the community can obtain permits.
- d. The village head should ask the DFS for explanation and technical instruction on logging permit regulations and how the community can obtain it.
- e. The villager head should ask the representative of Long Bagun sub-district in the District Parliament to bring the boundary dispute, together with other similar issues, to the government in order to produce comprehensive solutions.

4.4.3. External support required

- a. Explanation is needed from SLJ about how to obtain the right to manage the *tana' ulen* and the necessary support to meet the requirements.
- b. Explanation and technical instruction is needed from the DFS about the reforestation fund.
- c. Explanation and technical instruction is needed from the DFS on logging permits for the community and how to obtain them.
- d. Consultation is needed with the District Parliament (DPRD) on the issue of the boundary dispute, as well as the active participation of the MMT, as a part of the solution.

5. Village strengths and advantages

The village of Batu Majang has the following basic advantages in managing the forest in its territory:

1. Its relatively large, intact forest is the main source of timber and NTFPs, which offers a great incentive to properly manage the forest. The rivers flowing through the forest are the main sources of fish, which supply enough for the community's domestic consumption.

2. Village leadership (village head and customary leader) is democratic and respected by the villagers.
3. Strong existing tradition of collaborative work (*gotong-royong*) among village members.
4. Great support from SLJ in agriculture and the social, economic, and cultural lives of the people.
5. The existence of mineral deposits, especially gold, in the Alan River that can be collected by the people for supplementary income.

III. Village action guidelines for Mataliba'

1. Village general profile

The village of Mataliba' has been populated by the Bahau Teliva' ethnic group since it was established in 1929. Its total population, which has grown very slowly, was 688 people as of 2002, and consists of people from the Bahau Teliva', Buginese, Tonyoy, Timorese, and Kenyah ethnic groups.

The distance from the provincial city of Samarinda is about 400 kilometers. Its altitude is 60 to 100 dpl, and it has an average rainfall of about 440 millimeters per annum, with temperatures ranging from 19°C to 30°C. Compared with other villages, the territory of Mataliba' is very large, extending from the estuary of the Pari' River to a mountain bordering the Tabang sub-district.

Until 1988 the forest in this area was in good condition, because there had not been any exploitation by logging concessions (HPH), industrial tree plantation concessions (HPHTI), or transmigration. Hunting was easy because of the nearby forest. Since the arrival of the HTPH-TI concessionaires in 1992, however, the situation changed drastically. Most forest land in the upper region of the Pari' River was converted into falcataria (*paraserianthes falcataria*) and *gmelina* (*gmelina arborea*) plantations and partly for a transmigration settlement. One result of this massive forest exploitation is the forest fires that devastated the major part of the village forest and bushes in 1997/98. It was estimated that more than 40 percent of the total area was destroyed, including hundreds of hectares of the HTI plantation (partly owned by some villagers) and villagers' orchards (*lepu'un*). At present, there are three logging concessions: PT. Anangga Pundi Nusa (APN), PT. Barito, and a local concession under the IUPHHK scheme owned by the village cooperative, Koperasi Pari' Ngaliman.

Timber contributes a major portion of income to the community under the Cooperative Pari' Ngaliman, which is owned by the community. The HTI plasma or plasma tree plantation established by the villagers that was not destroyed by the fires is actually ready for harvest, but there are no buyers, even though in the beginning the HTI company promised to buy the community's plasma products. The community traditionally collected non-timber forest products (NTFPs), including important ones such as game animals (boar and deer), fish, and

varieties of fruit. Hunters from outside the area, the people say, benefit more from Mataliba's forest than the villagers themselves.

In the agricultural sector, more than 90 percent of the population work as swidden agriculturalists. Swidden farms are generally located along the Pari' River and its tributaries. Rice and vegetables from the farms are harvested for domestic household consumption. Fruit gardens, white pepper farms, and cocoa gardens were mostly destroyed by the 1997/98 fires and have not been fully recovered.

Socially, the village leadership is democratic in essence. The current village head has been in office for 30 years because the people continue to favor him for his democratic leadership. Collaborative work is still well practiced. Women's involvement in community decision-making has shown some important progress. For example, there are two female members in "Team Ten," the group that is actively involved in negotiations for compensation over the community's loss of economic sources due to the HTI operation and forest fires by APN, the HPH-TI company.

2. The community's expectations about the forest and the environment

The villagers dream that the forest that was destroyed will be re-forested, either with forest plants or fruit trees, and that the remaining forest, if possible, is used in a limited way. They think that the HTI operation should no longer be allowed to operate, for it will devastate the remaining pristine forest.

About 32 caves of bird nests are no longer active due to the HPH and HTI operations. Experts are expected to conduct research on how to recover the nests, which could become an important source of income. Moreover, the remaining forest land should be utilized in a sustainable manner, so that it can contribute significantly to the community's economy, either through forest-related activities, plantation, and agriculture, or the three of them together.

3. The goal of forest management

In Mataliba', forest management has the following goals:

1. To sustain the forest by protecting or preserving the remaining rich forest and to replant the degraded forest. In this way, timber and NTFPs such as bird's nests, game, fish, and other products can be utilized by the community in a sustainable manner.
2. Gradually raise the whole community's level of income from forest-related activities, plantation, and agriculture.

4. The problems in forest management and suggested measures to solve them

4.1. Forest and forest land

4.1.1. The problems

- a. The forest fires of 1997/98 destroyed a large area that includes primary forest, secondary forest, and a plantation owned by a private company and some villagers. The whole area of *tana' mawa'* alongside the Meriti' River, which was once rich in timber, was devastated. Moreover, 50 percent of the *lepu'un*, cocoa, and rubber tree plantations, white pepper farms, and the HTI plantation were also destroyed by the fires and have not been fully rehabilitated.
- b. People from neighboring villages encroach on Mataliba's forest to cut trees for their own use.
- c. A large area of forest land was cleared by the HTI company and for new settlements. The process of granting the permit to the HTI company was not done through consultation with the village.
- d. There are no clear boundaries or regulations on the *tanaa' mawa'*, *tana' berahan*, and other utilization zones, so that the utilization is not done properly.
- e. The *banjir kap* activities are conducted without any requirement for the loggers or company to pay compensation to the village for the timber and forest that they cut.
- f. The community is still confused about the status of their customary land (*tanah adat*) in relation to the forest utilization zone called *kawasan budidaya kehutanan* (KBK) and the non-forest utilization zone called *kawasan budidaya non-kehutanan* (KBNK) because, in reality, they overlap. The KBK that was allocated by the government prevents the people from utilizing their customary forest.

4.1.2. Suggested measures

- a. The village should submit a proposal to the DFS to acquire reforestation funding to rehabilitate the destroyed forest and plantations using high-value species and plantation crops. The community should not, however, rely only on the reforestation fund, because it will likely not last for a long period. The community should find their own low-cost way to continue the reforestation effort.
- b. The village head needs to carry out talks with the heads of the neighboring villages to inform them on how and where to properly clear land for swidden farms and to cut trees in Mataliba's territory.
- c. The village government, the HTI Trans, and the HPH should make an agreement on the boundary between Mataliba' and the HTI Trans settlements, as well as with the HPH concession. This action is necessary to avoid overlapping claims over forest

land and further disputes.

- d. The village leaders need to take immediate action to develop a land-use plan that takes into account the changes in land use caused by the forest fires.
- e. The village head, in collaboration with other leaders, should develop regulations on small-scale logging, in order to bring benefits to the whole community, not just for the loggers as it has been so far with the *banjir kap*.
- f. The village leaders should request information from the DFS regarding the status of forest in the village territory based on the government's TGHK, RTRWP, and RTRWK, and look for an opportunity or possibility to obtain formal recognition of Mataliba's customary forest.

4.1.3. Support needed

- a. Explanation and technical instruction are needed from the DFS about the reforestation fund, as is facilitation from the District Agricultural Service (DAS) on how to properly grow trees.
- b. Facilitation is needed from the sub-district government of Long Hubung in developing village regulations and disseminating them to the whole community.
- c. Mediation by the DFS and the sub-district government is needed to bring the village government, HTI Trans, and the HPH company to the negotiating table to discuss the boundary issue.
- d. Facilitation is needed from Bappeda (District Planning Body), the District Service for Community Empowerment (DSCE), NGOs, and universities to develop a village land-use plan.
- e. Facilitation is needed from the DFS, NGOs, and universities in developing regulations regarding the duties and responsibilities of small-scale loggers operating in the village's territory.
- f. Information from the DFS and Bappeda and facilitation from the DFS are needed in the effort to obtain formal recognition of the village's customary forest land.

5. Village economy related to forest utilization

5.1. The problems

- a. Even though the forest is rich in timber and NTFPs, most villagers are swidden agriculturalists with low incomes. The harvest from swidden farms is sometimes not enough to satisfy year-round household consumption demands. Only a handful of people benefit the most from the forest (timber), implying inequality in the distribution of benefits among villagers.
- b. Forest utilization such as *banjir kap*, HPHH, and IUPHHK are being done unscrupulously. People cut trees for cash and do not care about the need to replant trees. If trees aren't replanted after logging, then they will become extinct in the near future.

5.2. Suggested measures

- a. The diversification of agricultural products is deemed necessary. Coffee, cocoa, and other agricultural crops can be good choices. Fish breeding is also a possible alternative that can be developed by households in the rivers around the village proper.
- b. It is necessary to hold village meetings to discuss the future of the forest and to increase awareness about the need to sustain it. If this is not done then valuable trees will vanish, so serious efforts should be taken to save the forest.

5.3. Support needed

- a. Facilitation and guidance are needed from the DAS and DFS on how to grow tree crops.
- b. Guidance is needed from the DFS, NGOs, and universities in awareness building and ways to manage the forest in sustainable way.

6. Village institution

6.1. The problems

- a. Both outsiders and village members often do not comply with the unwritten rules on the utilization of forest. For example, they do not care about the traditional use zones, and other people do not pay fees to the village for the trees they cut. Unwritten rules, in this case, don't function well.
- b. The authority of the village head and customary leader is limited and not as strong as in the past in regulating the use of forest at the village level. This is because there are many external actors taking part in forest utilization who provide capital and money to the village loggers and traders.
- c. Even though women have participated in some public affairs, their participation in the public domain is considered to be less visible.
- d. The community is not familiar with working on long-term planning with clear-cut distribution of roles, rights, and duties among members.

6.2. Suggested measures

- a. The village head and other leaders should initiate an effort to create written village regulations on forest utilization. Such regulations, once completed, should be disseminated to all community members and outsiders who have an interest in the village's resources, and sanction should be applied accordingly.
- b. The level of social cohesion in the village community should be increased between the village head and customary leader as well as the whole community. This effort is necessary to increase the level of observance of village rules and to protect the village's resources from encroachers.

6.3. Support needed

- a. Facilitation is needed from the DFS, NGOs, and universities in developing village rules, as is support from the sub-district government in disseminating the rules to the neighboring villages and other outsiders who want to enter the village's territory.
- b. Facilitation is needed from the DSCE, NGOs, and universities in improving social cohesion and cooperation in the village.
- c. Facilitation is needed from the DSCE, the district, and the sub-district Family Welfare Program, called PKK (*Pendidikan Kesejahteraan Keluarga*), in encouraging women, especially the younger generation, to be actively involved in community decision-making.

7. Government policy

7.1. The problems

- a. Before decentralization (since 1999) the government issued concession permits to logging companies and HTI companies without prior consultation with the village. Under the current autonomy there has not been an effort by the government to evaluate and re-establish the relationship between the village people and the HTI/HPHTI companies.
- b. The government is considered to be too weak in enforcing the company's VCDP obligation.

7.2. Suggested measures

- a. The villagers should urge the government to avoid issuing permits and to propose to the district government to re-arrange or re-establish the relationship between the HPH/HPHTI and the local people.
- b. The village head should ask the government, through the district parliament, to seriously control the implementation of the village development program by concessionaires.

7.3. Support needed

- a. Mediation by the DCC, NGOs, and universities, as well as the district parliament, is needed to approach the district government in order to re-arrange the relationship between the HPH/HPHTI and the local community and to avoid the government issuing concession permits without prior consultation with local communities.
- b. Mediation by the DCC, NGOs, and universities is needed to urge the government to effectively control the implementation of the VCDP.

8. Village strengths and advantages

Mataliba's community has the following strengths and advantages, which can be used or developed to support the preservation of forest:

1. The remaining forest is still large and provides a

lot of resources such as timber and NTFPs.

2. The area that can be converted to agriculture is also large, meaning that pressure on forest land from new swidden farms is not so great.
3. Democratic village leadership with strong support from common villagers.
4. There are a number of skilled individuals in the village that can contribute to the betterment of the community.
5. There is support from NGOs and universities for developing a local system of forest management.

IV. Village action guidelines for Engkuni-Pasek

1. Village general profile

The forest in the relatively large territory of Engkuni-Pasek has been severely degraded due to forest fires in 1982 and especially in 1997/98. Logging activity is very limited if not totally absent. The fires also destroyed important economic resources such as rattan gardens, rubber tree plantations, and traditional orchards (*sim-pukng*).

Crystal-clear rivers (Idatn River, Lungau River, and Encui' River) flow within the village territory and provide fresh water for direct use by the villagers as well as fish for their diet. Some rivers provide stones and gravel that can be collected for construction materials, but if done unscrupulously this practice will jeopardize the clean rivers. The conservation of forest is deemed necessary to keep the rivers clean. Just minutes from the village proper is a waterfall named Jantur Gerongokng, which can be developed for eco-tourism and hydropower. For both these purposes, the conservation of forest is important.

Many parts of the area have been taken over by imperata grass, which is prone to fires particularly during the annual dry season. Some areas are dominated by marshland and can be developed for wet rice cultivation. Even though the soil is generally not suitable for dry rice, wet rice can grow well in the marshland, but not many people grow it due to the hard work required to convert marshland into agricultural land. Generally, most households are not able to produce enough rice for year-round consumption, especially if the weather is inclement.

People in the community also grow other annual crops such as vegetables, and perennial crops such as fruits trees, to supplement their income. In the past, people sold raw rattan for cash. Nowadays they also produce handicrafts from rattan such as a traditional rattan bag, called *anyat*, and other forms or styles. Forest products that contribute to local incomes include rattan (from several varieties), game, fruits (such as jackfruit), and sometimes timber. Many households have rubber tree gardens, but some of them are not very productive, even though they have grown rubber for more than ten years.

Village leadership is still a problem, because the decision-making process is often controlled solely by the

village head. As a result, many villagers are disappointed and distrust their leader. Many people have become apathetic and indifferent about village development. The tradition of cooperation in agricultural work has nearly disappeared, and new ways of cooperating are difficult to harness.

The village of Engkuni-Pasek is confronted with a boundary dispute with the village of Pepas-Eheng that has been difficult to settle. Its roots lie in a conflict over who gets the benefits from the forest (timber).

2. The community's expectations about the forest and the environment

It is expected that this area will become green again, full of either timber or fruit trees and plantation crops, as the imperata grass disappears along with a reduction in the threat of more fires and as the rivers are conserved following the conservation of the forest.

Economic improvement is expected as a result of simultaneous forestry and agricultural activities. To that end, the revival of the tradition of cooperation, including cooperation between the village head and common villagers, is deemed necessary. The village also needs to develop rules to support common activities in many respects, including forestry and agriculture.

It is also expected that the conflict with the other village can be smoothly resolved, so that members of each village can trust each other and respect the rights of each other over the use of land and forest.

3. The goal of forest management

Forest management in Engkuni-Pasek has two main goals:

1. Sustain the forest and protect/conservate freshwater resources.
2. Improve the community's economy through forestry, agriculture, and plantation, as well as eco-tourism.

4. The problems in forest management and suggested measures to solve them

4.1. Forest and forest land

4.1.1. The problems

- a. The forest is prone to fire due to the change in vegetation caused by the previous forest fires. Imperata grass in particular can easily catch fire. This situation is a serious threat to many people because of the annual dry season.
- b. The suitable area for swidden cultivation is limited, so the expansion of farm land is also very limited. This encourages the swidden practice with shorter fallow periods, and soil fertility will be reduced accordingly.
- c. The seeds of the boundary dispute with the village of Pepas-Eheng lie in the unclear boundary line between the villages and the differences in opin-

ions among inhabitants of the former Pepas village, who moved to both Engkuni-Pasek and Eheng. The dispute is essentially a conflict of interests over forest resources, particularly trees that can be cut for cash.

- d. Illegal logging by outsiders in the territory of Engkuni-Pasek is a concern, because the community cannot control the whole forest.

4.1.2. Suggested measures

- a. The community needs to set up forest fire teams whose members are adults. The teams may ask for support from the District Forestry Service (DFS) in providing technical skills to fight and prevent fires.
- b. The community needs to make a land-use plan and increase the productivity and capabilities of farmers to practice high-yield farming techniques.
- c. The village head should take the initiative to re-arrange the village boundary with neighboring villages, especially the one currently under dispute. The village map made in a participatory way with the help of SHK Kaltim a couple of years ago can be used as a basic reference for negotiations.
- d. The community, in collaboration with neighboring villages, needs to conduct control and surveillance of the primary forest in order to prevent illegal logging. This will work only if the community members develop good internal cooperation among themselves.

4.2. Support needed

- a. Technical training and tools for fire prevention are needed from the DFS Forest Fire Unit.
- b. Facilitation and guidance are needed from the DAS on how to develop affordable agricultural technology, such as how to make and use organic fertilizer.
- c. Mediation and facilitation are needed from the sub-district of Barong Tongkok, the District Council of Adat, and the Multi-stakeholder Mapping Team in the effort to establish the boundary line between Engkuni-Pasek and Pepas-Eheng.
- d. Facilitation is needed from the sub-district of Barong Tongkok, the DFS, and the District Customary Council (DCC) in making agreements and cooperating with neighboring villages in an effort to effectively control and prevent illegal logging.

4.3. Village economy related to forest utilization

4.3.1. The problems

- a. Households generally have low-income levels as a consequence of low productivity in swidden cultivation.
- b. Important supplementary sources of income, such as rattan gardens, traditional fruit gardens, and rubber gardens, were mostly devastated by the

forest fires and have not been rehabilitated.

- c. The remaining primary forest (*bengkar, lati*) has not been utilized for optimum economic benefit by the people.

4.3.2. Suggested measures

- a. Farmers need to increase farm productivity using simple organic fertilizer, and need to diversify their sources of income to also include raising livestock, fishing, and producing handicrafts (home industry).
- b. Farmers need to re-grow and re-enrich the rattan gardens, rubber tree gardens, and fruit tree gardens.
- c. The whole community needs to rehabilitate the forest's condition, especially along riverbanks and around waterfalls.
- d. In particular, the Jantur Gerongokng waterfall, which is located close to the village proper, should be developed for eco-tourism by developing it as a convenient place for bathing, swimming, relaxing, and camping.

4.3.3. Support needed

- a. Technical support is needed from the DAS and its sub-district agricultural extension program, from the Rio Tinto Foundation in the field of agriculture and fisheries, and from the District Labor Service (DLS) to support the community in developing a handicrafts industry.
- b. Facilitation and financial support is needed from the DFS for the rehabilitation of the lost crops.
- c. Facilitation as well as technical and financial support is needed from the DFS and District Environmental Service (DES) to rehabilitate areas around riverbanks and waterfalls.
- d. Facilitation and financial support is needed from the District Tourism Service (DTS) in the effort to develop the waterfall as an eco-tourism site of interest.

4.4. Village institution

4.4.1. The problems

- a. Village organizations that form the village's governance system (village government, village parliament, and customary council) have not given sufficient attention to the need for forest conservation. This is because they are not well coordinated and because most village decision-making is controlled by the village head.
- b. The changes in the forest's condition and forestry in general have caused some customary rules to be no longer appropriate.
- c. Villagers have become apathetic and indifferent about village development due to decades of weak leadership. They are reluctant to show interest in improving the village.

4.4.2. Suggested measures

- a. The village head or other leaders should initiate a move to coordinate among the various village governance organizations in order to be able to pay more attention to forest conservation issues.
- b. The community, under the leadership of the customary leader, should evaluate the current customary law on land and forest utilization and, if necessary, develop written rules. Community meetings need to be held frequently.
- c. The village head should take the initiative to develop a village plan in a participatory manner. It should have clear targets, steps, and role distribution in order to give as many community members as possible the opportunity to realize their aspirations.

4.4.3. Support needed

- a. Facilitation and guidance are needed from the DSCE in improving the coordination and collaboration among the organizations for village governance.
- b. Facilitation and guidance are needed from the DFS and DCC in developing programs for conserving the forest and in formulating rules on natural resources use and management.
- c. Facilitation and technical guidance are needed from the DSCE, NGOs, and universities in the effort to develop a village plan in a participatory manner.

4.5. Government policy

4.5.1. The problems

- a. Government policy regarding village development is sometimes unclear for the majority of people. Hence, they don't care about its implementation, control, and evaluation.
- b. Government policy on the reforestation fund is not well disseminated to the whole community, resulting in misunderstanding on how to make proposals.

4.5.2. Suggested measures

- a. The village head and the whole community need to proactively ask for information from the relevant government agencies about their programs for the village.
- b. The village leader needs to ask for detailed information from the DFS about the reforestation fund and how to submit proposals to the Land and Forest Rehabilitation Section.

4.5.3. Support needed

- a. The relevant district agencies need to inform the community about development programs or projects in the village, and allow the people to take

part in the execution and evaluation of the projects.

- b. The DFS needs to provide documents or information on how to carry out land and forest rehabilitation and how to submit proposals.

5. Village strengths and advantages

The village of Engkuni-Pasek has the following strengths and advantages that can function as a basis for further improvement:

1. Despite the weak state of village governance, the village has several young people who have achieved middle and higher education, and some of them are strongly committed to village development. They can be trained in village development.
2. Geographically, the village is located not far from the district and sub-district towns and has relatively easy transportation and communication. Such a strategic location is actually beneficial for marketing agricultural produce, forest products, and tourism.
3. It has a good relationship with external agents such as the Rio Tinto Foundation, SHK Kaltim, and the Center for Social Forestry at Mulawaman University.

V. Village action guidelines for Muara Jawa'

1. General village profile

The village of Muara Jawa' has undergone at least two large natural disasters in the last few decades, that is, the forest fires of 1982 and of 1997/98, which devastated the area's forests to a large extent. Another disaster the area now suffers from is flooding, which has become a recurrent phenomenon.

The village territory consists of degraded land (critical forest), a forested area, plantation area, shifting cultivation area, and secondary marshland forest. The so-called critical land is dominated by imperata grass that is spreading throughout the territory. The forested area (pristine forest) is found only in a small area of the upper Lalong River. Plantations are still insignificant in size. Shifting cultivation takes place mostly along the main roads. The marshland is divided into two categories: cultivated and not cultivated. Cultivated marshland is located near the village and is planted with sago palm and wet rice. The non-cultivated area is partly forested.

Secondary forest (*talutn batakng dan talutn urat*) has spread in the territory and has been partly converted to agriculture.

The traditional forest rights began to be disturbed with the arrival of a logging company in 1971. Currently, there are three logging companies with base camps in the village proper. They no longer extract timber from the Muara Jawa' area, because there are no valuable trees left

to be cut. The presence of the logging companies is not looked upon positively by the local people, even though the companies have provided some assistance to the community.

The village was established in 1905 and has experienced four important historical periods, that is, the Dutch occupation, the Japanese occupation, the New Order Indonesia period, and the reform period. During the Dutch occupation, the customary village government was recognized, while the Japanese occupation was marked with livelihood hardships, because the Japanese troops confiscated agricultural produce and dismissed the traditional governance system. The New Order regime changed the face of Muara Jawa' by giving logging concessions to private companies. The 33-year operation of the companies resulted in the liquidation of the timber supply in the area.

The main livelihood of the majority of the population is shifting cultivation, which generally has very low productivity. Therefore many households need to produce supplementary income, the source of which comes partly from the forest. But many of these sources were destroyed by the 1997/98 forest fires. Forest products that still can be harvested are rattan, sago palm, sugar palm, fruits, firewood, vegetables, and medicinal plants. In recent years, the community cleared some of the critical land for a small-scale rubber plantation, but this is still under development.

The large size of the population makes it difficult for the village authorities to organize and coordinate village-wide activities, so the village is divided into several groups according to the location of the residential groups. As a result, sometimes the activities of one group are not known by the others.

2. The community's expectations about the forest and the environment

The people of Muara Jawa' dream of having a well-managed forest, with the critical lands becoming green again because trees, either fruit trees or trees for timber, grow again. And the area will become more beautiful if the threat from forest fires can be removed.

If the forest is well managed, the fresh water resource of the Lalong River (*Sungai Lalukng*) will be sustained, forest products can provide more benefits to the community, and the economy would be improved.

3. The goals of forest management

In accordance with ecological conditions, the goal of forest management for Muara Jawa' can be set up as follows:

1. To sustain the forests and the environment, including reducing the threat of floods.
2. To improve the economy of the community.
3. To conserve freshwater resources, particularly potable water for the whole community.

4. The problems in forest management and measures needed to solve them

4.1. Forest and forest land

4.1.1. The problems

- a. A combination of rapid forest destruction due to forest fires, agriculture (shifting cultivation), and logging activities. The destruction is observable in the critical lands.
- b. The threat of forest fires every year, especially during the dry season. The forest has become prone to fires because of the change in the nature of vegetation and also from slash-and-burn cultivation.
- c. The freshwater resource of the Lalong River is under threat because of deforestation in the upper region.
- d. The tendency to clear land for shifting cultivation alongside main roads may lead to over-exploitation of the area.

4.1.2. Suggested measures

- a. Reforestation should be conducted by the people of Muara Jawa' in the area that has become degraded and critical. This can be done in private and communal forests.
- b. The community, under the leadership of the village head, needs to take action to prevent forest fires. The people should be wary, especially during the dry season when they burn swidden fields and in dealing with imperata grass.
- c. The village head and other leaders should initiate steps to set up a protection forest in the upper area of the Lalong River in order to protect freshwater resources and reduce flooding.
- d. The concentration of swidden field locations can be reduced if the practice of swidden cultivation itself is reduced. For that purpose, alternative means of livelihood are important such as planting rubber trees, rattan, and other trees, or a mixture of agricultural and forestry activities.

4.1.3. Support needed

- a. For the time being, financial support and seedlings for reforestation can be expected from the government's reforestation program through the District Forestry Service (DFS).
- b. Support for fire prevention should come from neighboring communities and the DFS, which is also expected to provide training in preventing and combating fires.
- c. In setting up a protection forest it is necessary to gain support from outside organizations such as the DFS, for legal aspects, and from NGOs and others for technical aspects such as mapping, with which assistance can be expected from the "Tim Peta Pihak" (Multi-stakeholder Mapping Team) of

West Kutai District. Getting agreement and cooperation from the logging company is also important because the area is under its concession.

- d. Support is needed from the DAS and DFS in promoting alternative agriculture-based and forest-based means of livelihood to replace swidden cultivation.

4.2. The community's economy in relation to forest use

4.2.1. The problems

- a. Important forest-based economic resources (i.e., rattan, orchards called *simpukng munan*, sugar palm, sago palm) were destroyed by the forest fires in 1997/98, and they have not fully recovered.
- b. The productivity of shifting cultivation is generally low, but it is still the main source of livelihood for the majority of people because of limited opportunities for more productive alternatives.

4.2.2. Suggested measures

- a. The community needs to make effective and efficient use of the reforestation fund (which they have already received) for planting high-economic value species such as aloewood, ironwood, *sungkai*, rattan, and rubber.
- b. Since the reforestation fund is not a continuous fund, the community should develop ways to reforest and plant that do not require a lot of funds. This, for example, can be done by step-by-step planting or reviving the traditional practice of village cooperation, called *gotong royong*. This kind of cooperation was effective in shifting cultivation, but it is not (or less) applied in other agricultural activities such as plantation.

4.2.3. Support needed

- a. Aside from the Reforestation Fund, the community needs technical support from the DFS and DAS.
- b. In efforts to reduce dependence on external funds, the community should work to organize itself well. The DSCE and NGOs may be expected to facilitate in community organizing activities.

4.3. Village institution

4.3.1. The problems

- a. The customary law has been contested and weakened, and it is hardly of use in protecting the remaining pristine forest. In Muara Jawa' this type of forest is considered common property. Each individual has equal rights to take benefits from the forest, except for a limited number of forest products that are considered individual property under the "finder's right."

- b. The village authority still has not put the problem of forest management into its priority programs and, as such, it does not allocate resources for the work.
- c. There is a low level of participation of women in the community's decision-making processes. Women generally do not attend village meetings. If they do, they rarely express their opinion. However, negative impact of the low participation has not been detected.
- d. There is a low level of participation of the youth in the adult community's decision-making process. As a result, the youth cannot be expected to be catalysts for improved forest management.
- e. It is difficult to bring together all segments of the community for any village-wide program or activity because of the large size of the population holding a diversity of jobs, and also because they live separately in different residential areas.

4.3.2. Suggested measures

- a. The community, under the leadership of the village head and customary leader, needs to review the existing customary law on forest management, both for the reforestation and protection forest, and develop new rules if necessary. The development or modification of the customary law should consider the scope of its application, given that the community is divided into several ethnic groups.
- b. Village governance bodies (village government, village parliament, and customary council) should strengthen their roles in forest management. For this purpose, the management capability of the village authority should be upgraded.
- c. Village leaders should encourage all elements in the community, such as women, youth, and religious groups, to be involved in the process of community decision-making. This would improve the process and system of decision-making regarding matters that impact the whole community.
- d. Village leaders should find ways to improve the village information system in order to improve coordination among the various segments of the community.

4.3.3. Support needed

The core of the effort to empower the village institution is community organizing. Support for community organizing can be expected from NGOs, and the DSCE is also an appropriate agent to support this effort.

4.4. Government policy

4.4.1. The problems

- a. The villagers' access to primary forest is restricted due to the concessions given to logging companies.
- b. The dissemination of government policy does not

reach the majority of people. For instance, the rules governing the reforestation fund are not clear to many people because they are not well informed.

4.4.2. Suggested measures

- a. The village authority (village head) should submit a proposal to the concessionaires in order to secure the use-rights to the remaining resources, in particular to develop a community-based protection forest.
- b. The village head and other leaders should improve the village's information system, including finding ways to disseminate information from the government.

4.4.3. Support needed

- a. Good will is needed from the concessionaires in order for successful talks with them to occur.
- b. Improvement of the village's information system is a part of community organizing, and this requires facilitation from the DSCE and NGOs.

5. Village strengths and advantages

Muara Jawa' has the following strengths and advantages that can be utilized to deal with the above problems:

1. Its strategic location on a major transportation and trade route—the Mahakam River. The river is the main route connecting urban areas in the lower regions and rural or hinterland areas in the upper regions, and the village's strategic location offers access to more markets for agricultural produce and forest products.
2. It is located very close to the center of the district government. This will enable frequent contact and communication with the administration and other parties in the town.
3. The fact that it has a large population may encourage the local administration to provide more development support to the community, including support for the agricultural and forestry sectors.

VI. Village action guidelines for Tanjung Jan

1. General village profile

The village of Tanjung Jan covers a relatively small territory of about seven square kilometers. In this small area, primary forest has become obsolete since the forest fires of 1997/98. There are no logging activities. Many of the previously forested areas are now dominated by secondary forest, shrubs, and grasslands, and this change in vegetation makes the area prone to fire.

The degradation of the forest in Tanjung Jan has contributed to jeopardizing the sustainability of Lake Jempang, which is very important to the surrounding villages. The lake, which is five square kilometers in width, has

functioned as a main route of transportation for generations for the surrounding villages such as Tanjung Isuy, Tanjung Jone, Pulau Lanting, Muara Ohong, Jantur, Mancong, and Tanjung Jan. Hundreds, if not thousands, of households are dependent on fishing in the lake as their main source of livelihood. Unfortunately, in the last decade the lake has dried up every year during the dry season.

A large portion of the village area is marshland, where human activities are rarely performed. The forest in the marshland was already destroyed by fire. This small area became the subject of a dispute between the villagers and an oil palm company, because the company confiscated a part of the land for a plantation without prior consent from the people.

The soil is not suitable for dry shifting rice cultivation and its productivity is low. Economically, most people have been relying more on growing pineapple, which is planted simultaneously with rubber and cassava trees. Some households grow rattan on their land. Although shifting cultivation is still practiced, the majority of people rely more on sedentary cultivation, which significantly reduces pressure on the forest. So the threat to the forest is nowadays less from shifting cultivation but more from forest fires.

Traditional weaving, called *ulap doyo*, is another source of income, but the number of women doing it has recently dropped to very few because of a poor market. Although Tanjung Jan is located on the banks of Lake Jempang, not many households are dependent on fishing.

Village leadership has changed drastically since 1999. The new village head, who was elected democratically, leads the village in a democratic manner. Decision-making is made with the people. Nonetheless, decision-making is still dominated by men, yet the women do not complain about this.

Puti Jaji, an NGO based in the provincial city of Samarinda, has worked with the people for years (since 1996), helping them in advocacy and strengthening the village institution. The NGO also set up a village library that provides books, magazines, newspapers, leaflets, brochures, and other forms of information about agriculture, livestock, and laws and ordinances, especially regarding human rights, civil rights and indigenous rights, and democratization.

2. The community's expectations about the forest and the environment

It is dreamed that the village forest that has been very much degraded grows back and becomes green again with trees for both wood and fruit. There should be no more imperata grass left growing, because it makes the area prone to fires. Improvement in the forest's condition should be followed by an improvement in the environment as a whole and the economy in particular. To that end, good relationships and cooperation among community members and among members and leaders are to be developed. They should work hand-in-hand to create

forest management plans and regulations. They also expect that the improvement in forest condition will contribute to the preservation of Lake Jempang.

3. The goal of forest management

Based on the general situation described above, the goals of forest management in Tanjung Jan can be described as follows:

1. To sustain and improve environmental conditions, including the forest itself, fresh water resources, and stabilizing the water level of Lake Jempang.
2. To improve the economy of the people from both forestry and agricultural activities.

4. The problems in forest management and suggested measures to solve them

4.1. Forest and forest land

4.1.1. The problems

The remaining secondary forest is prone to fires. The reason is because many parts of the forest have become degraded and can easily become dry. The people are worried about it.

4.1.2. Suggested measures

- a. Prevent fires by establishing good cooperation / coordination with neighboring villages.
- b. Replant the forest that has become degraded with fruit trees or valuable wood trees for greater economic incentives.

4.1.3. Support needed

Support for fire prevention can be expected from the oil palm company and the District Forestry Service (DFS). A reforestation fund is expected from the DFS.

4.2. Village economy related to forest utilization

4.2.1. The problems

- a. As natural forest resources are very limited, they are not so important for the economy of the community.
- b. Forest management and agricultural activities have not been well integrated, whereas planting trees can be done simultaneously with agriculture, such as planting cassava, pineapple, medicinal plants, and so on.
- c. Although *doyo* (*Curculigo spp.*), a material for traditional weaving, is gradually re-growing in the natural forest after the forest fires six year ago, this industry is not being developed due to poor market conditions.

4.2.2. Suggested measures

- a. In lieu of natural forest, it is necessary for the community to promote man-made forest, such as agroforestry and plantations, to be important in-

come supplements or even main sources of income in the future.

- b. The community needs to integrate forest management and agriculture through the *taungya* (*tumpang sari*) system by which valuable trees such as *sungkai* (*Peronema Canescen*), *ulin* (*Eusideroxylon zwageri*), and *gaharu* (*Aquilaria malacensis*) are planted together with agricultural crops such as cassava, chili, vegetables, pineapple, and so on.
- c. The community should make and promote the traditional clothing made of *doyo* to external societies, including tourists. It is also necessary to find out how to grow *doyo* in gardens rather than relying on naturally growing *doyo* plants.

4.2.3. Support needed

- a. Technical support for the first two measures (a and b) is expected from both the DFS and the District Agricultural Service (DAS).
- b. The DFS may financially support the reforestation fund for a larger-scale effort to develop agroforestry or plantations.
- c. The district government and the business world could provide support in marketing *ulap doyo*.
- d. Growing *doyo* has not been done by anybody before. The community may try to do so, but research by experts may be necessary to achieve high-quality *doyo* plants.

4. 3. Village institution

4.3.1. The problems

- a. Village governing bodies such as the village government, village parliament, and customary council do not have enough initiative and do not give priority to forest management in their programs.
- b. The change in forest features, including the rights over forest resources, and the change in the pattern of livelihood from swidden cultivation to sedentary gardening, has caused the gradual disappearance of traditional internal collaboration, called *pelo jerab*, in agricultural works.
- c. Low participation of women in community decision-making processes due to their low level of education.
- d. Lack of skills in developing program plans with detailed targets, steps, and procedures.

4.3.2. Suggested measures

- a. Improve coordination among village governing bodies as an effort to enhance the roles of the bodies in village development in general and in forest management in particular.
- b. The community, under the leadership of the village head, needs to find a new way to collaborate in agricultural work so as to revive the traditional

practices.

- c. The community needs to enhance the role of women in the community decision-making process by allowing them to take part in all village meetings and obtain training relevant to women's empowerment.
- d. The village head and other leaders need to have training on managerial skills relevant to village management, including among others the skills to develop program planning.

4.3.3. Support needed

- a. Puti Jaji, the NGO still operating in Tanjung Jan, can be asked to facilitate the above-suggested activities but particularly in the improvement of village management.
- b. The District Service for Community Empowerment (DSCE) should be able to provide advice and support in strengthening the village institutions.

4.4. Government policy

4.4.1. Problems

Many people believe that the government does not show clear support of the local people's rights over customary land. Their land, of which the ownership is based on customary law, can be at any occasion taken by an oil palm plantation company, as has happened before.

4.4.2. Suggested measures

- a. The community members, under the leadership of the village head, should be proactive in approaching the district government, or go to the central government through the district government, in order to secure the government's support of their traditional rights to the land.
- b. The rights to land can also be secured by obtaining a land certificate by each owner.

4.4.3. Support needed

Mediation and facilitation from a third party, such as an NGO, is necessary to bridge the communication gap between the community and the government as well as the private company that is interested in Tanjung Jan's land. Such facilitation is also important in obtaining the land title.

5. Village strengths and advantages

The village of Tanjung Jan has the following advantages or strengths:

1. Democratic village leadership and participatory mode of decision-making.
2. Long-lasting support from an NGO in the field of advocacy and institutional empowerment.
3. A large number of energetic, young people.

VII. West Kutai District Policy Guidelines for community participation in forest management

The elaborated guidelines are comprised of principal guides to follow, current problems, and suggested measures and support needed to mobilize, as described in the following section.

1. Recognition of local community rights and culture

1.1. Guideline 1

The recognition of local (*adat*) community rights and culture is very important, since they are related to the community's real life, their access to resources, and opportunities to improve themselves using their own resources.

1.2. Current problems

- a. There is no guarantee and safety of access, control, and ownership of the villagers of the local forest resources, especially in potential conflict areas such as in land rich in coal deposits and potential areas for plantations. The problem emerges from the ambiguous status of classifications of state forest (*hutan negara*) and proprietary forest (*hutan hak*) in the Basic Forestry Law No.41/1999, where the so-called customary forest (*hutan adat*) and village forest (*hutan desa*) are put in the category of state forest instead of proprietary forest. Embedded in this problem is the weak local government support, both provincial and district, of community rights in forest land areas. The community's forest land can be taken by any enterprise holding a concession permit issued by and with the support of the national government.
- b. The commonly-held view among quite a number of government officials and other parties is that the local community's level of general understanding is not very high, so they think that local people need to be trained based on the will of outsiders. This point of view tends to create a developmental approach which degrades the local community's rights and dignity.

1.3. Suggested measures

1. The district government should find a way under existing rules and regulations to guarantee access, control, and ownership of the community of its own forest resources, and also to involve it in decision-making that concerns matters such as the designation of locations for plantation areas and forest concessions (HPH). If the authority rests with the central government, then the district government should be designated as the mediator between the central government and the community.
2. The local community's rights should be recognized in the form of regulations and realistic implementation programs issued by the district at the village level, particularly those relating to forest

use and property rights of forest land that is commonly used and managed by the local community.

3. The "cultural competence" of the district government and the district legislative assembly (DPR) should be improved; this includes understanding the cultural differences among the various sub-ethnic groups in West Kutai District.
4. Another area needing improvement is the knowledge and understanding of staff and members of the district government and district legislative assembly (DPR) of human rights principles and related constitutions/laws that manifest those principles.

1.4. Support needed

A number of important undertakings are needed to guarantee the rights of local communities, such as the formulation of the necessary district regulations, effective execution of implementation programs, and the support of law experts, academics, and NGOs. All of these actors can give their support in the form giving seminars, providing consultation, writing articles in the mass media, etc. Similar support is also needed in improving the "cultural competence" of government officials and the general public, which includes understanding universal human rights and local community rights.

2. Social capital and community organizing

2.1. Guideline 2

1. In order to realise full participation, social capital and community organizing need to be revitalized. Social capital is the competence of the community to regularly carry out organized collective activities.
2. Social capital is related to the condition of the village institutions. Here, the term "institutions" refers to acts, behaviors, or habits (practices) based on similar principles that exhibit regularity and/or the underlying rules and regulations.

2.2. Current problems

Issues of social capital emerge from the fact that some villages are not well organized, a problem that is related to the factors listed below.

- a. *Weak customary laws for protecting the forest, especially primary forest.* Most primary forests are, in reality, "common forests," in which all people have the same right to extract forest products, except for a limited number of specific ones claimed by individuals. This weakness of customary law in protecting forest resources was found in every one of the villages studied.
- b. *There are no written regulations in any of the villages about the management and extraction of the surrounding forest.* In fact, each village needs to record the regulations issued by the village administration in written form, in coordination with

the village customary council, because the existing customary laws (unwritten) do not guarantee sustainable forest management in the current state. The unwritten regulations tend to be ignored by the villagers themselves—even more by outsiders—with the excuse argued that an “unwritten regulation is no-evidence of a regulation.” The absence of written regulations at the village level weakens the authority of the village head to the point of being ignored, especially in terms of forest exploitation. The fact that regulations are unwritten creates an even more serious problem when the people who actually do understand the regulations can’t implement them or even deliberately ignore them, as the study cases show.

- c. *The lack of attention given to forest management problems by village administrations is another problem.* There has been no organized effort at the village level, either among the village administration institutions or between these and the villagers themselves, to solve problems such as forest fires and excessive forest exploitation. This is quite surprising, since forest damage and degradation have been raised as concerns in the discourses with many villagers, including the village administration staff themselves. This situation is found in all villages.
- d. *Lack of women’s participation in decision-making.* Generally, women are passive or don’t take part at all in village meetings. There are some villages where the women are brave enough to speak out and are active, but they still do not play any significant roles in village decision-making. Such conditions are based on the local culture in which women are not really expected to be involved in the public domain. Another basic reason for this is the generally lower level of education of the women compared to the men—another situation observed in all villages.
- e. *Weak control mechanisms for village decision-making.* Local village communities are still in the transition to democracy. Some village heads are not accustomed to democracy, and they still make decisions the old-fashioned, autocratic way. The currently existing Village Parliament Board (BPK) could actually act as a control system to provide balance to the village head-centered policy decisions, but generally this relatively new institution still doesn’t work well in most of the villages studied.
- f. *The district government doesn’t have sufficient outreach capacity or competence in facilitating community organizing.* In each of the 233 villages in West Kutai District, the limitations of the district government were evident in the lack of basic knowledge and techniques of organizing the community, as well as in the limited number of personnel and budget allocated.

2.3. Suggested measures

1. Improve the community organizing activities in managing local forest resources, starting with the villages facing the biggest potential problems, to the villages that have almost no problems in this regard.
2. Facilitation measures should be addressed at improving the structure and mechanisms of each village’s management as a whole, which includes improving the managerial competence of village administrators, preparing village regulations that deal with forestry and natural resources management—including a review of local customary law—and reinforcing the participation of women in decision-making. The organizing has to be directed at improving cooperation in each village and between villages, based on common needs and concerns, in order to solve internal or external conflicts and improve democratic decision-making.
3. Improve the knowledge and skills of government personnel, especially the field officers of the District Service for Community Empowerment (DSCE), the District Forestry Service (DFS), and other district services related to community organizing.
4. The government should allocate sufficient funds to facilitate community organizing in the field.

2.4. Support needed

The efforts in organizing the community must have the support of concerned NGOs that are specialized in this matter, because they have more direct experience and close relations with the villagers. The recently launched International Fund for Agricultural Development (IFAD) program in West Kutai is also able to support these efforts. IFAD has an interest in community organizing, as shown in its efforts to improve the socio-economic status of communities in the interior.

3. Community access to information

3.1. Guideline 3

1. In a democratic country, access to information is a basic right of all citizens.
2. In Indonesia, which is now in the transition period to democracy, the right of access to information should be considered a crucial matter by the government as well as the general public.
3. Therefore, information disclosure matters must also be considered as vital by the government.

3.2. Current problems

- a. The general public still does not consider access to information as an important civil right.
- b. The district government is still lacking data in many fields, including forestry.

- c. There is a lack of multimedia information facilities that can be used by the government and the public.
- d. Government offices, in general, have not been sufficiently proactive in gathering the needed information from the public.
- e. The information passed from the public to the government is often responded to sluggishly.

3.3. Suggested measures

1. Build the public's awareness of citizen's civil rights, including the rights to access and giving information.
2. Accurate and reliable data must be gathered and provided through the Center of Forestry Data, which is now being developed by the District Forestry Service.
3. The government should continuously implement information disclosure to the public, especially information related to the public's interests and finances.
4. The government should exercise sanctions on parties who intentionally hinder the community's access to information.
5. The government should establish and maintain information channels for information flows from the public to the government and vice versa, including the handling and use of information.

3.4. Support needed

The cooperation of NGOs and other public institutions is needed to support these efforts, as is the cooperation of competent individuals such as law experts and academics. Continued support is also needed, at least for the next few years, from the Center for International Forest Research (CIFOR) and the CSF in fostering the Center of Forestry Data being developed by the District Forestry Service.

4. Value and critical education

4.1. Guideline 4

1. Value education is the notion of education to form the awareness of preserving forest sustainability, and in this regard the collaborative activities of all components of the community must be made a crucial issue in West Kutai's forestry program.
2. Value is something that is considered as good and proper, but it's not the same as ethics, which is concerned with rightness and appropriateness.
3. The understanding of value and value awareness must be reinforced from two sides—from the meaning of the value itself and from the knowledge of reality compared to the value, such as in an environmental crisis situation.

4.2. Current problems

- a. Government officers are still not sufficiently

aware of the importance of value education for community members and themselves.

- b. There is still no focused and organized value education program at the district level, particularly in the field of the environment.

4.3. Suggested measures

In terms of value and critical education, the government may use a number of alternative methods and media, such as radio, television, print media, theater, schools, hearings, etc. The education efforts should be directed at the following:

1. forming an awareness of the non-economic values of the forest (ecological, social, cultural, and spiritual);
2. forming an awareness of the forest and environment crises, understanding of the current realities and their future impacts; and
3. formulating the ideal concept or state for forest and environment conditions (a vision of forest use and management).

4.4. Support needed

Formal schools and the institutions which focus on environment- and forest-conserving activities (NGOs, research institutes, universities, etc.) can provide the main support needed in the effort to build value awareness and cooperation between the government and these institutions. It is also suggested that cooperation between Natural Resource Management (NRM), The Nature Conservancy (TNC), IGES, CSF, and others is still required for the next couple of years to support the district government's efforts.

5. Social control and law enforcement

5.1. Guideline 5

1. Social control and law enforcement is a necessity in encouraging community participation in local forest management.
2. A loss of respect for the law amongst the West Kutai communities should be prevented, since the impacts can be very nasty if it occurs.
3. Therefore, the way that money, relations, and power influence the thinking and behavior of government officials needs to be socially controlled somehow. In other words, the general public first needs to properly observe how law authorities and policymakers think, decide, and act in reality.
4. Social control and law enforcement should start particularly with the following current sensitive issues: the spending of public money (the government budget is indeed "public money"), the implementation of reforestation projects, the control over the issuance and implementation of log cutting permits (*Ijin Pemanfaatan Hasil Hutan Kayu [IPHHK]*), the responsibility of the forest concessionaires to conduct environmental impact

assessments, and so on.

5. The appropriate mechanisms to undertake and move forward on the above-mentioned social control and law enforcement measures need to be designed in a transparent and participatory manner.

5.2. Current problems

Law enforcement is a national problem in Indonesia. There is a sarcastic local saying that “a cat can turn into a buffalo,” meaning that the right can be the wrong and vice versa, depending on the three conditions of money, relations, and power. Nationally, the public’s distrust of law authorities is clearly evident, as are symptoms of social frustration, which are seen in the practice of people taking the law into their own hands and doing other deeds that are clearly against the law. The field research noted the following facts:

- a. The government is too weak in controlling the operation of forest concession holders (HPH), especially in fulfilling their obligation of conducting the Community Development Program (*HPH Bina Desa*) for the communities in the surrounding area. The negative impacts on the communities emerging as a result of their existence are still considered much larger than the promised benefits.
- b. The government doesn’t supervise reforestation projects properly, so that community participation in those projects is still not sufficiently optimal.
- c. Community members don’t have sufficient competence in supervising and enforcing laws or approved regulations.

5.3. Suggested measures

1. Create more channels for social criticism and impose penalties on whoever violates the law, including government officers.
2. The district government must create a complaint mechanism for community members or whoever suffers any kind of loss (loss of access, damage to property and resources, etc.) by establishing an *ombudsman* institution at the district level.
3. The district government should formulate regulations to arrange for financial support from outsiders to the government, law institutions, and/or government officers in order to prevent the government and law authorities from being weak in law enforcement.
4. The government should properly examine and take into consideration the people’s “notion of justice” in any policy formulation and decision-making.
5. The district government should exercise appropriate logging control mechanisms on the logging activities of both the forest concession-holders and community members.
6. The District Forestry Service should exercise control mechanisms on the implementation of reforestation projects as effectively as possible.
7. The district government should formulate reliable

regulations and exercise the appropriate mechanisms to ensure that environmental impact assessments are undertaken of the operation of forest concessions and other logging activities.

5.4. Support needed

The support for social control and law enforcement can be obtained from all community members, mass media (newspapers, television, radio), scientists, NGOs, law experts, law institutions and officers, public institutions, and many others, but all supports must be done in synergy with one another.

6. Conflict prevention and resolution

6.1. Guideline 6

Any potential, emerging, and manifested conflicts need to be either appropriately prevented or properly resolved, as conflicts prevent the effective participation of the parties in conflict in local forest management and development activities as a whole.

6.2. Current problems

West Kutai District possesses many potential, emerging, and already existing conflicts, be it the conflict between the community and the company, the conflicts among villages, or internal conflicts in the villages themselves. The field research noted the following:

- a. The economic value of the timber causes forest boundary conflicts between villages, which are difficult to solve by the two sides alone. This kind of conflict also raises the following questions about the notion of the *adat* forest (*hutan adat*): Is the *adat* forest the same as the village forest (*hutan kampung*), or is the *adat* forest similar to the genealogically-based forest (*hutan waris*)—the forest considered to be the proprietary right of the people descended from one owner/ancestor, usually the “noble”?
- b. The conflicts between the community and the company still exist; some inherited from the time before the establishment of West Kutai District. Most of the conflicts occurred because of the expropriation of the community forest by the company that obtained a forest concession from the central government.
- c. The government has not properly functioned in solving the boundary conflicts between villages (Long Bagun Ulu versus Batu Majang, Engkuni/Pasek versus Pepas/Eheng, Tanjung Jaan versus Pulau Lanting). The problem is quite serious and difficult to solve alone by the concerned parties themselves.

6.3. Suggested measures

1. The district government should pay more attention to the root causes of the existing conflicts and try not to make the same mistakes again in policy and

decision-making, for example, in areas such as issuing permits for the operation of plantation enterprises, mining companies, and the like that could have direct impacts on the local community and stimulate conflicts.

2. The district government should settle land delineations between villages and sub-districts through participatory mapping, which involves all neighboring parties, and it should conclude the District Land Use Master Plan (*Tata Ruang Wilayah Kabupaten [RTRWK]*), including acknowledging local (*adat*) rights.
3. The district should clarify the notion of the *adat* forest (*hutan adat*) according to the Basic Forestry Law No.41/1999, as well as the notions of the village forest (*hutan kampung*) and the genealogically-claimed forest (*hutan waris*).
4. The district government should actively initiate mediation to resolve conflicts by establishing a mediation team that involves all concerned parties.
5. The district government should establish an institution for an ombudsman at the district level to address community complaints.
6. The district government should impose the use of collaborative forest management in any disputed forest area by designating the area as a joint-use area (*wilayah pemanfaatan bersama*) if the parties in conflict do not accept the division of the forest area.

6.4. Support needed

Preventing and solving conflicts is basically a shared responsibility, one that requires the efforts of all sides, including neutral third parties. Therefore, the district government needs support from all related and concerned parties—the community, the company, NGOs, security officers, law experts, and academics.

7. Village economy development

7.1. Guideline 7

1. Community participation in local forest management must be treated as part and parcel of village economic development.
2. Although socio-cultural and spiritual incentives may be of similar importance to the community, economic incentives might be more encouraging, particularly in the first phases of participation.

7.2. Current problems

- a. In villages where community logging (*banjir kap*) activities are being conducted, there is a tendency for the big profits to flow to only particular groups in the community (individual traders and loggers), while most of the community members only get a small share (*the compensation fee*). This is a matter of equality in reaping the benefits from the forest products and resources.

- b. There is also a tendency lately that community members have been more exploitative in their use of forest resources, focusing more on economic profits rather than conservation. This tendency is clearly evident in the villages that are still rich in timber resources.
- c. The community members generally think that their low economic level makes it difficult for them to conduct self-initiated reforestation without financial support from the government or third parties. The basic need of the community members is to fulfill their short-term livelihood needs, so it is difficult for them to concentrate on reforestation activities that hold long-term benefits. The government fund for village reforestation programs (*Dishut*), although to an extent helps fulfill their immediate need for cash, doesn't seem to be a steady guarantee for any certain period of time to come.
- d. Forest management activities are not yet seen as a major economic activity (except for those involved in exploitative logging activities), because most of the community members earn their living from plantations and farming, not merely from the forest, although forestry and plantation activities can actually be combined.

7.3. Suggested measures

1. The district government should formulate regulations on the use and management of forest resources that allow equal opportunities for all villagers to benefit from them, for example, in the form of “collective forest management” or “joint forest management.”
2. The district government should maintain incentives in the form of providing sufficient long-term funding for replanting and reforestation activities to the villagers who are institutionally capable of responsibly managing funds.
3. The government and the community should find ways to conduct inexpensive replanting and reforestation activities that are manageable by the community members, without having to wait for a large amount of funds or continued financial support from the government or third parties.
4. If there is no more primary forest left in the village area, or if the forest no longer produces timber, forest management should be addressed at increasing the amount and quality of non-timber forest products for the benefit of all community members.
5. The district government should support the integration of farming activities and forest management so that community members are motivated to carry out constructive forest management activities, instead of merely exploiting the forest resources and extracting forest products.
6. The district government must guarantee the

long-term rights of the community of its forest and land, particularly the assurance that a particular right will not be spoiled by other economic activities such as overlapping land allocation to a certain large enterprise. For such a purpose, any plan to start a timber or plantation company in a particular village area should be processed through direct consultation with and agreement from all villagers.

7.4. Support needed

Support is needed by the business enterprises, particularly for product marketing, from donor institutions for initial village community economic development activities (IFAD is now starting its programme in West Kutai) and from NGOs and academics for technical and conceptual assistance.

References

- Kelompok Kerja Program Kehutanan Daerah (KK-PKD).
2001a. *Potret Kehutanan Kabupaten Kutai Barat*. Sendawar: Kelompok Kerja Program Kehutanan Daerah (KK-PKD).
- . 2001b. *Program Kehutanan Kabupaten Kutai Barat*. Sendawar: Kelompok Kerja Program Kehutanan Daerah (KK-PKD).
- . 2002. *Aspek Hukum Pengelolaan Hutan Oleh Masyarakat di Kutai Barat: Skema-Skema Peluang*. Sendawar: Kelompok Kerja Program Kehutanan Daerah (KK-PKD).
- Makoto, Inoue et al. 2001. *Research Framework for Local Approach*. Manuscript. Hayama: Institute for Global Environmental Strategies (IGES). Unpublished.
- Matius, Paulus and Rujehan Setiawati. 2003. *Laporan Workshop Penyusunan Bahan Local Forest Management Guidelines, Sendawar, 31 Juli 2003*. Samarinda: CSF Universitas Mulawarman. Unpublished.
- Okamoto, Sachie. 2001. The movement and activities of environmental NGOs in Indonesia. In *IGES Policy Trend Report 2001*. Tokyo: Soubun Printing Co.Ltd.

Part 2: Guidelines for Lao P.D.R.

by

Hyakumura Kimihiko, Morimoto Takashi, Ishikawa Miyuki, Thananh Kotpathoum, Boonthavy Douangphosy, Kaisone Pengsopha, Somsy Gnophanxay, Khamvieng Xayabouth, Kheungkham Keonuchan, Matsumoto Satoru, and Inoue Makoto.

1. Introduction of VAGs and LPGs for Laos

1.1. Introduction

Lao People's Democratic Republic (P.D.R.) is a country in transition towards a market economy. Specific features concerning the forestry sector are (1) the existence of a change-over period to implement the new forest law (2) and the recent reaction to and trend of the efforts to transfer the responsibility of forest management to the local people.

Upon this backdrop, the Forest Conservation Project of the Institute for Global Environmental Strategies (IGES) has aimed to develop guidelines for participatory forest management with the participation of local people and local officials to support policy implementation. The objective of these guidelines is to seek sustainable and participatory forest management at the local level and, at the same time, be beneficial to the forest management of local people. The guidelines may also be beneficial for forest conservation activities and integrated village resource programmes, including the land and forest allocation programme, the stabilization of shifting cultivation, and protected area management, supervised by agricultural and forestry offices at both the provincial level (Provincial Agricultural and Forestry Office [PAFO]) and district level (District Agricultural and Forestry Office [DAFO]) under the Ministry of Agriculture and Forestry (MAF).

The promotion of participatory forest management can support the efforts of the government of Laos, especially for governmental programmes to clarify the responsibility of forest management, to implement forest laws, and to conduct integrated village resource management programmes, including land and forest allocation, land-use planning, rehabilitation activities, and sustainable management of non-timber forest products (NTFPs).

Research has been carried out under the Faculty of Forestry at the National University of Laos (FOF) and the IGES Forest Conservation Project, led by Prof. Inoue Makoto (Project Leader of the IGES Forest Conservation Project/The University of Tokyo) and Mr. Soukkongseng Saingnaleut (Dean, Faculty of Forestry, National University of Laos). It is, in other words, joint research between the Faculty of Forestry, the National University of Laos, and IGES, with the collaboration of local officials. The project ran from September 2001 to March 2004.

Research was conducted by IGES and FOF researchers,

who conducted interviews with the government sector and related non-governmental organisations (NGOs). Field research in villages was carried out by DAFO staff as well as the above-mentioned researchers using participatory action research (PAR) methodology.

We have developed two sets of guidelines to support participatory forest management: the Village Action Guidelines (VAGs), which are guidelines for forest management at the village level; and the other is the Local Policy Guidelines (LPGs), which are guidelines for forest management at the district and provincial levels through local participation.

The target group of the VAGs is local people and the main target group of the LPGs is the district and provincial authorities, supported by a number of stakeholders comprised of supporting donors and academics. The VAGs and LPGs are closely related to each other in the sense that the LPGs support the activities designed in the VAGs.

For the purpose of developing guidelines for forest management, two different natural conditions were selected as research sites: a rich forest area in Savannakhet Province, and the other a degraded forest area in Oudomxay Province.

1.2. The process used to develop the guidelines

Originally, the outputs of the VAGs and LPGs were considered the result of field research in villages using the PAR method as VAGs, and the result of discussions with local officials and policy analysis became the LPGs. However, the result of the PAR process includes the demands of local people to the local officials, namely, the LPGs components. Discussions with local officials include the demands of local officials to the villages, namely, the VAGs components (cf. Figure 1, 2).

Consequently, the LPGs appeared to be composed of the two major research activities conducted: (1) field research done through PAR, and (2) interviews and discussions with the local officials and policy analysis of forestry issues. At present, the output of the research in Laos consists of the results of each research activity. In the last stage, we will re-edit the results to draw up the final VAGs and LPGs.

(a) The guidelines from the local people's viewpoint

The contents of these drafted guidelines show the

guidelines for participatory forest management from the viewpoint of local people as a result of the PAR process.

The procedure of developing these guidelines is described below (see Figure1). Each guideline includes the following components: (i) *important issues* covers specific problems and good examples connected with forest management at the village level; (ii) *internal and exter-*

nal factors include the cause of each problem and good examples; (iii) *principles* include the fundamental rules accelerating sustainable forest management by local people through identification of problems and good examples; and (iv) the *recommended actions* correspond to concrete ideas and actions for the realisation of sustainable forest management.

Components:

1. The research results of the PAR process
2. Situation/important issues from the viewpoint of the local people
3. Situation/internal factors and actors causing the important issues in preceding item 2
4. Situation/external factors and actors causing the important issues in item 2
5. Principles as premises to propose actions in order to improve the present situation
6. Guidelines composing of the following recommended actions:
 - 1) Actions that should be taken by local people in order to improve their own activities→VAG (1)
 - 2) Actions that should be taken by local people toward external stakeholders→VAG (2)
 - 3) Actions that should be taken by local officials (NGOs, companies, and other stakeholders)→LPG (1)
 - 4) Actions that should be taken by external stakeholders→LPG (2)

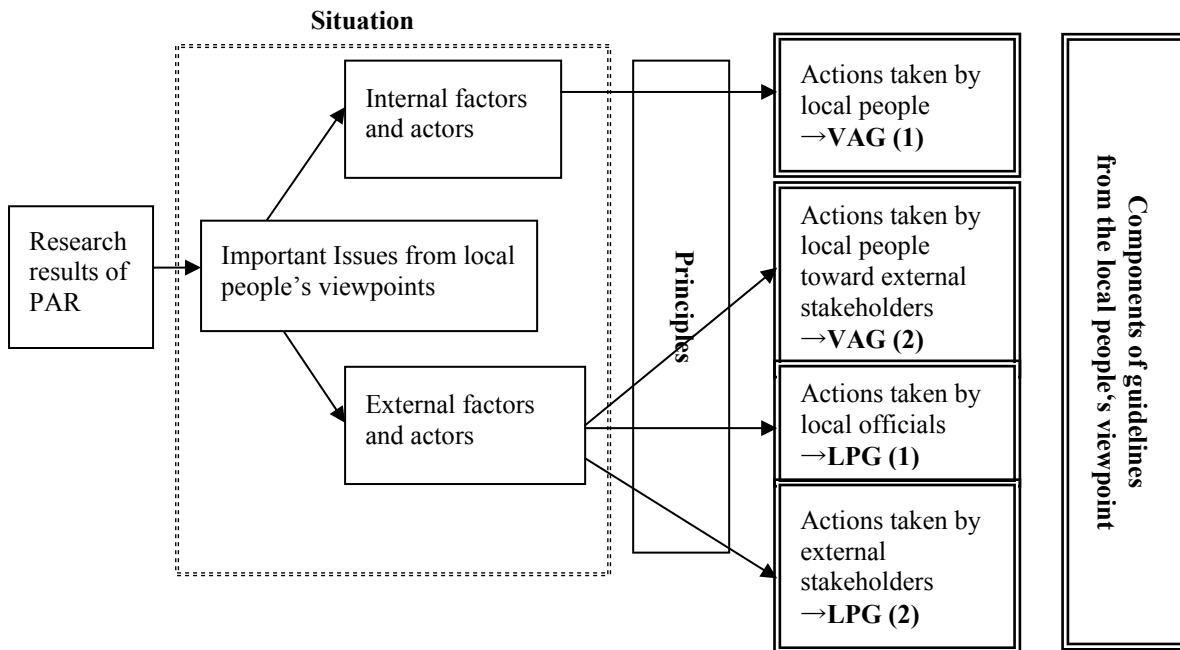


Figure 1. Concrete process to develop guidelines from the local people's viewpoint

(b) The guidelines from the viewpoint of local officials and other stakeholders

The contents of this set of drafted guidelines show the proposed rules for participatory forest management from the viewpoint of local officials.

The process of producing this set of guidelines is described below (see Figure 2). (i) *Important issues* cover specific problems and good examples connected to forest

management at local levels. (ii)*Internal and external factors* include the cause of each problem and good examples. (iii)*Principles* include the fundamental rules accelerating sustainable forest management by local officials through identification of the problems and good examples. (iv)*The recommended actions* correspond to concrete ideas and actions leading to sustainable forest management.

1. Analysis of local and national policies from the viewpoint of local participation (villagers' participation)
2. Results of a brainstorming meeting with local officials (the result of guidelines based on the PAR process that have already been conducted by us, shown in Figure 1)
3. Situation/important issues from the viewpoint of local officials
4. Situation/internal factors and actors causing important issues in item 3 above
5. Situation/external factors and actors causing important issues in item 3 above
6. Principles or premises proposing actions that could improve the present situation
7. Guidelines composed of the following actions:
 - Actions that should be taken by local officials in order to improve their own activities→LPG (3)
 - Actions that should be taken by local officials toward external stakeholders→LPG (4)
 - Actions that should be taken by external stakeholders (NGOs, companies, and other stakeholders)→LPG (5)
 - Actions that should be taken by local people→VAG (3)

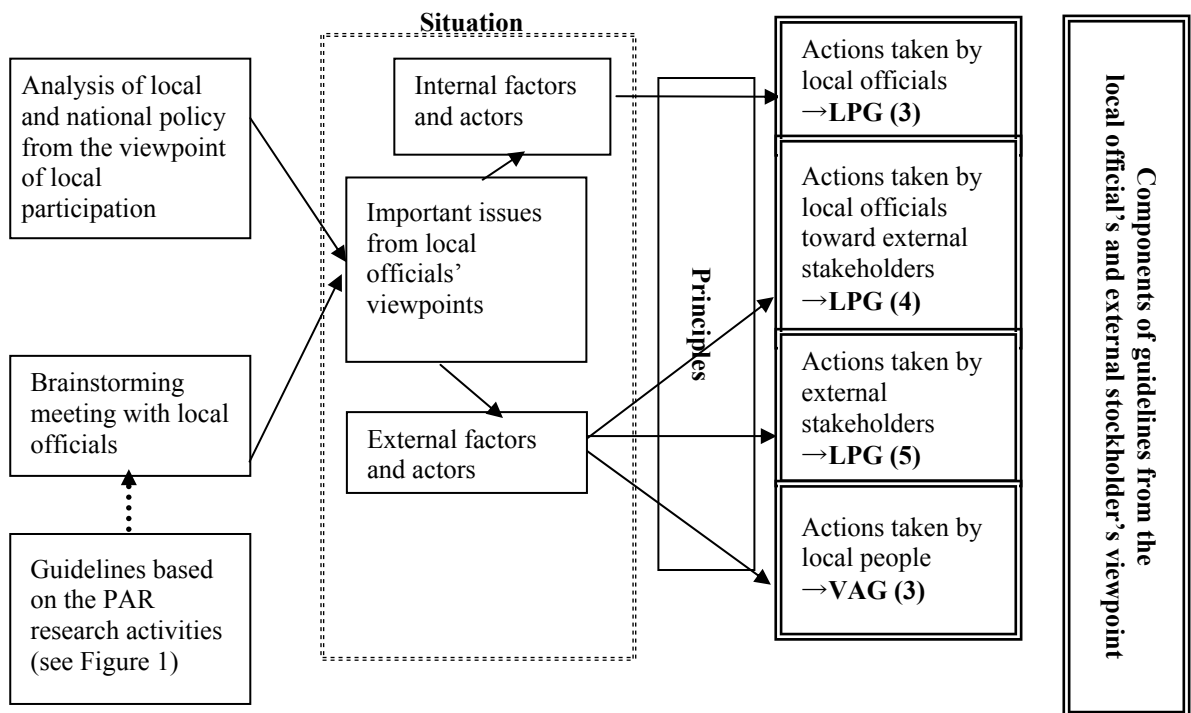


Figure 2. Concrete process to develop guidelines from local official's and external stockholder's viewpoint

1.3. Village action guidelines (VAGs)

The main objective of the VAGs is to support village authorities in enhancing their role regarding forest management at the village level. They can provide lots of information on the main issues related to local forest management and express the measures to deal with various issues. Discussions about issues will include not only problems but also good examples of implementation. Problems should be solved; good examples should be accelerated and extended.

The targets of the VAGs are local people, especially decision-makers, local officials, and external supporting

organisations. The VAGs are useful for decision-makers at the village level to develop the implementation of forest-related activities. The VAGs can be supported by the district agricultural and forestry offices in implementation of the policies to enhance the participation of local people in forest management, and they are useful for supporting organisations such as foreign donors and NGOs in developing collaboration or facilitation plans.

The process of developing the VAGs is described below. The main part of the VAGs comes from the research results of the PAR process and the research input from local officials.

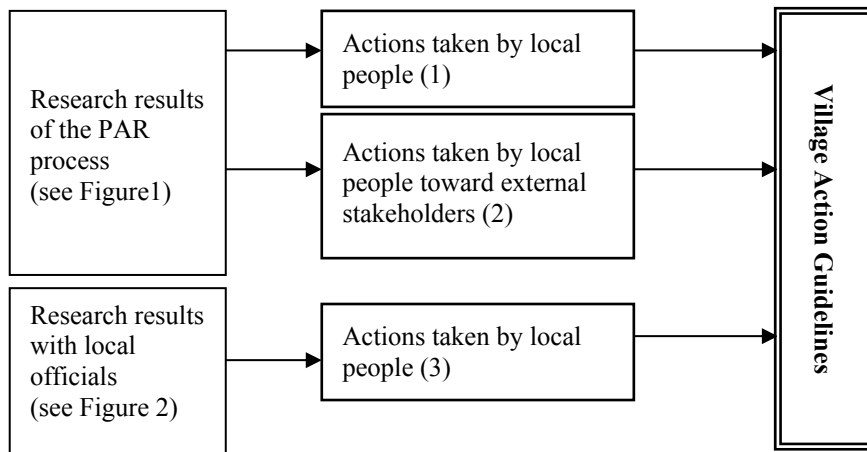


Figure 3. The process of developing the Village Action Guidelines (VAGs)

1.4. Local policy guidelines (LPGs)

The main objective of the LPGs is to support the local authorities in conducting local forest management using the participatory process. In addition, another objective of the VAGs is to support village authorities in enhancing their role regarding forest management at the village level by implementing the actions taken by local officials

and other external stakeholders. They can give lots of information on the main issues related to local forest management and outline measures to deal with various issues. Issues include not only problems but also good examples. Problems should be solved; good examples should be accelerated and extended.

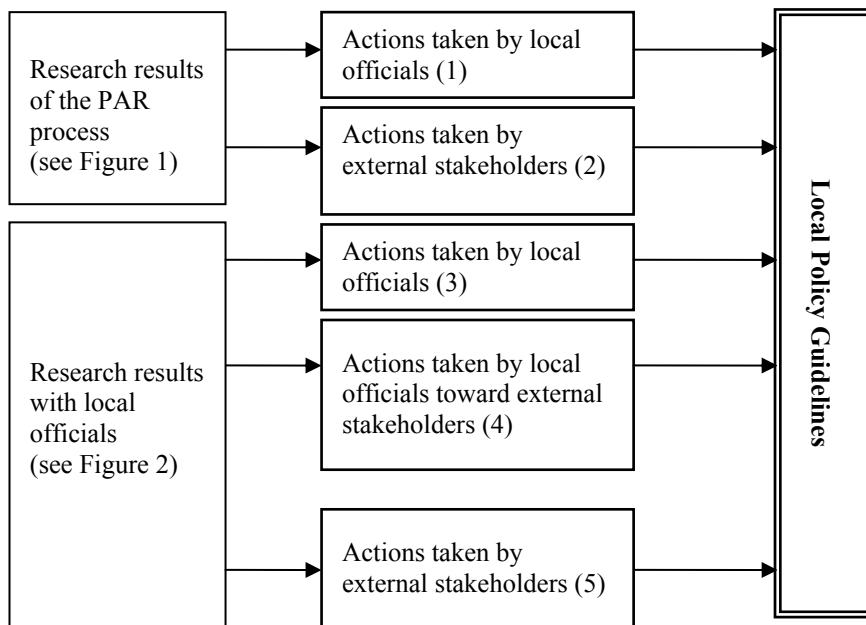


Figure 4. The process of developing the Local Policy Guidelines (LPGs)

The targets of the LPGs are the local officials, especially in the agricultural and forestry sectors, and external supporting organisations. The LPGs are useful to local government decision-makers in developing local gov-

ernance policies. In addition, they can be used to support the district agricultural and forestry office(s) in implementing policies that promote the participation of local people in forest management.

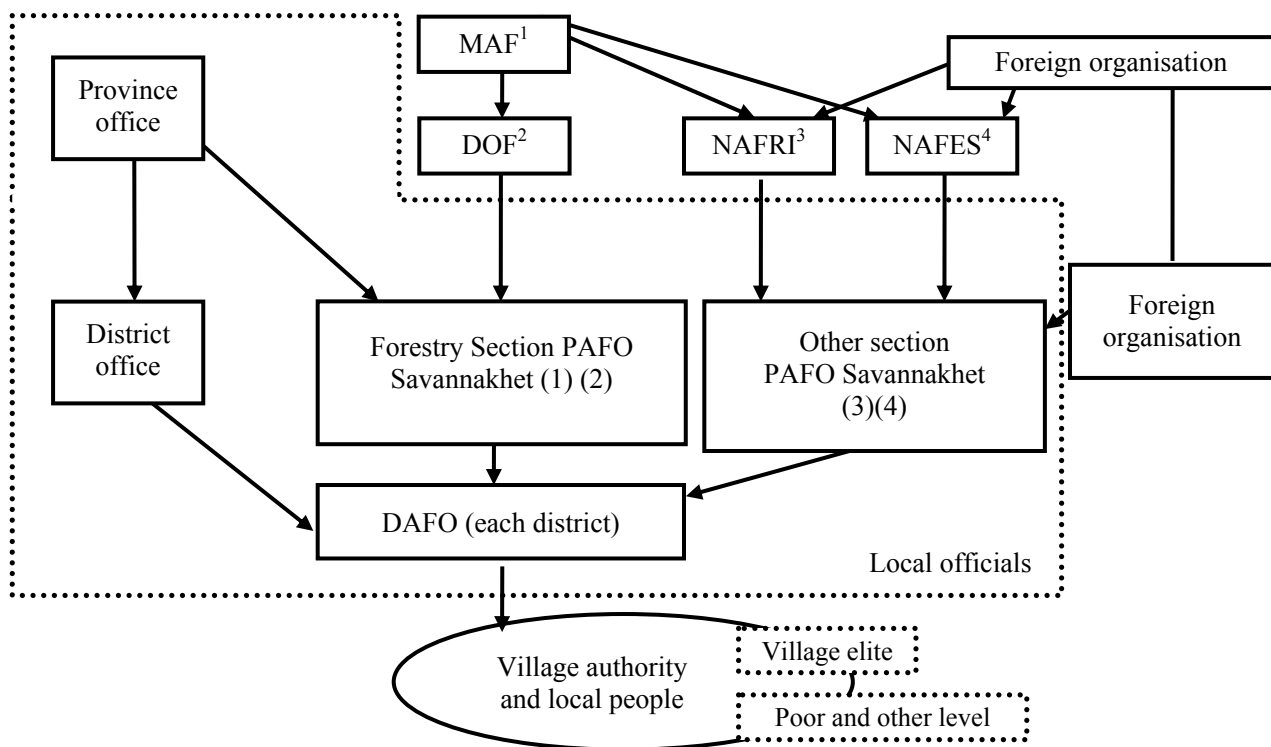


Figure 6. The relationships among stakeholders in Savannakhet Province

2.2. General description of villages studied

2.2.1. Common background of three villages

The target villages include three villages in Savannakhet Province, where the predominant ethnicity is the *Bru (Mongkong)* tribe of the Mon-Khmer ethnic group, the *Lao Theung*. More than fifty years have passed since these villages were established. They are located very far from the local market and/or main roads, and the principal occupation of villagers is agriculture in the form of paddy field cultivation, shifting cultivation, and the collection of NTFPs (*khuang pa khongdong*), etc. Their staple food is sticky rice, but many households in these villages run short of rice in the rainy season. The exchange and/or selling of NTFPs and small livestock (pigs and chickens) make up for the insufficiencies in rice. Although more than 80 percent of villagers do not have enough rice to eat year round, they still have emergency foods such as wild potato, called *koy* (a kind of yam).

In our research, we found out that in these villages there are three economic levels. Influential villagers,

such as the village leader, its most experienced person, and the village elders, have access to a lot of paddy field area and enough labour in the form of manpower and work animals, so most of them belong to the rich level. On the other hand, most of the people in the poor level suffer from a lack of manpower, and they have little or no paddy field area, few work animals such as buffalo, and no one to take care of their children. Therefore, they must make a living not only from rice products but also from the collection of NTFPs.

2.2.2. Village N

Village N is in the Phalanxai district. The village is located on an unpaved road that branches off after heading five kilometers (km) toward Vietnam from the Phalanxai district along National Road No. 9, and then 15 km to the north. It is located on a hill facing the Xe Xang Xoi River, and its territory encompasses 10,034 ha, with about 57 percent of the village territory overlapping the Phou Xang He National Biodiversity Conservation Area (NBCA). The village has a population of 714 living in 118 households. Of those, 72 households have a paddy field (*din na*) and 63 households have a shifting cultivation area (*din hai*), but 107 households still had *din na* before the land and forest allocation (LFA) process (*mop din mop pa*).

Our wealth-ranking research showed that 11 households are at the rich level, 42 households are at the mid-

¹ Ministry of Agriculture and Forestry.

² Department of Forestry, Ministry of Agriculture and Forestry.

³ National Agriculture and Forestry Research Institute, Ministry of Agriculture and Forestry.

⁴ National Agriculture and Forestry Extension Service, Ministry of Agriculture and Forestry.

dle level, and 65 households are at the poor level. From 29 January to 14 February 1998, a land and forest allocation programme (LFA) was carried out with the support of the Lao-Swedish Forestry Programme (LSFP), along with some foreign experts, which allocated agricultural land (*din kasikam*) to villagers that requested it. After the LFA process, the number of households practicing shifting cultivation (*din hai*) decreased rapidly.

2.2.3. Village M

Village M is also in the Phalanxai district, and it's reached by traveling ten km from the district center toward Savannakhet and then going 20 km north. An unpaved road leads to the village, which is located on hilly land looking out on the Xe Kong River. More than 50 percent of the village territory overlaps the Phou Xang He NBCA. Village M has a population of 253 living in 52 households, and of those, 40 households (76.9%) have a paddy field (*din na*) and 36 (69.2%) practice shifting cultivation (*din hai*).

Our wealth-ranking research showed that 11 households are in the rich level, 31 are at the medium level, and 10 are at the poor level. By 1990, almost all of the households had obtained paddy fields. The LFA programme was conducted under the DAFO initiative from

5–20 April 2000, and it demarcated village areas into specific categories, but it did not allocate land to individuals.

2.2.4. Village K

Village K is located in the district of Atsaphone. The village, with a population of 270 living in 49 households, is located five km from Provincial Road No. 10 and reached by unpaved road that is inaccessible in the rainy season. The village is located in the foothills of the Phou Xang He Mountains, and the entire village lies within the Phou Xang He NBCA. The Houay Don River flows beside the village, but the water flow is very small because the village is located in the river's upper reaches. Forty-four households own paddy fields and 20 households cultivate upland rice. According to our wealth-ranking research (criteria: paddy fields, labour, housing materials, dependency on NTFPs), there are 19 rich households, 19 at the middle level, and 21 at the poor level. In the late 1990s, the number of households engaged in upland cultivation decreased following the issue of a government instruction to end the practice. This was followed by the promulgation of a regulation to cover conservation areas. As of November 2002, the LFA programme had not yet been conducted here.

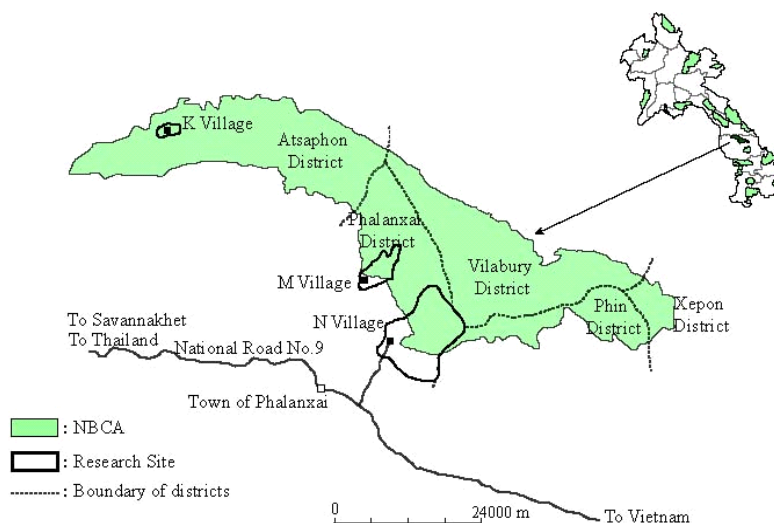


Figure 7. The Phou Xang He NBCA and research sites

2.3. Village action guidelines (VAGs) for a protected area in Savannakhet Province

2.3.1. Land use/border issues

(1) Conservation forest established by villagers

Background

The people in Village N believe in a spirit that is said to live in the “spirit forest” and protects the village. The spirit forest is a dense forested area,

and all production activities have been prohibited, including logging or collecting NTFPs, since the establishment of the village. The spirit forest was voluntarily designated by the villagers as a conservation forest—even before the establishment of the government-designated conservation area—and it is effectively protected.

Good example

A conservation forest (spirit forest) was designated

and protected voluntarily by the villagers and recognised by the government through the LFA programme.

External factor

The LFA process, initiated by DAFO, effectively reflected villagers' practices and recognised the spirit forest. This is because DAFO staff made a special effort in understanding their practices and land use, plus the fact that enough time was spent on the LFA process.

Principle

The customary rules on the use of the spiritual forest should be maintained and followed by the local people, and the forest will continue to be protected.

Recommended actions

(local people)

- ⇒ Establish religious events as a village regulation in statutory form in order to enable the local people to restrict the use of the spirit forest.
- ⇒ Recognise the concept of forest conservation through use and protection of the spirit forest.

2.3.2. Livelihood

(1) The utilisation of NTFPs among neighboring villages

Background

In both the villages of M and K, villagers can freely collect NTFPs for household consumption, such as bamboo shoots (*no mai*) and frogs (*kop* and *khiat*), regardless of the boundaries, while such cross-border collection of marketable NTFPs, such as cardamom (*mak neng*), dammar resin (*khisy*), and oleo resin (*nam man nyaang*), is prohibited.

Good example

The customary rule for NTFPs utilisation is effective in preventing conflicts between neighboring villages.

External factor

The customary regulations for marketable NTFPs function effectively in preventing discord among villages.

Principle

The customary rules for the use of marketable forest products between villages should continue to be sustained.

Recommended action

(Local people)

- ⇒ Recognise the importance of the customary regulations on marketable NTFPs and record them in statutory form.

(2) Sustainable use of forest products

Background

When people in Village K collect yam potatoes (*koy*), one of their emergency crops, they intentionally leave part of its roots in the ground to promote its growth for the next season.

Good example

Local people collect yam potatoes and keep some of the root in the ground as a method for better growth.

Internal factor

Customary use and management of forest resources by villagers has led to the sustainable use of forest resources.

Principle

Koy, a type of yam potato, should be used and managed in a sustainable fashion.

Recommended action

(Local people)

- ⇒ Recognise the customary regulations on collecting yam potatoes and record them in statutory form.

2.3.3. Institution (regulation, management system, decision-making)

(1) Regulations on seasonal use of forest resources

Background

In Village N, the people believe that a spirit lives in their forest, and thus they established rules and taboos to avoid disturbing it. These rules include regulations on the use of forest resources such as a ban on the felling of rattan stems during the rainy season (for either household consumption or sale), a ban on burning for swidden agriculture, and a ban on logging large trees (applied during the rainy season, when plants and trees grow the most).

Good example

Villagers have established and followed the customary rules that prohibit the felling of rattan during the rainy season in order to promote the sustainable use of their forest resources. Their traditional knowledge contributes to promoting sustainable forest management.

Internal and external factors

Prime Minister Decree 15, Article 2, mentions the prohibition of collecting NTFPs during the growing season with the aim of promoting sustainable resource management. The traditional rule of villagers corresponds to the legal system.

Principle

The control of forest products use during the rainy season by adhering to local customs should be maintained.

Recommended action

(Local people)

- ⇒ Continue the prohibition on collecting NTFPs in the rainy season.

(2) Perception of shifting cultivation and *suan* cultivation

Background

The government specifies two kinds of shifting cultivation: shifting cultivation that should be terminated (*hai khuan thi*) and other kinds of shifting cultivation (*hai khong thi*) or (*suan*). *Hai khuan thi* refers to a farming practice where dense forest is

slashed and burned in a way that contributes to forest degradation. *Hai khong thi*, on the other hand, refers to a practice that uses designated cultivated areas and rotates cultivation within the areas. The government legally recognises and approves of *suan* cultivation when it is restricted to designated areas and is sustainable.

Important issue

Villagers are engaged in *suan* cultivation, which is a practice recognised by the government. Sometimes, DAFO prohibits such practices (prohibition does not involve a fine or dispossession of land, as is the case for *hai khuan thi*).

External factor

The government categorizes shifting cultivation into *hai khuan thi* and *hai khong thi*, or *suan* cultivation. Although *suan* cultivation is legally recognised, this fact might not be known and understood at the local level.

Principle

DAFO should allow the practice of one kind of *hai*, *hai khong thi*, as *suan* cultivation, in which local people use designated areas and rotate within those areas.

Recommended action

(Local people)

⇒ Carry out *suan* cultivation for permanent use, instead of *hai khuan thi*.

2.3.4. Human relations (social capital)

(1) Ensuring villagers' participation in projects

Background

A paddy-field expansion programme was implemented in 2000 under the government-led Rural Development Project (*Khongan Chutsum*). It targeted households without paddy fields and aimed at providing a financial incentive to those who opened up paddy fields (500,000 kip per hectare of land cultivated). The participants, however, were mostly middle-class households that already possessed paddy fields, and only a few of the lower classes with no available paddy area participated. Most households who do not have paddy fields belong to poorer-class households that lack labour resources, including draught animals (buffalo).

Important issue

Poor villagers are not able to participate in programmes that have external support, including the forest management and conservation programme, because they are not aware of such programmes or they are not informed when they are qualified to participate. This problem could occur in any village.

Internal factor

The decision on who will participate in aid programmes is made by the village elite, and poor villagers are not involved in this decision-making process. Information is not communicated to the

poorest segment of the village, which is in fact supposed to be the target of these programmes.

External factor

Aid programmes fail to give consideration to the poorest segment of the community or make special efforts to facilitate their participation.

Principle

The aid project should communicate the details of their programmes, strategies, and planning to local people, especially to the poor villagers.

Recommended action

(Village's influence)

⇒ Decide that project information must be communicated to all villagers, including the poor.

(2) Building trust despite differences in culture and lifestyle

Background

The ethnicity of villages N, M, and K is *Lao Theung* (Midland Lao). They worship a spirit and follow a unique lifestyle and culture (including language) that are different from the *Lao Loum* (Lowland Lao).

Important issue

Ethnic minorities living in the conservation area have limited opportunities to receive administrative services from DAFO, including agriculture extension activities and NBCA activities.

External factor

Most of the DAFO staff are *Lao Loum*, while the villagers living in and around the conservation area are *Lao Theung*. Due to the differences in lifestyle and culture between them, communication and building trust tends to be difficult.

Principle

Every ethnic group should receive administrative services impartially.

Recommended action

(Local people)

⇒ Make a decision to build relationships of mutual trust with DAFO.

2.4. Local policy guidelines (LPGs) for a protected area in Savannakhet Province

2.4.1. Land use/border issues

(1) Conservation forest established by villagers

Background

People in Village N also believe in a spirit that is said to live in the "spirit forest" and protects the village. The spirit forest is a dense forest where production activities, including logging and NTFPs collection, have been prohibited since the establishment of the village. The spirit forest has therefore been voluntarily designated as a conservation forest by the villagers themselves—even before the establishment of the government-designated conservation area—and it has been effectively protected.

Good example

A conservation forest (spirit forest) was designated and protected voluntarily by the villagers and recognised by the government through the LFA process.

External factor

The LFA process, initiated by DAFO, effectively reflected the villagers' practices and recognised the spirit forest, because DAFO staff made a special effort to understand their practices and land use, and also because enough time was spent on the LFA process.

Principle

The customary rules for use of the spirit forest should be maintained by the local people, and the forest will continue to be protected.

Recommended actions(DAFO or PAFO)

- ⇒ Reflect the regulations concerning the spirit forest in the land-use plan created by the LFA programme.
- ⇒ Recognise the local people's concept regarding the spirit forest as a protected area. (The present spirit forest is still too small to adequately conserve the biodiversity in this area.)

(2) Implementation of the LFA programme (*mop din mop pa*)Background

The process of LFA has been largely changed since the end of support from the Lao-Swedish Forestry Programme (LSFP) in 2000. While the LFA was financed by the Swedish International Development Cooperation Agency (SIDA), the funding was more than enough, and about two weeks were spent on conducting the LFA process in each village. For the past two years, however, the LFA programme has been financed solely by the government, and the limited funding resulted in a reduction of the days spent on the LFA process to 15 days for five villages, or three days per village. The present manual explains the process procedures in detail, but it is not adapted to reflect the shorter implementation period of the LFA.

Important issue

Spending fewer days on each LFA process could mean that a land-use map may be prepared without sufficient consultation with the villagers; in turn, this could lead to future conflicts over forest use and village boundaries. If a land-use map is prepared under a time constraint, it is difficult to accurately reflect the villagers' practices and needs. This problem could occur in any village.

External factor

The LFA budget provided by the government is not adequate. The LFA process is therefore forced to follow standardized steps without considering the specific conditions in each village.

Principle

In the LFA process, the local people's concerns should be reflected in the land and forest-use plan and map.

Recommended action(DOF or PAFO)

- ⇒ The LFA manual should be simplified and adapted so that DAFO can implement activities based on the revised manual.

2.4.2. Livelihood**(1) The utilisation of NTFPs among neighboring villages**Background

In the villages of M and K, villagers can freely collect NTFPs for household consumption, such as bamboo shoots (*no mai*) and frogs (*kop and khiat*), regardless of their boundaries, while such cross-border NTFPs collection is prohibited for marketable NTFPs such as cardamom (*mak neng*), dammar resin (*khisy*), and oleo resin (*nam man nyaang*).

Good example

The customary rules for NTFPs utilisation are effective in preventing conflicts between neighboring villages.

External factor

The customary regulations on marketable NTFPs function appropriately to prevent discord over scrambling for resources among villages. In addition, the enclosure of these resources by some of the local people is effected and outsiders can be prevented from taking advantage of them.

Principle

The customary rule for the use of marketable forest products between villages should be continued.

Recommended actions(DAFO)

- ⇒ An agreement should be achieved on forest management that supports the local people's customary activities.
- ⇒ Recognise the customary regulations in the use of forest products established by two neighboring villages as a useful forest management system, and accept it in the land-use plan.
- ⇒ Adopt a regulation regarding the non-marketable NTFPs in order to avoid conflicts in the near future.

2.4.3. Institution (regulation, management system, decision-making)**(1) Regulations on seasonal use of forest resources**Background

In Village N, villagers believe that a spirit lives in their forest, and thus established rules and taboos to avoid disturbing it. These rules include regulations on the use of forest resources, such as a ban on the felling of rattan stems during the rainy season (both

for household consumption and sale), a ban on burning for swidden agriculture, and a ban on the logging of large trees—all applicable to the rainy season when plants and trees grow the most.

Good example

Villagers have established and followed the customary rules that prohibit the felling of rattan during the rainy season in order to promote the sustainable use of NTFPs. Their traditional knowledge contributes to promoting the sustainability of the forest.

Internal and external factors

Prime Minister Decree 15, Article 2, mentions the prohibition of collecting NTFPs during the growing season and aims to promote sustainable resource management. The traditional rules of the villagers correspond to the legal system.

Principle

The control of forest products use regulated by the local people's customs during the rainy season should be maintained.

Recommended action

(DAFO)

⇒ Recognise the customary use of NTFPs during the rainy season, and approve its use as a useful forest management system.

(2) Regulations on forest resource use in the conservation area

Background

The whole area of Village K is located inside the NBCA.

Important issue

The use of forest and forest resources by the villagers is restricted in the whole village area.

External factor

According to Article 10 in Ministry of Agriculture and Forestry Decree No. 524, the use of forest resources in buffer zones (residential, agricultural, production areas) within an NBCA is recognised as long as it is done in a sustainable manner. Because this regulation is not effectively communicated and understood, the villagers' use of forest resources is more restricted than necessary.

Principle

Following MAF Decree No.524, forest use by local people within the protected area should be accepted.

Recommended actions

(DAFO)

⇒ Recognise the forest use of the local people in protected areas based on MAF Decree No.524.

(PAFO)

⇒ Inform the concerned legal system on protected areas to DAFO regarding their appropriate activities. DAFO should reflect these activities.

(3) Perception of shifting cultivation and *suan* cultivation

Background

The government specifies two kinds of shifting cultivation: shifting cultivation that should be terminated (*hai khuan thi*) and other kinds of shifting cultivation (*hai khong thi* or *suan*). *Hai khuan thi* refers to a farming practice that involves slashing and burning dense forests and contributes to forest degradation. *Hai khong thi*, on the other hand, refers to the practice that uses designated cultivated areas and rotates within them. The government legally recognises and approves *hai khong thi* as *suan*, when it is restricted to designated areas and is sustainable. Some villagers are engaged in *suan* cultivation on a small scale.

Important issue

Villagers are engaged in *suan* cultivation, which is recognised by the government. In certain cases, DAFO prohibits this practice (although prohibition does not involve a fine or dispossession of land), the same as with *hai khuan thi*.

External factor

The government categorizes shifting cultivation into *hai khuan thi* and *hai khong thi* as *suan* cultivation. Although *suan* cultivation is legally recognised, this fact might not be sufficiently communicated and understood at the local level.

Principle

DAFO should accept *hai khong thi* as *suan* cultivation, which uses designated areas and rotates within an area by the local people.

Recommended actions

(DAFO)

- ⇒ Recognize that *suan* cultivation does not contribute to deforestation.
- ⇒ Do not take strong measures to stop the practice of swidden agriculture.

2.4.4. Human relations (social capital)

(1) Ensuring villagers' participation in projects

Background

A paddy-field expansion programme was implemented in 2000 under the government-sponsored Rural Development Project (*Khongan Chutsum*). The programme targeted households without paddy fields and aimed at providing financial incentives to those who wanted to open up land for paddy fields (500,000 kip per hectare of land cultivated). The participants, however, were mostly middle-class households that already possessed paddy fields and just a few of those who didn't. Most of those who do not have paddy fields belong to poorer-class households, because they lack labour resources including draught animals (buffalo).

Important issue

Poorer villagers are not able to participate in programmes that provide external support, including the forest management and conservation programme, because they are not aware of them or have not been informed if they are qualified to par-

ticipate. This problem could occur in any village.

Internal factor

The decision on who will participate in aid programmes is made by the village elite, and poorer villagers are not involved in the decision-making process. Information is not communicated to the poorest segment of the village, which is supposed to be the target of such programmes.

External factor

Aid programmes fail to give consideration to the poorest segment of the community and to make special efforts towards facilitating their participation.

Principle

The aid project should inform the local people, especially the poorer ones, about the details of programmes, strategies, and planning.

Recommended actions

(Aid project or DAFO)

- ⇒ Devise an information system for communicating the contents of projects to the local people.
- ⇒ Focus on all of the villagers, especially those who have less opportunity to join the project.

(2) The participation of poorer households in aid programmes

Background

In Village N, aid agencies and district agencies have implemented a series of village development projects such as the Kengchip-Nalay focal site project (*Khongan Chutsum*), which includes forest management and conservation.

Important issue

The poorer segments of villagers are unable to participate in aid programmes supported by external agencies, even if they are informed of and wish to participate.

Internal factor

Poorer households have limited labour resources because they do not have any buffalo and often are comprised only of the elderly or small children.

External factor

Aid programmes fail to design specific supporting measures to meet the needs and economic conditions of each segment of the village.

Principle

Poorer villagers should be given the first priority for participation in aid programmes.

Recommended action

(Aid programmes)

- ⇒ Design projects in such a way that they ensure the participation of those villagers who have insufficient labour resources and less opportunity to participate.

(3) The necessity of frequent visits to villages by DAFO staff

Background

The villages of N and M are located far from any

main road and have no easy access, which is made even more difficult in the rainy season.

Important issue

Villagers living in the conservation area have few opportunities to receive administrative services from DAFO staff, including those involved in agricultural extension programmes and the NBCA.

External factor

DAFO staff often have only limited time and financial resources for visiting villages. The villages in and around the conservation area, especially, require more time and energy, thereby making visits by DAFO staff more difficult; in addition, the road conditions become much worse during the rainy season.

Principle

Villages located far from the center of a district, such as a village located near a protected area, should still be given administrative services.

Recommended actions

(DAFO)

- ⇒ Design a plan to supply administrative services, even though a village is located far from the center of the district.
- ⇒ Adjust budget allocations in order to achieve the above-mentioned level of service.
- ⇒ Design plans and carry out activities regularly with the local people in order to build close relationships with them.

(4) Building trust to overcome differences in culture and lifestyle

Background

The ethnicity of Villages N, M, and K is *Lao Theung* (Midland Lao). They worship a spirit and follow a traditional lifestyle and culture (including their own language), which are different from the *Lao Loum* (Lowland Lao).

Important issue

Ethnic minorities living in the conservation area have limited opportunities to receive the administrative services offered by DAFO, including those involving agricultural extension programmes and the NBCA.

External factor

Most DAFO staff is *Lao Loum*, while villagers living in and around the conservation area are *Lao Theung*. Due to the differences between them in lifestyle and culture, communication and the building of trust tends to be difficult.

Principle

All ethnic groups should be delivered administrative services impartially.

Recommended actions

(DAFO)

- ⇒ Provide administrative services even though the areas may be remote.
- ⇒ Plan for building relationships of mutual trust with local people.

(5) Infrequent visits to villages by DAFO staff

Background

Some villages are located far from main roads with no easy access, which is made even more difficult during the rainy season.

Important issue

Local people living in remote areas including protected areas have few opportunities to receive administrative services offered by DAFO, including agriculture extension and other services.

External factor

DAFO personnel often have limited time and financial resources available for visiting villages. But villages in and around the protected areas, especially, require more time and energy, which makes effective visits by DAFO staff even more difficult. Road conditions also become much worse during the rainy season.

Principle

A village which is located far from the central organisation of a district, such as villages near protected areas, must be given the opportunity to access administrative services offered by DAFO in the same manner as other more centrally-located villages.

Recommended action

(DAFO)

⇒ Design a plan to supply administrative services and make budget allocations for achieving the above-mentioned service.

(6) Addressing the negative impacts of personnel changes in PAFO and DAFO

Background

Some staff persons of DAFO and PAFO are

changed in the section every two or three years.

Important issue

Because of short-term personnel changes, improper data and materials management has caused the loss of important information, such as land-use maps that record which village programmes have already been carried out. Future activities of DAFO may easily be interfaced, overlapped, or missed entirely for a specific village.

Internal factor

Some programmes may not be carried out because of personnel changes.

Principle

On the occasion of personnel change, programmes should be continued as planned, not be omitted for a concerned village.

Recommended action

(PAFO and DAFO)

⇒ Tasks should proceed as planned, especially the LFA programme.

3. Concrete guidelines - Part 2: Degraded forest area, Oudomxay Province

3.1. Description of Oudomxay Province

(1) General description

The province of Oudomxay is located in the northern part of Laos, bordered by Phonsaly Province and China to the north, Xayabury Province to the south, Luangprabang Province to the east, and the provinces of Luangnamtha and Bokeo to the west. Oudomxay is divided into seven districts and has a population of 239,572 living in 38,510 households (see Table 1 below). The Khamu ethnic group is the majority in the province.

Table 1. List of households, by district, in Oudomxay Province

Number	Districts	Villages	Households	Poor households	Percent of poor households
1	Xay	143	9,319	4,190	44.96
2	La	56	3,181	1,193	37.50
3	Namo	95	4,537	2,507	55.26
4	Nga	90	4,464	2,891	64.76
5	Beng	74	4,878	3,341	68.49
6	Houn	162	8,929	5,218	58.44
7	Pakbeng	75	3,740	3,331	89.06
Total		695	39,048	22,671	

Source: Provincial Planning and Cooperation Department, Oudomxay Province

The province has divided its territory into lowland and mountainous areas for socio-economic development purposes. The lowland area, covering only 15 percent (2,305 square kilometers), is located mainly in the valley along the major rivers in the provincial and district capital town. About 32.4 percent of population lives in the area. Most of them are engaged in lowland shifting cultivation.

The mountainous areas cover about 85 percent, or 13,064 square kilometers, of the province. There are 161,954 people (24,916 households) living in 518 villages in this region. Because of the mountainous terrain, these districts are difficult to access and markets do not exist; most people live by practicing shifting cultivation. This is the poorest area in the province, and many households are in a critical and vulnerable position. The provincial authority is concerned about the degradation of the forests, and it has been trying to introduce viable tree plantations and livestock as alternative solutions for reducing the practice of shifting cultivation.

(2) The relationship among stakeholders

According to a workshop for donor-funded projects in Oudomxay Province held on 13 January 2004, there are currently many international development agencies and

NGO projects working in the province. In the agriculture and forestry sector, there are nine projects now operating, including the International Fund for Agricultural Development (IFAD), European Union (E.U.), Food and Agriculture Organization of the United Nations (FAO), United Nations Development Programme (UNDP), Quaker, and German Agro Action (GAA). Most of them support agriculture, livestock, and non-timber forest products initiatives, along with natural resources management activities in the project areas, which focus on shifting cultivation and developing livelihood alternatives for the people. Although they share similar objectives, most funded projects are operating according to their own objectives and locations.

It was reported that there is a need to improve cooperation as well as to share experiences and information among stakeholders. In order to overcome this problem from now on, the provincial planning and cooperation department plans to organise a meeting every six months among the government implementation line agencies (agriculture, education, health, and transportation), all district governors, and funded projects.

The figure below shows the relationships among stakeholders in Oudomxay Province.

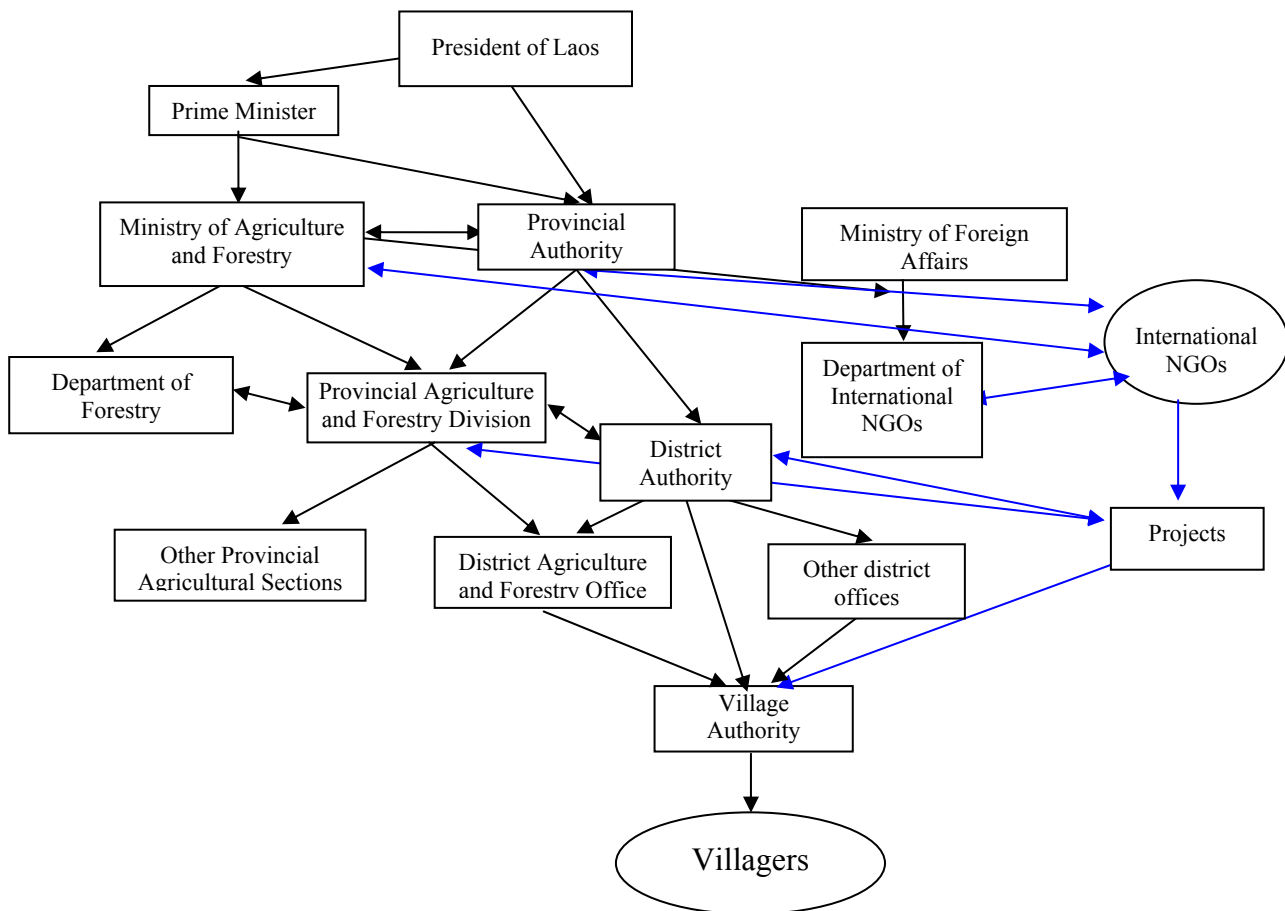


Figure 8. The relationship among stakeholders in Oudomxay Province, Laos

3.2. General description of target villages

The target villages include the following four in Oudomxay Province: Village A, Village B, Village C, and Village D.

3.2.1. Village A

The population of the village is 356, and in 2003 it was comprised of 49 households. The ethnic group is Khamu. This is a resettlement village built in 1995 with the support of a national policy that encouraged the people in the upper mountains to move to the lowlands. There has been only one development project here (a sanitation project of the World Bank in 2002 that provided sets of toilets), but it has very good accessibility and more development projects may come soon.

Agriculture

The main activity in this village is swidden agriculture for glutinous rice. The villagers cultivate their agricultural lands, which were provided at the time of the Land and Forest Allocation (LFA) programme, on a seven-year rotation. And they borrowed swidden areas belonging to the adjacent village in Xaignaburi Province. However, the lands in Xaignaburi were allocated as “regeneration forests” in 2002, and thus the people were barred from cultivating them the following year and onwards (although gathering NTFPs was not restricted).

Forestry

The forests in this village have been classified into five categories by the District Agriculture and Forestry Office (DAFO) as conservation forest, protection forest, production forest, regeneration forest, and burial forest. The villagers seemingly acknowledge the forest classifications so far and say that they never cultivate in any of them, but they sometimes fell trees in the protection forest for house building and materials.

Self-sufficiency

Almost all the households have rice shortages during the rainy season every year. However, they can usually find alternate sources of income such as selling vegetables, NTFPs, and livestock. They can thus cover all their expenditures for rice and daily commodities.

3.2.2. Village B

The village population is 422, divided into 54 households (2003). There were originally two villages before 1998; they then joined together and now live along the road under order of the district. Their ethnic group is Khamu. The process of land and forest allocation is still at the sixth step, the same as in Village A. It is situated about 16 km from the center of the district, along a road that is usually accessible as long as there are no landslides. It takes about four hours on foot or about one-and-a-half hours by truck. It was the choice location for a sanitation project by IFAD, which provided water pumps and sets of toilets.

Agriculture

The main activity in this village is swidden agriculture to grow glutinous rice. The villagers cultivate the agri-

cultural lands, which were allocated through the LFA programme, as well as cultivating in their home villages far from this village. In the process, DAFO allocated new lands to the villagers in order to restrict cultivation in the new conservation forests, but the areas originally belonged to the two adjacent villages, and this led to subsequent land conflicts. People do not recognise the LFA land classifications in their subsistence activities. For example, they conduct swidden agriculture in the areas assigned as conservation forest.

Forestry

The lands in this village have been classified into only two categories by DAFO: as a conservation forest and as agricultural land. As mentioned above, the villagers do not follow the DAFO classifications and fell trees anywhere, whenever they need materials for things such as house building. Selling trees is the main source of income for some families, and they are reluctant to reveal where they obtain the wood.

Self-sufficiency

In terms of self-sufficiency, almost all of the households have rice shortages every year during the rainy season. However, they usually find alternate sources of income such as selling livestock and NTFPs. This village is situated farther away from the market than Village A, and they necessarily place more emphasis on animal husbandry to obtain cash when they need it. It is characteristic that the wealthy families hire the poor to help with their agriculture activities such as weeding and harvesting. The per diem rate is usually 5,000–10,000 kip per day (this might slightly narrow the poverty gap within the village). They are able to cover all of their expenditures for rice and daily commodities.

3.2.3. Village C

Village C is located in the Namo district along the national road, 50 km from the provincial center and 1 km from the district center. It is a Khamu Lou (*Lao Theung*) village, with a population of 684 (330 females), comprised of 103 households (mostly headed by men, except for the few with widows). The village boundary is not clear (the LFA programme has not been conducted yet), but the area includes swidden areas (43 ha), rain-fed paddy fields (14 ha), gardens (11 ha), protection forest (50 ha) that is traditionally regarded as a water source, and a small river that demarcates the border of Village C and the village of Na Noi. The village was established about 74 years ago when people from five villages migrated from remote areas of the district to settle here because it has easier road access.

The main economic activity is swidden agriculture or upland rice cultivation. Given the large population compared to available arable land, upland cultivation has been practiced in three-year rotations since their migration. The yield of rice is approximately 2 tonnes per hectare, though it can range from 0.5 t/ha to 3 t/ha, depending on variable factors such as annual rainfall and the incidence of pests. About 60–70 percent of the house-

holds have a rice deficiency during half the year from June to November, the rainy season. Villagers raise livestock for household consumption and sale in exchange for rice. They depend on the forest for resources such as NTFPs and wildlife, as well as being a source of water. There are two village forestry volunteers who have a dual role of supervising forest management and collecting land taxes.

The village has one school, five water taps (provided with outside support), and some small grocery shops. Electric wires have been put up in the village, but there is no electricity because the villagers cannot afford to pay for it.

There have been three projects conducted in Village C with outside support: a community development project supported by Quaker Service Laos, a mother-child nutrition project by the Asian Development Bank (ADB), and a school meals project by the World Food Program. The community development project, implemented from 1993 and 1996, had three components: construction of water taps, a small-scale tree project for firewood, and provision of a grain-threshing machine. Six years after the completion of the project, the water taps are properly maintained, while the grain-threshing machine is broken and the trees planted for firewood are left unmanaged.

3.2.4. Village D

Village D is located in the Namo district along the national road, 70 km from the provincial center. It is situated near the Laos-China border and shares borders with Luang Namtha Province to the north. The village is comprised of 51 households with 278 people, of which 147 are female. It was established in 1973 when people migrated from Phou Tong Mountain to settle in the area because of its easy road access.

According to the LFA programme conducted in 1997, the total land area is 2,259 ha and includes conservation forest (158 ha), protection forest (1,579 ha), production forest (123 ha), regeneration forest (291 ha), and agricultural land (398 ha). The villagers believe that a spirit lives in a certain area of the village's land and they protect it as a sacred forest (3 ha). The forest in the village area is rich in NTFPs such as bitter bamboo, wild and/or planted cardamom (mak neng), red mushrooms (*het daeng*), and rattan.

Their main economic activities include swidden agriculture and NTFPs collection/sale. Only four households have recently developed rain-fed paddy fields and abandoned their swidden lands. The fallow periods of swidden areas used to be seven to nine years before the LFA programme in 1997. After the LFA was conducted, each household was allowed to practice swidden agriculture only on allocated lands, usually three plots of one ha each (but the size of plots could vary, depending on the number of family members or labour available). The average rice yield is approximately 2.2 t/ha. Out of 51 households, 34 are short of rice for more than half the year. These households supplement their rice consump-

tion either by borrowing from the village rice bank or buying rice at markets with the income from selling NTFPs.

The World Conservation Union (IUCN) implemented an NTFP project in the village from 1996 to 2000. It was aimed at developing a model for sustainable harvesting and improved marketing of NTFPs (cardamom [mak neng] and bitter bamboo shoots [*no mai khom*]), planting cardamom (mak neng), and establishing an NTFPs marketing group. It also supported the LFA programme, a rice bank, and infrastructure such as the school and water taps.

3.3. Village action guidelines (VAGs) for a degraded forest area, Oudomxay Province

3.3.1. Land use/border issues

(1) Intrusions within village boundaries (a, b)

Background

In Village A, the conservation forest is situated along the village's northeast border. In 2000, some villagers who happened to go into the forest to collect NTFPs discovered that some people from the village next to theirs were conducting swidden farming within their village's area. These people ignored their objections and again cultivated there in 2001.

(a) Important issue

The adjacent villagers intruded into these areas to conduct swidden agriculture and ignored the objections of the villagers.

External factors

The adjacent village was built as a settlement for army families in 1990. The village border was once demarcated under mutual agreement in the course of the LFA programme. Then they lost and could not utilise some of their former agricultural areas. Lately their population has increased and they needed more arable areas to farm. The head of the adjoining village changed and he was not content with the village boundaries. They made a request to enlarge their lands, against the objections of Village A, and they went ahead and began conducting swidden agriculture in the conservation forest of Village A along the village boundary.

Internal factor

The village did not originally have any land around these areas because its people had just moved here for resettlement and insisted on the village borders being demarcated under the LFA.

Principle

The demarcated borders should be confirmed and upheld by all the stakeholders.

Recommended actions

(Local people)

⇒ Reconfirm the village boundaries.

⇒ Make rules for conduct and enforce the penalties

for infringing on the village's boundaries.

(b) Important issue

The villagers perceive that there is still the potential for intrusions by outside villagers.

External factor

Potential intruders are those from the adjacent villages who need and want more agricultural land because of their own lack of it. They lost parts of their village territories to build the new resettlement village of Village A. The area of this village once totally belonged to the adjacent villages.

Internal factor

As mentioned above, village borders are not always monitored or well managed. This may encourage adjacent villagers to intrude into the territory of the other village. Since they haven't done anything yet, the villagers in Village A have not yet called for action to prevent potential conflicts.

Principle

The village boundaries should be upheld by all the people of both villages.

Recommended action

(Local people)

⇒ Hold inter-village discussions to avoid boundary conflicts.

(2) The prohibition of conducting swidden agriculture in Xaignaburi Province

Background

As mentioned in the previous section, the villagers have been cultivating their swidden areas in Xaignaburi Province for three years. In January 2002, however, the district agricultural and forestry office in Xaignaburi Province allocated these areas as "regeneration forests." Villagers were therefore not allowed to conduct swidden agriculture there from 2003 onwards. This will lead directly to even less arable land being available to the village, and the people will likely start utilising forest land to enlarge their agricultural lands.

Important issue

The villagers in Village A will lose swidden lands in Xaignaburi and will be worse off than before.

External factor

The agreement to allow swidden agriculture was made at the village level, while the decision to establish these areas as "regeneration forests" was made at the district level. Both of the DAFOs in Pakbeng and Ngeun districts (Xaignaburi Province) did not approve this inter-village agreement.

Internal factor

Two-thirds of the households depend on these areas as their main agricultural land, and they don't cultivate any areas within their own village in general.

Principle

Land shortages can be dealt with at different lev-

els—intra-village, inter-village, and district.

Recommended actions

(Local people)

- ⇒ At the intra-village level, rules should be made so that villagers facing land shortages will be able to borrow land from other villagers who have surplus land or borrow it from the communal lands (e.g., reserve land designated in the LFA process).
- ⇒ At the inter-village level, negotiate land lease agreements between villages that have either a land shortage or surplus. They should clearly specify and record the relevant information and terms in writing (e.g., area of land leased, conditions of use, payment, and duration).
- ⇒ At the district level, if necessary, demarcate or re-arrange village boundaries according to populations and their need for food security, using the participatory approach to facilitate border issue negotiations between villages.
- ⇒ Negotiate inter-district agreements if a village is situated along the district's border.

(3) Village boundaries

Background

In the process of conducting the LFA in 2000, enormous areas of Village B were allocated as "conservation forest," although the villagers had used them as swidden areas for a long time. The reasons given for specifying them as conservation forest were that there is a hydroelectric dam below the village, built by a Chinese company in 1996, and that DAFO was aiming to restrict cultivation in order to prevent soil erosion. But in fact the dam's reservoir is already filled with too much sediment and the system does not work properly.

In order to prohibit the villagers from conducting swidden agriculture in the newly designated conservation areas, and in order to enlarge their available agricultural lands, DAFO provided additional areas outside the area for the villagers to use. Unfortunately, these lands originally belonged to the adjacent two villages. In order to avoid land conflicts with them, some paid compensation to cultivate the land, while others simply returned to the "conservation areas" to conduct swidden agriculture instead of renting arable land. Their decision depended on the existence of relatives in the potential swidden areas. If they had a relative who had enough agricultural land outside, they tended to rent their lands or help them out in some way.

According to household interviews, villagers' birthplaces are closely related to the location of their swidden areas—even after the land and forest allocation programme. There are 13 families who are originally from one of the old villages situated in the "conservation forest." Of these, seven households continued their swidden practices there after the LFA. Only one family went out to other

places in order to conduct swidden. It seems that the LFA did not help the villagers move out of the protected areas it had appointed. The people still generally continue to live in their customary ways, without caring about or following the policy.

Important issue

Village boundaries were demarcated during the LFA process without respecting the traditional village borders.

External factor

The local DAFO might not have had enough time to discuss boundary issues with the people from around the villages. Although the village borders had already been demarcated with the consensus of the heads of the adjacent villages, those who were the original landowners of the next villages before the LFA process strongly opposed the new borders for fear that they would lose their properties.

Principle

DAFO should respect the customary village boundaries.

Recommended action

(Local people)

⇒ At the time of LFA process, the villagers should negotiate and specify among themselves how reserve land can be obtained and allocated, with support from DAFO, if appropriate.

(4) Land shortage (a, b)

Background

Village C was established in 1974 when the villagers of five villages migrated from remote areas of the district to settle there. The area is close to the district center, but it's relatively small for a village with more than 100 households.

(a) Important issue

Villagers have insufficient land available for swidden agriculture.

Internal factor

The village territory contains little arable land suitable for swidden agriculture. This shortage of swidden land has been an issue since the people from five other villages migrated to this relatively small village area near the district center, but it has been aggravated due to population increase.

External factor

Adjacent villages have conducted the LFA, and the village boundaries between them and Village C have been drawn, leaving Village C with no land to expand their own swidden agriculture area.

Principle

Land shortage can be alleviated at different levels—intra-village, inter-village, and district.

Recommended actions

(Local people)

⇒ At the intra-village level, establish rules for allowing villagers facing land shortages to borrow

land from other villagers that have surplus land or from the communal land (e.g., from the reserve land, if the LFA has already been conducted).

⇒ Negotiate land lease agreements between villages with a land shortage and those with surplus land at the inter-village level; relevant information and terms should be clearly specified and recorded in writing (e.g., area of land leased, conditions of use, payment, and duration). DAFO can serve as a facilitator, if desired.

⇒ At the district level, if necessary, demarcate or re-arrange village areas according to the size of populations and their need for food security.

⇒ Negotiate inter-district agreements if a village is situated along the district's border.

(b) Good example: one coping strategy

Village C used to have a village rule that households with surplus land could transfer excess land to landless households free of charge. With the recent population increase, no households in Village C have any excess land. Starting in 1989, five to ten households have been using the reserve forests of three adjacent villages, Lao, Na Boun Tai, and Pho Thong, by permission of each village chief. The borrowers pay only the land tax to the district tax authority, with no land-use fees paid to the landowners in the three villages. There has been no land dispute between Village C and these three villages.

Principle

Inter- and intra-village discussions should be held by the villagers.

Recommended action

(Local people)

⇒ Create opportunities to discuss land-use issues with those in other villages.

(5) Vicious cycle of exploitative land use and declining soil fertility

Background

Village C has a large population compared to the available arable land. The rotation period of swidden agriculture was seven to nine years at the time of migration, but the recent population increase has resulted in three-year rotations. The yield of rice is approximately two tonnes per hectare, though it can range from 0.5 t/ha to 3 t/ha, depending on precipitation and pest incidence. About 60–70 percent of the households have rice shortages half the year during the rainy season (June–November).

Important issue

Villagers intensify their upland rice production on limited arable land in shorter rotation periods, creating a vicious cycle of declining soil fertility and more exploitative, unsustainable land use.

Internal factor

Village C already had a large population at the time

of migration, but the recent population increase put even more pressure on swidden areas through the practice of intensive land use with three-year rotation periods. Currently, more than 100 households share 40 ha of swidden land. Despite the declining fertility and frequent pest incidences, villagers have had to rely heavily on swidden agriculture because there are few cash income sources to buy enough rice from the market. This intensive use of swidden land, often in an exploitative and unsustainable manner to get the most out of the limited land available, has further decreased the soil's fertility and yield.

External factor

Opening up new land and expanding swidden land for higher productivity is no longer possible, as the adjacent villages have already conducted LFA and the village boundaries have been drawn (although villagers in Village C often do not know or have not been informed of these boundaries).

Little support has been given by DAFO or other external agencies to provide alternative incomes through on-farm and/or off-farm economic activities.

Principle

To ease exploitative land use, various measures should be taken that will reduce reliance on land, and thus break the vicious cycle of exploitative land use and declining soil fertility.

Recommended actions

(Local people)

- ⇒ Attempt to diversify farming systems and reduce the pressure on land.
- ⇒ Seek alternate income-generating activities for the villagers to tap new sources of revenue and get away from subsistence farming.

(6) Insufficient land for inheritance: a negative impact of the LFA programme (common issue)

Background

According to the LFA programme conducted in 1997, each household received three plots of land for some sort of production. The size of the plots depended on the number of family members and labour available, but the perception of the villagers is that the allocated land was too small to divide among their offspring in the future.

Important issue

Allocated land is too small to divide among descendants to allow them to maintain their food security and assets.

Internal factors

Rich households usually have close relationships with the village chief and can make a request for reserved land easily, while the poor have little voice in deciding how reserve land is allocated. Wealthy families can afford to hire labour from inside and outside the village to work the allocated

reserve land, but poor families cannot afford such resources.

Another internal factor is that the villagers have abandoned their customary rules regarding the opening up of forest areas. There used to be a rule that the villagers could open up any forest if they did not have enough land for inheritance. This rule, however, was abandoned after the LFA introduced new rules, and there is now peer pressure to restrict the opening up of forest outside the designated areas.

External factor

The land allocation process did not take into consideration the impacts on inheritance, especially among the poor. Besides allocating three plots to each household, the LFA demarcated some village areas as reserve land to be used for production activities in the future. In principle, anybody who is willing to open and cultivate an area can obtain part of the reserve lands by permission of the village chief. In reality, however, only a few of the richer households have claimed and received reserve lands for their offspring because opening a new area requires a considerable amount of funds. In some cases, it even requires technical support from DAFO because some of these reserve areas are not suitable for agricultural production. Reserved land was designated in anticipation of a population increase of the village and the expansion of production areas in the future, but the manner in which it can be obtained and opened up was not considered carefully enough for it to be readily available, even for the poor who are often landless.

Principle

The LFA programme should be conducted in consideration of its impacts on inheritance, especially among the poor and the vulnerable.

Recommended actions

(Local people)

- ⇒ At the time of LFA, negotiate among villagers and specify how reserve land can be obtained and opened, with support from DAFO, if appropriate.
- ⇒ Make arrangements within a village so that the poor and the vulnerable can claim the right to reserve land and ask for assistance in opening up such land.

3.3.2. Livelihoods

(1) Gaining new agricultural areas by agreement

Background

In Village A, insufficient arable lands were allocated to the population, and the villagers were not able to produce enough food within their own village lands.

Good example 1

In order to avoid rice shortages, in 2000 they visited the village in Xaignaburi Province across the Mekong River of their own accord (and because

they had some relatives living there) in order to obtain permission to utilise their lands. Since the request was accepted, 24 out of the 36 families have cultivated these areas for three years. They have been able to take action to deal with their rice deficits by themselves and reduced their food shortage without any outside support.

Good example 2

In addition, they have gathered NTFPs, the major source of income in this village, around the new swidden areas.

External and internal factors

One reason why the villagers accepted outside cultivation within their settlement is that they live so far away that they seldom visit these areas. Second, they can obtain 20,000 kip/ha from Village A for renting the land. Another reason is that the villagers in Village A have relatives in that village across the river, allowing the building of mutual trust at a personal level and making it easier to submit their offers.

Principle

Inter-village agreements should be permitted by DAFO.

Recommended action

(Local people)

⇒ Go and visit other villages to discuss problems that require a solution.

3.3.3. Institutions (regulations, management systems, decision-making)

(1) Necessity of reinforcement of DAFO rules by the villagers

Background

DAFO always requires common village rules for politics and natural resource management in the sixth step of the LFA process. However, these rules are too general to cover all village conditions. For more effectiveness, the villagers must enforce the rules themselves to meet the actual situations in each village.

In Village A, DAFO's common village rules were proclaimed in 1999. After that, the land-use problem occurred with the adjacent village. In order to avoid conflicts and to reinforce the DAFO rules, more than ten people gathered for discussions to seek better preventive measures. This resulted in 15 articles of Village A village rules. These new rules are more specific to the village and impose restrictions as well as fines for offenders.

Good example

DAFO's rules on politics and natural resource management are so general that the villagers needed to make specific rules based on their own situation, and then enforced the village rules.

Internal factor

Bonds among the villagers are so strong that they met and produced new village rules on their own.

In addition, they had to demand that the village territory be demarcated, because they themselves are immigrants from the outside and originally had no land here before resettlement.

Principle

The villagers should make specific rules based on the actual village situation.

Recommended action

(Local people)

⇒ Consider the general rules proposed by DAFO and then make some specific rules.

(2) "Dead" village rules on natural resource management

Background

As explained above, these people usually live in their own traditional ways, and many of their situations are in conflict with local or national policies. For instance, they made some village rules for natural resource management in 2001 stemming from advice from DAFO. It was established that those who cultivate in the conservation areas would be fined 50,000–70,000 kip. In reality, no families cultivating these lands have been penalized so far, nor would they be fined later unless the land-use problems are solved with full agreement from all the main stakeholders. Moreover, half the documents of the village rules are missing. This fact implies a lack of need for passive rules. It is essential for themselves to realise the importance of the new rules. DAFO need not ask the villagers to produce new rules without their request. This misunderstanding could cause a conflict between DAFO and the villagers.

Important issue

The villagers did not make rules that they can follow.

External factor

DAFO allocated the former swidden areas as conservation forest and left the villagers out of the process, forcing them to produce new village rules on natural resource management.

Internal factor

They cannot survive without swidden in those areas because the newly allocated lands are not adequate enough for them and originally belonged to other villages. They superficially made new rules that are not useful for the villagers.

Principle

Village rules should be established and observed regarding land use and forest/forest resources management.

Recommended action

(Local people)

⇒ Discuss the village rules available and consider better forest management.

(3) Forest resource degradation due to un-permitted use of forest by other villages

Background

Village C and the adjacent village of Na Noi share swidden areas in which the village boundary was drawn during the LFA process in Na Noi. Formerly, there was no perceived boundary in the swidden area between the two villages, and some landless farmers from Na Noi still cultivate upland rice in Village C's area. In addition, NTFPs, especially bitter bamboo shoots (*no mai khom*), are also subject to exploitation by outsiders.

Important issue

Un-permitted use of the forest by other villages has led to the degradation of forest lands and forest products.

Internal factor 1

Villagers are not able to prevent outsiders from using their forest and forest resources without permission. Villagers have not established any monitoring mechanisms regarding the use of forest and forest products by other villages. Even when unapproved use of forest and forest resources by outsiders is detected, there is no sanction against such intrusion, hence no deterrent effects or actions. Official communication between Village C and adjacent villages, including Na Noi, about land use is so minimal that they do not have any common rules regarding the use of shared land.

Internal factor 2

There used to be no perceived boundary in the swidden area between the two villages, and neither village needed permission to use the forest around the border for upland cultivation and NTFPs collection in the past. With a population increase, however, land shortage has become a major concern in Village C, and it led them to restrict the use of their forest and forest products by other villages without permission.

External factor

LFA was conducted only in the village of Na Noi and not in Village C. During the LFA process in Na Noi, Village C was neither consulted about their traditional land use, especially in the shared swidden area, nor informed of the newly-drawn boundary.

Principle

All the stakeholders should uphold the village boundaries.

Recommended action

(Local people)

⇒ Reconfirm the village borders with the people around the village.

Good example: coping strategy

With support from the IUCN's NTFP project, Village D established village management rules for

the collecting of bamboo shoots and cardamom (*mak neng*). Regarding the collection of NTFPs by outsiders, there is a rule that people from other villages must pay a daily fee of 5,000 kip and obtain permission from the village chief, if the purpose is for household consumption. Collecting NTFPs for commercial purposes is not allowed. The village rules include sanctions for any violations. Although it is hard to detect intruders and punish them, the villagers in Village D have started to patrol their NTFPs forests and strengthen monitoring.

(4) Voluntary rule-making for sustainable NTFPs collection

Background

Village D has established management and marketing rules for bitter bamboo shoots (*no mai khom*) and cardamom (*mak neng*) with support from the IUCN's NTFP Project. There are, however, no management rules established for red mushroom (*het daeng*) collection, although it has become one of the most important cash income sources recently (see Table 2). The lack of rules has prompted some villagers to collect red mushrooms in a prohibited area, collect immature plants, or over-harvest. This is a typical collective action problem regarding the use of common-pool resources such as forests and forest products.

Good example: coping strategy

To cope with the situation, the villagers have begun to establish regulations on red mushroom (*het daeng*) harvesting. Like the other village rules for bitter bamboo shoots (*no mai khom*) and cardamom (*mak neng*), the rules for collecting red mushroom will include the opening and closing of access times in forests for red mushroom collection and patrolling to ensure sustainable harvesting.

This is a good example that shows how concerns over unsustainable harvesting of valuable NTFPs has prompted villagers to voluntarily set up regulations on harvesting practices.

Internal factor

The income from selling red mushrooms (*het daeng*) is very important for the villagers' livelihoods. There is thus an increasing awareness that the forest from which they harvest mushrooms should be well managed and access regulated. Although valuable forest products can become subject to overexploitation if there is no regulation, the people of Village D, having become concerned about losing their economic benefits from forest resources, or fearing the loss of income due to unsustainable management practices, agreed together to establish voluntary regulations for more sustainable management of the forest resources—even though they had no secure rights to these resources that are usually considered as common property.

Table 2. Changes in family cash incomes ranking in 1996 and 2002 in Village D

No.	Category	Women, 1996		Men, 1996		Women, 2002		Men, 2002	
		Share %	Ranking	Share %	Ranking	Share %	Ranking	Share %	Ranking
1	Bitter bamboo shoots	20	1	35	1	18	1	28	1
2	Cardamom	15	3	25	2	12	3	14	4
3	Rattan	x	x	20	3	x	x	x	x
4	Mushrooms	x	x	x	x	16	2	16	3
5	<i>Peuakmeuak</i> (<i>Debregeasia hypoleuca</i>)	x	x	15	4	x	x	x	x
6	<i>Nya bai lay</i> (<i>Sansevieria Zeylanica</i>)	10	5	x	x	x	x	x	x
7	Fuel wood	x	x	x	x	6	5	18	2
8	Rice	15	3	x	x	x	x	x	x
9	Wildlife	20	1	x	x	x	x	x	x
10	Livestock	5	7	x	x	12	3	x	x
11	Sesame seeds	10	5	x	x	x	x	10	5

Sources: Field Report #4 by the IUCN NTFP Project Oudomxay Field Team (1996), and Wealth Ranking Exercise conducted by the Ishikawa and Boonthavy in September 2002.

(5) Organising as a collective, participatory decision-making body

Background

As part of the IUCN's NTFP Project, a village marketing group was created using a participatory approach and based upon the villagers' own perceived needs. With the project's support, they identified the main objectives of their marketing group as follows:

- to improve the villagers' bargaining power with traders;
- to establish a sustainable management system for bitter bamboo shoots (*no mai khom*);
- to increase the income of the villagers; and
- to promote a village-based development fund.⁵

The marketing group consists of a committee, monitoring unit, accounting unit, and a trade unit. All the households are members of the group. One person from each household attends the group meetings, where decisions and regulations are made collectively. Through this decision-making body, every household is involved in marketing and management activities. Moreover, the participants can bring any issues concerning their village to the meetings. The group thus provides those who cannot attend the village authority meetings with an opportunity to voice their needs and opinions.

Good example

Villagers organised themselves to form a marketing group for collective management and better mar-

keting of NTFPs; the group also serves as a collective, participatory decision-making body where overall village issues can be discussed.

Internal factor

The village originally had a village committee for discussing village administration, but it was not inclusive. Only the village elite such as the village chief and representatives of functional groups (Lao Women's Union, Elder's Group) participated. They were willing to learn about the marketing group's operation and have all the households participate in the process of its organisation. The village chief's leadership contributed greatly to the successful consolidation of the group. Furthermore, once the villagers perceived the tangible benefits from the organisation (effective marketing/management, better and stable prices, increased incomes, etc.), the villagers themselves became active in village activities for their mutual benefit and became willing to involve themselves in broader village issues.

External factor

The marketing group was established with the support of the IUCN NTFP Project after a series of consultations with the village committee (village chief, deputy village chief, and representatives of functional groups) and selected villagers. The process included joint problem analysis concerning NTFPs collection/marketing, identification of group objectives, participatory election of group representatives, and planning and training in market administration. These participatory activities familiarized villagers with the purposes and importance of the group and encouraged active villager participation.

⁵ Cited from "Case Study on the Marketing Group of Bitter Bamboo Shoots in Oudomxay Province," IUCN NTFP Project Report.

Principle

Collective management should be implemented to promote villagers' needs.

Recommended action

(Local people)

⇒ Form groups for collective management and improved lifestyles.

(6) Establishing a development fund for financial sustainability and improved livelihoods

Background

As part of the IUCN NTFP Project's activities to improve livelihoods, villagers in Village D established a village development fund in which part of the income from sales of NTFPs is pooled and used for the administration of the marketing group and its development activities.

Good example

The village development fund has contributed to ensuring the financial sustainability of the group and improving villagers' livelihoods. During the 2001/2002 harvesting season, the villagers sold harvested bamboo shoots to the marketing group for 2,000 kip per kilogram and then the group sold them to traders for 2,300 kip/kg, with an average profit of 300 kip per/kg of bamboo sold, considering that prices and profit margins change throughout the season. Of this profit of 300 kip/kg, 200 kip was pooled in the fund and 100 kip was used for covering administrative costs. During the season, the sale of 57.2 tonnes of bamboo shoots generated more than 7 million kip for development activities (including a loan scheme to support agriculture and livestock, infrastructure such as a school, a village meeting room, and rice mills between 1997 and 2002) and another 4 million kip for the administration of the group (mostly for salaries of three marketing staff and operating costs). With this income, it has remained financially self-sufficient and the livelihoods of villagers have improved.

Internal factor

Through consultation with and the training provided by the IUCN NTFP Project, the marketing group staff understood the group's administration and management rules, which were simple and easy to follow but well designed and adjusted by the project and villagers to maintain financial sustainability. As the funds are used for the village's development activities, members have an incentive to follow the rules of the marketing group and the fund. How to use the fund is discussed and decided by all the households within the group, furthering the public benefits of improving the villagers' standard of living, rather than promoting private interests.

External factor

The IUCN NTFP Project designed the management rules of the fund with the villagers and provided

training in administration (e.g., weighing and recording harvests, bookkeeping). The rules were designed so that villagers could easily understand and apply them. By pooling the profits rather than distributing them to the households, the fund succeeded in improving the living standard of the village at large and maintaining financial sustainability.

Principle

The villagers should set aside some funds for other purposes.

Recommended action

(Local people)

⇒ Discuss how the fund is pooled and the purposes for which it is to be used.

3.3.4. Human relations (communication, social capital)

(1) Disparities between Unit 1 and Unit 2

Background

According to the district administration, Village A consists of two housing units. From the point of view of the village constitution, however, it can be thought of as there actually being two villages in Village A, because the livelihoods of the villagers in the two units are different. People in Unit 1 are mainly farmers, originally from the same village, while those in Unit 2 come from other villages and some go to work every day as outside wage labourers.

Important issue

It is hard for the people in Unit 2 to attend the meetings held by Unit 1.

External factor

DAFO staff usually visit Unit 1 because it is situated nearer to their office.

Internal factor

The villagers in Unit 1 know that the members of Unit 2 also belong to the same village, but they do not share all the available information. Topographically, the distance between the two units is about 500 meters. In addition, their birthplaces are different, so there is not a strong bond between them.

Principle

All information should be shared between all units.

Recommended action

(Local people)

⇒ Visit the villagers in the other unit in order to establish contact and relations with them.

(2) Limited communication with DAFO (a common issue)

Background

When villagers need DAFO support, either technical or financial, the formal method of communication between the villagers and DAFO is for a villager to send an official letter prepared by a village head.

Important issue

This does not seem difficult, but in fact this communication channel is not used as often as villagers would like to. They therefore have a limited channel to voice their needs and receive support from DAFO.

External factor

DAFO staff perceive that they are unable to visit the villages to provide technical support due to a lack of financial and human resources. As well, DAFO staff find it difficult to visit and communicate with villagers, often minority ethnic groups, due to the remoteness of these villages and because of language barriers. Moreover, it is a common perception among district staff that villagers are uneducated and thus unable to plan their own economic activities and future life.

Internal factor

Knowing the DAFO staff's reluctance to support them, villagers are hesitant to ask for support from them. Language barriers are another factor that hamper communications.

Principle

An open communication channel with DAFO and villagers should be enforced.

Recommended actions(Local people)

- ⇒ Organise a forest/forest resources management group based on the needs of villagers.
- ⇒ Establish a participatory decision-making body through regular meetings, where all households are represented and collectively make decisions and regulations.
- ⇒ Such meetings should also function as a participatory decision-making body in which participants can bring up any issues concerning the village or forest-related issues and voice their needs and opinions.
- ⇒ The objectives of the various groups should be identified at the beginning of organising.

(3) Lack of social capital for poor householdsBackground

In Village D, a rice bank was established with NTFP Project support to mitigate their rice shortage. In principle, any household suffering from rice shortage can borrow rice from the village rice bank as long as there is stock available. However, some poor families that are regarded by other villagers as lazy are not allowed to borrow rice anymore, while other poor families still have access to it. Moreover, those poor families without access to the rice bank can't borrow money from other villagers or from the village development fund (in which part of NTFPs sales are earmarked), although the villagers have traditionally helped each other in time of financial difficulties through social and informal credit.

Important issue

Some poor households are excluded from the public social network and have no access to social capital (bonding social capital), thus being hindered from rising out of their poverty. It is likely that these households are also excluded from, or at least only participate inactively in, the participatory decision-making processes of NTFPs collection and management, benefiting little from existing social capital such as NTFPs management rules and the loan scheme using the village development fund.

Internal factor

Even though the village has developed an umbrella social network and social capital for mutual help, there are restrictions on the use of such social capital. One of them is that poor families, if their poverty originates in their laziness, should not count on other villagers for support, as reciprocal help cannot be expected.

Principle

In initiating new forest management, existing social capital should be carefully examined and used to encourage mutual help and promote other common activities.

Recommended actions(Local people)

- ⇒ Examine various elements of social capital (social network, communal rules, etc.) at the beginning of any new initiative using participatory action research (PRA) methods and other studies jointly conducted by villagers.
- ⇒ Incorporate social capital such as reciprocal relations and trust, if any, into the planning process, and use it for promoting mutual help and improving livelihoods.

3.4. Local policy guidelines (LPGs) for a degraded forest area, Oudomxay Province**3.4.1. Land use/border issues****(1) Intrusions within village boundaries (a, b)**Background

In Village A, the conservation forest is situated along the village's northeast border. In 2000, some villagers who happened to go into the forest to collect NTFPs discovered that the people from next to the village were conducting swidden farming within their village's area. These people ignored the objections of the villagers from A and cultivated there again in 2001.

(a) Important issue

The adjacent villagers intruded into these areas to conduct swidden agriculture and ignored the objections of the villagers.

External factor

The adjacent village was built as a settlement for

army families in 1990. The village border was demarcated under mutual agreement in the course of the LFA programme, after which they could no longer utilise some of their former agricultural areas. Lately, their population has increased and they actually do need more arable areas. When the head of the next village changed, he was not content with the village boundaries, so they made a request to be able to enlarge their lands in spite of objections from Village A. They then intentionally conducted swidden agriculture in the conservation forest of Village A along the village boundary.

Internal factor

The village did not originally have any land around these areas because they had just moved here for resettlement, but they insist on the village borders as demarcated in the LFA process.

Principle

The demarcated borders should be confirmed and upheld by all the stakeholders.

Recommended action

(DAFO)

⇒ Reconfirm the village boundaries.

(b) Important issue

In this case, the villagers in Village A went to consult with DAFO to solve the land-use problem. The following day some of the villagers and five DAFO staff members in the forestry section went to the adjacent village and confirmed the village boundary again. Later on, the villagers from the adjacent village stopped utilising these lands, showing that the problems were solved with DAFO participation. After that, in a show of friendship, the villagers invited DAFO staff for a free meal and offered them some goat meat and lao-hai (rice wine pot).

External factor

DAFO staff collaborated together with the villagers and worked with them to solve the inter-village problem.

Internal factor

It is easy for the villagers to visit DAFO staff because of their accessibility, and the village usually has had a good relationship with DAFO.

Principle

DAFO should always be ready and open to hearing from the villagers about issues such as border conflicts.

Recommended action

(DAFO)

⇒ Create opportunities that ensure DAFO staff's ability to keep in touch with villagers.

(2) Prohibition of swidden agriculture in Xaignaburi Province

Background

As mentioned in the previous section, the villagers here have been cultivating some swidden areas in

Xaignaburi Province for three years. In January 2002, however, the DAFO in Xaignaburi Province reallocated these areas as "regeneration forests," with the result that they were no longer allowed to conduct swidden agriculture in that area after 2003. This will lead directly to even less arable lands for the villagers and will probably also lead to illegal utilisation of the forests to enlarge agricultural lands.

Important issue

The villagers in Village A will lose swidden lands in Xaignaburi and will then be even worse off.

External factor

The agreement to allow swidden agriculture was made at the village level, while the decision to designate these areas as "regeneration forest" was made at the district level. Both DAFOs, the one in Pakbeng and the one in Ngeun district (Xaignaburi Province), did not approve this inter-village agreement.

Internal factor

Two-thirds of the households depend on these areas as their main agricultural lands, and they do not cultivate any areas within the village itself.

Principle

Land shortages can be alleviated at different levels—intra-village, inter-village, and district.

Recommended actions

(DAFO)

- ⇒ At the district level, if necessary, demarcate or re-arrange the village areas according to the populations and their need for food security. Use the participatory approach in the process of facilitating negotiations on border issues between villages.
- ⇒ Negotiate inter-district agreements if a village is situated along the district's border.

(3) Village boundaries

Background

In the process of conducting the LFA programme in 2000, enormous areas of Village B that had been swidden areas for a long time were designated as "conservation forest." The reason for doing so was that there is an electric dam below the village, built by a Chinese company in 1996, and DAFO wanted to restrict cultivation in that area to prevent soil erosion. In fact, the dam's reservoir was already filled up with too much sediment and the system doesn't function well.

To prohibit swidden agriculture in the new conservation areas and to enlarge their agricultural lands, DAFO provided new areas for the villagers. But these lands originally belonged to the adjacent two villages. In order to avoid land conflicts with them, some of the villagers agreed to pay compensation for cultivating these lands, and others went back to the "conservation area" to conduct swidden instead of renting arable lands. The difference in their

choice depended on the existence of relatives in the potential swidden areas. If they had a relative with enough agricultural land outside, they were likely to rent them land or help them in some way.

According to household interviews, people's birth-places show a relation to their chosen swidden areas even after the land forest allocation process. There are 13 families who are originally from one of the old villages situated in the "conservation forest," and seven households continue to practice swidden in the same area after the LFA. Only one family went out to other places in order to conduct swidden. It seems that the LFA process did not help the villagers move out of the protected areas appointed in the LFA, and the people continue to live in their customary way without worrying about policies.

Important issue

The village boundaries were demarcated without respecting the traditional village borders during the LFA process.

External factor

DAFO might not have had enough time to discuss the boundary issues with the people living around the villages. Although the village borders had already been demarcated with the consensus of the heads in the next villages, those who were the original landowners of the next villages before the LFA process strongly opposed the new borders for fear that they would lose their properties.

Principle

DAFO should respect the customary village boundaries.

Recommended actions

(DAFO)

- ⇒ Make the time to discuss boundary matters with the villagers.
- ⇒ In the LFA process, set aside reserve lands in anticipation of an increase in demand for land in the future (e.g., inheritance, opening up of new land).
- ⇒ At the time of conducting the LFA process, negotiate and specify how the reserve lands can be obtained and opened up among villagers, with support from DAFO, if appropriate.
- ⇒ Make arrangements within a village so that the poor and the vulnerable can claim the right to the reserve lands and ask for assistance in opening up such land.

(4) Land shortages

Background

Village C was established in 1974 when people from five villages migrated from remote areas of the district to settle in the current village area. The area is close to the district center but is relatively small for a village with more than 100 households.

Important issue

Villagers have insufficient land for swidden agri-

culture.

Internal factor

The village territory contains little arable land for swidden agriculture. A shortage of swidden land has been an issue since the people from five villages migrated to the relatively small village area near the district center, but the situation has been aggravated due to a population increase.

External factor

Adjacent villages have already conducted the LFA process, and village boundaries between Village C and these adjacent villages have been drawn, leaving Village C with no land to expand their swidden agriculture.

Principle

Land shortage can be alleviated at different levels—intra-village, inter-village, and district.

Recommended actions

(DAFO)

- ⇒ At the district level, if necessary, demarcate or re-arrange village areas according to populations and their need for food security.
- ⇒ Negotiate inter-district agreements if a village is situated along the district's border.

(5) Vicious cycle of exploitative land use and declining soil fertility

Background

Village C has a large population compared to the available arable land. The rotation period of swidden agriculture was seven to nine years at the time of migration, but the recent population increase has resulted in three-year rotations. The yield of rice is approximately two tonnes per hectare, though it can range from 0.5 t/ha to 3 t/ha, depending on precipitation and pest incidence. About 60–70 percent of households have rice deficiencies during the June to November rainy season.

Important issue

Villagers intensify upland rice production on limited arable land in shorter rotation periods, creating a vicious cycle of declining soil fertility and more exploitative, unsustainable land use.

Internal factor

Village C originally had a large population at the time of migration, but recent population increases have put even more pressure on swidden areas and brought about even more intensive land use with three-year rotation periods. Currently, more than 100 households share 40 ha of swidden land. Despite declining fertility and frequent pest incidence, the villagers have to rely highly on swidden agriculture because there are few other cash income sources to buy enough rice from the market. This intensive use of swidden land, often in an exploitative and unsustainable manner, to get the most out of the limited land, has further decreased soil fertility and yields.

External factor

Opening up of new land and expanding swidden land for higher productivity is no longer possible, as the adjacent villages have already conducted the LFA process and the village boundaries have been drawn (although villagers in Village C often do not know or are not informed about the boundaries).

Little support has been given by DAFO or other external agencies to provide alternate incomes through on-farm and/or off-farm economic activities.

Principle

To ease exploitative land use, various measures should be taken that can reduce reliance on land and thus break the vicious cycle of exploitative land use and declining soil fertility.

Recommended actions

(DAFO)

- ⇒ Seek alternative income-generating activities for villagers in order to tap new sources of revenue and get away from subsistence farming.
- ⇒ Provide technical assistance to villagers by DAFO and other relevant organisations for more suitable use of land and farming methods. If this is not possible, give technical advice regarding potential income-generating activities through on-farm and/or off-farm activities.

(6) Insufficient land for inheritance: negative impact of the LFA programme (a common issue)

Background

According to the LFA programme conducted in 1997, each household was given three plots of land for some sort of production. The size of the plots depended on the number of family members and labour available, but the perception of the villagers is that the allocated land was too small to divide among their offspring in the future.

Important issue

Allocated land is too small to divide among descendants for maintaining their food security and assets.

Internal factor

Rich households usually have a close relationship with the village chief and can easily make a request to use reserve lands, while the poor have little voice in deciding how these lands should be used. Wealthy families can afford to hire labour from inside and outside the village to open up the allocated reserve land, but poor families cannot afford such resources.

Another internal factor is that the villagers have abandoned their customary rules regarding the opening up of forest. There used to be a rule that the villagers could open up any forest if they did not have enough land for inheritance. This rule, however, was abandoned after the LFA programme introduced new rules, and there is now peer pres-

sure to restrict the opening up of forest outside the designated areas.

External factor

The land allocation process did not take into consideration its impacts on inheritance, especially among the poor. Besides allocating three plots to each household, the LFA programme demarcated some village areas as reserve lands to be used for production activities in the future. In principle, anybody who is willing to open up and cultivate an area can obtain part of the reserve lands with permission from the village chief. In reality, however, few households have claimed and received reserve land for their offspring, because opening a new area requires a considerable outlay of funds. In some cases, they even require technical support from DAFO, because these reserved areas are often not suitable for agricultural production. Some land was reserved in anticipation of population increases in the village, as well as for expansion of future production areas, but how it can be obtained and opened up, so that the land could be readily available even for the poor, who are often landless, was not carefully considered.

Principle

The LFA programme should be conducted in consideration of its impacts on inheritances and population increases, especially among the poor and the vulnerable.

Recommended actions

(DAFO)

- ⇒ In the LFA process, set aside reserve lands in anticipation of increased demand for land in the future (e.g., inheritance, opening up new land).
- ⇒ At the time of LFA, negotiate among villagers and specify how the reserve lands can be obtained and opened up, with support from DAFO, if appropriate.
- ⇒ Make arrangements within the village so that the poor and the vulnerable can claim rights to the reserve lands and ask for assistance in opening up such land.

3.4.2. Livelihoods

(1) Gaining new agricultural areas through agreement

Background

In Village A, insufficient arable lands were allocated to the population and the villagers could not produce enough food within their village.

Good example 1

To avoid rice deficits, they visited their relatives in Xaignaburi Province across the Mekong River of their own accord in order to seek permission to utilise some of their lands in 2000. Since the request was accepted, 24 out of the 36 families have cultivated these areas for three years. Villagers therefore can take action to deal with rice deficits

on their own and reduce food shortages without any support from outside.

Good example 2

In addition, they have also gathered NTFPs, which is the major income source in this village, from around the new swidden areas.

External and internal factors

One reason why the villagers in the second village allowed Village A people onto their lands for cultivation is that their settlements are so far away from their own village that they seldom visit these areas. Second, they profit from the deal. They can make 20,000 kip/ha on rent from Village A. A final reason is that the villagers in Village A have relatives in that village across the river. They can count on mutual trust at a personal level, making it easier for those in Village A to go there to submit their offers.

Principle

Inter-village agreements should be permitted by DAFO.

Recommended action

(DAFO)

⇒ Accept and acknowledge inter-village agreements.

(2) New activities to supplement the loss of livelihood

Background

Conducting swidden agriculture in areas in Xaignaburi Province that have been used for three years is now prohibited from 2003 and onward.

Good example

Villagers here often gather to discuss village matters among themselves. They discussed the matter of lost swidden farms and decided to plan new activities to generate cash. In fact, they bought corn seeds from the Agricultural Promotion Bank in Hun District with some advice from DAFO for the purpose of reducing the practice of swidden agriculture, and 15 out of 36 families started planting corn this year. They intend to grow sesame as a cash crop next year.

External factors

DAFO provided some advice for new income generating activities. Besides this, the Agricultural Promotion Bank not only sold them the corn seed but also provided technical advice on things such as making fences to protect their crops from wild animals. Moreover, middlepersons, mainly from the district center, can more easily reach the village to buy their products.

Internal factor

There are two housing units in this village. Unit 1 comprises the majority and consists of 28 households. Most of them originated from the same village in the mountain hills. They have many relatives within the village and are well known to each other. They also usually have a good relationship

with DAFO and often ask for advice.

Principle

They often gather to discuss village matters among themselves.

Recommended actions

(DAFO)

⇒ Provide assistance for the villagers' activities.

⇒ Give assistance to villagers in learning good practices and lessons from successful livelihood-enhancing forest management activities.

(3) Limited income generation opportunities

Background

Village C is located along the national road, 50 km from the provincial center and 1 km from the district center. Although the villagers' main economic activity is swidden agriculture, their economy is at a subsistence level due to land shortages and low productivity. To supplement their incomes, the people also engage in paddy rice cultivation, livestock farming, and handicrafts. NTFPs such as bamboo shoots and wild animals are available, and some villagers are engaged in collecting them, which they sell at local markets or to Chinese traders. These activities, however, are all on a small-scale and do not generate enough income for the villagers to get by on and get ahead.

Some villagers have made requests for DAFO support in view of income generation activities such as fish farming. But DAFO staff have not responded to these requests.

Important issue

Despite good access to district and provincial centers, feasible income-generation opportunities are limited, keeping villagers' lives at subsistence levels.

Internal factor

Although there are opportunities to generate alternate incomes, such as fish and livestock farming, such potential remains untapped because villagers lack seed money to engage in these activities. For example, villagers wish to raise livestock as a "savings bank" to exchange for rice in time of shortages, but they do not have enough cash to buy livestock in the first place. NTFPs are collected mostly for household consumption, with little sold to local markets. Villagers never organized themselves to harvest and sell NTFPs to Chinese traders, and failed to improve their bargaining power and tap the potential of NTFPs sales on a larger scale.

External factor

The main objective of the projects implemented in Village C was to improve social conditions (nutrition, clean water, etc.), but they did not provide specific support for income-generating activities. It is likely that DAFO is not responding to villagers' requests for additional support because Village C has already received support for three projects. This indicates that there is little consideration for

what the villagers want and for which projects DAFO could provide to them.

Principle

Villagers should be provided with opportunities for income generation activities.

Recommended action

(DAFO and other organisations)

⇒ Give assistance to villagers to learn good practices and lessons from successful livelihood-enhancing forest management activities elsewhere.

(4) Widening poverty gap within a village

Background

According to the wealth survey conducted in 1996 and 2002 (before and after project intervention [Figure 9]), the poverty rate (as a ratio of poor households versus total households) in Village D has decreased from 33 percent to 20 percent, mainly due to higher incomes from NTFPs sales, confirming the positive impacts of the project on livelihoods as a whole. Nevertheless, comparisons between 1996 and 2002 reveal that the poor households in 2002 are either the ones that have been newly established or the ones with sick or old members. This means that the rich and middle-class households have become better off, while the poor households, either newly established or the vulnerable, still remain poor. In some cases, the poor have become even worse off.

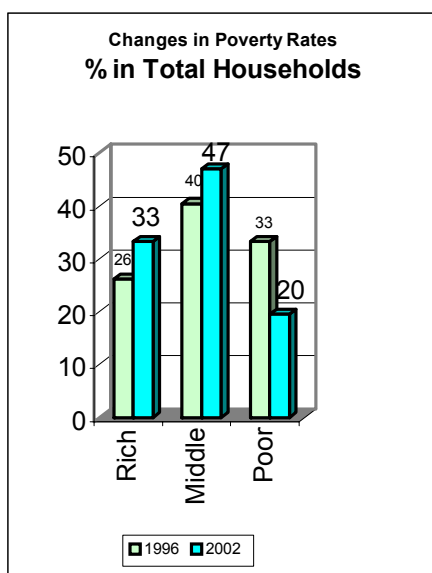


Figure 9. Changes in poverty rates during 1996 and 2002, Nampheng Village (prepared by Ishikawa and Boonthavy).

Important issue

A widening gap in the standard of living may become an obstacle to collective action, such as mar-

keting groups, and undermine the foundation for participatory activities.

Internal factor

The households that still remain poor despite the economic benefits from the project are either single mothers as a result of divorce, separation, or death of a husband, and/or the ones with sick or old household members. These vulnerable households usually own swidden land but do not have enough labour resources to help them produce rice or to engage in other income-generating activities. Moreover, some poor households are excluded from accessing social safety nets in the village such as the rice bank and informal credit systems. This could imply that the poor would also not have equitable participation opportunities in forest and forest resource management. For instance, even though the participatory village committee allows all households to participate in the decision-making discussions on NTFPs management, the poor might be participating in these meetings merely by attending without having much of a say.

Principle

Aid projects should assist not only the rich and the middle-income levels but also the poor.

Recommended action

(DAFO and other organisations)

⇒ Take care of the poorer households.

3.4.3. Institutions (regulations, management systems, decision-making)

(1) “Dead” village rules on natural resource management

Background

As explained above, the people usually continue to live in their customary ways and many of the situations go against local or national policies. For instance, certain village rules were brought in for natural resource management in 2001 based on advice from DAFO. One rule, for example, says that those who cultivate within conservation areas will be fined 50,000–70,000 kip. In reality, no families cultivating these lands have been penalized so far and likely will not be fined at a later date, unless the land-use problems are resolved with full agreement from all the main stakeholders. Moreover, half of the documents recording these village rules have gone missing, implying that there is no real need for these passive rules. It is essential for the people themselves to realise the importance of the new rules. DAFO should not make the villagers produce new rules without their request; this misunderstanding could cause conflicts between DAFO and the villagers.

Important issue

The villagers did not make rules that they can follow.

External factor

DAFO designated former swidden areas as conservation forests, moved the villagers out, and made them produce new village rules on natural resource management.

Internal factor

The people cannot survive without swidden in those areas because the newly allocated lands are not large enough for their needs and originally belonged to other villages. They superficially made new rules that are not useful for the villagers.

Principle

Village rules should be established and observed regarding land use and forest/forest resources management.

Recommended action

(DAFO)

⇒ Discuss the village rules now in effect and consider better forest management practices.

(2) Forest resource degradation due to un-permitted forest use by other villages

Background

Village C and the adjacent village of Na Noi share swidden areas in which the village boundary was drawn during the LFA process in Na Noi. There used to be no perceived boundary in the swidden area between the two villages, and some landless farmers from Na Noi still continue to cultivate upland rice in Village C's area. NTFPs in Village C's area, especially bitter bamboo shoots (*no mai khom*), are also subject to exploitation by outsiders.

Important issue

Un-permitted use of forest areas by other villages has led to the degradation of the forest and forest products.

Internal factor 1

Villagers are not able to prevent outsiders from using their forest and forest resources without permission. Villagers have not established any monitoring mechanisms of the use of forest and forest products by other villages. Even when unapproved use of these resources by outsiders is detected, there are no sanctions against such intrusions and hence no deterrent effect.

Communication between Village C and adjacent villages, including Na Noi, about land use is so minimal that they do not have any common rules regarding the use of shared land.

Internal factor 2

There used to be no perceived boundary in the swidden area between the two villages, thus villagers from both areas did not need to get permission to use the forest around their borders for upland cultivation and NTFPs collection in the past. With a population increase in Village C, however, the land shortage has become a major concern and has led them to restrict the use of their forest and forest products by other villages without permission.

External factor

The LFA process was conducted only in Na Noi and not in Village C. During the LFA process in Na Noi, Village C was neither consulted about their traditional land use, especially in the shared swidden area, nor informed of the newly-drawn boundary.

Principle

All the stakeholders should acknowledge and keep to the village boundaries.

Recommended action

(DAFO)

⇒ Reconfirm the village's borders with the people around the village.

3.4.4. Human relations (communication, social capital)

(1) Limited communication with DAFO (a common issue)

Background

When villagers need DAFO support, either technical or financial, the formal communication method between villagers and DAFO is for a villager to approach DAFO with an official letter prepared by a village head.

Important issue

This does not seem difficult, but this communication channel is not used as often as villagers wish to. They thus have limited opportunity to voice their needs and receive support from DAFO.

External factors

DAFO staff perceive that they are unable to visit villages to provide technical support due to a lack of financial and human resources. DAFO staff have difficulty visiting and communicating with villagers, often minority ethnic groups, due to the remoteness of these villages and language barriers. Moreover, it is a common perception among district staff that the villagers are uneducated and thus unable to plan their own economic activities and future life.

Internal factors

Knowing of the DAFO staff's reluctance to support them, the villagers are hesitant to ask for support. Language barriers are another factor that can hamper communications with DAFO staff.

Principle

Communication channels with DAFO and villagers should be strengthened.

Recommended action

(DAFO)

⇒ Organise a forest/forest resources management group based on the villagers' needs.

(2) Lack of social capital for poor households

Background

In Village D, a rice bank was established with project support to mitigate their rice shortages. In

principle, any households suffering from rice shortage can borrow rice from the bank as long as there is stock available. However, some poor families, which are regarded by other villagers as lazy, are not allowed to borrow rice, while other poor families do have access to the bank.

Moreover, those poor families without access to the rice bank cannot borrow money from other villagers or from the village development fund (for which part of NTFPs sales are earmarked), although the villagers have traditionally helped each other in times of financial difficulties through social capital and informal credit.

Important issue

Some poor households are excluded from social networks and have no access to social capital (bonding social capital), thus being hindered from getting out of poverty. It is likely that these households are also excluded from, or at least only participate passively in, the participatory decision-making processes dealing with NTFPs collection and management, and thus benefit little from existing social capital such as the NTFPs collection management rules and a loan scheme using the village development fund.

Internal factor

Even though the village has developed a social assistance network and social capital for mutual help, there are restrictions on the use of such social capital. One of them is that poor families, if their poverty originates in laziness, should not count on other villagers for support, because then reciprocal help can't be expected.

Principle

In initiating new forest management practices, existing social capital should be carefully examined and used to encourage mutual help and promote other common activities.

Recommended action

(DAFO)

⇒ Incorporate social capital such as reciprocal relations and trust into planning in order to promote mutual help and improve livelihoods.

(3) Low levels of Lao language literacy

Background

The ethnic majority of people in both villages are the Khamu, which accounts for about 60 percent of the population in Oudomxay Province. Males can speak the Lao language because they often go outside to trade, while females are always engaged in housekeeping and only speak the Khamu language.

Important issue

It is difficult for the villagers to understand the Lao language, yet the information that DAFO provides is always written in Lao.

Internal factor

The women, who are busy housekeeping, have

fewer opportunities to master the Lao language and miss out on much information.

Principle

Special attention should be given to communicating with minorities.

Recommended action

(DAFO)

⇒ Do not ignore the minority; rather engage with them for better relationships.

3.5. Guidelines from the viewpoint of local officials, Pakbeng District, Oudomxay Province

3.5.1. Important issues from local officers' point of view

Many issues related to forest management in Oudomxay Province were mentioned to researchers by the provincial and district officers. These issues include insufficient staffing, limited budgets for operation and extension, lack of basic infrastructure and markets, limited paddy fields, low incomes, and the fact that most rural people are still living by shifting cultivation. Although many issues were mentioned, only the issues of land allocation and resettlement will be discussed in the following section because they relate to the outcome of policy implementation.

(1) Land allocation and land-use conflicts

In the early 1990s, a land and forest allocation process began to be developed and implemented in Lao P.D.R. Since then it has become one of the most important tools of the Lao government in ensuring forest protection and stabilizing shifting cultivation.

Provincial and district officers recognised that land and forest allocation policies were a positive step forward, especially in the northern provinces, where most people live by shifting cultivation. Mr. Nen Vienvisit, the deputy chief of the provincial agriculture and forestry office of Oudomxay Province, was convinced that land and forest allocation, if implemented according to proper procedures, would help to protect natural resources and villagers would use land more effectively.

Although they were in full agreement with the government's policy regarding land and forest allocation, the provincial and district officers were concerned about its indirect results because they had an insufficient number of capable staff persons and a limited budget for implementation, monitoring, and extension. Indeed, the land and forest allocation process would not be sustainable if an alternative solution to improving the living standards of rural people were available. In the case of Oudomxay Province, for example, to date only 50 percent of land and forest allocations have been fully completed. In essence, it requires 15 to 20 people to take part in the land and forest allocation process for each village. In practice, however, only two officers took part in the land and forest allocation process in one village of the Pakbeng district. As a result, land and forest were not properly clas-

sified in sufficient detail, and conflicts over land use continue to exist, as in the case of A and B villages.

(2) Issue of the resettlement plan

Relocation of people from watershed and protected areas to a more permanent place has become one of the alternative solutions for natural resource management and rural development in Laos. According to this plan, a group of households who are living in watershed and protected areas are encouraged by local authorities to relocate and form into a bigger and more permanent village. The main objective of this model is to improve the living standards of rural people and develop basic village infrastructure such as water supply, health centers, schools, and roads.

However, where the relocation plan has not been well prepared and managed, as in the case of Village A, the resettlement was not a success. The district authority admitted that the resettlement programme in Village A failed because of conflicts over land use between the native villagers and the new-comers (Phengsopha and Morimoto 2004). Many families who were encouraged to move to Village A had returned and continued to practice shifting cultivation in areas where it was prohibited, because they had no other alternative to produce enough food for their own consumption. This has become an issue for the district authority in managing and protecting natural resources.

3.5.2. Actors and factors involved in forest conservation

This section is aimed at describing the roles and responsibilities of the internal and external actors that are involved in natural resources development and management in Laos. The internal actors include the Ministry of Agriculture and Forestry, provincial agriculture and forestry departments, district agriculture and forestry offices, and village committees. The external actors include international development agencies that are actively working in the province, such as the GAA and IFAD projects.

(1) Internal actors

The Ministry of Agriculture and Forestry and its department of forestry have had an important role in managing and protecting natural resources in Laos. Before the economic reform in 1986, the role of the ministry of agriculture had been one of central planning. Afterwards, the main objective of this ministry was to guide the policies of the government and to provide technical support and links with international organisations in the agriculture and forestry sectors. The Ministry of Agriculture and Forestry now reports to the prime minister's office regarding activities concerning the agriculture and forestry sectors.

The provincial agriculture and forestry department represents the ministry of agriculture at the provincial level. Its main responsibility is to provide technical assistance to the district agricultural offices. The chief of

the provincial agriculture and forestry department has a duty to help the minister and deputy minister of agriculture and forestry in managing and implementing agriculture and forestry along a vertical line with the district office (MAF 1999).

The District Agriculture and Forestry Office is the closest office to villagers in implementing government policy. The role and responsibility of a district agriculture and forestry office is to provide assistance to provincial agriculture in the field, assistance to villagers in forestry activities, as well as supervision and control of forest management (MAF 1999).

The village committee, which includes the chief of the village, the council of elders, the women's union, and youth unions, plays an important role in organising and managing forests at the village level. The chief of the village is the key person in organising and maintaining relationships with district officers. He also has a role in dealing with problems and conflicts that arise in the village and among villagers.

(2) External actors

External actors in this context means the international development agencies and donors who provide additional budgets and technical assistance to the province, districts, and villages in managing natural resources. Presently, the international development agencies involved with natural resources development and management in Oudomxay Province are the GAA and IFAD projects. These aim at supporting the provincial and district agriculture and forestry offices in strengthening their institutional base for agriculture and forestry as well as providing alternatives that could improve the living standards of its target villagers.

3.5.3. Recommendations

Unity and harmony among people in a society is the foremost concern of Lao officers when dealing with issues of a local community. The Lao government stresses that the Lao people will not be able to develop their country if there is no peace, harmony, and cooperation among them. This fundamental principle has become a doctrine for the Lao people within the existing constitution. The following sections will present recommendations on how local officers should deal with specific problems.

(1) Recommendations to solve land-use conflicts among households in the village

The chief of the District Agriculture and Forestry Office for the Pakbeng district indicated that, in principle, the conflict of land use among villagers within the village is the responsibility of the village committee. This committee includes the chief of the village, the chief of the group, and the council of elders. The village committee is the primary body responsible for day-to-day administrative affairs and acts as adjudicator in traditional land management disputes. It also acts as a formal representa-

tive of district officers.

Traditionally, shifting cultivation of land was settled by means of an agreement between clan members, relatives, or neighboring households. Shifting cultivators did not pay much attention to land ownership and gave access to land and other natural resources to all members of the village.

In order to avoid land-use conflicts among households, those who wanted to use land would seek permission from previous land users before clearing the area. This traditional right to use the land is little understood by outsiders. These households have learned the system from their collective experience over years of involvement in shifting cultivation activities (Kheungkham 2000).

There are two steps involved in solving this type of conflict. First, the village committee allows and encourages the people themselves to negotiate and solve the problem. This step is considered to be informal problem solving. If an agreement can't be reached between the parties, then the village committee is requested to intervene. At this stage, the conflict becomes a formal matter. Based on the consensus among the people in the village regarding their customary rights, the village committee decides and offers a solution accordingly.

If the conflicting households do not accept the decision of the village committee, they can then appeal to the district authority. However, this step has rarely happened because the majority of village households accept and follow the committee's decisions, although some do not, and they would be considered as having a negative attitude toward authority. Since rural villagers have traditionally relied on each other for farming and social activities, they generally avoid being in conflict with each other. Therefore, most of the cases are settled at the village level without the involvement of district officers.

(2) Recommendations to solve land-use conflicts between people of different villages

Land-use conflicts between people and outside villagers in this context refers to people in a village who use land in some other village, district, or province without obtaining permission from the concerned people or authorities. In the case of Village B, there were many households who cultivated upland rice across the boundary of their village in an area belonging to Xayabury Province, while in return some households of a nearby village cultivated upland rice in B's area. This is a common problem in villages where most people are living by shifting cultivation and that have high population density and insufficient arable land.

Traditionally, before clearing forest outside the boundary of the village, individual households or a representative of the village would seek permission from a concerned person or the authorities of that village in order to avoid conflicts over land use at a later stage. When these traditional practices have been ignored, conflicts over land use always seem to happen.

In order to solve this problem, the district officers would invite opposing villages, along with the district agriculture and forestry officers of that province, to consult and discuss. At first, the DAFO officers outline the problem, the cause of the problem, what has brought about the disagreement among concerned people, and then ask the concerned stakeholders to seek an alternative solution.

If the conflict can't be solved at this level, then the district officers report the case to the provincial agriculture and forestry office, which, based on information from the district officers, would recheck and try to resolve the conflict. The problem would be more easily solved if the conflict of land use occurred between villages in the same district rather than between different districts and provinces.

3.5.4. Action taken by stakeholders

(1) Action taken by local officials

Although local officials agree with the policy of the central government and consider the policy as an order, it has not been successfully implemented due to a lack of understanding of it and its implications, a limited number of qualified staff persons, and a lack of a large enough budget for operation and extension purposes. Sometimes, as well, these laws and regulations are often not supervised or enforced. Nevertheless, the local officers intend to improve their own activities, as indicated below.

(a) Implementing the policy

Local officers recognise that the awareness of the local people is a very important component for the sustainability of natural resources development and management. Presently, the information and sources of information are very limited in the rural villages; therefore local people are not well informed about the land and forest allocation policy. In order to improve the situation, the district authority should send brochures about the government policy to the district officers, especially for A and B villages where high forest degradation and conflicts over land use have occurred. The boundary of the village and its neighboring villages should be re-clarified.

Protecting natural resources should go hand-in-hand with social and economic development. Presently, the first priority is given to protecting forest and natural resources, while improving the living standards or providing new alternate sources of income to villagers is considered only a second priority. This was clearly shown in Village A, where the land and forest allocation process has been completed but remains only a symbolic result, because the problems of the people have not been addressed. Therefore local officers should know the will of the villagers in order to provide technical assistance and train and assist them in generating and assessing different options.

It was recognised that resettlement without a proper plan would lead to an unsustainable way of life for the villagers. Therefore, the options must be evaluated and a

proper plan should be made before making decisions and proceeding to implementation.

(b) Human resources and budget

Local officers in provincial and district offices operate under a situation of “enough but not sufficient.” This means having basically enough people but not enough qualified staff persons to manage and operate activities properly. This is a common problem found in Laos.

Staffing and budgeting are beyond the capability of local officers to manage and control, because it is linked to the budget allocation that is provided and approved by the central authority. In order to improve the existing situation, the local authority should continue to ask the central authority for increases in the budget and provision of more technical staff to the district, in order to better implement the policy and prevent further degradation of natural resources. Besides that, local officers should try to improve cooperation among line agencies and international development agencies. Villagers should also be encouraged to play an active role in all aspects of planning and decision-making, while local officers should provide technical assistance. This is a long-term process that also needs assistance from outsiders.

(2) Actions taken by local officials with regards to external stakeholders

Acknowledging that they have insufficient knowledge and inadequate budgets to control the degradation of natural resources is not an easy situation for local officers. Therefore, they fervently intend to request help from external stakeholders to provide technical assistance that would improve their capacity in the long term, as well as to develop and search for new alternative solutions to protect the forests and improve the living standards of rural people. Without assistance from outsiders, villagers would continue to practice their traditional way of life, and natural resources would continue to be degraded due to the limited alternatives available.

As mentioned in Section 3, there are only a few international development agencies working in the district, and their scope of operation is very limited. Therefore, local officers hope that additional external stakeholders would join to provide technical and budget support in finding a long-term sustainable way to protect natural resources as well as to improve the living standard of the rural community in those areas.

(3) Recommended action taken by external stakeholders

Local authorities expect external stakeholders (i.e., IGES) to provide more technical assistance and increased funding to improve the capability of district officers and villagers in managing natural resources as well as looking for alternatives to improve the living standard of rural communities.

In the case of villages A and B, with the participation of villagers, external stakeholders should help them to develop their own village development strategies with an emphasis on the role of the community in land and forest management. The development strategies should be based on the will of the villagers, not primarily on the will of the local authority or project manager, but closer integration into district planning and monitoring should also be considered.

Land and forest allocations should be reviewed in Village A and in the seven villages nearby that are located in watershed areas. Alternative solutions to shifting cultivation should be emphasised, because this is one of the major obstacles to protecting watershed areas.

In sum, the local officers highly expect that external stakeholders will provide technical support to villagers in identifying their problems, the cause of the problems, possible alternative solutions to prevent or solve these problems, and what approach should be taken. These are the most ardently hoped for actions to be taken by external stakeholders.

Part 3: Guidelines for Far East Russia

Comprehensive Guidelines for Local Population Participation in Forest Management in the Southern Part of Khabarovskiy Krai

by

Prof. Alexander Sheingauz (Economic Research Institute, or ERI, of the Far Eastern Branch of the Russian Academy of Sciences), Dr. Natalia Antonova (IGES), Dr. Oksana Glovatskaya (ERI), Dr. Grigoriy Sukhomirov (ERI), Dr. Anna Bardal (ERI), and Hiroaki Kakizawa, Ph.D. (Hokkaido University, Japan).

1. Introduction: Setting of the problem

Already for many decades the forests of the Russian Far East (RFE) have endured depletive use, mirroring a similar situation in many countries of the world.¹ All of these nations face the task of making the transition to sustainable forest management, but because of a lack of effective and concerned forest owners and the domination of state ownership, state management itself is considered to be the main reason for the exhaustive use. That is why the idea of sharing responsibility and, accordingly, management for forests between various ownership levels has been brought forward in the last few years as one of the more radical measures for establishing order in the use of forest resources. In particular, the idea of broad involvement of local populations in forest management has been brought forward.² It is considered that local residents have a direct interest in rational use of forest resources, and therefore their involvement in forest management could promote the transition to sustainable forest use. Sustainable forest use supposes the consideration of the interests of all forest-use participants, including entrepreneurs (first of all local ones), state authorities, public organizations, and communities at the krai and local levels (raions, settlements). It is assumed that the dwellers of forested areas that use the forest's resources and influence its ecosystems know and understand the state of those ecosystems and their reaction to anthropogenic pressures, and having this essential information, they are able and willing to support appro-

priate decisions or oppose (not sanction) inappropriate ones made by the state forest and ecological bodies as well as big logging firms.

This supposition was one of the working hypotheses of the Russian-Japanese Forest Conservation Project, which was developed in the south of Khabarovskiy krai from 2001 to 2003 by the Economic Research Institute of the Far Eastern Branch of the Russian Academy of Sciences (ERI) and the Institute for Global Environmental Strategies (Japan). Targets for elaboration of the hypothesis were chosen in three levels: Khabarovskiy krai as a whole, Lazo raion, and two rural municipal formations (RMF) of the raion. These RMFs have different socio-economic conditions: Sita is in a depressed state and Sukpai is under progressive development. Data on the udege village of Gvasyugi were used additionally at the lowest level. The investigation of the problem was implemented by socio-economic analysis of official reports and statistical information, interviewing specialists at the raion and rural level, and questioning the population.

Brief results of the problem investigation and the recommendations to the krai and self-governing bodies and their experts for solving them are given further down.

2. Socio-economic situation related to forest use in the investigated areas

2.1. Current state of forest business

The forest sector of Khabarovskiy krai is based on the use of vast forest resources, first of all in the commercial use of wood. Timber harvests in Khabarovskiy krai were 5,825,000 cubic metres (m³) in 2000, 6,539,000 m³ in 2001, and 7,121,000 m³ in 2002. About two-thirds of this wood was exported abroad (from 72 to 83 percent in various years), but the share of the domestic market has risen gradually. The main importer of the krai's wood is China (59 percent in terms of value in the first half of 2003); the second largest is Japan (34 percent); and the third is the Republic of Korea (7 percent).

¹ Malaysian company is logging forests of Equatorial Guinea. 2002. Pacific Currents. 2002. May 1. www.pacificenvironment.org; Russia: Forest policy in the transition period. 1997. Washington DC, World Bank. 320 p.

² Les i obshchestvo: posobie dlya rabotnikov lesnogo khozyaistva. (Forest and society: manual for foresters). 2000. Moscow, All-Russian Research Center on Forest Resources, 208 p. (Rus.); Bray D.B. et al. 2003. Mexico's community-managed forests as a global model for sustainable landscapes. Conservation Biology, vol. 17, No. 3, June, pp. 672–677; Matsumoto, Satoru. 2002. Community forestry seen as a grassroots Movement – trends and challenges of NGO activities in Lao PDR. Policy Trend Report. 2001. Hayama, Institute for Global Environmental Strategies, 24–33 p.

The allocation of forest lots for use is done on a competitive basis. The competition conditions include silvicultural-technical and socio-economic demands for the winner. Above that, additional demands are brought forward for each specific competitive lot (i.e., to provide firewood to the population of the nearest settlements, establish jobs for the local population, support schools in maintenance and acquisition of equipment, etc.), but these conditions included in lease agreements are very often not fulfilled by leasers.

The use of forest lots is strictly documented and should be systematically controlled by a leskhoz. However, the existing legislation doesn't require that harvested wood or other forest products be accompanied by the documents that confirm their legacy, which leaves a lot of loopholes for illegal forest use. All the further operations on the forest products trade are not considered to be specific enough and are implemented in accordance with the ordinary norms of the civil code.

The forest sector is managed by the federal government as well as the krai government. This complicates the interrelations of various branches of power. The forest code of the Russian Federation has limited significantly the power of provincial administrations and practically completely deprived municipal organs of their rights. Management of the forest sector worsened specifically after the cancellation of the independent Federal Forest Service in 2000.

The forest industry is one of the main economic sectors filling the krai and raions budgets. In 2003, the tax paid to the krai from one cubic metre of harvested wood was 36 rubles (U.S.\$1.2)³ on average, and payment for the use-right was 29 rubles (\$1). Above that, on the basis of additional conditions included in lease agreements, leasers pay annually from 9 to 180 rubles/m³ (\$0.3–\$6).

Forestry is financed from the federal budget. Because of systematic under-financing, the leskhozoes are forced to turn in the interim to cutting down forests using the worst type of commercial logging, and because of that they are one of the main forest violators. This causes additional opportunities for the illegal use of forest resources.

The Lazo raion's economy is sufficiently well developed and is characterized by industry and agriculture. The forests cover 84.9 percent of the raion territory, and they are managed by five leskhozoes. The annual allowable cut (AAC) is 3130.4 thou. m³ and only 14 to 15 percent of it is used. In the middle of 2001, 24 leasers with a total of AAC 1.2 million m³ were operating in the raion. About fifty small entrepreneurs harvest wood on short-term use conditions (less than one year). The raion's forest resources are being used irrationally; mainly only the valuable species of trees are removed, while wood of low value and low grades is left in cut-over patches.

The raion forest sector is one of the longest standing

and most developed in Khabarovskiy krai. The logging and woodworking industries are the main industries of the raion economy. Many settlements and communities originated near logging and woodworking enterprises, and existed on the basis of their activities. Late in 1980, industrial-production workers of the logging and woodworking industries made up 11.2 percent of all the residents of Lazo raion, or 24.7 percent of population employed in the raion economy. The crisis of the 1990s caused serious damage to the raion forest sector. Many enterprises, including large ones, went bankrupt or were broken down to average size and small units. Late in 2000, the raion forest sector employed 2.0 thousand persons, which made up only 3.5 percent of the raion population, or 11.5 percent of employment in the economy. Subsequently, investments into the social sphere have sharply decreased.

Early in 2000, nine large and middle-size forest enterprises, including six logging operations, were operating in the raion. In 2000, 412.0 thousand m³ were harvested and 22.1 thousand m³ of lumber were produced. New logging enterprises were started up, including a large Malaysian company, Rimbunan Hijau DV Co. Ltd. The logging enterprises of the raion are focused on round log export, but woodworking is being restored gradually.

Research has shown that the average age of forest enterprises at the beginning of 2002 was six years. Almost half of the firms are joint-stock companies with limited liability; in second place are individual private enterprises, and in third place are private enterprises. Both of the last two forms are typical for small business. The source of investments in the forest business comes from the internal funds of owners, proprietor's stake, funding from large firms, and even from public organizations. The average number of staff in the enterprises is 83 persons. The local residents make up 83 percent of the personnel, and there are no differences between their pay and the rest of the staff, officially.

Over three-quarters of the firms hold the forest lots on lease, and one-third also have short-term logging permits. The average data on lease lots in the raion are as follows: time remoteness of getting is three years; leased area is 44,7 thousand hectares (ha); AAC is 54.7 thousand m³; and lease term is 32 years. The average area of the short-term use plots is 55.7 ha, with an operational stock of 2.0 thousand m³ that should be removed during a year.

The average payment for forest resources use in 2000 was 29.25 ruble/m³ (\$1.03) for leases and 15.49 ruble/m³ (\$0.55) for short-term use. Thus, payments for short-term use are as much as two times lower than for a lease, although according to existing regulations they should be as much as two times higher and more. In procuring the right to use, every enterprise paid an average of 40.5 thousand rubles (\$1,400) for documents issuance, 58.7 thousand rubles (\$2,100) for project development, and 95.5 thousand rubles (\$3,400) in the shape

³ Conversion of Russian currency into U.S. dollars was made based on the exchange rate of the corresponding period.

of payments for various social needs of the population.

The profitability of manufactured products in 2000 was 17 to 28 percent. The profitability of round wood in 1999 was approximately two times higher than the profitability of sawn timber, but in 2000 this gap decreased.

The enterprises are poorly equipped technically; the average amount of their capital assets is 1.0 million rubles (\$35,500), and this index is much lower when the capital investments of the Malaysian company aren't included. Of total capital assets, 73 percent are machinery and equipment, i.e., the enterprises are not burdened by buildings and facilities, including roads. The average degree of machinery and equipment wear and tear is very high—80 percent. The investment in production of one enterprise was, on average, 42.2 million rubles in 1999 and 8.8 million rubles in 2000 (\$1,740,000 and \$312,060, respectively).⁴

In terms of buyers, 59 percent of the inspected enterprises sold their production in 2000 directly to customers, 24 percent to dealers, and 17 percent to both. As for their location, 37 percent of trading addresses were in China, 26 percent in the city of Khabarovsk, 11 percent in Lazo raion and Khabarovskiy raion, and 5 percent each in Japan, the Republic of Korea, and Khabarovskiy krai (without specifying the place).

The main source of market information for 62 percent of the entrepreneurs is personal contacts, for 26 percent it's personal analyses of the market, 11 percent get theirs from periodical publications and the Internet, and 11 percent purchase or get for free reviews carried out by other organizations. Only 26 percent are aware of forest products certification and are ready to accept the procedure of certification.

In the entrepreneurs' opinion the problems of great importance are high credit rates; high taxes; lack of circulating assets; deficit of funds for development; rising prices of energy, raw resources, and materials; administrative barriers; and an insufficient legislative base. The problems they rated as of medium importance were a shortage of qualified personnel, excessive control and checking, and insufficient information. The problems of small importance are unfair allocation of resources, high credit debt, difficulties with getting raw materials, difficulties of equipment acquisition, distribution difficulties, threats from criminal rackets, and a lack of professional experience among managing personnel, including in activities in market conditions.

The possibility of personal business development was regarded by 53 percent of the raion entrepreneurs in 2000 as indefinite, 42 percent as favourable, and 5 percent as unfavorable.

As a whole, the forest business in Lazo raion is difficult to deal with, but it is relatively stable, in terms of prospects for development. It is highly heterogeneous and consists of small, average, and large enterprises (criteria of the forest sector) that are staffed by qualified

managers and personnel.

The small forest businesses of the raion are of special importance in terms of the population's involvement in forest management. Late in 2002, 61 small enterprises engaged in forest business were registered in Lazo raion. Only 14 of those enterprises were effecting their activities in reality. In addition, there were seven small forest enterprises operating that were not registered in the raion. The most common form of enterprises was the limited liability company (Ltd.). The greatest number of small forest firms is concentrated in those settlements, where after the bankruptcy of large state enterprises there remained a high engineering potential or where facilities, access routes, etc., remained.

Small forest enterprises employ 40.6 percent of all the people working in the forest sector in the raion. The number of employed people continues to grow; from 2000 to 2001 it increased by 4.2 percent. The volume of wood harvested by small enterprises increased at the same time by 8.6 percent, and the volume of marketable production grew by as much as 2.4 times. Woodworking has gradually started to be developed in small enterprises; from 2000 to 2001 timber output increased by almost as much as four times. New types of production are being manufactured (veneer and others), and new production lines and shops were installed for the production of sawn timber. Small business enterprises pose considerable competition in wood sawing for large enterprises, because they could efficiently acquire more updated equipment and ensure much higher quality of sawn materials. This fact means that small businesses may still be able to develop if given time.

Small and large firms are disengaged in fact. The relations of all the firms with raion administration and the population are complicated. In getting forest lots, forest users are being bound to conclude agreements with the raion administration on providing support for local social infrastructure. But a number of forest users, specifically those working on short-term use or on logging operations of intermediate use, evade carrying out those agreements and even signing them. At the same time, the support of the enterprises that invested large-scale funds in their development quite often appears to be higher than it was envisaged in the agreement.

Specific forms of relations between the population and the firms and enterprises just do not exist. The main middlemen between them are the administrations of the raion and the RMF. The negotiating power of the authorities needs to be used with the firms to solve conflict situations. Sometimes, in extraordinary cases, decisions have to be made that force firms to execute specific social orders.

Forest users provide support mainly to those settlements where they are based and partially to the nearest settlements. The settlements where workers of other industries reside, first of all of agriculture, practically do not receive such support. The agricultural enterprises conduct logging operations on their own.

⁴ Such disparity of investments and fixed assets are shaped on the base of questioning processing.

They get forest lots on a privileged basis on the grounds of Article 43 of the RF Forest Code. Practically every large agricultural unit has its own stock crew to serve the needs of the community.

2.2 Community survey

The rural municipal formation (RMF) of Sita consists of four settlements, and as of 12 January 2001 had a population of 2,240 people, a decrease from 1990 of 31 percent. The main causes of the decrease are a decline in production, worsening housing and communal conditions, emigration of young people, and the death rate exceeding the birth rate. At the same time, there was a small inflow of unsuccessful families from Khabarovsk city. The number of citizens older than the employable age is 778 persons, or 34.7 percent of the RMF's population.

The Sita settlement was the center of the well-known Obor lespromkhoz and Obor logging railway in the middle of the twentieth century. The lespromkhoz went bankrupt and was liquidated in 1999, and the railway is practically out of service. Nine small enterprises and offices operate in Sita RMF, each with an average of 30 laborers. Sita RMF is in a depressed state as a whole.

RMFs have no budgets of their own; the financing is carried out via corresponding committees and departments of the raion administration. The income of Sita RMF in 2003 was 2427.1 thousand rubles (\$82,400) including the own income of 125.1 thousand rubles (\$4,170), or 5.1 percent of the total. The expenses were equal to total income; the difference was covered from the raion budget. Thus, the budget of the Sita RMF is subsidized by 94.9 percent. The RMF head has an insignificant source of getting a cash income from payments for notary services (registering marriages, births, and deaths, etc.)

During any year, enterprises and the population harvest about 500 m³ of commercial wood in forests surrounding the RMF. The annual demand of the population for firewood is about 3,000 m³. The fuelwood needs to be logged mostly in the forests of Obor leskhoz, which is available to only a small portion of the local population. That is why timber poaching for fuelwood takes place. The population's participation in guarding the forests is minimal.

The social activity of the Sita settlement's residents has manifested in the establishment of various public, religious, and party organizations.

The Sukpai RMF consists of one settlement, which was built specifically for forest workers. At various time periods, there were large lespromkhozes and a forest industrial combine operating, but they closed down in the 1990s crises. As a result, the population of the settlement decreased during 1990 to 2001 by as much as 2.2 times and now numbers 1,520 persons. However, the share of capable working residents increased owing to the creation or arrival of new enter-

prises, and in 2000 it stood at 75.2 percent. The share of people older than the able-bodied age that same year was 8.2 percent, i.e., as much as four times lower than in the Sita RMF. The number of residents employed by industrial enterprises increased between 1995 and 2001 by as much as 26 times. The enterprises functioning in the settlement use qualified laborers, some even from the settlements of Khor and Mukhen. The prospects of Sukpai RMF can be regarded as being positive.

There are two large-sized logging enterprises, one of average size, and one small logging enterprise operating in the RMF's territory. The two large ones are also involved in sawmilling.

The budget revenue of the Sukpai RMF in 2000 was 2626.6 thousand rubles (\$93,140), i.e., 3.6 times more than that of the Sita RMF in the same year. But internal funds provided only 26.6 thousand rubles (\$943), or 1.0 percent of all revenues. Expenditures were 2626.2 thousand rubles (\$93,140). The Sukpai RMF budget was subsidized by 99.0 percent.

The enterprises functioning in the settlement's territory participate in various aspects of social infrastructure maintenance: they provide sponsorship support to the school and the day-care, and they supply firewood to the budget sphere laborers (teachers, medical workers) and to the under-privileged part of the population (war veterans and disabled people). Annually, they supply up to 2 thousand m³ of wood for the maintenance of housing/communal and social/cultural purposes as well as for providing the population with firewood.

A large drawback in the development of the Sukpai settlement is the lack of reliable transport, communication, and permanent telephone lines.

Gvasyuginskoe RMF includes one udege village, Gvasyugi, the main residents of which are indigenous people, whose families have resided in the territory of Lazo raion for many centuries. Their principal occupations are hunting and fishing. The village sprang up in 1935 upon the forced concentration of udege people, who once resided in various locations around the raion. With that they were cut off from their ancestral hunting and fishing grounds, which caused food, transport, housing, and other problems. Drastic reorganization of the native people's style of life, destruction of their traditional economy, and the imposition of a unified approach without taking into account their original culture, traditions, and way of living has caused destruction of their traditional lifestyle, including the loss of hunting and fishing customs and knowledge and folk handicrafts that were connected in many respects with the use of forest products.

Starting in the 1980s some measures were taken to revive native traditions. A territory of traditional nature use (TTU) measuring 816.7 thousand hectares in the watershed of the Chuken River was since designated. Native producers' communities have been established that try to go into the forest for not just hunting but also

logging trees. But these communities still suffer under a difficult financial situation. In fact, they are struggling for survival. Over half of udege families belong to the poverty-stricken category, and the level of sickness and death rates is high. The village has no telephone or radio communication or bus transportation between other settlements. There also didn't remain skilled in embroidery of traditional clothes and footwear or in fish skin currying. The Udege people have almost completely lost their native language to Russian.

2.3 Questionnaire carried out in 2002 reflected the raion population's state and its attitude towards the issue of forest management.⁵

More than three-quarters of the working population (excluding entrepreneurs) have incomes only in the form of wages or salaries. Income from forest-related activities is mainly brought about by jobs for hire at forest enterprises, while 13 percent of the raion population gets income from picking and selling mushrooms, berries, etc., on their own. Relative to the infrastructure of the settlements and the raion, where the people reside, parasitical mentality prevail.

Almost half of the population (46 percent) regards the forest as an integral component of their lives, while 27 percent use the forest only for recreation and trips, and 13 percent regard the forest as the basis of their well being. Of the total population, 38 percent visit the forest several times a year, 22 percent visit one to two times a month, while only 21 percent visit several times a week. The main reasons for going into the forest are to pick wild vegetables and mushrooms (35 percent), for recreation, tourism, and sport (28 percent), and for hunting and fishing (14 percent).

The main sources of information on the forest sector for the population are television (32 percent) and, almost the same, newspapers (31 percent). The third source is radio, but it lags behind significantly (12.7 percent). Only 32 percent of the population believe that they need additional information on this issue, but 94 percent think that special forest-oriented education of the population is needed with the help of lessons at school, visual aids (signs), and lectures, as well as through the mass media.

As a whole for the raion, 44 percent of the population is not willing to get into any forest business, 25 percent would like to establish a forest business of their own on the basis of using non-timber forest resources, 6 percent on the basis of servicing forest tourists, and 3 percent on the basis of logging. Almost two-thirds of those willing to establish a business of their own (62 percent) said they needed a partner with capital, 15 percent needed a loan, and 11 percent said they would rely on themselves.

About half of the population regards the involvement

of personnel from other raions of Russia and from abroad in operations in the forest negatively.

The population doesn't regard the forest as an object of privatization and is not willing to transfer the forest into private hands: 37 percent believe that forests should be under krai ownership, 26 percent said federal ownership, and 21 percent believe that the forests should be the property of the RMFs. There exists a prevalent fear that in case the forest becomes the property of a private entrepreneur it will be logged without further replanting of the logged plot. The soundness of such fear is not proved, but this conviction is rather strong. The prevailing majority (79 percent) does not want to allow an opportunity for application of private ownership of the forests, however, 12 percent view such an opportunity positively. Those who agree with forest privatization believe that it should be free and involve only the residents of the forest settlements (38 percent) or be open to be "bought by anyone" (21 percent).

The general opinion of the population is that the money from the payments for forest use should remain in the territory where forest is cut, 28 percent believe that the payments should go to the budget of the RMFs (27 percent said to the raion budget and 26 percent said to the krai budget). And only 6 percent are ready to give the money up to the federal budget.

The situation in the use and guarding of the forests was evaluated by the population as "poor." The main negative factors mentioned were forest fires and illegal logging operations, with 81 percent of the population believing that illegal logging operations make up half of the volume of legal harvesting and appear to cause large damage. The negative relation to this phenomenon is absolutely obvious—70 percent of the raion residents regard illegal logging as criminal, but 30 percent believe that a person involved in such a crime could just be fined.

Three-quarters of the population (74 percent) rejected the idea of their (public) involvement in forest management and believe that it should be done by professionals; about 24 percent regard such involvement as required. However, even they regard this involvement as not being profound to sufficient extent as to be considered passive. Only 9 percent believe that it should be equal in rights and complete. This means that the population is not ready and is not striving for active participation in forest management. Over one-third (34 percent) turned down the idea of their personal participation in improving forest conditions, almost half (44 percent) are agreeable to, but only with their efforts being paid, and only one-fifth (21 percent) agreed to participate in improving forest conditions without being paid.

The attitude of the population towards forest companies is not simple. The fact that these firms, in some cases, provide the only opportunity to get a job is perceived positively; 42 percent of the raion population expects the creation of new jobs by the forest firms. Besides this, 35 percent expect the firms to contribute to

⁵ Developing a Forest Conservation Strategy for the Russian Far East. The research interim report for the second year study of Economic Research Institute, Far Eastern Division of Russian Academy of Sciences. In: Russia Country Report 2002/2003. IGES Forest Conservation Project. Japan 2004.

the social sphere of their settlement's development, 16 percent expect housing/communal facilities support, and 7 percent would like that the firms established joint ventures with the communities. However, the fact that these firms are private and the people "had to work for the owner" quite often is perceived negatively, especially because rather often unscrupulous forest entrepreneurs sometimes do not settle their accounts with their laborers. The number of entrepreneurs who have come to the forest sector for permanent and stable work gradually grows, but the population's trust has already been undermined.

The population is estranged from the management of forest sector enterprises. Most of the enterprises are established by private founders, and everything at those enterprises depends on the owners' will. Trade unions do not exist even at the old, large enterprises, with no existing signed collective agreements. A number of enterprises care about establishing the necessary social conditions for their laborers, but many enterprises do not. It is practically impossible to secure complete administrative control at all the enterprises.

The small first nations, by virtue of their isolation and remoteness, are supported only by their native-producers' communities, which in essence are small private enterprises formed by the most active individual representatives of that part of the population.

Thus, as a whole, the socio-economic situation in the krai forest sector is complicated, with some elements of positive development that haven't yet become stable. In this respect, the local population could come forward as a positive factor, but it doesn't show a high level of activity and to some extent even preserves a mood of obscurantism.

3. Population classification in the southern part of Khabarovskiy krai according to opportunities for involvement in forest management

It is obvious that various social groups of population are in different degrees ready and willing to participate in forest management. More than that, the interests and activities of those groups are uneven in different communities. Hence, the methods and measures of involving a population in forest management should be differentiated. From this point of view, two population classifications are proposed: according to the level of urbanization (settlement size), and according to the social state. It is understandable that, as with any classification, those presented here are conventional and that the description of various population groups' attitudes towards forest management is averaged for every single group.

3.1 Three sets of population could be differentiated according to settlement size.

The first set is residents of large and middle-size

towns with a population of over 50,000 people.⁶ This set is highly heterogeneous, and many groups, being its components, have no direct link with the forest sector except for professionals working directly in the sector. These, as a rule, are employees of various forest state and municipal management organizations and firms. They are already involved in forest management (Type 1cl).

In Khabarovsk and Komsomolsk-na-Amure there is also a group of scientists researching forests and the forest sector. A smaller portion of them participates permanently in forest management as members of various committees and councils as well as acting as consultants. The majority are not involved in forest management, however, they are ready to be, and that is why this group is a target of further activation (Type 1sc).

The other prospective group in terms of population involvement in forest management (target group) is university and school teachers, especially those specialized in biology and geography (Type 1st).

The fourth target group consists of members of ecological and partially ecological non-governmental organizations (NGOs), which permanently seek ways of influencing the situation with use of the krai's forest treasures. Practically all the actively functioning NGOs are based in large and average size cities, with 85 percent of them located in Khabarovsk and Komsomolsk-na-Amure (Type 1pb). In Lazo raion there are eight active NGOs: two in Pereyaslavka, two in Khor, two in Ekaterinoslavka, one in Drofa, and one in the Sita settlement.

The fifth and largest target population group consists of residents that use the forest for recreation. Among them there are a good deal of those who damage forest cover and the forest environment during their visits. But as a whole they are interested in forest conservation and could be involved in appropriate campaigns (Type 1fr).

The rest of the population, which probably makes up about two-thirds of the regarded set, is practically inert from the point of view of involvement in forest management (Type 1in). Their inertness is caused by laziness (50 percent), indecision (30 percent), and indifference (20 percent).

The second set consists of residents of small towns and large settlements with populations ranging from 5,000 to 50,000 people. It includes practically the same target groups as the previous set, excluding a group of scientists. At the same time, the share of the group of forest professionals is higher here, and they play a more significant role in the settlement's social life. They are, as a rule, not only management employees but also members of forest firms, leskhozoes, nature reserves,

⁶ Quantitative limits of the aggregates are conventional essentially and taken by Lappo G.M. and Polyani P.M. *Novyte tenedentsii v izmenenii geourbanisticheskoi situatsii v Rossii* (New trends of the transformation of geo-urban situation in Russia). Proceedings of the Russian Academy of Sciences, 1996, No. 6, p. 7-19 (Rus.). The limits can be moved to one or another side in every concrete case.

hunting organizations, other local intelligentsias, and so on (Type 2cl).

The third and main target set for the given recommendations consists of residents of the settlements and villages with populations of 5,000 people and less, which have a great deal of practically everyday links with their surrounding environment. This set is divided by the type of community, listed below, in the order of the number of their links with the forest landscape.

1. Residents of settlements on the banks of big rivers and on the seacoast. Livelihoods are based on fishing and (more rare) servicing water transport (Type 3mr).
2. Residents of settlements at small industrial units (Type 3id).
3. Residents of settlements located along a railway; they are mainly transport workers (Type 3tr).
4. Residents of settlements in areas dominated by agriculture; settlements are surrounded by agro-field landscapes (Type 3ag).
5. Residents of forest settlements where forest industry activities are dead or dying. These are depressive settlements surrounded by depleted forest resources (Type 3dp).
6. Residents of forest settlements with active and even growing forest industry activities. They are surrounded by a prospective forest resources base (Type 3dv).
7. Residents of settlements with sanatoria and health resorts that are specialized for these types (recreation) of activities (Type 3rt).
8. Residents of settlements with a high share of small first nations that carry on their traditional natural resource use (Type 3na).

In spite of the categories presented above, which are significantly conventional, the residents of all of these settlements have links with the forests in the landscape of Khabarovskiy krai. Therefore, the issue of involving local populations in forest management is topical for all of these communities, but most of all for the populations of the last four types (3dp, 3dv, 3rt, and 3na), i.e., for the residents of the forest settlements. From the point of view of opportunity for involvement in forest management, residents can be differentiated into the following groups:⁷

1. Forest workers – The share of this group is higher among the residents of the type 3dv and lower in the type 3dp groups. Their main activities are directly or indirectly connected with immediate operations in the forest, and they are divided into two subgroups: local residents and workers hired from other regions.

The workers of the second subgroup have a single goal: earn as much money as possible and then go back to their native areas. They are passive in social respects

and obey the firm they work for. In the given settlements their way of living is similar to a bachelor's life. This subgroup is practically useless for involvement in public forests management.

Workers of the first subgroup are vitally active and have firm self-awareness. Soviet times, they were considered to be the most advanced social class; they were very active and almost at liberty in their position because of a high level of social protection. Presently, their main concerns are keeping their job, preserving their earnings level, etc. The share of young people in this subgroup is not high—the average age is about 40 years old. These workers and their family members have a high level of forest skills not only in logging but also in hunting, collecting non-timber forest products (NTFPs), and so on. Most of them regard their settlement as their permanent home. They have their own opinions on the forest situation, but currently they do not openly display it because they depend highly on their proprietors.

Workers of this subgroup are potential participants in public forest management but only in a passive way and within the framework of existing statutes. Possible activation is, as a rule, timed to the moments of mass labor conflicts (delayed payment of salaries and so on).

2. Business people – Most of these are men. Businessmen of a rather high level, such as those working for Rimbunan Hijau or Ross-DV, do not live in the small settlements of Lazo raion. Only businessmen of small or medium-sized businesses close in size to the small ones reside in such settlements. Their business activities vary highly (production, trade, services, and so on), but many of them are engaged in forest business as their main or one of their main type of activities. They are very active; the majority of them are local residents, highly mobile, use modern transportation means, communication, etc. In their evaluations of the situation, they, as a rule, are independent, but their self-appraisal is raised to high quite often. According to their interest in logging or, on the contrary, in forest conservation (as the environment of their business or personal life), they could be very active relative to public forest management. Significant parts of this group are representatives linked with criminal structures and/or belong to specific circles of white-collar state workers.

3. Managers – They represent the most intellectual, professional, and active part of communities. This group includes people of various professions. It can be divided into two subgroups according to level of personal income, well-being, and sphere of interests: managers of commercial firms and managers of non-commercial organizations.

Managers of commercial firms have high incomes, the main source of which is mainly from the use of natural resources and first of all from logging operations. Therefore, the everyday activities, professional goals, and lifestyles of most of them are in contradiction with sustainable forest use. And above that, they are obliged to manifest and observe the interests of their proprietors,

⁷ The given here classification is close to classification of Yasvin V.A. *Regionalnaya ekologicheskaya politika: formirovaniye ekologicheskoi kultury* (Regional ecological policy: ecological culture shaping). Moscow, TsEPR, 2001, 66 p. (Rus.).

whose views and activities also do not coincide with the goals of sustainable forest use.

The managers of non-commercial organizations include the heads of municipal administrations and their deputies, school principals, directors of leskhozoes, persons in charge of hospitals, and deputies of those chiefs, as well as other persons of the first and second management levels of various organizations. Officially, they are paid not very high salaries from the state or municipal budget. They are active and usually regard their settlements as their permanent home. As a rule, they are devoted to moderate use of natural resources without their exhaustion. This subgroup includes the most probable participants in public forest management.

4. Office workers – This group includes white-collar workers of commercial firms, teachers, doctors, middle-level leskhozoes employees, post office workers, and so on. This is an educated part of the communities; they acknowledge nature protection problems and care about them. In most cases, their personal incomes are not high and they are worried about survival, but some of them are active in relation to nature protection problems.

5. Part-time employees – This group constitutes lower-level employees of the lower level that are not busy full-time daily, weekly, or annually, and includes professional hunters, tourist guides, seasonal employees of holiday homes, resorts, ski lodges, etc. Their jobs are very concerned with nature, especially forests. They have a high education level and sufficiently wide mental outlook for their type of work. They realize the problems of forest conservation and are very good prospects to be involved in public forest management.

6. Retired people – These represent the poor part of the population, specifically if they live on their own without the support of younger relatives. And still, many of them are quite policy attached, and those who are healthy enough are publicly active. Some of the main political issues of their interest are the use of natural resources and nature protection. They could be activists of public forest management, specifically those whose former activities were linked with the forest.

7. Housewives – The nature of their lifestyle is that usually the proportion of this group in rural populations is higher than in urban areas, and hence they play an important role in their community. Having a flexible daily routine, they get loads of information from TV and radio, which in great extent shape their perceptions and opinions. They have strong influence on members of other social groups, who could be their relatives or neighbors. Some of them are very active in community life. Practically, however, they cannot be key figures in public forest management but could be its advocates if they are positively influenced via the mass media and such trustworthy people as representatives of administration, teachers, and so on.

8. Students of universities and colleges – Most of their time, they live in large and middle-size cities in which they get educated. They are receptive to modern ideas,

including environmental protection, development of Internet communities, etc. Unfortunately, they are unable to give much of their time to community affairs and do not have strong influence on local public life. A great number of them do not regard the communities they live in as the place of their future activities and residence.

9. School children – It is natural that their behavior reflects the styles and opinions of their parents, who are very much different. At the same time, they are strongly influenced by teachers and the mass media. Usually, it is quite easy to get them involved in nature protection programs, specifically for events like “Blue” and “Green” patrols, school forest rangers, etc.

10. Unemployed – This is a very poor and socially unstable group. Many of them are alcoholics to various extents. Gathering non-timber forest resources is quite often their main source of income. Generally, they are very unreliable people, although among them there are those who like to speak out loudly on various subjects, including nature protection. The group includes representatives of a relatively new phenomenon of migrants from big cities who have lost their jobs and homes, in many cases as a result of lack of discipline because of laziness and heavy drinking.

These groups are characteristic of all varieties of small rural communities, including specific ones such as settlements in which the indigenous people are dominant, and it is only the ratio of these groups in the community that differs.

It is evident that the key figures for involving the population in forest use management could be representatives of the subgroup made up of managers of non-commercial organizations and some clerks. But it is rather important that this movement is supported by businessmen and the managers of commercial firms. At the same time, involving representatives of various groups and subgroups of the population in forest management causes a conflict situation, because those who conform to and sometimes strive to participate in forest management have different goals. Some want to conserve forests, to make forest use inexhaustible, or even to introduce protective regimes in forests; others want to get access to forest resources for their own enrichment.

The classifications and groupings given in the present section show the necessity of using different approaches to involve the local population in forest management, not only their direct involvement but also in establishing a process involving the general social environment.

4. Obstacles to involving local population in forest management

Involving the local population in forest management encounters a number of various obstacles that should be eliminated or lessened.

Legal obstacles

Legal measures to support the rights of local populations to participate in solving forest management

issues do not exist practically. The main forest law—the Forest Code of the RF—envisages just such a system of state forest management. Only Clause 102 mentions that “citizens and public associations may participate in providing rational use, guarding, protection and reproduction of forests according the legislation of the Russian Federation,” but forms and methods of participation, and the rights and responsibilities of the participants, are not stipulated. This issue is not conveyed any more precisely in projects of the new Forest Code of the RF, which was reviewed recently by the RF government.⁸

Much broader treatment of this issue is found in the Forest Code of Khabarovskiy Krai, in which Articles 87 to 90 and 93 were dedicated to it, but even in this document the participation of the local population is not declared as compulsory.⁹

These issues are also not regarded in other closely related laws, especially from the point of view of concrete mechanisms and forms for their realization.

Some legal issues surrounding local population participation in forest management can be solved on the basis of the Civil Code of the RF that are pertinent to agreement relations, property relations, and ensuing rights and obligations of the public and officials.

The instability of norm-legal acts, caused by their frequent changing as well as non-observance, raises serious obstacles to public involvement in real forest management, although just this measure can and should promote an increase of the legal character of the whole system and first of all elimination of criminal elements.

Many discrepancies with forest use by small first nations in the frames of traditional nature use are caused by the vagueness, antipathy, and inaccuracy of normative acts, in particular those related to the status of territories of traditional nature use (TTU) as well as the rights of native communities and representatives of the small first nations relative to managing TTUs.

Thus public participation in forest management lacks a legal basis. Some heads of RMFs think that legal obstacles would be either subdued or eliminated if the ownership of forests was handed to the provinces.

Institutional obstacles

The main institutional barrier to public participation in forest management is the sharp decrease of the rights of administrative organizations from the top to low levels. The population of forest settlements can practically participate in forest management only directly via leskhozoes and forest enterprises, but it is just that they are almost deprived of all the management rights. These rights are not available at the raion level either; almost all of them were previously con-

centrated at the krai level, but since 2000 they were also cut down for the benefit of the central federal government.

The other institutional barrier is the lack of mechanisms that would either make public participation in the use and conservation of forests compulsory or, at least, were directed at involving the public in such participation. This is specifically important in view of the high level of apathy among the population, particularly in rural areas, towards any public actions.

The most significant institutional barrier was and still is the alienation of forestry and the Forest Service, not only from the population but also even from the local administration. Here the coordination is effected to a great extent on the principles of agreements. To some extent it is regulated by the krai normative acts but not regulated as compulsory from the side of the federal authorities.

One more institutional barrier is the reorganization of forestry management that has dragged on for many years, accompanied by multiple changes of forestry staff members and permanent slackening of all the functions of that service, first of all of the control functions. Specifically exposed to this stroke appeared to be the leskhozoes, the main units executing practical forest management. Since the middle of 2000, they have been in “suspended” state, and their status, further development, and even existence are in question. However, they are the sole most important institutions destined to work with the local populations and establish permanent links with the people.

The fact that a system of forest industry management adequate to the market economy was not constructed is no less of an institutional barrier. Multiple reorganizations have also taken place here, and as a rule, outdated methods characteristic to commanding management are reappearing.

The management of small forest businesses remains absolutely unsatisfactory. Practically, besides allocating logging plots and collecting taxes, the small business sector remains out of the sphere of state management.

A considerable barrier is the absence after 2000 of general federal service of environmental control at the raion level. Those organizations worked quite closely in the past with the local population. The departments of environment and natural resources protection established in some raion administrations are not endowed with the required rights of control and management.

Partial delivery of federal functions to provincial authorities without due financing is also a serious barrier to public involvement in forest management.

Thus, the institutional system of forest management is itself imperfect; it does not provide the necessary conditions for involving the local population and is not interested in it.

Big problems exist with the full institutional uncer-

⁸ The project of the Forest Code of the Russian Federation <www.mnr.gov.ru/index> (Rus.).

⁹ The Code was revoked in October of 2003.

tainty of the state of TTUs and aboriginal communities in the total system of nature use, especially in the system of forest use. In particular, commercial harvesting provides significant income to aboriginal communities, but it is not the traditional kind of nature use and, moreover, it causes damage to the TTUs and violates their status of specifically protected territories.

Financial obstacles

The inadequate incomes of raion budgets as well as the practically complete absence of financial means of RMFs are undoubtedly also a barrier. Moreover, the financing of RMFs is not fixed by any legislative act. The existing budget system of municipal bodies does not suppose separate budgets for each RMF. This fact to a great extent weakens and even eliminates the actual power of the raion heads and rural administrations.

Another financial obstacle is the absence of a practice to allocate money for involving the public in forest management, and such practice is not envisaged in any norm-legal act. For example, attempts at public organization in Khabarovskiy krai to create the production in municipal orders either to extract drawn logs or to allow winter logging in areas of potential forest fires did not find support among provincial authorities.

As a result, the whole public activity is based on grants, in most cases from international or foreign organizations.

Communication obstacles

One of the most important methods of involving the population in public activity is the increase of the population's possession of information and the ability to mutually exchange information. The most important means for that are telephone, fax, e-mail, and the Internet. Unfortunately, few of the small rural settlements are provided with such means of communication, even a telephone, which makes modern methods of information dissemination unaffordable.

Underdeveloped road networks, poor road conditions, as well as lack of regular transport routes to a number of remote small communities is one more communication obstacle to bring together people or their representatives to discuss and make decisions on issues of forest management.

Informational obstacles

The population's possession of information on the actual situation in the forest sector is very low, although there exists preconceived information brought to the population by journalists and NGOs. As a rule, it is alarmist or sensational in character, resulting in the formation among the population of negative views of the state of the forest sector. At the same time, evaluations of the real situation by experts, company reports, and so on are kept confidential. In addition,

information is to a great extent gotten secretly, quite often paid for. Even liable to publicity on decisions on forest auctions and competitions are kept secret.

Social obstacles

The most notable social obstacle is the passiveness of the population, which is caused by many reasons. First of all, the population is not willing to participate in public events because of a loss of trust in authorities. It is rather difficult to involve residents in occasional public events such as elections, rural community meetings, etc. And it is even more difficult to involve them in long-term public actions.

Another social obstacle is the social dependence cultivated during decades of Soviet power. The principle of impersonal "they should do that" is very much common for all sectors of the population, specifically among people of middle and old ages. Such behavior is combined with an inability and unwillingness to make decisions and to take upon themselves even a minor personal responsibility.

The population's alienation from forest matters over many years caused a specific but still social phenomenon manifesting in the fact that people do not consider forest resources as their own. Existing previously demagogic assertions that forests are "public" property is nowadays even changed formally in legislative acts in regard to state property. On top of it all, the local population witnesses that in reality everything in the forests is decided by private firms, including those established by local residents, which get all the forest benefits to the detriment of the local situation. This only enhances the alienation of the population, although with the proper approach to the problem it could arouse public activity.

Another enormous obstacle is the prevalence of outdated thinking in the face of new socio-economic and ecological conditions, the bearers of which are not only those who make decisions but also many ordinary representatives of the population. This is a particular characteristic of groups of senior people.

To a lower extent, but still a social obstacle, is the population's regard of forest management problems as not having a high priority. More important in their minds are problems of employment, personal earnings, improvement of lifestyle, educating their children, and others.

The unpromising situation in a number of small settlements is also regarded as a social obstacle. Usually the populations of prospective settlements (Type 3dv) with more stable social positions express higher public activity. The populations of depressed settlements (Type 3dp) are quite often active in various discussions, in particular in criticism; however, they are far from always being active in real public events.

Social tension in the forest sector that hinders involvement of the local population in forest management is caused also by complicated, quite often antagonistic relations between forest users and forest holders, be-

tween large, medium, and small firms, as well as between firms and the population. The problem of mitigating these relation issues is paid absolutely insignificant attention. To a great extent, this is explained by absence or lack of modern managers in the firms that understand the importance of good public relations and the necessity of establishing them.

A big social problem of the indigenous people that influences forest use is the loss among younger generations of traditional hunting skills and native cultural behaviors in which the forest and its products play an important role.

The elimination of the obstacles mentioned above is the main way of involving local populations in forest management with the aim of increasing its tendency toward sustainable development. Such a mission could be achieved with various degrees of profoundness and time rates. The most complicated and time-consuming could be the mission to eliminate social obstacles.

5. Links between krai laws and official and public programs

The given guidelines are developed taking into account the existing norm-legal basis pertaining to this issue. A number of krai laws as well as official and public krai programs envisage, directly or indirectly, public involvement in forest management.

Certainly, the involvement of the local population and its socially active members in forest management cannot be a spontaneous event; it needs to be organized by a specialized unit. In a legal democratic state, the forest service should be the most interested in that. However, the Russian forest service has been historically formed in the shape of a closed system, to some extent like a caste system. And beside that, it is presently enduring a difficult organizational situation. That is why the main organizers of establishing relations with the public in Khabarovskiy krai early in this decade are the Ministry of Natural Resources (MNR) of the krai government, the administrations of raions and rural municipal units, as well as NGOs, including some associations of small first nations.

The Statute of the MNR of Khabarovskiy Krai envisages cooperation with organs of local self-governing and public organizations in the development of proposals on forming krai state policy in the sphere of nature use, including the preparation of new laws and updating active ones, as well as other normative acts of Khabarovskiy krai in the sphere of nature use, determination of payment amounts for natural resources use and their differentiation, and improvement of tax policies relative to enterprises and organizations using natural resources.¹⁰ There are

also envisaged the joint development and implementation with these organizations of measures on issues of residing and economic management of the small first nations, including their national and cultural development.

The MNR of Khabarovskiy krai is also obliged to organize informational and explanatory activities on the state of the use and safety of natural resources and the environment and to provide for the participation of the population and krai public organizations in solving those problems.

The krai "Law on Procedure of Public Discussion of the Draft for Handing Over a Forest Tenure Plot to Lease" directly involves the public in forest management.¹¹ According to that law, the projects with annual timber harvesting volumes of 100,000 m³ and more are liable to public discussion as well as allowing the population to extract forest products or receive services for the amount corresponding to the stumpage value of 100,000 m³ and more.

Under the law, a plenipotentiary agency of the krai government must call a meeting (*skhod*) of citizens residing in the municipal unit in the territory where it is planning to hand over a forest plot to lease for public discussion of the issue. The project is directed to that municipal unit before the meeting.

In case the forest plot intended to be turned over to lease coincides with the limits or is directly adjacent to the limits of a TTU plot transferred in the established order for traditional nature use and/or management, then project coordination with the subjects of traditional nature use is implemented.

The same law says that an environmental assessment could be implemented by public organizations (associations), the main activities of which are natural environment protection, including organization and implementation of environmental assessments, and which are registered in the order established by federal legislation on the initiative of residents and public organizations (associations) as well as on the initiative of the local self-governing agencies.

Another act directly involving the public in nature use management, including forest use, is the Decree of Khabarovskiy Krai Government on measures on the further development of first small nations.¹² The list of measures included in this decree envisages the extension of self-government and participation of the

¹⁰ Ob utverzhdenii Polozheniya o Ministerstve prirodnykh resursov Khabarovskogo kraya (On adoption of the Statute of the Ministry of Natural Resources of Khabarovskiy krai). Decree of the Khabarovskiy Krai Governor, 30 August 2002, No. 403, version of 31.12.2002. In: the Information System "Consultant plus" (Rus.).

¹¹ Zakon Khabarovskogo kraya o protsedure publichnogo ob-suzhdeniya proekta peredachi v arendu uchaska lesnogo fonda (Law on Procedure of Public Discussion of the Draft for Handing Over a Forest Tenure Plot to Lease). Adopted by the Legislative Duma of Khabarovskiy Krai 07.06.2001, No. 312. In: the Information System "Consultant plus" (Rus.).

¹² O merakh po dal'neishemu razvitiyu korennykh malochislennykh narodov Severa, prozhivayushchikh v Khabarovskom kraye (On measures for the further development of the first small nations residing in Khabarovskiy Krai). Decree of the Khabarovskiy Krai Government, 08.07.2002 No. 12-pr. // In: the Information System "Consultant plus" (Rus.).

first small nations in administrative and production activities, including environmental assessment of the nature use plans and discussions of assessment methods. Training organizers from those nations is also envisaged as well as establishing an authorized representatives' council attached to the krai governor.

The governor's decree on the krai commission on forest use introduced representatives of the krai association of the small first nations and of the local self-government agencies to the members of the commission.¹³ The decree specified the necessity of representatives of public organizations to be invited to the sitting of the commission and obliged the commission to inform the public on the state, use, guarding, and protection of forests via the mass media.

Extensive goals are set out in the same direction by the krai law on the basics of youth policy.¹⁴ The main policy targets of this law are youth education to prepare for their social "coming of age," involving their spiritual and physical development; providing them with opportunities to participate in the socio-economic, political, and cultural life of the krai; and establishing the legal and socio-economic conditions necessary, including programs and projects, to implement youth initiatives useful to the whole of society. Implementation of young people's rights in the sphere of labor and employment in order to support their entrepreneurial activities is treated by the law as a main priority of the youth policy.

The main trend of the krai in terms of supporting employment from 2001 to 2003, approved by the head of the Khabarovskiy krai administration, envisages an increase in employment level. The following are some of its key actions for krai authorities that are aimed at solving problems of employment: providing progressive shifts in the employment structure of industries; increasing the incentives for active job-searching for the unemployed; improving the system of training, changing of qualifications, and increasing staff levels of training and education institutions; development of small businesses and economic stimulation of small and medium-size entrepreneurships and individual entrepreneurship activities; increasing personal social support of the population; further development of the system of continuous professional training; increase of the role of social partnership on all levels in order to provide favorable conditions for improving the quality of life of the staff and their family members, protection of their social guarantees in the sphere of

employment, and prevention of mass unemployment.

Special ecological and forest education programs in schools of general education could be introduced according to the basic theses of the concept of stabilizing and developing general education in Khabarovskiy krai for the period up to 2005, which envisages providing for the functioning of the education system and implementation of target projects of education development.¹⁵

The program of small entrepreneurship development and support in 2001–2003 envisages public involvement in other priority activities, which could also be realized in the forest sector, such as production of food commodities and consumer goods, providing consumer services to the public, manufacturing goods for technical and production use, environmental and nature protection activities, and utilization and recycling of raw materials.¹⁶

Among the non-governmental acts, the main place in public involvement in forest management is taken by the Russian-American "Forest" program operated by the Winrock International Group and the Ecoregional Project of the World Wildlife Fund. Some short-term programs exist that were implemented via the Association of the First Small Nations and some non-specific programs on arousing public activity of the population implemented via some NGOs. For example, the Khabarovsk Krai Association of Recyclers of production and consumption wastes has implemented a number of projects since 2002, including the creation of lignin at the Khor hydrolization plant, recycling of ill-conditioned sawn timber and raw waste lumber at the Vyzemskiy wood-processing combine, and extraction of drawn logs.

The measures cited below should be carried out while taking into account the norm-legal acts and programs mentioned here individually and in combination.

¹³ O krayevoi komissii po lesopol'zovaniyu pri Gubernatore Khabarovskogo kraya (On the commission on the forest use attached to the Governor of Khabarovskiy Krai). Decree of Khabarovskiy Krai Governor, 11.09.2002, No. 419. In: the Information System "Consultant plus" (Rus.).

¹⁴ Ob osnovakh molodezhnoi politiki v Khabarovskom kraye (On the basic of youth policy in Khabarovskiy krai). Law of Khabarovskiy Krai, adopted by the Legislative Duma of Khabarovskiy Krai, 24.12.1999, No 175. In: the Information System "Consultant plus" (Rus.).

¹⁵ Ob osnovnykh polozheniyakh kontseptsii stabilizatsii i razvitiya obshchego obrazovaniya v Khabarovskom kraye na period do 2005 goda (On basic theses of the concept of stabilization and development of the general education in Khabarovskiy krai up to 2005). Decree of the Head of Khabarovskiy Krai Administration, 24.01.2000, No. 21. In: the Information System "Consultant plus" (Rus.).

¹⁶ O programme razvitiya i podderzhki malogo predprinimatel'stva v Khabarovskom kraye na 2001–2003 gody (On the program of development and support of small entrepreneurship in Khabarovskiy Krai during 2001–2003). Decree of the Head of Khabarovskiy Krai Administration, 19.10.2000, No. 361, Collection of normative acts of Khabarovskiy Krai Administration, 2000, No. 10, p. 28–53.

5. Measures recommended for involving local population in forest management.

Table 1. Description of recommended measures.

Code	Measures	Target type of population	Executors	Term of execution	Financing source
	Legal				
L1	Include articles on mandatory public participation in forest management and on mechanisms and forms of that participation in federal and krai laws related to guarding, protection, reproduction, and use of forests.	All types	Legislative Duma, krai government with participation of political parties and other NGOs	2004–2010	Krai budget, public funds
L2	Initiate the adoption a new law on associations (cooperatives) to bring together small and individual forest businesses, and on the forms of their management and their cooperation with authorities, commercial firms, and the rest of the population in the issues of forest management.	Sets 2 and 3	Legislative Duma, krai government with participation of political parties and other NGOs	2004–2010	Krai budget, public funds
L3	Specify the federal law on TTU regulations concerning the rights and obligations of the first small nations and national communities as well the forms of their realization of forest use in TTUs. Adopt the krai law on TTUs with analogous regulations. Include the control of forest use in TTUs in the responsibilities of plenipotentiary representatives of the first small nations.	3na	Legislative Duma, all-Russian and krai association of the first small nations	2004–2007	Krai budget, international funds
L4	Develop amendments to the RF Forest Code and other linked federal acts that will clarify and extend the jurisdiction, power, and responsibilities of municipal authorities in the sphere of forest management and forest conservation.	All types	Legislative Duma, krai government with participation of political parties and other NGOs	2004–2005	Krai budget, public funds
	Institutional				
I1	Develop special measures on the support, development, and legalization of small forest business, in particular setting its maximum uniting into associations (cooperatives), and regulate its cooperation with other forms of business and with the public according the krai program of small business support.	All types of set 3, specifically 3dp, dv, na, rt	Krai: MNR, Ministry of Forest Industry (MFI), Ministry of Economy, Ministry of Property, of local self-governing, scientific research institutes	Permanent	Krai budget
I2	Search for new niches of activities of small forest business: use of low-quality raw wood material (production of small items, charcoal, etc.); production of goods from non-timber forest resources; forest recreation including tourism; etc.	All types of set 3, specifically 3dp, dv, na, rt	Associations of small business, NGOs	Permanent	Associations and various funds

Table 1. Continued

Code	Measures	Target type of population	Executors	Term of execution	Financing source
	Institutional				
I3	In settlements with a large share of first native nations, develop and diversify economic activities carried out in TTUs. Provide consultations in using TTUs in the transition to sustainable use.	3na	Authorities of krai and municipal levels, krai association of the first small nations	Permanent	Krai and municipal budgets, international and domestic public funds, sponsors
	Financial-economic				
F1	Including of target items into expenditure parts of krai and local budgets providing financing of population involvement into forest management	All types	All the organs of power at krai level and lower	Annually	-
F2	Search for additional funds in the shape of grants and sponsors' donations (fundraising) to realize measures on public involvement in forest management.	All types	All the organs of power, NGOs	Permanent	-
	Informational				
N1	Develop and realize programs for stable and non-biased informing of the public on the state of the krai forest sector via mass media.	All types	Krai organs of power, Forest Service of the RF MNR, mass media, NGOs	2006	Budget of the MNR RF, krai budget, public funds, sponsors
N2	Develop and realize programs for interactive public education on the state of the krai forest sector by organizing lectures, presentations, round tables, public reception rooms, and so on.	All types	Krai and municipal organs of power, Forest Service of the RF MNR, political parties, and other NGOs	2008	Budget of the RF MNR, krai budget, public funds, sponsors
	Social				
S1	Develop and realize long-term programs to increase public activity that envisage forms of activity, organizational structure, basic measures, sources to finance measures, and structural work.	All types especially 3dp, dv, na, rt	Krai and municipal organs of power, political parties and other NGOs	Program development to 2007, permanent program realization	Public funds, sponsors

Table 1. Continued

Code	Measures	Target type of population	Executors	Term of execution	Financing source
	Social				
S2	Develop and realize target programs to involve the public in forest management, including development of activities and civic ecological consciousness, and forming of constant activists among the local population and city-dwellers to participate in forest management via: 2004-establishment of different public teams and patrols to guard forest and to control forest use; 2004-establishment of public control stations along roads and on the boarders of forest tracts designated for local needs; 2004-organizing of a constant patronage of nursery, watershed protective zones, tourist routes, etc., that can be monitoring objects, field laboratories, habitats to rehabilitate wild animals and birds; -organizing of volunteer works in forests, of ongoing and seasonal points of attracting volunteers, of planning and selection of public works projects, of preparation and maintenance of tools and equipment, etc.	All types especially 3dp, dv, na, rt	Krai and municipal organs of power, Forest Service of the RF MNR, political parties, and other NGOs	Program development to 2007, permanent program realization	Budgets of krai and municipal organs of power, budget of the RF MNR Forest Service, public funds, sponsors
S3	Organize public hearings on projects related to the use of forest resources of all types (commercial logging, commercial extracting of non-timber forest products, organizing of protected territories, laying of electric power lines, pipelines, and so on). Conduct hearings on projects with volumes lower than those envisaged by the krai legislation in cases of special importance or environmental danger posed by the project. Ensure timely access of residents to project documentation, and assign a local public representative at hearings, with the agreement of public organizations, who would notify (at least three days in advance) the public on the place and time of hearings (<i>skhod</i>).	All types specifically 3dp, dv, na, rt	Krai MNR, if the project covers several raions; raion administrations, if the project embraces several RMF; administrations of RMF, if the project touches only their territory, all types of NGOs	Permanent	Budget of the agency organizing hearings by involving means of sponsors and public funds
S4	Monitor project developments and control the conducting of public hearings.	All types specifically 3dp, dv, na, rt	NGOs	Permanent	Public funds and sponsors
S5	Carry out public environmental assessments of developed projects as well as of pre-project materials (feasibility study, documents on lease, and so on) with the purpose of using its results for the state's assessment.	All types specifically 3dp, dv, na, rt	Citizens, public organizations, organs of local self-government	Permanent	Public funds and sponsors
S6	Conclude "agreements of social responsibility" simultaneously between forest firms and associations with municipal administrations when permitting the use of local forest resources.	3dp, dv, na, rt	Municipal agencies of power, krai commission on forest use	Permanent	Means of forest users

Table 1. Continued

Code	Measures	Target type of population	Executors	Term of execution	Financing source
	Social				
S7	Establish working groups of local population and organize their dialogue with forest users, the krai MNR, and agencies of the RF Forest Service.	3dp, dv, na, rt	Municipal organs of power, local agencies of the RF MNR Forest Service, NGOs	Permanent	Budgets of municipal organs of power, of local agencies of the RF MNR Forest Service, public funds, sponsors
S8	Provide support for NGOs involved in forest management: 2004-establish associations of forest NGOs; 2004-organize conferences and workshops to coordinate forest NGOs; 2004-install a complete and available to the public database on forests; -form an open, competitive system of grant support for forest NGOs; 2004-provide for obvious participation of forest NGOs in decision-making, especially on the local level; 2004-constantly monitor the population's attitudes toward the situation in the forest sector; and - wide and systematic dissemination of information on NGO activities to the population via the mass media.	All types	All the organs of power, the RF MNR Forest Service, NGOs	Permanent	Public funds, sponsors
S9	Carry out inspections and competitions to publicize the best organizations and successful cases of public involvement in forest management with issue of money awards and grants to winners to go towards further development.	All types	All the organs of power, local agencies of the RF MNR Forest Service, NGOs	Permanent	Public funds, sponsors
	Educational				
E1	Establish educational groups including residents of different age groups willing to participate in forest management including school forest rangers. Develop training courses targeted at interactive methods, i.e., business games, practical work, training, etc. Select, train, and re-educate specialists as instructors; organize the educational process. Manufacture and acquire educational equipment and aids.	All types	Krai MNR, local agencies of the RF MNR Forest Service, municipal organs of power, NGOs	Permanent	Local budgets, public funds, sponsors

Table 1. Continued

Code	Measures	Target type of population	Executors	Term of execution	Financing source
	<i>Educational</i>				
E2	Develop and introduce specialized programs and lessons for secondary schools and university disciplines related to the forest sector.	All types specifically 3dp, dv, na, rt	Krai Ministry of education and MNR, local agencies of the RF MNR Forest Service, universities, and scientific research institutes	Permanent	Krai budget, university budgets, public funds, sponsors
E3	In settlement schools with a high share of first small nations, develop and introduce specialized programs and lessons for secondary schools that teach the basics of forest use according to traditional culture, especially hunting and fishing, with biodiversity conservation.	Type 3na	Krai Ministry of Education and MNR, krai association of the small first nations, Khabarovsk State Pedagogical University, raion administrations, RMF	Permanent	Krai and local budgets, public funds, sponsors
E4	Develop and introduce a system of informing the public, first of all via the mass media, in particular via TV as well as via public presentations and lectures. Organize permanent centers for public lectures. Select lecturers and speakers, develop and review lectures on the forest sector and forest management. Manufacture and acquire educational equipment and aids.	All types specifically 3dp, dv, na, rt	Organs of local self-governing, local agencies of the RF MNR Forest Service, forestry research institutes, universities, NGOs	Permanent	Public funds, sponsors
E5	Publish information materials on the forest sector and forest management in the form of booklets, leaflets, papers, Internet materials, and broadcasts in the mass media.	All types	Mass media, NGOs	Permanent	Public funds, sponsors
E6	Organize public schools for teaching the local population on the principles of operating a small forest business, especially in settlements with a high share of the first small nations.	All types especially 3dp, dv, na, rt	Krai Ministry of Economy, MFI, MNR, krai association of entrepreneurs, krai association of the small first nations, economic faculties of universities, ERI, institute of market, municipal administrations	Permanent	Krai and local budgets, public funds, sponsors

Distribution of the proposed measures according to the competence level of their executors is described in Table 2. Some details of measures are omitted for brevity as they are described fully in Table 1.

Table 2. Measures distribution according to the competence level of their executors.

Code	Level/measure	Main executors	Collaborating executors	Term of execution
	Krai level			
L1	Include articles on mandatory public participation in forest management and on mechanisms and forms of that participation in federal and krai laws related to guarding, protection, reproduction, and use of forests.	Legislative Duma, krai government	Political parties and other NGOs	2004–2010
L2	Initiate the adoption of a new law on associations (cooperatives) to bring together small and individual forest businesses, and on the forms of their management and cooperation with authorities, commercial firms, and the rest of the population in the issues of forest management.	Legislative Duma, krai government	Political parties and other NGOs	2004–2010
L3	Specify the federal law on TTU regulations concerning the rights and obligations of the first small nations and national communities as well the forms of their realization for forest use in TTUs. Adopt the krai law on TTUs with analogous regulations, including the control of forest use in TTUs in the responsibility of plenipotentiary representatives of the first small nations.	Legislative Duma,	All-Russian and Krai Association of the first small nations	2004–2007
L4	Develop amendments to the RF Forest Code and other linked federal acts that clarify and extend the jurisdiction, power, and responsibilities of municipal authorities in the sphere of forest management and forest conservation.	Legislative Duma, Krai Government	Political parties and other NGOs	2004–2005
I1	Develop special measures on the support, development, and legalization of small forest businesses, in particular setting the maximum uniting into associations (cooperatives), and regulate its cooperation with other forms of business and with the public according to the krai program of supporting small business.	Krai: MNR, Ministry of Forest Industry (MFI), Ministry of Economy, Ministry of Property	Organs of local self-governing, scientific research institutes	Permanent
I3	In settlements with a large share of first native nations, develop and diversify economic activities carried out in TTUs. Provide consultations aid in the use of TTUs in the transition to sustainable use.	Krai authorities	Authorities of municipal level, krai association of the first small nations	Permanent
F1	Including of target items in expenditure parts of krai and local budgets to provide financing of public involvement in forest management	All the organs of power of krai level	All the organs of power of lower than krai level	Annual
F2	Search for additional funds in the shape of grants and sponsors' donations from (fundraising) to realize measures on public involvement in forest management	All the agencies of power of krai level	All other agencies of power, NGOs	Permanent
N1	Develop and realize programs for stable and non-biased informing of the public on the state of the krai forest sector. via the mass media to	Krai agencies of power, Forest Service of the RF MNR	Mass media, NGOs	2006

Table 2. Continued

Code	Level/measure	Main executors	Collaborating executors	Term of execution
	<i>Krai level</i>			
N2	Develop and realize programs for interactive public education on the state of the krai forest sector by organizing lectures, presentations, round tables, public reception rooms, and so on.	Krai agencies of power, Forest Service of the RF MNR	Municipal agencies of power, political parties, and other NGOs	2008
S1	Develop and realize long-term programs to increase public activity that envisages forms of activities, organizational structure, basic measures, sources to finance measures, and structural work.	Krai organs of power	Municipal organs of power, political parties, and other NGOs	Program development to 2007, permanent program realization
S2	Develop and realize target programs to involve the public in forest management, including developing activities and civic ecological consciousness, and forming of constant activists among the local population and city-dwellers to participate in forest management.	Krai organs of power, Forest Service of the RF MNR	Municipal organs of power, political parties, and other NGOs	Program development to 2007, permanent program realization
S3	Organize public hearings on projects related to the use of forest resources of all types. Conduct hearings on projects with volumes lower than those envisaged by the krai legislation in cases of special importance or environmental danger posed by the project. Ensure timely access of residents to project documentation, and assign a local public representative at hearings, with the agreement of public organizations, who would notify the population on the place and time of hearings.	Krai MNR, if the project covers several raions	Raion administrations, if the project embraces several RMF; administrations of RMF, if the project touches only their territory, all types of NGOs	Permanent
S6	Conclude "agreements of social responsibility" simultaneously between forest firms and associations with municipal administrations when permitting the use of local forest resources.	Krai commission on forest use	Municipal organs of power	Permanent
S8	Support NGOs involved in forest management.	Legislative Duma, krai government, the RF MNR Forest Service	Other organs of power, NGOs	Permanent
S9	Carry out inspections and competitions to publicize the best organizations and successful cases of public involvement in forest management with issue of money awards and grants to winners to go towards further development.	Krai organs of power, the RF MNR Forest Service	Other organs of power, local agencies of the RF MNR Forest Service, NGOs	Permanent

Table 2. Continued

Code	Level/measure	Main executors	Collaborating executors	Term of execution
	Krai level			
E1	Establish educational groups including residents of different ages willing to participate in forest management, including school forest rangers. Develop training courses that use interactive methods. Select, train, and re-educate specialists as instructors; organize the educational process. Manufacture and acquire educational equipment and aids.	Krai MNR, the RF MNR Forest Service	Local agencies of the RF MNR Forest Service, municipal organs of power, NGOs	Permanent
E2	Develop and introduce specialized programs and lessons for secondary schools and university disciplines related to the forest sector.	Krai Ministry of Education and MNR, RF MNR Forest Service	Local agencies of the RF MNR Forest Service, universities, research institutes	Permanent
E3	In settlement schools with a high share of first small nations, develop and introduce specialized programs and lessons for secondary schools that teach the basics of forest use according to traditional culture, especially hunting and fishing, with biodiversity conservation.	Krai Ministry of Education and MNR,	Krai association of the first small nations, Khabarovsk State Pedagogical University, raion administrations, RMF	Permanent
E6	Organize public schools for teaching the local population the principles of operating a small forest business, especially in settlements with a high share of the first small nations.	Krai Ministry of Economy, MFI, MNR	Krai association of entrepreneurs, krai association of the first small nations, economic faculties of universities, ERI, Institute of market, municipal administrations	Permanent
	Raion level			
I1	Develop special measures on the support, development, and legalization of small forest business, in particular setting its maximum uniting into associations (cooperatives), and regulate its cooperation with other forms of business and with the public according to the krai program of small business support.	Organs of local self-governing	Krai: MNR, Ministry of Forest Industry (MFI), Ministry of Economy, Ministry of Property, scientific research institutes	Permanent
I3	In settlements with a large share of first native nations, develop and diversify economic activity carried out in TTUs. Provide consultation in using of TTUs in the transition to sustainable use.	Raion authorities	Authorities of krai and RMF, krai association of the first small nations	Permanent
F1	Include target items into expenditure parts of krai and local budgets to provide financing for public involvement in forest management.	All the raion organs of power	All the organs of power of krai level and lower	Annual
F2	Search for additional funds in the shape of grants and donations from sponsors (fundraising) to realize measures on public involvement in forest management.	Raion organs of power	All other organs of power, NGOs	Permanent
N2	Develop and realize programs for interactive education of the public on the state of the krai forest sector by organizing lectures and presentations, round tables, public waiting rooms, and so on.	Raion organs of power	Krai and RMF organs of power, Forest Service of the RF MNR, political parties, and other NGOs	2008

Table 2. Continued

Code	Level/measure	Main executors	Collaborating executors	Term of execution
	Raion level		Krai level (continue)	
S1	Develop and realize long-term programs to increase public activities that envisage forms of activity, organizational structure, basic measures, sources to finance measures and structural work.	Raion organs of power	Krai and municipal organs of power, political parties, and other NGOs	Program development to 2007, permanent program realization
S2	Develop and realize target programs to involve the public in forest management, including development of activities and civic ecological consciousness, and forming of constant activists among the local population and city-dwellers to participate in forest management.	Raion organs of power	Krai and municipal organs of power, Forest Service of the RF MNR, political parties, and other NGOs	Program development to 2007, permanent program realization
S3	Organize public hearings on projects related to the use of forest resources of all types. Conduct hearings on projects with volumes lower those envisaged by the krai legislation in cases of special importance or environmental danger of the project. Ensure timely access of residents to project documentation, assign a local public representative at hearings, with the agreement of public organizations, who would notify the population on the place and time of hearings.	Raion administrations, if the project embraces several RMFs	Krai MNR, if the project covers several raions; administrations of RMF, if the project touches only their territory, all types of NGOs	Permanent
S5	Carry out public environmental assessments of developed projects as well as of pre-project materials (feasibility study, documents on lease, and so on) with the purpose of using the results for the state's assessment.	Raion organs of power	Citizens, public organizations, RMF organs of self-government	Permanent
S6	Conclude "agreements of social responsibility" simultaneously between forest firms and associations with municipal administrations when permitting the use of local forest resources.	Raion organs of power	RMF organs of power, krai commission on forest use	Permanent
S7	Establish working groups of local population and organize their dialogue with forest users, the krai MNR, and agencies of the RF Forest Service.	Raion organs of power, local agencies of the RF MNR Forest Service	RMF organs of power, NGOs	Permanent
S8	Support NGOs involved in forest management.	Raion agencies of power	Other agencies of power, the RF MNR Forest Service, NGOs	Permanent

Table 2. Continued

Code	Level/measure	Main executors	Collaborating executors	Term of execution
	Raion level			
S9	Carry out inspections and competitions in order to publicize the best organization and successful cases in public involvement in forest management with the issue of money awards and grants to winners towards further development.	Raion agencies of power, local agencies of the RF MNR Forest Service	All the organs of power, the RF MNR Forest Service, NGOs	Permanent
E1	Establish educational groups including residents of different age groups willing to participate in forest management including school forest rangers. Develop training courses targeted at interactive methods, i.e., business games, practical work, training, etc. Select, train, and re-educate specialists as instructors; organize the educational process. Manufacture and acquire educational equipment and aids.	Raion organs of power	Krai MNR, local agencies of the RF MNR Forest Service, RMF organs of power, NGOs	Permanent
E3	In settlement schools with a high share of the first small nations, develop and introduce specialized programs and lessons for secondary schools that teach the basics of forest use according to traditional culture, especially hunting and fishing, with biodiversity conservation.	Raion administrations	Krai Ministry of Education and MNR, krai association of the first small nations, Khabarovsk State Pedagogical University, RMF	Permanent
E4	Develop and introduce a system of informing the public, first of all via the mass media, in particular via TV as well as via public presentations and lectures. Organize permanent centers for public lectures.	Raion organs of self-governing, local esponses of the RF MNR Forest Service	Forestry research institutes, universities, NGOs	Permanent
E6	Organize public schools to teach the local population the principles of operating a small forest business, especially in settlements with a high share of first small nations.	Raion administrations	Krai Ministry of Economy, MFI, MNR, krai association of entrepreneurs, krai association of the first small nations, economic faculties of universities, ERI, institute of market, RMF's	Permanent
	Level of rural municipal formation			
I1	Develop special measures on the support, development, and legalization of small forest business, in particular setting its maximum uniting into associations (cooperatives), and regulate its cooperation with other forms of business and with the public according to the krai program of small business support.	Organs of local self-governing	Krai: MNR, Ministry of Forest Industry (MFI), Ministry of Economy, Ministry of Property, scientific research institutes	Permanent
I3	In the settlements with a large share of the first native nations, develop and diversify economic activity carried out in TTUs. Provide consultation in using TTUs in the transition to sustainable use.	RMF authorities	Authorities of krai and raions, krai Association of the first small nations	Permanent
F1	Include target items in expenditure parts of krai and local budgets that provide financing for public involvement in forest management.	All the organs of power of RMF	All the organs of power of krai level and lower	Annual

Table 2. Continued

Code	Level/measure	Main executors	Collaborating executors	Term of execution
	Level of rural municipal formation			
F2	Search for additional funds in the shape of grants and sponsors 'donations (fundraising) to realize measures on public involvement in forest management.	RMF organs of power	All other organs of power, NGOs	Permanent
N2	Develop and realize interactive public education programs on the state of the krai forest sector by organizing lectures and presentations, round tables, public waiting rooms, and so on.	RFF organs of power	Krai and raion organs of power, Forest Service of the RF MNR, political parties, and other NGOs	2008
S1	Develop and realize long-term programs to increase public activity that envisages forms of activity, organizational structure, basic measures, and sources to finance measures and structural work.	RMF organs of power	Krai and raion organs of power, political parties, and other NGOs	Program development to 2007, permanent program realization
S2	Develop and realize target programs to involve the local population in forest management, including development of activities and civic ecological consciousness, and forming of constant activists among the local population and city-dwellers to participate in forest management.	RMF organs of power, leskhozoes	Krai and raion organs of power, Forest Service of the RF MNR, political parties, and other NGOs	Program development to 2007, permanent program realization
S3	Organize public hearings on projects related to the use of forest resources of all types. Conduct hearings on projects with volumes lower than those envisaged by the krai legislation in cases of special importance or environmental danger of the project. Ensure timely access for residents to project documentation, assign a local public representative at hearings, with the agreement of public organizations, who would notify the population on the place and time of hearings.	Administrations of RMF, if the project touches only their territory	Krai MNR, if the project covers several raions; raion administrations, if the project embraces several RMFs; all types of NGOs	Permanent
S5	Carry out public environmental assessments of developed projects as well as of pre-project materials (feasibility study, documents on lease and so on) with the purpose of using the results for the state's assessment.	RMF organs of power	Citizens, public organizations, raion organs of self-government	Permanent
S6	Conclude "agreements of social responsibility" simultaneously between forest firms and associations with municipal administrations when permitting the use of local forest resources.	RMF organs of power	Raion organs of power, krai commission on forest use	Permanent
S7	Establish working groups of local population and organize their dialogue with forest users, the krai MNR, and agencies of the RF Forest Service.	RMF organs of power, leskhozoes	Raion organs of power, NGOs	Permanent

Table 2. Continued

Code	Level/measure	Main executors	Collaborating executors	Term of execution
	Level of rural municipal formation			
S8	Support NGOs involved in forest management.	RMF organs of power	Other agencies of power, the RF MNR Forest Service, NGOs	Permanent
S9	Carry out inspections and competitions to publicize the best organization and successes in public involvement in forest management with the issue of money awards and grants to winners towards further development.	RMF agencies of power, leskhozoes	All the organs of power, local agencies of the RF MNR Forest Service, NGOs	Permanent
E1	Establish educational groups including residents of different ages that are willing to participate in forest management, including school forest rangers. Develop training courses targeted at interactive methods. Select, train and re-educate specialists as instructors; organize the educational process. Manufacture and acquire educational equipment and aids.	RMF organs of power	Krai MNR, local agencies of the RF MNR Forest Service, raion organs of power, NGOs	Permanent
E3	In settlement schools with a high share of the first small nations, develop and introduce specialized programs and lessons for secondary schools that teach the basics of forest use according to traditional culture, especially hunting and fishing, with biodiversity conservation.	RMF administrations	Krai Ministry of Education and MNR, krai association of the first small nations, Khabarovsk State Pedagogical University, raion administrations	Permanent
E4	Develop and introduce a system of informing the public, first of all via the mass media, in particular via TV as well as via public presentations and lectures. Organize permanent centers for public lectures.	RMF organs of self-governing, leskhozoes	Raion organs of self-governing, local agencies of the RF MNR Forest Service, forest research institutes, universities, NGOs	Permanent
E6	Organize public schools for teaching the local population the principles of operating a small forest business, especially in settlements with a high share of the first small nations.	RMF administrations	Krai Ministry of Economics, MFI, MNR, krai association of entrepreneurs, krai association of the first small nations, economic faculties of universities, ERI, institute of market, raion administrations	Permanent
	Level of parties, other NGOs, enterprises, and institutions			
L1	Include articles on mandatory public participation in forest management and on mechanisms and forms of that participation in federal and krai laws related to guarding, protection, reproduction, and use of forests.	Political parties and other NGOs	Legislative Duma, krai government	2004–2010
L2	Initiate the adoption a new law on associations (cooperatives) to bring together small and individual forest businesses, and on the forms of their management and their cooperation with authorities, commercial firms, and the rest of the population in the issues of forest management.	Political parties and other NGOs	Legislative Duma, krai government	2004–2010

Table 2. Continued

Code	Level/measure	Main executors	Collaborating executors	Term of execution
	Level of parties, other NGOs, enterprises, and institutions			
L3	Specify the federal law on TTU regulations concerning the rights and obligations of the first small nations and national communities as well the forms of their realization of forest use in TTUs. Adopt the krai law on TTUs with analogous regulations. Include the control of forest use in TTUs in the responsibilities of plenipotentiary representatives of the first small nations.	All-Russian and krai association of the first small nations	Legislative Duma	2004–2007
L4	Develop amendments to the RF Forest Code and other linked federal acts that will clarify and extend the jurisdiction, power, and responsibilities of municipal authorities in the sphere of forest management and forest conservation.	Political parties and other NGOs	Legislative Duma, krai government	2004–2005
I1	Develop special measures on the support, development, and legalization of small forest business, in particular setting its maximum uniting into associations (cooperatives), and regulate its cooperation with other forms of business and with the public according the krai program of small business support.	Scientific research institutes	Krai: MNR, Ministry of Forest Industry (MFI), Ministry of Economy, Ministry of Property, organs of local self-governing	Permanent
I2	Search for new niches of activities of small forest business: use of low-quality raw wood material (production of small items, charcoal, etc.); production of goods from non-timber forest resources; forest recreation including tourism; etc.	Associations of small business, NGOs	-	Permanent
I3	In settlements with a large share of first native nations, develop and diversify economic activities carried out in TTUs. Provide consultant aid on how to use TTUs in the transition to sustainable use.	Krai association of the first small nations	Authorities of krai and municipal levels	Permanent
F2	Search for additional funds in the shape of grants and sponsors' donations (fundraising) to realize measures on public involvement in forest management	NGOs	All organs of power	Permanent
N1	Develop and realize programs for stable and non-biased informing of the public on the state of the krai forest sector via mass media.	Mass media, NGOs	Krai organs of power, Forest Service of the RF MNR	2006
N2	Develop and realize programs for interactive public education on the state of the krai forest sector by organizing lectures, presentations, round tables, public reception rooms, and so on.	Political parties and other NGOs	Krai and municipal organs of power, Forest Service of the RF MNR	2008
S1	Develop and realize long-term programs to increase public activity that envisage forms of activity, organizational structure, basic measures, and sources to finance measures and structural work.	Political parties and other NGOs	Krai and municipal organs of power	Program development to 2007, permanent program realization

Table 2. Continued

Code	Level/measure	Main executors	Collaborating executors	Term of execution
	Level of parties, other NGOs, enterprises, and institutions			
S2	Develop and realize target programs to involve the public in forest management, including development of activities and civic ecological consciousness, and forming of constant activists among the local population and city-dwellers to participate in forest management.	Political parties and other NGOs	Krai and municipal organs of power, Forest Service of the RF MNR	Program development to 2007, permanent program realization
S3	Organize public hearings on projects related to the use of forests resources of all types. Conduct of hearings on projects with volumes lower than those envisaged by the krai legislation in cases of special importance or environmental danger of the project. Ensure timely access of resident to project documentation, assign a local public representative at hearings, with the agreement of public organizations, who would notify the population on the place and time of hearings.	All types of NGOs	Krai MNR, if the project covers several raions; raion administrations, if the project embraces several RMF; administrations of RMF, if the project touches only their territory	Permanent
S4	Monitor project developments and control the conducting of public hearings.	NGOs	-	Permanent
S5	Carry out public environmental assessments of developed projects as well as of pre-project materials (feasibility study, document on lease, and so on) with the purpose of using the results for the state's assessment.	Citizens, public organizations	Organs of self-government	Permanent
S7	Establish working groups of the local population and organize their dialogue with forest users, the krai MNR, and agencies of the RF Forest Service.	NGOs	Municipal organs of power	Permanent
S8	Support NGOs involved in forest management.	NGOs	All of organs power, the RF MNR Forest Service	Permanent
S9	Carry out inspections and competitions to publicize the best organizations and successful cases of public involvement in forest management with the issue of money awards and grants to winners to go towards further development.	NGOs	All the organs of power, local organs of the RF MNR Forest Service	Permanent
E1	Establish educational groups, including residents of different ages, willing to participate in forest management, including school forest rangers. Develop training courses targeted at interactive methods. Select, train, and re-educate specialists as instructors; organize the educational process. Manufacture and acquire educational equipment and aids.	NGOs	Krai MNR, local agencies of the RF MNR Forest Service, municipal organs of power	Permanent
E2	Develop and introduce specialized programs and lessons for secondary schools and university disciplines related to the forest sector.	Universities and research institutes	Krai Ministry of Education and MNR, local agencies of the RF MNR Forest Service	Permanent

Table 2. Continued

Code	Level/measure	Main executors	Collaborating executors	Term of execution
	<i>Level of parties, other NGOs, enterprises, and institutions</i>			
E3	In settlement schools with a high share of first small nations, develop and introduce specialized programs and lessons for secondary schools that teach the basics of forest use according to traditional culture, especially hunting and fishing, with biodiversity conservation.	Krai association of the first small nations, Khabarovsk State Pedagogical University	Krai Ministry of Education and MNR, raion and RMF administrations	Permanent
E4	Develop and introduce a system of informing the public, first of all via the mass media, in particular via TV as well as via public presentations and lectures. Organize permanent centers for public lectures. Select lecturers and speakers, develop and review lectures on the forest sector and forest management. Manufacture and acquire educational equipment and aids.	Forest research institutes, universities, NGOs	Local organs of self-governing, local agencies of the RF MNR Forest Service	Permanent
E5	Publish information materials on the forest sector and forest management in the form of booklets, leaflets, papers, Internet materials, and broadcasts in the mass media.	Mass media, NGOs	-	Permanent
E6	Organize public schools for teaching the local population on the principles of operating a small forest business, especially in settlements with a high share of the first small nations.	Krai association of entrepreneurs, krai association of the first small nations, economic faculties of universities, ERI, institute of market	Krai Ministry of Economy, MFI, MNR, municipal administrations	Permanent

6. Conclusion

The recommendations on public involvement in forest management suggested here cannot be applied solely in the framework of the forest sector. The success of their implementation depends completely on the level of public-political activity of the population as well as on the trend and depth of solving property issues in terms of natural resources, including forest resources.

In reality, achieving public involvement in forest management is possible only in an atmosphere of democracy, the absolute functioning of normative-legal acts, and the transfer to communities (and probably to individual citizens) if not the property of forest resources then at least a portion of the profits for their use. Pushing forward the organizing activities of local authorities is a crucial element necessary to fulfill the given tasks.

Above that, the population should be ensured (i.e., it should be demonstrated to the public) that they could really influence decision-making on forest use. Only in that case, i.e., in the case of social (nature conservation) or economic involvement of the population and their belief in the success of their efforts, will the population's participation in forest management become active and permanent.

Acknowledgements

The authors appreciate the advice and comments made during the compiling of the guidelines from Dr. Dmitriy Efremov (Far Eastern Forestry Research Institute, Russia), Dr. Victor Saikov (Far Eastern Council of the party "Zeleniye [Greens]", Russia), Mr. Leonid Sarakhman (Administration of Sita RMF, Russia), Shiro Sasaki, Ph.D. (National Ethnography Museum, Japan), and Mr. Ichiro Noguchi (of the NGO "Friends of the Earth – Japan").

Appendix: Examples of local population participation in forest management

Collaboration of the firm "Phytoncid" with the local population

The firm Phytoncid Ltd. works in the Lazo and Nanaiskiy raions, with 56 residents of the Duboviy Mys (Oak Cape) settlement working for the firm. The leased area is 12.3 thousand hectares and the timber stock is 1271.8 thousand m³. The firm produces round wood that is export to Japan and China, lumber for the domestic market, and fir oil. The fir oil is manufactured in the firm's section in Duboviy Mys and sold through a store in Khabarovskiy krai, as well as being exported to the Republic of Korea for the fragrance industry.

The average monthly salary is 15,000 (\$472). The employees value their workplace because they have a good wage that is paid on time. There are about ten persons wishing to be employed for every vacant position.

Phytoncid Ltd. and the administration of Nanaiskiy raion concluded an agreement that stipulates that the firm must give 300,000 rubles (\$9,400) annually to

maintain the social sphere of Dada, an aboriginal village. Employees who have worked for the firm more than five years can receive a permanent loan for their children's university education, which at present amounts to three persons. The firm also covers the education of young people in a technical college in Khavarovsk city if they agree to work at the firm after graduating from college.

Relations of the native community company, Amur Ltd., with the local population

Amur Ltd. is a small enterprise that has status of the native community. It was established in 1992 in the Sinda settlement by two nanai people: Yuriy Donkan and his wife. The firm produces round wood (partly for export to China) and lumber, and constructs houses. It has 54 employees, only local residents, who are mostly representatives of the first small nations, and many of them are skilled in several professions. The average employee age is 30 years old, and the average monthly salary is 4,000 rubles (\$127).

The firm's production has not suffered from employee drunkenness because they are highly motivated. If an employee is intoxicated during working hours, he or she incurs a penalty of 1,000 rubles (\$31.4). After a second such case an employee must be fired. Stealing of the firm's property among employees is also absent because they value their workplace.

Amur Ltd. collaborated actively with two Russian-Canadian projects: Model Forest "Gassinskiy" and McGregor. The firm was an initiator and partner in the construction of a demonstration Canadian-type wood-frame house by these projects. The company also helps significantly in the social sphere of the Sinda settlement. The firm purchases TV sets and videotape machines for local social bodies, helps the local hospital and common school, and provides Sinda and the neighboring Mayak residents with fuel wood.

The firm also constructed a discotheque in Sinda for the local youth, with a construction investment of 1.5 million rubles (\$47,800), which has become a local cultural center. The selling or consumption of alcoholic beverages is prohibited in the building.

The struggle of the udege community of Krasniy Yar (Primorskiy Krai) for forest conservation

In 1992/1993, decrees of different authorities established a TTU within the upper and middle parts of the Bikin River watershed with an area of 1,259,000 hectares, and these were transferred into forests of the first group (protected). In 1997, the regime of these forests was specified tiger preservation as the priority. The governor of Primorskiy Krai adopted the establishment here of the zakaznik "Verchnebikinskiy," in which clear cutting and road construction not connected with supporting the zakaznik's function were forbidden.

Unfortunately, the TTU was not set with the maintenance of legal procedures. That is why a joint-stock company, Primorskiye Lesopromyshlenniki, initiated a

campaign to liquidate or decrease the area of the zakaznik "Verchnebikinskiy" in order to start logging in its territory. At the common meeting (skhod) of Krasniy Yar and Olon residents protested and appealed to the Government of the Russian Federation to legally establish a TTU. In May 2003 the UNESCO Center of World Heritage and some NGOs sent a letter to the Primorskiy Krai Administration with a request that it conserve the worldwide heritage value of the natural environment of the Upper Bikin River watershed. In June 2003 the Association of the First Small Nations of Primorskiy Krai sent official documents on the establishment of the TTU to the Government of the Russian Federation. At the same time, in June 2003, at the common meeting of residents of Krasniy Yar, Olon, and Ochotnichiy, a letter was adopted on the establishment of the TTU and addressed to the president of the RF, the chairman of the State Duma, and the chairman of the RF government.

Voluntary forest guard

There is an active group of local people who have very close ties with the hang-gilders' club in Khabarovsk city. They suggested organizing a forest patrol using motorized hang-gliders, which would be up to five times cheaper than helicopter patrolling. It is possible to involve 40 to 50 residents of Lazo raion if they can get sponsorship support for the project. Volunteers can either call the forest fire service or take appropriate urgent measures in case they need documents and communication means.

The fight of one NGO, Strazh Taigi, for forest conservation

In 1995 a student group of the Komsomolsk-na-Amure pedagogical university established an NGO called Kedr (Cedar). Then it was re-named as Strazh Taigi (Taiga Guard). A U.S. NGO, the Pacific Energy and Resource Center (PERC), helped with financing at the start of the project, and by 2003 Strazh Taigi had 20 members and more than 30 volunteers.

The main goal of Strazh Taigi is the protection and conservation of nature in Khabarovskiy and Primorskiy

krais. The NGO's tasks are education and enlightenment of the population; educating citizens on environmental problems of the RFE; control on implementation of environmental legislation in Khabarovskiy and Primorskiy krais; biodiversity conservation in the region; and participation in the optimization of the protected territory system.

In 1998 Strazh Taigi had accomplished a project called "For Taiga!" In 1999/2000 it participated in joint projects with BROK (Vladivostok) and Russian Greenpeace on forest monitoring of illegal logging. Since 1999, it has regularly carried out summer ecological camps for children, and after 2000 it began operating field education schools. In 2000/2001, Strazh Taigi took part in the all-Russian "Forest Watch" project. The NGO has conducted environmental education via the mass media during its total history.

Strazh Taigi implemented six projects in 2003:

- "School of Field Environmental Education," a project to unify children and school circles, lesnichestvos, etc., to improve environmental education, disseminate useful experience, and to support different measures and actions.
- "School of Citizen's Ecological Leadership," a project to educate and involve youth and other population segments to make their own independent decisions on environmental protection.
- "Give Forest a Chance," a project to involve the population in public control of loggers' activities and on fighting against violations of environmental legislation in the forest industry.
- "For Taiga!" is a project to create and disseminate booklets on the social, economic, and environmental situation in Khabarovskiy krai, as well as to provide common environmental information to wide population segments.
- "Alive Sea," a project to protect Far Eastern seas against the hazardous influence of extractive production industries as well as informing the population about the state of the sea.
- "GIS Project," to compile a GIS map of the state forest in Khabarovskiy krai.

Part 4: National Policy Recommendations

by

Hiroji Isozaki, Satoshi Tachibana, and Kiyoshi Komatsu

1. Introduction

The international approach to forest conservation is comprised of legal, political, and economic aspects. The Institute for Global Environmental Strategies' (IGES) Forest Conservation Project (FC Project) is conducting research to achieve two objectives in this realm. The first is to develop *national policy recommendations* that set out the measures and actions needed to ensure domestic implementation of relevant provisions in multilateral environmental agreements on the participation of local people in forest management, and to encourage all stakeholders—including national governments, local governments, and non-governmental organisations (NGOs)—to promote and support this goal. The second objective is to develop *local policy guidelines* that set out the necessary measures at the local level to ensure local people's participation in forest management in harmony with local approaches to forest management.

The necessity of ensuring the participation of local people was recognized early on, and several measures were recommended in the first phase of this research project (April 1998–March 2001). In accordance with the findings to date, these policy recommendations are being developed with consideration of the actual situation in each target country (Indonesia, Lao P.D.R., and Far East Russia) and referenced to the analyses of each country's unique situation from the point of view of implementing international treaties related to forest conservation.

2. Framework of the international approach

2.1. Outline of the studies

The key elements required for the participation of local people in forest management have been set out in various existing international instruments, both binding and non-binding. Since most of the necessary materials were collected and the fundamental analyses were carried out in the first phase of the FC Project, the activities in the second phase (April 2001–March 2004) were limited to supplementary activities to update data and include recent developments in this field. The supplementary activities include intensive legal examination of the relationship between biological resources management and intellectual property rights. Evaluation of the project's recommendations that were proposed at the end of the first phase will also be necessary, especially for items and actions based on relevant international instruments. To that end, it was necessary to do the following:

- Analyse legal and non-legal measures for local

participation in existing international treaties such as the Ramsar Convention on Wetlands, World Heritage Convention, Convention on Biodiversity, Aarhus Convention, and existing guidelines developed by the International Tropical Timber Organization (ITTO).

- Collect, examine, and analyse the domestic laws, regulations, and administrative systems of target countries. (Since basic documents and materials were collected in the first phase, the main activities in the second phase were the supplementary collection of the most recent materials and consolidated examination of legal and administrative measures.)

To carry out this work, it was necessary to do the following:

- Analyse policymaking processes at the national level.
- Analyse national forest regimes and administration from an international perspective.
- Identify obstacles to effective implementation of the recommended policies and actions in the respective target countries.

Finally, to carry out the tasks listed above, it was necessary to do the following:

- Analyse the compliance of effective implementation of international obligations and non-binding measures suggested at national and local levels.
- Analyse obstacles for better implementation of forest regimes at national and local levels.
- Identify necessary local and national measures for better implementation.

Examination and analysis from the economic perspective supports examination of the legal and political factors in developing policy recommendations. In particular, this work focuses on timber distribution, partnerships between local people and wood-based industries, and forest/timber certification schemes as important factors for sustainable forest management.

The following research was carried out in the second research phase:

- Analysis of timber distribution
 - to illustrate a timber distribution system with its permit procedures,
 - to clarify the related stakeholders, and
 - to suggest recommendations for promoting transparency from the point of view of participation in timber distribution.
- Analysis of wood-based industry

- to show the current situation of the wood-based industry by conducting a questionnaire survey,
- to consider developing partnerships between them, and
- to suggest recommendations for encouraging partnerships in the near future.
- Analysis of forest and timber certification schemes
 - to carry out comparative study of criteria, indicators, and main systems such as the Forest Stewardship Council (FSC), International Organization for Standardization (ISO), and Pan European Forest Certification (PEFC) in commissioned papers;
 - to analyse ownership, scale, type of forest (artificial, natural), harvest times, and manager examination of the levels of participation of local people;
 - to collect and examine information on forest certification; and
 - to make recommendations on the participation of local people in relation to actual forest certification.

Based on these activities, policy recommendations will be developed.

2.2. Basic idea of ensuring effective participation of local people

Based on rural sociology, three types of networks involved in the process of forest management might be identified: family connections, social connections, and organisational connections. The family connection basically consists of people with strong blood ties. The social connection, sometimes stronger than blood relationships, is composed of community relationships and individual friendships. The organisational connection develops first on a business basis, but spreads gradually into daily lives. At the beginning stage of socio-economic development, a special connection of family is already very strong or partially developed. As a result, information is often limited to a few people, encouraging corruption, collusion, and nepotism.

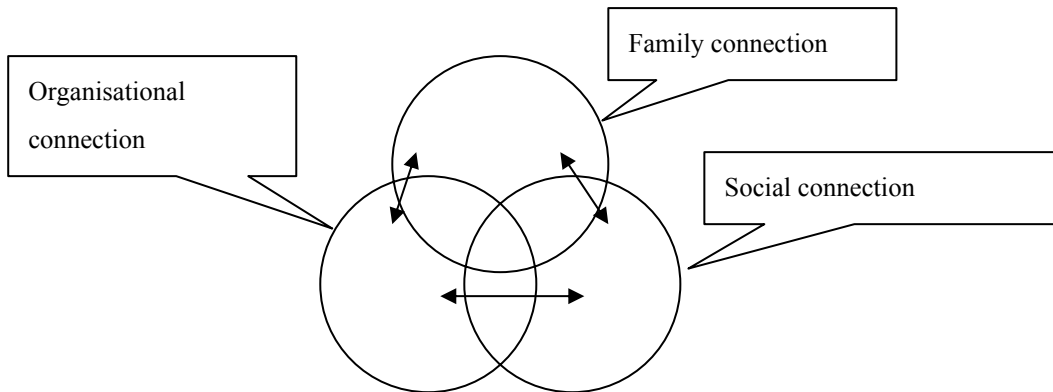
If a society consists of these connections in balance, the transparency of decision-making and every activity

will tend to increase while problems decrease. These connections can affect each other and restrict the activities in other connections as both a partner and observer. In reality, however, there is heavy imbalance in these connections, and this causes problems in forest management. An imbalance in these connections, such as strong family connections, which can overpower the other two, means that the power of some specific connections can be strong or stronger than the other two and restrict the other connections. In such a case, corruption or other problems in society may occur by limiting access to information only to a limited number of people, allowing them to monopolize information. Accordingly, there is a need to maintain and promote a balance of power among these three connections by sharing information properly among all stakeholders, in particular with local people, in order to realise sustainable forest management. The FC Project's policy recommendations will be one of the tools for keeping or promoting a balance of power between them.

Accordingly, we recognized the importance of dissemination of information on forest management. Moreover, analysis of international treaties indicated the necessity of effective information dissemination to ensuring the participation of local people. Therefore, we need to first grasp the information on forest management and then disseminate it to the local people. In relation to combating illegal logging, which is recognized as one of the obstacles hindering sustainable forest management, a tracing system for timber products can provide information on the legitimacy of their source.

According to these results and findings, we can clarify the following six "pillars" of measures for ensuring the participation of local people: authorization of the rights of local people to forest; establishment of an environmental impact assessment (EIA) system; establishment of a tracing system for timber products; establishment of a system of information dissemination; and establishment of a dispute settlement mechanism, including an ombudsman system. Each of these pillars has more detailed measures, and for implementation of these by government, we can categorise them into four groups: legislative, administrative, judicial, and others.

Relationships among human networks in forest management



Situation causing problems in the human network

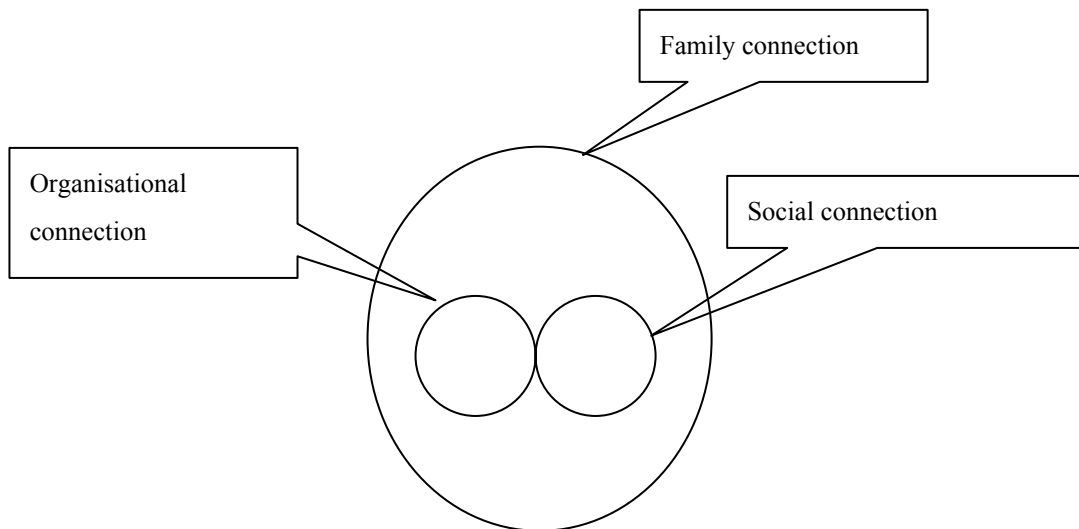


Figure 1. Relationships among the three types of networks.

Source: By the authors

3. Analysis of international instruments related to forest management

3.1. Objective

The instruments to be analysed include the Ramsar

Convention on Wetlands, the World Heritage Convention, the Convention on Biodiversity, the Aarhus Convention, and existing guidelines developed by the ITTO, etc. The target instruments are indicated in Table 1 below.

Table 1. International instruments analysed in this study.

<i>Legal status</i>	<i>Name of instrument</i>
International treaties (global)	(1) 1992 Convention on Biological Diversity (CBD)
	(2) 1994 International Tropical Timber Agreement (ITTA)
	(3) 1994 Convention to Combat Desertification
International treaties (regional)	(4) 1991 Convention on Environmental Impact Assessment in a Transboundary Context (Espoo Convention)
	(5) 1993 Regional Convention for the Management and Conservation of the Natural Forest Eco-system and the Development of Forest Plantations
	(6) The 1998 Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (Aarhus Convention)
	(7) 1985 ASEAN Agreement on the Conservation of Nature and Natural Resources (not enforced)
Guidelines deprived from international treaties	(8) Annex of Decision IV/7 of CBD; Work Programme for Forest Biological Diversity
	(9) CBD decision v/ 16 (article 8[j] and related provision)
	(10) ITTO 1998 Criteria and Indicators for Sustainable Management of Natural Tropical Forests
	(11) Ramsar Convention, Resolution 7.8
Resolutions or declarations adopted in international conferences	(12) World Charter for Nature
	(13) Rio Declaration on Environment and Development
	(14) Agenda 21
	(15) Statement on Forest Principles
	(16) Proposal Actions of Intergovernmental Panel on Forests (IPF)
	(17) Proposals for Action of the Intergovernmental Forum on Forests (IFF)
	(18) Statement on Criteria and Indicators for the Conservation and Sustainable Management of Temperate and Boreal Forests

Note: By Hiroji Isozaki and Kiyoshi Komatsu.

3.2. Elements of participation

As a result of project work, several elements of participation were defined. Moreover, it was clarified that the instruments included supporting measures for participation by paying considerable attention to measures to be taken by governments. Accordingly, the instruments describe both the elements of participation and supporting measures.

The elements have two levels, substantive and procedural, which show the actions or interests authorized in the participation. The substantive level stipulates what types of actions or interests will be authorized. The procedural level stipulates procedures or detailed conducts to realise the substantive rights in the process of participation. It details the process and the means of participation at each step in the process. Rights and duties stipulated by laws can be divided into two levels. For example, if a law stipulates a property right, it requires the government to prepare detailed procedures for ensuring rights, such as procedures for procurement, for registration of the rights, for transition of the rights, and so on. In the substantive level, laws or regulations authorize some actions, in this case, the act of possessing something. And in the procedural level, laws or regulations provide

detailed procedures and conducts in the procurement of rights. In the case of Japan, the civil code stipulates mainly substantive rights such as property rights, mortgages, and so on. These rights correspond to the substantive level. For ensuring rights stipulated in the civil code in the courts, the code of civil procedures provides procedures of ensuring those rights. The procedures correspond to the procedural level.

According to the results of project work, international instruments indicate elements of only the substantive level, not the procedural level. It is assumed that the detailed procedures will be up to each country's discretion, in order to reflect the varied situations in each country.

As mentioned above, the instruments describe not only elements for participation but also supporting measures. These measures are intended to be implemented mainly by governments, although several measures are also indicated for implementation by international organisations and NGOs. These can be divided into five categories: legislative, administrative, and judicial, economic benefit-related, and others. Because it is mainly governments that can implement the legislative, administrative, and judicial measures, their role in ensuring participation is very important.

These measures can also lead to suggestions for detailed and concrete legislative, administrative, and judicial measures. In particular, many administrative measures are suggested and can be divided into three categories: making plans and regulations, providing support, and disseminating information.

Based on the findings and awareness described above, elements can be categorised as shown in Table 2 and Table 3. These two tables indicate the state of current awareness at the international level and possible elements in national legislation related to the participation of local people.

Moreover, the instruments analysed in the policy recommendations indicate actors in the process of participation. There are several kinds of actors: people that own rights, affected people, and others.

People that own rights have some type of rights such as property rights on land, rights to use, rights to access, and so on. Any type of rights should be ensured and recognized by law in order to ensure their participation on the grounds of these rights. Although, some of those who own rights live in urban areas and not in the village where the forests are located, they have much stronger legal power compared with other people who live in the village yet don't have ownership rights.

Under the domestic law of the country where they live, most indigenous people in the Asian region have been denied their rights to ancestral land and natural resources there in. Invoking an emerging international norm on the human rights of indigenous people, they claim the right to own, occupy, use, and control their ancestral land and resources, as well as determine the priority in and grant

free and prior consent to development projects affecting their distinct culture and survival. On the other hand, some people, who immigrated to the village without legal permission and yet got settled, are affected by forest activities. Moreover, outside of the village, some people are affected by forest activities, and these can also affect people who live in neighboring countries. There are also some people who are not directly affected but have concern for the forest. They live outside of the village and have some concern for the forest due to their hobby or academic interests. They are not the same as people who are directly affected, but they are similar actors to them and somehow they have an interest in forest activities.

Finally, there are people who are not affected by forest activities. Even though they live in the village, some are not affected by forest activities. Such people can also be found outside the village. In terms of elaborating the participation of local people, measures for such affected people who don't have any land and/or forest rights are very important. Otherwise, their participation is not ensured and their rights are neglected. Therefore, somehow, any types of rights are very important to these people. In particular, an EIA system can provide an opportunity of participation to those who don't have any forest rights. These types of actors can be divided into more categories, depending on their residence, interest, and legal status (details are shown in Figure 2).

Based on previous studies, the relationships between these actors are shown in Figure 2. These relationships indicate the necessity of intervention from many stakeholders, in particular people who are affected directly from change of situations in forests

Table 2. Elements of participation.

Level of rights	Substantive level	Procedural level	*Activities for participating in their process (indicated in the instruments)
Processes			
Preparatory and planning process	<ul style="list-style-type: none"> - Access to information (6), (18) - Ensuring the opportunity for comments, opinions, and objections (4), (6) 	International instruments do not describe detailed elements so much at this level. The elements included in this level can be described in national laws and regulations. The Aarhus Convention generally describes the elements required in the procedures of participation as the following: providing information, sufficient time for public to elaborate and participate, encouraging prospective participants to do so, allowing submission of comments in any form, and consideration of outcome of participation in the decision-making process.	Making plans, programmes and policies, making laws and regulations (6); monitoring process (11); plantation (15); research, assessment of multiple benefits of forest, developing criteria and indicators (C&I), forest certification (16); protected areas, non-timber forest products (NTFP) (17).
EIA process	<ul style="list-style-type: none"> - Ensuring equitable sharing of benefits, in particularly local people (1), (2), (5) - Prior informed consent 		
Decision-making process			
Implementation process			
Review process			
Process of distributing benefits			

Table 3. Supporting measures for participation.

Legislative measures	<ul style="list-style-type: none"> - Legal framework for participation (12), (18), (19) - Framework of preserving traditional forest-related knowledge (TFRK) (17) 	
Administrative measures	Making plans and regulations	<ul style="list-style-type: none"> - Establishment of a framework of participation (10), (11), (17) (Establishment of framework of preserving TFRK [17]) - Coordination among relevant activities (in particular those necessary for preserving TFRK) (17) - Consideration for opinions of local people in the decision-making process (6)
	Providing support	<ul style="list-style-type: none"> - Capacity building of local community (3), (9), (16) - Support participation of local people by official development assistance (ODA) project (3) - Financial support for participatory management (11)
	Dissemination of information	<ul style="list-style-type: none"> - Dissemination of information (6), (7), dissemination of reason of decision (7) - Promotion of the exchange information among stakeholders (9)
Judicial measures	<ul style="list-style-type: none"> - Access to means of redress (6), (12), (13), (18) 	
Others		<ul style="list-style-type: none"> - Adaptive approach (11) - Public awareness (3), (13), (21) - Research and development of methodologies of integration of TFRK into sustainable forest management (SFM) (8) - Exchange information related to preservation and utilizing traditional knowledge (8) - Co-management agreement (10)

Note: By Hiroji Isozaki and Kiyoshi Komatsu.

A. People that own rights and indigenous people
This group consists of people who own rights on land, forest, and other resources in the administrative district, such as tenure rights, property rights, rights on hunting.

B. Affected people and indigenous people
This group consists of people who live in the administrative district where forests are located and are affected by and depend on the forest and land, even though they don't have rights in the administrative district; for example, landless peasants, illegal immigrants, and so on.

C. Local people

This group consists of groups A and B and other people who live in the administrative district.

D. Public affected

This group consists of people who don't live in the administrative district and are still affected by activities in the forest, even though they don't have any forest rights; for example, people who use forest contiguous with neighbor villages.

E. Public concerned

This group consists of people who have concern for forests and activities therein, even though they aren't affected directly; for example, scholars and persons whose hobbies or interests are connected to the forest and land.

F. Public

This group consists of A, B, C, D and the general public who don't have any interests and concern for the forest situation in a country.

G. People that are affected in affected countries

This group consists of people who live in countries and are directly affected by the forest and activities related to it in other countries.

H. People that aren't affected in affected countries

This group consists of people who live in countries affected by the forest and activities related to it in other countries and are not affected by them.

I. Public in unaffected countries

This group consists of people who live in countries that are not affected by forest and activities related to it in another country.

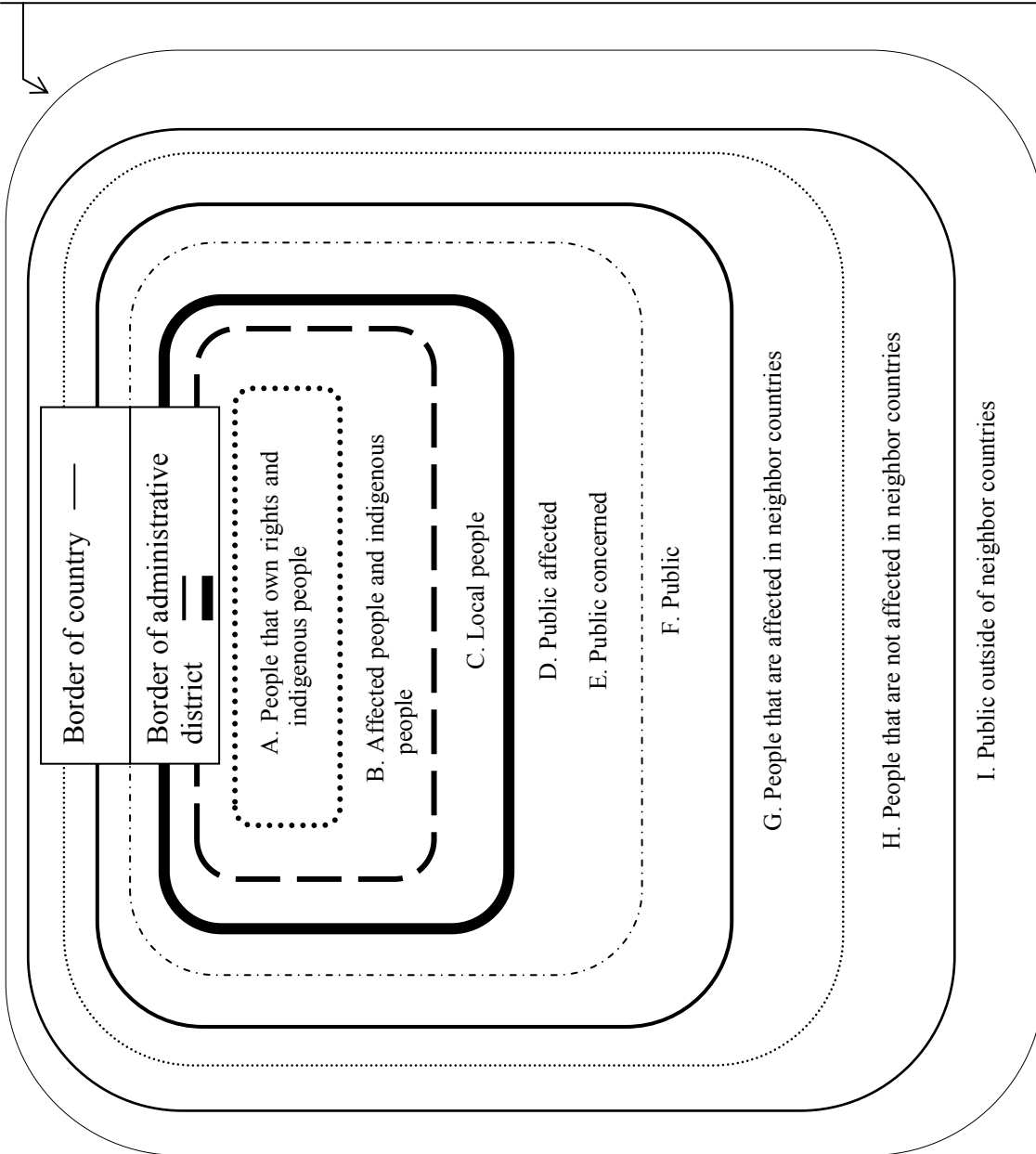


Figure 2. Composition of participants.

Source: By Hiroji Isozaki and Kiyoshi Komatsu

4. Analysis of laws and administrative systems in target countries

4.1. Basic measures for implementation of international treaties at the national level

As a logical consequence of ratification of international treaties, governments are required to implement measures for ensuring that their countries are in compliance with the treaties; in other words, these are measures required for the implementation of treaties at the national level. In particular, three types of measures to be taken by governments can be viewed as playing an important role: legislative, administrative, and judicial. Generally, these measures can play the following roles:

- Legislative measures - Enacting new laws is a good example of this role. Revision of existing laws can also be included in this category. This group consists of legislative works and actions for compliance with international treaties, and provides a base for the actions of all stakeholders, governments, companies, and NGOs.
- Administrative measures - Making administrative rules that indicate detailed criteria and procedures is also indispensable for the implementation of laws; this includes making policies or programmes for the implementation of laws. Allocating appropriate budgets and human resources within administrative organisations is crucial for effective implementation of these policies and programmes. These measures can elucidate detailed actions and procedures for implementation of the laws and provide resources by allocating budgets and administrative personnel.
- Judicial measures - Execution of international treaties by the national courts is a good example of utilizing judicial measures for compliance of international treaties, but this type of measure is not implemented often. Redress for violation of laws that have been enacted in order to implement international treaties can be very effective. Moreover, national courts can provide more detailed definitions of stipulations in the laws by making judgments on cases related to the implementation of the laws. Even though international treaties are not applied automatically in the national courts, they can contribute to the effective implementation of international treaties by correcting erroneous implementation or providing detailed interpretation of stipulations in the laws.

The results of the analysis of international treaties suggest several supporting measures such as capacity building of local people. Consideration of the implementation of these treaties at the national level produced examples of concrete policies and planning. The results from the first phase research also included recommendations of several measures for ensuring the participation of local people, and these measures can also be divided into the same three categories as the result of the analysis of

international treaties. They also included concrete and detailed measures.

According to these examinations, the results of the first phase are almost the same as the analysis of the international treaties, and they also indicated detailed and concrete measures rather than the supporting measures indicated in the international treaties. On considering policy recommendations at the national level, therefore, the results of the first phase provide a base of work, including a list of measures for ensuring participation and consideration of each country's situation for deciding on the measures necessary to ensure the participation of local people.

4.2. Situations in target countries of this study

The results of the first phase revealed many external constraints on ensuring the participation of local people and provide many recommendations to prevail over these constraints. As well, several reports and results of research in target countries have already been conducted in the second phase. Referring to these, we can list the three countries studied in order of their forest utilization: Laos, heavy and daily dependence on various forest products; Russia, dependent mainly on wood products; and Indonesia, in between the two.

4.2.1.1. Indonesia

The Indonesian government has signed onto international conventions related to forest conservation such as the International Tropical Timber Agreement, Convention on Biological Diversity, the Ramsar Convention on Wetlands, and so on.

The government owns the forests in Indonesia and it has strong powers to manage them, even though its 1945 constitution stipulates that local communities are to enjoy prosperity through the sustainable use of the nation's resources. The constitution states that "land and water and their natural riches are controlled by the state and are to be utilized for the maximum prosperity of the people," and this stipulation provides strong authority to the government to manage Indonesia's natural resources for the good of its people. Accordingly, the Basic Agrarian Act of 1960 recognizes "*adat*" law (customary law) as long as it doesn't contradict national laws and regulations; but in fact, national laws and regulations themselves have long been ignored. Moreover, the Basic Forestry Act of 1967 provided the central government with the authority of managing forest resources.

Since the 1997 economic crisis, however, the government has been changing its policy in regard to this authority. In ongoing policy reforms, the role of the community is being increasingly recognized. For example, the Forestry Law was revised, and a new forestry law, Act No.41 of 1999 on Forestry, clearly emphasized the role of local communities in forest conservation, as seen in the following stipulations:

1. Society can enjoy the right to environmental quality produced by forestry.

2. The community can utilize forestry and its products according to the laws in effect.
3. The community is entitled to know the plan of forest allocation, allocation of benefits of forestry products to community members, and information on forestry.
4. The community can provide information, advice, and ideas towards forest development.
5. The community can directly or indirectly supervise forest development.
6. The community in or near the forest can ask for compensation if their access to the forest is blocked or taken away.
7. Anyone who has lost their property rights due to a decision of building a forestry area can have the right to ask for compensation in accordance with the law.

Moreover, Act No. 23 of 1997, which entirely amended and replaced Law No. 3 Concerning Environmental Management of 1982, emphasizes the importance of the role of local communities in protecting the environment. It requires governments to take measures to empower local communities. These rights belong to the substantive level described above in the results of the analysis on international treaties and other international documents (Section 1); therefore, procedures are needed to realise them.

Processes of decentralization of government authority also hold the possibility of providing opportunities of participation. Regional Autonomy Act No.22 of 1999 stipulated that the central government should transfer its authority to manage natural resources to local government; then local government has the authority to manage natural resources.¹ The act clearly states in its preamble that decentralization leads to the encouragement of democracy and the participation of local people. This means that these decentralized processes can provide opportunities of participation for local people. In addition, the EIA system in Indonesia, which is stipulated in the Act on the Environmental Impact Assessment of 1999, can also provide opportunities for participation.

In ensuring the rights of people, the courts play an important role by making judgments on violations of those rights. The judicial system in Indonesia has also been reformed since 1997 for realising a democratic society. In previous days, the courts were controlled by the government, and therefore the people didn't trust the judicial system. In the process of reformation, however, the courts succeeded in gaining independence from the government. In addition, the government established several dispute settlement mechanisms such as the National Ombudsman Committee system. At the present

time, the number of committee members is limited, but it can provide opportunities for correcting violations of laws through the participation of all people.

Even though, Indonesia's central government's policies are changing, policy reformation also faces difficulties. For example, to ensure the interests of communities, the government is required to provide information and advice to the public, but detailed procedures for ensuring the interests of local communities have not yet been developed. Moreover, too many changes and rapid reformation causes confusion in understanding the legal and administrative system. Therefore, there is no commonly shared understanding on the current legal and administrative system on forest conservation, even among the Indonesian people. In addition, the development of detailed procedures on realising the rights described in the substantive level has been delayed, and without clear and detailed procedures, decentralization leads to chaotic situations in the field.

4.2.1.2. Forest certification and timber distribution

In Indonesia, although forest certification is in its preliminary stages, some programmes are in operation, such as the LEI scheme (Indonesia Ecolabel Institute), the mandatory central government scheme (Ministry of Forestry), the FSC scheme (Forest Stewardship Council), and the APHI self-declaring scheme (Association of Indonesian Forest Concession Holders).

The LEI scheme, which was established officially in 1998, certified a natural forest of 90,957 hectares (ha) in Sumatra in the middle of 1999 and a furniture company in Uniseraya in March 2002. The forest was also certified by SmartWood under the FSC scheme. In order to share their experiences and lessons, increase confidence nationally and internationally, and develop capacity building for Indonesian assessors, LEI and FSC reached a joint certification protocol in 1999 and have been conducting joint field surveys since then. Referring to criteria and indicators, the LEI scheme, which is based on the Production Forest Management Unit (PFMU), is quite similar to the FSC scheme. One difference between the two is in the examination process; FSC has two steps of pre-assessment and assessment, and LEI has three steps of pre-assessment, field assessment, and decision-making process. Furthermore, the FSC has been certifying two plantation forests in South Sumatra and East Java since March 2000, while it suspended four certified forests in October 2001 for not clarifying the volume of illegal logs in their operations.

Based upon interviews with key personnel in the forest certification organisations and the forest industry in Indonesia, there appears to be a possibility of convergence of three of the schemes into the LEI scheme in the near future. There are some difficulties, however, in promoting its original certification for the following reasons:

1. Applying for both the FSC and LEI certifications doubles the expected costs for forest holders, so it is necessary for the two organisations to realise a

¹ Under the Act of 1999, provinces remain as an autonomous governmental administrative unit; however, districts (kabupaten) and municipalities become autonomous and are no longer a part of the central government hierarchic structure. Sub-districts (kecamatan), sub-districts and villages are in the Regency. Regency and municipality offices of the central government were abolished or transferred.

mutual certification scheme.

2. An expansion of illegal logging and trade in Indonesia illustrates that there are some problems in timber distribution, including the scale and behavior of the wood processing industry. To counter these it is necessary to develop and ensure an effective tracing procedure system using a label or stamp, in order to promote legal timber distribution directly and sustainable forestry indirectly.
3. The incentives to take on and implement their forest certification system are lower, because certified wood does not produce enough economic benefits in the international timber market of the western Pacific Rim region.

Indonesia's forest industry is closely observing the trends of the timber market among major importing countries such as Japan right now. If Japan develops a certified timber market, they may pay attention to forest and timber certification without delay.

In theory, a tracing system to complement labeling can strongly contribute to ensuring that timber distribution meets legal requirements directly while supporting sustainable forestry indirectly. Under this system the first tracing procedure is conducted during log scaling at the

log pond, the next is at the wood processing factory, and the final step is at the shipping port—with each using the common standard of labeling the timber's origin, species, and the names of the logger and factory, etc. The second tracing procedure may be connected with the issues and permits of a factory's establishment and wood transportation. Indonesia already has a tracing system in place, as shown in Figure 3, but it cannot fulfill its functions adequately in reality because of corruption, collusion, and nepotism. We can point out that an ombudsman system and monitoring by local people and NGOs are needed to make the system work in actual practice. The systems could be ameliorated by both improving consumer's consciousness of labeling and by obtaining solid support from other countries and international organisations. The practice should increase governmental revenues from timber royalties and promote sustainable forestry indirectly, at the same time as reducing illegal logging.

Reforming or restructuring the country's forest industry will be indispensable to realising sustainable forest practices and a sustainable economy. In this regard, the process of developing partnerships between local people and the forest industry is very important.

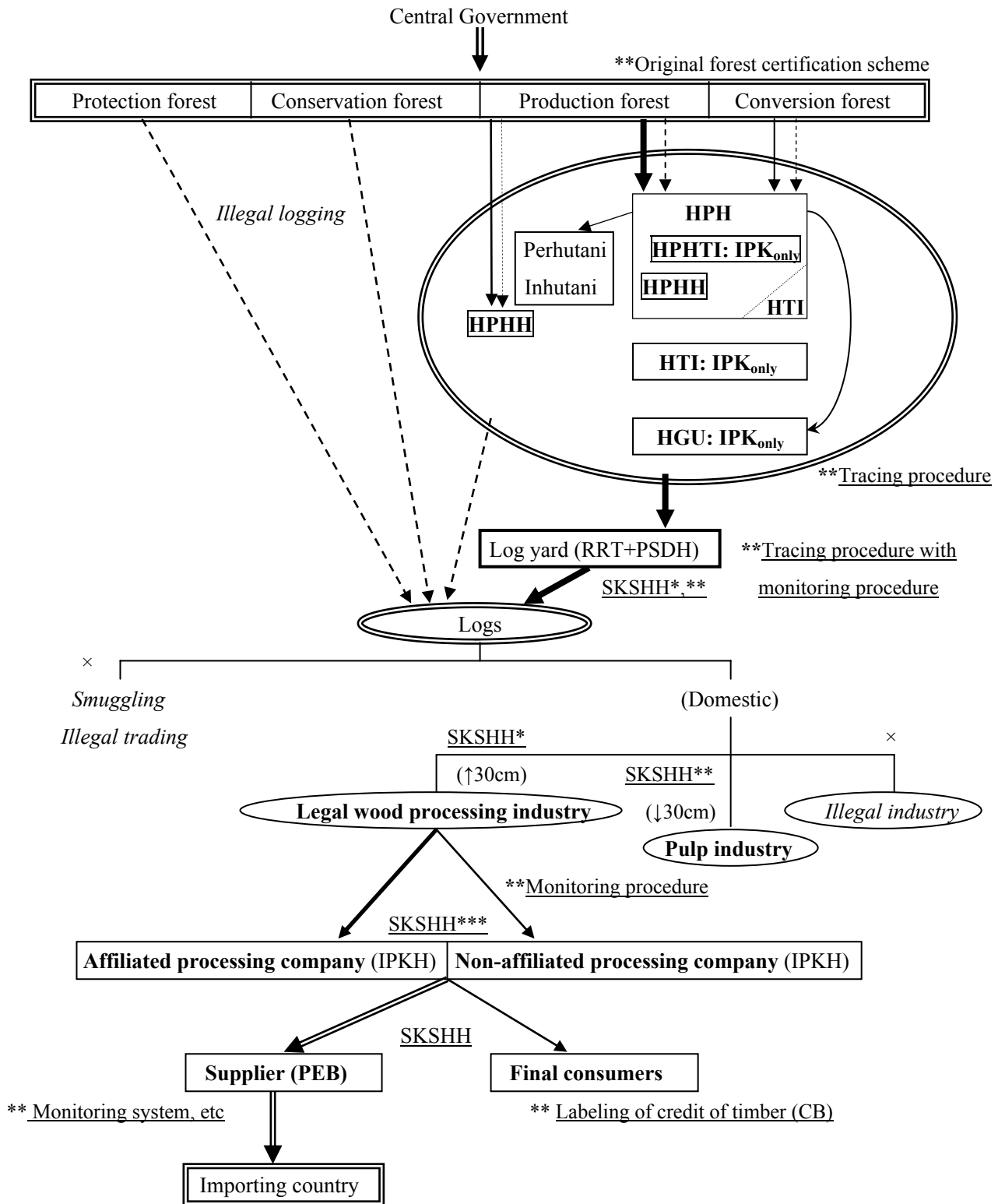


Figure 3. The timber distribution system in Indonesia up to the middle of 2002

Source: By Satoshi Tachibana

Notes: HPH (hak pengusahaan hutan) = concession; HPHH (hak pemungutan hasil hutan) = small-scale concession; IHH (iuran hasil hutan) = timber royalty; IPK (izin pemanfaatan kayu) = timber-use permit; IUI (izin usaha industri) = manufacturing business permit; PEB (pemberitahuan ekspor) = certification of export goods; PSDH (pajak sumber dana hutan) = processed wood tax; SAKB (surat angkutan kayu bulat) = log transportation permit; SAKO (surat angkutan kayu olahan) = sawn timber transportation permit; SKSHH (surat keterangan syahnya hasil hutan) = certification of legally processed wood

4.2.2. Lao P.D.R.

The government of Lao P.D.R. has also very actively joined international treaties on forest conservation, such as the Convention on Biological Diversity, but there are several international treaties that Laos has not ratified yet, such as the Ramsar Convention on Wetlands. In the legal system of Laos, there are no articles in the constitution, other laws, or decrees that stipulate the relationship between international treaties and domestic laws. This is decided on a case-by-case basis.

Given that only ten years have passed since the Lao P.D.R. government adopted its constitution, it has tried to build a legal and administrative system in the country. The constitution recognizes the importance of ensuring people's rights of possession, use, transfer, and inheritance; and it requires people to protect the environment, including natural resources. The constitution and the land law adopted in 1997 stipulate that land is owned by the "national community" and that the state is required to carry out allocation of use-rights to individuals, families, and organisations "for effective use." The government is in charge of allocating use-rights to people, and in regards to forest land it has carried out allocations based on the forestry law. The government has had six years of experience in implementing the forestry law since its adoption. According to the law, the national community owns the forests in Lao P.D.R, and it categorises them into five classifications: protection forest, conservation forest, production forest, regeneration forest, and degraded forest land or barren land. It also stipulates that rights to the use of forest in "degraded forest land or barren land" will be allocated to the local people and that the government will ensure those rights. Moreover, it ensures the customary rights of local people to use forests, even when they fall under other classifications, showing that the government intends to respect the customary rights of local people. Referring to the results of analysis on international treaties and other international documents in Section 1, laws related to forest conservation in Laos stipulate the use-right at the substantive level only.

Lao P.D.R. has an EIA system in place that requires public participation; this can provide local people with opportunities to participate. The Law of Environmental Protection (LEP) adopted in 1999 required the government to develop an EIA system. According to the LEP, an EIA system should include the participation of the "population likely to be affected by the respective development project or activities." Based on this stipulation, the government adopted regulations on EIA. They emphasize the importance of participation, and also require the development of guidelines on public involvement in the EIA process. Therefore, the EIA system ensures opportunities for participation by local people in the process of conducting a development project, such as the construction of a huge dam. Even though the LEP doesn't give opportunities of participation to all people, the right of participation is authorized by legislation and the government is now preparing detailed EIA proce-

dures in a regulation and guidelines. Therefore, participation in the EIA process is authorized at the substantive level, and now the government of Laos is developing a system at the procedural level.

Even though the government has succeeded in developing a legal and administrative system, it still has problems and difficulties. For example, customary rights stipulated in the forestry law are permitted mainly for the use of households, and it doesn't stipulate the role of collective forest management by local people. Even though the government has promulgated several decrees on declaring the participation of local people in the process of forest management, the basis of these decrees is unstable. In addition, the allocation of use-rights is not being achieved due to inconsistent categories of forest classification among various relevant laws and decrees. Accordingly, it seems that there is inconsistency between descriptions in the forestry law and the decrees for its implementation.

Moreover, since the judicial system in Lao P.D.R. is still in the process of developing, there are still difficulties in ensuring the rights of local people by judicial measures. Another challenge is the difficulty of gathering data on the timber trade.

4.2.3. Russian Far East

The Russian Federation has joined many multilateral environmental agreements, including several international treaties on forest conservation such as the Convention on Biological Diversity, United Nations on Framework Convention on Climate Change, and so on. In these international treaties, the Russian Federation plays an important role and has been expected to do so. According to the Constitution of the Russian Federation, adopted in 1993, international treaties ratified by the government are lower in power than the constitution and higher than federal laws.

In relation to the implementation of international treaties, the Forest Code of the Russian Federation also stipulates "implementing international cooperation of the Russian Federation in the sphere of use, control, and protection of the forest fund and forest reproduction" as one of the responsibilities of the federal government. It also stipulates ownership of forests, but it contradicts the stipulation of the constitution because it stipulates that forest resources belong to the federal state, although the constitution authorizes all forms of ownership of land and other natural resources. Since the constitution authorized all forms of ownership of land and other natural resources, some subjects of the federation² complained about the stipulations in the Forest Code to the Constitutional Court. In response, the court stated that the concerned stipulations did not contradict the constitution due to the nature of the forest. The court decision pointed out that forests in the Russian Federation play an important

² Subjects consisting of federation and krai administrations are included here.

role in the global environment, and that it is obliged to protect and ensure sustainable forest management; therefore, forests should be managed by the federal government as an integral part of the ecosystem and in the national interest. On the other hand, the Forest Code says that some parts may be transferred to subjects of the federation from the federal government, therefore involving subjects of the Russian Federation in the process of forest conservation. Moreover, if the subject is able to bear the burden of forest maintenance, it can have ownership of those forests. The stipulations in the Forest Code show general principles, but these don't reflect realities at the field level. This characteristic of the code leads to the necessity of filling gaps between the code and the realities in each region. As one of the ways to do this, the federation member can enact its own legislation.

Accordingly, the subjects of the Russian Federation are now playing an important role in forest conservation. In the Russian Far East (RFE), the Krai Code was adopted by the Krai Duma of Khabarovsk Krai in 1998. The Krai Code stipulates the rights of forest use, but it cannot stipulate property rights to forests. Regarding use rights, the *krai* (provincial) government can distribute these by auction and conclude an agreement with use-right holders. Under the agreement, the Krai Code requires owners of forest-use rights to pay attention to the ecological aspects of the forest and to take actions that are not required in the Forest Code of the Russian Federation. The Krai Code also ensures local people's use-rights for personal consumption.

In federal law, both the Law on Environmental Protection and the Law on Ecological Assessment contain articles on public participation. Moreover, the Forest Code of the Russian Federation requires it to disseminate information on forest conservation to all citizens, including local people. By responding to these articles, the Krai Code tries to ensure opportunities for the participation of local people through public hearings. In the Krai Code, citizens and public associations have rights to publicity and information on forest conservation, and have rights to express their opinions on the process of forest conservation. Therefore, elements in the substantive level, described in Table 2, are stipulated in the federal laws and the Krai Code. Moreover, the detailed procedures on public participation in the process of deciding forest leases are described in Khabarovsk Krai Law No. 312 (7 June 2001) under the section titled "On the procedure for public hearing of the project of a forest plot transfer for lease." Even though, the law can stipulate a detailed process, it is limited to only the process of deciding on the lease of forests but not the whole process of forest management. Accordingly, there are several problems at the procedural level (see Table 2). In addition, because of the decentralization of authority, local governments can also play an important role in ensuring the participation of local people. NGOs (environmental NGOs in particular) have utilized the judicial systems in the RFE to achieve their conservation objectives. Even though there

is an active NGO that uses the legislation supporting public participation, a lot of people don't have an interest in environmental issues, including forest conservation. Therefore, these legal tools have not been utilized much.

In the RFE the forest industry plays an important role in local economies and people's lives. In order to understand the relationships in this regard, we conducted a questionnaire survey of a sampling of 19 forest businesses representatives in the Lazo raion of Khabarovsk Krai.

Most of these enterprises were established over the past decade (16 out of 17 valid respondents) and are newcomers to the business (13 out of 15). The incomes of these enterprises depend heavily on the forest; for example, 8 enterprises out of 16 depend on forests for more than 90 percent of their income. Average annual log production increased from 6,051 cubic metres (m³) in 1998 (6 valid respondents) to 7,724 m³ in 1999 (11 valid respondents), and 17,486 m³ in 2000 (11 valid respondents). The structure of the main costs of production is as follows: labor, 24 percent; energy, 19 percent; and transport, 21 percent (17 valid respondents).

The average number of staff employed is 88 persons, and many of them come from outlying villages (17 valid respondents). The average monthly salary is 3,500 rubles (19 valid respondents). These figures indicate the necessity for creating partnerships between the local people and these enterprises in order to develop local economies and increase local interest in forestry.

As for holding forest leases, 14 enterprises hold some kind of lease, as follows: one out of 14 enterprises has a five-year lease, ten hold 25-year leases, and three have 49-year leases. The average area of these leases is almost 70,000 hectares, with an average annual allowable cut of almost 481,000 m³. These figures indicate that the production level of useable forest resources is not relatively high.

These enterprises supply mainly China and Khabarovsk (7 enterprises), Lazo raion and Komsomolskiy raion (2 enterprises), and Japan and Korea (1 enterprise). Referring to interviews and some previous studies, the size of timber exports to China from the RFE now exceeds both the domestic market and exports to Japan. Furthermore, the log prices of 12 out of 15 enterprises increased by a range of a few percentages to double between 1999 and 2000. Two enterprises evaluated the timber market as being in a glut, nine evaluated it as being stable, and four evaluated it as being in a shortage situation.

An examination of the changes in the quality of logs revealed that 10 out of 14 enterprises evaluated that it has "become significantly worse," pointing out increasing amounts of dead wood (wood rot), disease, and secondary logging (i.e., small diameter logs). Although they would like to invest in newer machinery, the average investment in productive activities is small and decreasing—42 million rubles in 1999 (6 valid respondents) and 9 million rubles in 2000 (7 valid respondents).

In terms of forest and timber certification schemes, most of these enterprises do not have reliable information. However, four enterprises indicated that they might seek certification in the future, indicating the possibility of some development of forest and timber certifications following the provision of reliable and useful information and development of a suitable forest certification system.

Based mainly on information from the questionnaire survey, we can point out some expected developments in this area.

- The development of partnerships between the local people and these enterprises.
- Introduction of investment, especially foreign investment.
- Provision of reliable information on forest certification and development of a suitable certification system with local people and the forest industry.
- Ensure that a tracing procedure system and monitoring system with labeling are developed under the ombudsman, similar to the approach taken in Indonesia.

5. Measures for ensuring the effective participation of local people

National policy recommendations for each target country can be formulated based on these ideas. The measures listed in Table 4 were developed by considering measures suggested in the results of the first phase of research, in particular those related to ensuring the participation of local people. New knowledge made available as a result of the second phase research activities to date reinforces the necessity of some of these measures.

As shown in Table 2, the research identifies several elements of participation. These can be supported by the

supporting measures listed in Table 3. According to these tables, legislation provides a base of participation by stipulating elements indicated in Table 2 as rights or duties of government, and administrative measures develop policies, provide support to local people, and disseminate information for the purpose of ensuring the rights authorized by the legislative measures. Then the rights of participation need a judicial mechanism for protection from violation of the rights. Accordingly, it is necessary for the elements to be tangible in the national governance system as “rights of participation.” On the other hand, research in the target countries clarifies the necessity of elaborating effective implementation of the system related to participation, because people don’t use their rights to participate even though these are ensured by law.

The results of the first phase indicated nineteen detailed measures for ensuring the participation of local people, such as authorization of local people’s rights to the forest and the EIA system. Moreover, they indicated the need for coordination among relevant ministries and departments for ensuring participation, and they also pointed out the importance of making and showing clear instructions or directions for the process of participation. Finally, they emphasized the importance of a dispute settlement mechanism for ensuring the rights of local people.

By elaborating the research results from both the first and second phase, so far several measures are indicated. For ensuring opportunities for expression of opinions and comments, the EIA system can be indispensable. Moreover, collective forest management can ensure the equitable sharing of forest benefits with local communities, the government, and companies.

Table 4. Measures necessary for ensuring participation of local people by the national government.

1. LEGISLATIVE MEASURES	
The participation of local people in processes of sustainable forest management should be assured by law.	
(1) Establishment of a legal system to ensure the participation of local people in forest management.	
i) Authorization by law of collective forest management by bodies such as village communities, cooperatives, and forest user groups.	
ii) Assurance by law of rights to benefits derived from forests such as rights to use, management rights, or property rights of local people.	
(2) Establishment of an environmental impact assessment system.	
(3) Establishment of a tracing system of timber products.	
(4) Establishment of a system of disseminating information.	
2. ADMINISTRATIVE MEASURES	
Appropriate administrative measures should be taken by the national governments in order to ensure the effective participation of local people in the decision-making process, in management processes of protected areas, in the planning and implementation processes of international aid programmes, and in the processes of granting forest concessions.	
A. Making plans and regulations	(1) Development, coordination, and revision of administrative systems related to forest management based on the participation of local people.
	(2) Provision of direction and instruction of necessary measures and procedures on participation of local people from the national government to local government.
B. Providing support	(3) Provision of support for local people, including financial, technical, and human resources assistance, and encouragement of private sector investment in collective forest management bodies.
	(4) Carrying out capacity building programmes for government officers, members of NGOs, journalists, and local people to enhance the ability to sustainably manage forests.
	(5) Establishment of a system to provide sufficient advice from experts, including judicial measures. Taking measures to facilitate use of the system, such as expansion of the number of experts, development of networks among them, and development of an inventory of experts.
C. Ensuring collective and individual forest management	(6) Support and encouragement of collective forest management by local people.
	i) Giving priority to collective forest management by local people over large-scale forest management by corporations in the process of granting permission by the government.
	ii) Where appropriate, authorization of the collective forest management bodies by the government to carry out necessary regulations and provision of technical support to such a collective management body.
	iii) Coordination among ministries and authorities related to collective forest management in developing the forest plans within and among local governments and between the national government and local governments.
(7) Establishment of a plan to support tree planting and for distribution of benefits in order to support individual-based forest management.	
D. Environmental impact assessment system	(8) Notification of local people regarding concerned activities.
	(9) Ensuring opportunities to local people for expressing views and comments on the concerned activities.
	(10) Provision of support to affected local people who need it, particularly advice on technical matters.
E. Tracing system on timber products	(11) Dissemination of information on tracing systems and ensuring access to information.
	(12) Establishment of an ombudsman system on the tracing system.
F. Dissemination of information	(13) Dissemination of information related to forest management and ensuring access to the information on it.
	(14) In order to promote the use of dispute settlement mechanisms, related information should be disseminated to all stakeholders. Information related to objection procedures should be widely disseminated.
3. JUDICIAL MEASURES	
Dispute settlement systems including an informal mechanism should be established or modified.	
(1) Establishment of a reliable, independent, and informal dispute settlement mechanism by considering recourse to the traditional conflict resolution mechanism.	
(2) Establishment of procedures for objection or appeal in order to ensure the public can raise objections to government decisions or the ombudsman system.	
4. OTHER MEASURES	
(1) Making the public aware of the importance of sustainable forest management and their rights to the forests.	

Source: By the authors.

6. Strategic elements for effective implementation of the recommendations

Some measures listed in Table 4 are emphasized in Table 5 in order to deal with specific situations in each target country, because they vary greatly. For instance, some measures are not yet established by laws or administrative orders. In addition, for those already established there are often problems with implementation. Accordingly, measures not yet established by laws or administrative measures are marked × in the table, indicating the need to do so. Measures having problems with implementation are marked ▲, indicating the necessity for improvement for effective implementation. A blank signifies that the measures are already established by law or administrative order but require more effective imple-

mentation. In regard to some measures, implementation of them in each country can lead to more difficulties or confusion such as creating the need for constitutional revision.

For improvement of effective implementation of the measures listed in Table 4, we can indicate several elements for more effective implementation of the recommendations by referring to each country's situation. As mentioned above, the recommendations provide measures for ensuring the participation of local people, and these measures need to be implemented in each country. However, some measures need to be emphasized or modified upon implementation in order to be adapted to the specific situation in each country.

Table 5. Measures necessary for ensuring the participation of local people at the national government level in target countries.

List of measures	Countries		
	I	L	R
1. LEGISLATIVE MEASURES The participation of local people in processes of sustainable forest management should be assured by law.	/		
(1) Establishment of a legal system to ensure the participation of local people in forest management.	/		
i) Authorization by law of collective forest management of bodies such as village communities, cooperatives, and forest user groups.	▲		
ii) Assurance by law of rights to benefits derived from forests, such as rights to use, management rights, or property rights of local people.	▲		
(2) Establishment of an environmental impact assessment system.			
(3) Establishment of a tracing system of timber products.		×	
(4) Establishment of a system of disseminating information.	▲	×	
2. ADMINISTRATIVE MEASURES Appropriate administrative measures should be taken by the national governments in order to ensure the effective participation of local people in the decision-making process, in management processes of protected areas, in the planning and implementation processes of international aid programmes, and in the processes of granting forest concessions.	/		
A. Making plans and regulations	/		
(1) Develop, coordinate, and revise administrative systems related to forest management based on the participation of local people.	▲	×	
(2) Provision of direction and instruction of necessary measures and procedures on participation of local people from the national government to local government.	▲	▲	
B. Providing support	/		
(3) Provision of support for local people, including financial, technical, and human resources assistance, and encouragement of private sector investment in collective forest management bodies.	▲	▲	×
(4) Carrying out capacity building programmes for government officers, members of NGOs, journalists, and local people to enhance their ability to sustainably manage forests.	×	▲	▲
(5) Establishment of a system to provide sufficient advice from experts, including judicial measures. Taking measures to facilitate use of the system, such as expansion of the number of experts, development of networks among them, and development of an inventory of experts.	▲	▲	▲

Table 5. Continued

List of measures	Countries	I	L	R
C. Ensuring collective and individual forest management	(6) Support and encouragement of collective forest management by local people.			
	i) Give priority to collective forest management by local people over large-scale forest management by corporations in the process of granting government permission.	×	×	×
	ii) Where appropriate, authorization of collective forest management bodies by the government to carry out the necessary regulations and provision of technical support to such collective management bodies.	▲	▲	×
	iii) Coordination among ministries and authorities related to collective forest management in developing forest plans within and among local governments and between the national government and local governments.	▲	▲	▲
	(7) Establishment of a plan to support tree planting and for distribution of benefits in order to support individual-based forest management.	▲	▲	▲
D.Environmental impact assessment system	(8) Notification of local people regarding concerned activities.	▲	▲	▲
	(9) Ensuring opportunities to local people for expressing their views and comments on the concerned activities.	▲	▲	▲
	(10) Provision of support to affected local people who need it, particularly advice on technical matters.	▲	▲	▲
E. Tracing system on timber products	(11) Dissemination of information on tracing systems and ensuring access to information.	▲	▲	▲
	(12) Establishment of an ombudsman system on the tracing system.	▲	▲	▲
F. Dissemination of information	(13) Dissemination of information related to forest management and ensuring access to the information on it.	▲		▲
	(14) In order to promote the use of dispute settlement mechanisms, related information should be disseminated to all stakeholders. Information related to objection procedures should be widely disseminated.	×	×	×
3. JUDICIAL MEASURES				
Dispute settlement systems, including informal mechanisms, should be established or modified.				
	(1) Establishment of a reliable, independent, and informal dispute settlement mechanism by considering recourse to the traditional conflict resolution mechanism.	▲	×	▲
	(2) Establishment of procedures for objections or appeals in order to ensure that the public can raise objections to government decisions or the ombudsman system.	▲	×	▲
4. OTHER MEASURES				
	(1) Raise public awareness on the importance of sustainable forest management and their rights to the forests.	▲	▲	▲

*I=Indonesia; L= Lao P. D.R.; R=Russian Far East

Table 6. Strategic elements for effective implementation of the measures in the target countries.

Indonesia		
<i>Situation</i>	<i>Necessary actions</i>	<i>By whom</i>
Even though government has reformed policies, it is facing difficulties in implementing them effectively.	A) Development of guidelines for implementation of policy or, where appropriate, revision of laws.	Government
	B) Capacity building for government officials.	International organisation, government, NGOs
Ineffectiveness of tracing system of timber production.	Establishment of a monitoring system or ombudsman system engaged mainly in monitoring and checking activities on timber distribution, in particular paying attention to log pond procedures.	NGOs and academic people
Ineffectiveness, corruption of judicial system.	Reforming the judicial system and developing alternative mechanisms of dispute settlement. Otherwise, utilize the ombudsman system or the court of human rights, which are mechanisms established in the process of democratization of Indonesian society after the collapse of the Soeharto regime.	Government, NGOs
Lack of awareness of local people of their rights to forests stipulated by law.	Raising awareness of the rights of local people among themselves and government officials.	Government, NGOs, community (village leaders), indigenous leaders, and the mass media

Source: By the authors

Lao P.D.R.		
<i>Situations</i>	<i>Necessary actions</i>	<i>By whom</i>
Inconsistency between forestry law and implementation decrees.	To ensure consistency among them.	Government
Lack of capacity of government, courts, and local people.	Capacity building of all stakeholders.	International organisations, government, NGOs
Lack of awareness of local people of their rights to forests as stipulated by law.	Raising awareness of the rights of local people among themselves and government officials.	Government, NGOs, community (village leaders), indigenous leaders, and the mass media

Source: By the authors.

Far East Russia		
<i>Situations</i>	<i>Necessary actions</i>	<i>By whom</i>
The Forest Code of the Russian Federation clearly stipulates that the federal government owns the forests. Therefore, it cannot authorize the property rights of local people to forests.	Improved implementation of the federal forest code by permitting local people access to forest resources.	Government
An official tracing system on timber products was abolished.	Development of a voluntary tracing system or code of conduct on distributing timber products.	Association of timber product industries, NGOs, and academics
Lack of awareness of local people of their forest rights as stipulated by law.	Raising awareness of the rights of local people among themselves and government officials.	Government, NGOs, community (village leaders), indigenous leaders, and the mass media

Source: By the authors.

Part 5: Differences and Commonalities of Studies on Local Participatory Forest Management in Indonesia, Laos, and Russia

by

Natalia Antonova and Kazuhiro Harada

1. Introduction

The purpose of this report is to compare research outcomes and identify the differences and commonalities between studies of local participatory forest management (PFM) in Indonesia, Lao P.D.R. (People's Democratic Republic), and Far East Russia. These three target countries are quite different in their natural-economic conditions, legislative and administrative systems, and cultural and national traditions. Hence, we have to take into account all these peculiarities when comparing the research outcomes of our studies of each country.

First, the analytical framework will be elaborated. Such a framework is needed in order to select the main points of comparison of the country studies. Following the description of the framework, the basic conditions of forest management in Indonesia, Laos, and Russia will be described briefly, and then the characteristics of PFM in each country will be covered. Finally, the commonalities and differences will be highlighted. As a result of this analysis, we hope to discover whether the experiences and lessons of these three countries are applicable to other countries or not.

2. Analytical framework

2.1 The basic conditions of forest management

First of all, the basic conditions of forest use in each country should be compared as a base for the implementation of PFM. These conditions are as follows: forest land classification, forest ownership rights, implementation of these rights in practice, relationship among authority levels in respect to allocation of forest lands for use, and decision-making process in respect to PFM.

2.2 Characteristics of local participatory forest management in three countries

2.2.1. Current level of participation following the typology of participation

Estimation of the original status of PFM in the target countries is essential for comparison of elaborating approaches to PFM in the countries' guidelines. The classification of the levels of participation in development will be used, which includes the follow grading: informing, information gathering, consultation, placation, partner-

ship, and self-mobilization.¹

2.2.2. Focus on participatory forest management

Depending on the national features of forest use, PFM can be oriented on different local levels of participation: either the community or district level, or even the provincial level. This will also be one of the points of the comparative analysis.

2.2.3. Relationship between the local people and the forest with respect to livelihood

Analysis of the relationship between local people and the forest with respect to livelihood will show whether or not local people have some economic incentives to manage the forest properly.

2.2.4. Social groups in the community with respect to PFM

It is obvious that various social groups in the community are, to different degrees, ready and willing to participate in forest management, i.e., the interests and activities of the groups are different. Hence, measures of population involvement in forest management should be differentiated. Selection of social groups in the community of each country will serve the purpose for comparing these groups and finding commonalities or differences.

2.2.5. Characteristics of village action guidelines (VAG)

The outline of comparison of the VAGs is based on the following structure of VAGs for Indonesia and Laos: main goals of the VAGs, main problems in forest villages, guideline measures/actions, and main target group (actor) for participatory forest management at the village level. Note that only the VAGs for Indonesia and Laos will be compared.

2.2.6. Characteristics of local policy guidelines (LPG)

The LPGs elaborated for the three countries reflect the national-specific state of forest management in each

¹ Outline of "IGES Local Guidelines for Participatory Forest Use and Management," drafted by INOUE Makoto, Project Leader, Forest Conservation Project of IGES.

country. The framework for comparison of LPGs is defined by their structure and consists of the following: main goals of the LPGs, main problems at the district level, main guideline measures/actions, and main stakeholders of PFM at the district level.

The components of each framework for Indonesia, Laos, and Far East Russia are discussed below.

3. The basic conditions of forest management in each country

3.1. Indonesia

3.1.1. Property rights to forests

The 1945 constitution stated that Indonesian's natural resources were controlled by the state and were to be used to attain the maximum prosperity of the people.² In reality, the central government exerted strong control on all resources including forests, not utilizing them for society's interest but just for large logging concessionaire companies. This process became especially aggravated during the Soeharto regime, when forest management was characterized as centralistic and monopolistic, and caused the degradation of natural resources. It caused corruption in the forestry sector because of the collusion among big forest businessmen with state-bureaucrats regarding forest resources use. The central government didn't delegate its authority over forest management to local government.

After the fall of Soeharto in 1998 and the adoption of the Act of Regional Autonomy No. 22/1999 and Forestry Law No. 41/1999, the authority and responsibility regarding forest management was transferred to local governments, especially to district governments.

According to the Forestry Law, forest lands in Indonesia are categorized with respect to forest functions into protection forest, with main functions of watershed protection, soil fertility maintenance, prevention of floods, erosion, and salinity; conservation forest, where the main function is the conservation of biological diversity and ecosystems; and production forest for timber production.³

This law defines all the forests in respect to the status of ownership as state forests and proprietary forests. Most forests belong to the state. All of the forest lands, including production and conservation forests, are managed by district governments. Regarding national parks, the authority of forest management rests with the central government, which also has the responsibility of managing protection forests, conservation forests, and production forests in cross-provincial areas. Meanwhile, provincial governments have the obligation of managing large forest stands in cross-district areas.

3.1.2. Implementation of forestry laws with respect to participatory forest management (PFM)

Among forest-dependent communities in Indonesia, formal forestry laws as well as *adat* law (customary rights) are simultaneously in use. According to *adat* law, villagers who have been using forest lands around their community consider these their property.

During the Soeharto period, community-based rights to forests were ignored, even though officially these rights were recognised. That is, wherever the government wished to exploit any particular forest area, the community's rights could be neglected in order to access the forest resources at any time and place.

Forestry Law No. 41/1999 recognised *adat* forests as part of the state forests but managed by community people, and provided for the rights of the community to use the forest. As the same time, this forestry law outlines the responsibilities of the community in taking care of and protecting the forest.⁴ Now under development in the legal process itself, as well as in the formal forestry laws provided by the government, customary *adat* law is being increasingly integrated.

Unfortunately, sometimes the rights of local people are neglected because of the ambiguous status of classification of state forest and proprietary forest given in Forestry Law No. 41/1999, where the so-called customary forest and village forest belong to the state, instead of being proprietary. This means that the community's forest land can be taken by any enterprise that holds a concession permit issued by and with the support of the national government.

3.1.3. Decision-making system in respect to forest management

In the context of regional autonomy and the policy-making process, there are now two separate branches of authority in Indonesia: state management, consisting of the central government and provincial governments, and regional autonomy, represented by district or municipal governments and village heads. According to Law No. 22/1999, there is no hierarchical relationship with respect to forest management between the Ministry of Forestry of the central government and the forestry departments of district governments.⁵

There are some unsustainable processes that occurred in the formation of the legal system during the transition period since the Soeharto regime, which are reflected at the local level as well and are even more remarkable. Potential conflicts between the central government and

² Naoyuki Sakumoto. 2002. The Participatory Forestry Management System in Indonesia. In: Policy Trend Report 2002. Forest Conservation Project of IGES, 2002. p.52-76.

³ Wahjudi Wardoyo and Nur Masripatin. 2002. Trends in Indonesian Forest Policy. In: Policy Trend Report 2002. Forest Conservation Project of IGES, 2002. p. 77-87.

⁴ Naoyuki Sakumoto. 2002. The Participatory Forestry Management System in Indonesia. In: Policy Trend Report 2002. Forest Conservation Project of IGES, 2002. p. 52-76.

⁵ Herman Hidayat. 2004. Decentralization of forest policy in Indonesia. In: Indonesia Country Report 2003: Local People in Forest Management and the Politics of Participation Chapter 9. IGES. Hayama, Japan (in press)

the districts, and the province and its districts, arise due to contradictory interests and different interpretations of regional autonomy itself.⁶ Some of the conflicts with respect to forest management reflect the opposite of progress to regional autonomy.

One of the conflicts is based on unsatisfactory distribution of allocation rights among authority levels. Under the original terms of the Basic Forestry Law, adopted in 1967, there were divisions amongst several institutions. For example, the forestry department could only give out timber concessions larger than 10,000 hectares (ha), while provincial governors retained the authority to grant timber concessions of up to 10,000 ha. And district heads could grant concessions of up to 5,000 ha, while sub-district heads could grant concessions of up to 100 ha in size. Unfortunately, in the current forestry law there is no mention of specific rights of the different authority levels to grant timber concessions. At the same time, according to the central forestry department's Regulation No. 34/2002, the rights of local governments have been cut remarkably—district heads can grant timber concessions of up to 50 ha, the provincial governor can allocate concessions of up to 1,000 ha, and the central forestry department has the authority to grant concessions larger than 1,000 ha in size. Accordingly, the distribution of revenues from forest resources fees has been changed now in favor of the central forestry department. There are many complaints now from local governments and communities to the central government about this unequal distribution of rights to allocate forest resources. It's possible to say that the democratic process in forest management has been reversed.⁷

Another conflict is based on the attitudes of central government officials that, so far, the district governments are not well prepared for sustainable forest management because of lack of institutional capacity building (regulation, forest managers, experience, etc.).⁸ Using this temporary inability of district governments to sustainably manage forests as justification, the central government is now trying to again take over the authority of forest management in spite of the decentralization process occurring in the country.

3.2. Lao P.D.R.

Among Southeast Asian countries, Laos has the highest per capita forest area (2.4 ha/capita) due to its relatively high ratio of forest cover (54%) and low population density. About 83 percent of the total population

lives in rural areas, and some 66 percent rely on subsistence agriculture.⁹ Also, non-timber forest products (NTFPs) generate a major part of their cash income.¹⁰

Laos is presently a country in transition to a market economy. Specific features concerning the forestry sector are (1) the existence of a change-over period to implement new forest laws, and (2) the recent reaction to and trend in efforts to transfer the responsibility of forest management to the local people.¹¹

3.2.1. Property rights to forests

After the formation of Lao P.D.R. in 1975, the country's forest resources became the property of the national community to be managed by the state. The constitution of Laos, enacted in 1991, provides general principles on the rights of citizens, including ethnic minorities, to own, use, transfer, and inherit natural resources. The Land Law (1997) and the Forestry Law (1996) provide the frameworks for the rights of villages, households, and individuals to own, use, and manage land and forest resources. At the same time, organisations and individuals have an obligation to manage the land on a sustainable basis.¹² All of the laws were enacted following the institution of a programme of structural reforms, collectively called the New Economic Mechanism (NEM), which means that the laws are intended to support the NEM.¹³

According to the Land Law, land in Laos is classified into eight categories: agricultural land, forest land, constructional land, industrial land, communicational land, cultural land, land for national defense, and land around water resources. Among these, the types of land for which the right to utilize them is allocated to organisations or individuals are agricultural land, forest land, and constructional land.

According to the Forestry Law, forest lands are classified under five categories: protection forest, conservation

⁶ Yekti Maunati. 2004. Powers in forestry revisited: New Order, military, conglomerates, newcomers, and local community. In: Indonesia Country Report 2003: Local People in Forest Management and the Politics of Participation. Chapter 8. IGES. Hayama, Japan (in press)

⁷ Interview with Mr. Cimon Devung. 26 November, 2003, IGES.

⁸ Herman Hidayat. 2004. Decentralization of forest policy in Indonesia. In: Indonesia Country Report 2003: Local People in Forest Management and the Politics of Participation Chapter 9. IGES. Hayama, Japan (in press)

⁹ Phouang Parisak Pravongviengkham. 2000. "A National Advocacy for a Holistic and Decentralized Approach to Forest Management in Lao PDR" - In: Enters, T., Durst, P. B., and M. Victor (eds.). *Decentralization and Devolution of Forest Management in Asia and the Pacific*. RECOFTC Report N.18 and RAP Publication 2000/1. Bangkok, Thailand. <<http://www.fao.org/DOCREP/>>

¹⁰ Takeda Shinya. Local response to a government land-allocation program: The role of NTFPs in marginal mountainous areas in Lao PDR. Abstract of presentation on International Symposium on Alternative Approaches to Enhancing Small-Scale Livelihoods and Natural Resources Management in Marginal Areas-Experience in Monsoon Asia. <<http://www.unu.edu/env/plec/marginal/abstracts.html>>

¹¹ Hakymura Kimihiko, Inoue Makoto, Morimoto Takashi and Ishikawa Miyuki. 2004. "Participatory Action Research as a tool for collaboration among stakeholders and scientists (3) -Lesson from Laos-, The Proceeding of the 115th Japanese Forestry Society Conference, The Japanese Forestry Society.

¹² Makoto Inoue, Kimihiko Hyakumura. 1998. Forest Policy of Laos in Terms of Local Participation. In: A Step toward Forest Conservation Strategy(1). Interim Report. 1998. IGES, Forest Conservation Project. p. 300-308 <<http://www.iges.or.jp/en/fc/phase1/ir98-3-24.pdf>>; Todd Sigaty. Legal Framework of Forestry Sector for Forestry Strategy to the Year 2020 in Lao PDR. 2003.

¹³ Martinus Nanang, Kimihiko Hyakumura, Kazuhiro Harada, Makoto Inoue, and Hiroji Isozaki. 2004. Community, Forest, and Policy: What makes participation work? In: White Paper, IGES (in press).

forest, production forest, regeneration forest, and degraded forest land and barren land. The forest land allocated to individual households is degraded forest land or barren land.

The right to utilize land granted to organisations and individuals is guaranteed by the Land Law.¹⁴ They can be given land for a three-year period, and then, if their land use was rational and there are no objections to its use, they can apply to extend their right to utilize the land for a longer term. But the law prohibits the buying and selling of land.¹⁵

3.2.2. Implementation of forest law with respect to PFM

The land use planning and land allocation process (LUPLA) at the village level has been the dominant policy followed in Laos in the allocation of land-use rights to rural villagers. Each District Agriculture and Forestry Office (DAFO) is to coordinate with the village administrative authorities to allocate temporary (three-year) land use certificates (TLUC) for degraded forest to individuals and households in villages for agriculture and tree planting, and also to coordinate village forest management arrangements (VFMA) for the use of natural forest within the village boundaries and allocate these to the village as a community. By the end of 2001, the LUPLA process had been completed in 5,370 villages, resulting in the issuance of over 600,000 TLUCs and thousands of VFMA.¹⁶

The general rule is that individuals and organisations using land are required to pay a land tax that is collected by village administrative authorities on behalf of the Ministry of Finance.

TLUCs provide the rights to use and inherit degraded forestland and, potentially, to obtain full property rights and title after the initial three-year period upon showing good management and payment of taxes. The provincial agriculture and forestry offices (PAFO) are supposed to convert the TLUCs to permanent land title after three years, but none of those issued over the past decade have been converted yet because of lack of consistent guide-

lines for titling rural land, as well as the reluctance of villages to subject themselves to a process that may restrict their traditional land tenure and use patterns.

Individuals and organisations can't own natural forest, since it is state property, but the VFMA acts as a form of lease agreement between a village and the state, guaranteeing exclusive customary use and protection rights to the village with no tax obligations.

Villages have open access and exclusive use of the forest land and resources within their village boundaries, which are either identified by the LUPLA process or traditionally recognised between villages. Customary user rights include five cubic metres (m³) per year of timber from natural forest for non-commercial household and public purposes, the hunting of non-protected wildlife and aquatic species, and the sustainable collection and sale of non-protected NTFPs from community or government forests, which includes abandoned swiddens and natural forests. Villagers have full ownership and user rights over trees on their land planted with their own labour and expense.¹⁷

Through the LUPLA process the government has attempted to identify village boundaries and define forest use and protection zones within those boundaries. Securing temporary tenure and management rights over forest areas has been a positive step, but the process has been inconsistently implemented, hindered by inadequate training for district staff. The government also introduced reforestation projects, but people were not strongly motivated to participate due to the long periods required until harvest and the uncertainty of markets.¹⁸

3.2.3. Decision-making process in respect to PFM

The current level of decision-making process in respect to PFM in Laos still employs the top-down approach. According to the Forestry Law, there are four levels of state forest management organisations that enact rules and regulations and implement government forest policy in the forestry sector, as follows:

- Ministry of Agriculture and Forestry (MAF)
- Provincial Agriculture and Forestry Office(s) (PAFO)
- District Agriculture and Forestry Office(s) (DAFO)
- Village Administrative Authority

As the same time, just as PAFO is under strong influence from provincial authorities, DAFO is also under the strong influence of district authorities. To combine the interests of both the central government and the provincial authority, a special committee was created to solve forest management problems and make joint decisions on

¹⁴ "The area to be allocated will be no more than 1 ha per laborer for rice cultivators, no more than 3 ha per laborer for other crops, and no more than 15 ha per laborer for the cultivators of grasses to raise livestock. For forest land no more than 3 ha per laborer are allocated." Makoto Inoue, Kimihiko Hyakumura. Forest Policy of Laos in Terms of Local Participation. In: A Step toward Forest Conservation Strategy (1). Interim Report. 1998. IGES, Forest Conservation Project. p. 300-308.

¹⁵ Foreigners do not qualify for land titles in Laos, but are eligible as foreign investors to lease degraded land from the state for tree planting, usually for a 50-year term, approved by various authorities based on land size: district authorities for forest area less than 3 ha with approval by PAFO; provincial authorities for forest area 3 to 1,000 ha with approval by MAF; MAF for forest 1,000 to 10,000 ha with approval by government; government for forest area more than 10,000 ha with approval of the National Assembly. Todd Sigaty. Legal Framework of Forestry Sector for Forestry Strategy to the Year 2020 in Lao P.D.R. 2003.

¹⁶ Todd Sigaty. 2003. Legal Framework of Forestry Sector for Forestry Strategy to the Year 2020 in Lao P.D.R.

¹⁷ Todd Sigaty. 2003. Legal Framework of Forestry Sector for Forestry Strategy to the Year 2020 in Lao P.D.R.

¹⁸ Takeda Shinya. Local response to a government land-allocation program: The role of NTFPs in marginal mountainous areas in Lao P.D.R. Abstract of presentation on International Symposium on Alternative Approaches to Enhancing Small-Scale Livelihoods and Natural Resources Management in Marginal Areas-Experience in Monsoon Asia. 29 - 30 October 2003, Tokyo, Japan. <<http://www.unu.edu/env/plec/marginal/abstracts.html>>

this issue. The same practice is applied at the district level.

Village authorities should enact legally binding rules to govern the implementation of forestry policy and regulate use and management of the forest resources within village boundaries. At the same time, villages in Laos have historically and, in most cases, continue to practice traditional methods of forest tenure, use, and management, despite a government management system and interventions that are recognised in legislation. In the Forestry Law, customary forest utilization is defined as the “long-term use of forests, forest land and forest products approved [of] socially and legally.” In concrete terms, this includes the collection of wood for fences and fuel, the harvesting of forest products, and hunting for household consumption and others, but this does not include swidden agriculture.¹⁹ Recognition of the need to increase the role of villages in forest management has emerged over the past decade, especially since poverty alleviation and the reduction of natural forest degradation have become higher policy goals of the government and international donor community.

Nowadays, we can see the progress of several of the government’s efforts, such as the decentralization movement,²⁰ which is one of the eight national priority development programmes in Laos. Government policies for improved social and economic systems are largely geared towards efforts to stabilize shifting cultivation.

3.3. Far East Russia

Khabarovskiy Krai, located in the southern part of Far East Russia, has abundant forest resources. Forests cover 93.5 percent of the krai’s area, amounting to 73.7 million ha. The growing timber stock is 5.1 billion m³. Khabarovskiy Krai includes over 200 specially protected territories, including six state natural reserves that cover 1.7 million hectares.²¹ The annual allowable cut (AAC) is 26.8 million m³, while actual use of the AAC is only approximately one quarter (27% in 2002).

3.3.1. Property rights for forests

According to the Land Code of the Russian Federation, adopted in 2001, land in Russia is classified according to function into seven categories: agriculture land; residential land; industrial, communicational, and defense land;

special protected land; forest fund land; water fund land; and reserve land.

According to the Forest Code of the Russian Federation (RF Forest Code), adopted in 1997, most of the forest fund lands are owned by the federal state. At the same time, the RF Forest Code allows for the transfer of forest ownership to any province, but it requires that the region bear the burden of forest maintenance.

The Russian forest legislation divides all forests into three groups with respect to forest functions: the first is protected forests, the second is exploitable-protected area, and the third is exploitable forests. In Khabarovskiy Krai, the first group makes up 12.5 percent of total forest land area, the second group makes up 1.5 percent, and the third group makes up 86 percent.

The division between forest management and the forest industry is strictly preserved in the Russian forest sector. Forest management includes protection, use, and regeneration of forests, and is implemented by the state bodies known as *leskhoz*—the main units executing practical forest management. The RF Forest Code prohibits them from carrying out commercial harvesting.

The forest industry is made up of commercial enterprises, which are managed as private units, although in a number of them, the state (Federation or krai) has its share of property.

The Federal Code, however, doesn’t consider the specificity of such a diverse country as Russia. The forested provinces, including Khabarovskiy Krai, have tried to fill the RF Forest Code’s gaps by adopting local norms.

All of these rights, however, are not clearly described in Russia’s legislation, and sometimes this is the cause of conflict among counterparts.

3.3.2. Implementation of forest law in respect to PFM

According to the forest legislation, local people can acquire rights for forest use for only social needs. According to the krai decree, “On the order of small sales of standing timber” (1997), small sales of standing timber are allocated to the local population, daycare centers, schools, hospitals, and other budget organisations for personal and public needs, in order to meet local demands for timber for construction, maintenance, and home heating, as well as production and business facilities. Most of this is for firewood harvested by the general public independently and issued in the *leskhoz* via settlement administration orders for specific volumes of wood. The user is required to pay forest dues for the harvested wood, although in reduced amounts.

As far as participation in forest management, the RF Forest Code calls for citizens and public associations to participate in the rational use, guarding, protection, and reproduction of forests. Unfortunately, the code does not include any instructions at all on mechanisms, except for stating that citizens and public associations “may participate.”

¹⁹ Martinus Nanang, Kimihiko Hyakumura, Kazuhiro Harada, Makoto Inoue, Hiroji Isozaki. 2004. Community, Forest, and Policy: What makes participation work? In: White Paper of IGES. (in press).

²⁰ Phouang Parisak Pravongviengkham. 2000. “A National Advocacy for a Holistic and Decentralized Approach to Forest Management in Lao P.D.R.” In: Enters, T., Durst, P. B., and M. Victor (eds.) Decentralization and Devolution of Forest Management in Asia and the Pacific. RECOFTC Report N.18 and RAP Publication 2000/1. Bangkok, Thailand. <<http://www.fao.org/DOCREP/>>

²¹ Antonova Natalia Ye. and Sheingauz Alexander S. 2002. Forest Sector of Khabarovskiy Krai – Problems of Economy and Management in a Heavily Wooded Province of the Russian Far East. // Eurasian Journal of Forest Research. Hokkaido University Forests, EFRC, 2002. Vol. 4. p. 13–23.

The Forest Code of Khabarovskiy Krai includes a particular mechanism for citizens and legal associations to participate in forest management, but it does not describe the forms of public management themselves. The Khabarovskiy Krai's law, "On the procedure for public hearings of the project of a forest plot transfer for lease," adopted in 2001, allows for the direct and specific involvement of the public in the management of forests. Until now, however, the only example of such hearings was a wide public discussion on the formulation of the krai's Forest Code in 1999.

3.3.3. Decision-making system in respect to forest management

According to the law there are two separate branches of authority: (1) state management, consisting of the federal and provincial governments, and (2) the self-governing branch, represented by district (*raion*) or municipal governments and rural municipal formations. In reality, district governments depend financially on provincial governments; therefore, they have to follow provincial policy.

Although most forests belong to the federal state, the real allocation of forest resources is fulfilled by the krai government, including the right-of-use transfer to commercial bodies. According to the forest legislation, the rights to use forest resources, including non-timber forest resources, should be decided based on competition. Direct transfer of rights for forest use is made in the case of forest use for the social needs of the local people. Forest dues consist of payment for long-term forest resource use (lease charge) and payment for short-term forest resource use.

The RF Forest Code deprived the rights of raion administrations. This is especially true for lower-level municipalities. The Khabarovskiy Krai Forest Code tried to give some rights to raion authorities, if not in the form of decision-making power, at least in terms of coordination.

The krai office of the RF Ministry of Nature Resources has tried to deprive the krai of all the rights to dispose of resources. As a result, relations between the federal executive and krai agencies have deteriorated, even though they still have to collaborate.

One of the main collaboration bodies is the krai commission on forest use, which unites federal, krai, and

raion authorities under krai leadership. The members of the commission make joint decisions on transferring forest plots for lease on a competitive basis.

4. Characteristics of local participatory forest management in three countries

In this chapter, the characteristics of local participatory forest management in three countries are examined based on the following:

- Village action guidelines for five East Kalimantan villages (Indonesia)
- West Kutai District's Policy Guidelines for Community Participation in Forest Management (Indonesia)
- Village action guidelines and local policy guidelines for Oudomxay Province (Laos)
- Village action guidelines and local policy guidelines for Savannakhet Province (Laos)
- The Comprehensive Guidelines for Local Population Participation in Forest Management in the Southern Part of Khabarovskiy Krai (Far East Russia)

The key points for the description of local participatory forest management in Indonesia, Laos, and Far East Russia are as follows (see Table 1):

- current level of participation following the typology of participation
- focus of participatory forest management
- relationship between local people and the forest with respect to livelihood
- social groups in the community with respect to participatory forest management
- characteristics of village action guidelines (VAG)
- characteristics of local policy guidelines (LPG)

The VAGs for Indonesia and Laos are compared only, because the VAGs for Far East Russia were not elaborated due to the specific situation in forest management and the peculiarities of the decision-making process in Russia. Instead of VAGs and LPGs, comprehensive guidelines for local population participation in forest management were developed, which combine provincial, district, and village levels. Therefore, these comprehensive guidelines are compared with the LPGs for Indonesia and Laos.

Table 1. Characteristics of local participatory forest management in three countries.

	Indonesia	Laos	Russia
Main points for comparison			
1-1. Current level of participation following the typology of participation	Conciliation	From informing up to consultation, depending on the village	Information, information gathering, or consultation
1-2. Focus of participatory forest management (village or district level)	Guidelines are focused on issues of local forest management in villages of East Kalimantan.	Guidelines are focused on the main target group as local people at the village level.	Guidelines are made for all the population in the southern part of Khabarovskiy Krai, with a main focus on residents of the settlements with populations of 5,000 people and less that have a close relationship with the surrounding forest.
1-3. Relationship between local people and the forest with respect to livelihood	People in the communities depend on the forest resources mostly for their own consumption, and they also conduct logging to increase their incomes. But these are not the main source of income for them. Most community members earn their living from the plantation and farming. Although, even under these conditions, it is still indispensable for them to manage the forest.	Most of the local people get their livelihood from farming. People also depend on forest products, mainly NTFPs, for their own consumption as well as to sell. This is important especially for poor people, whose incomes depend in large part on the revenues from NTFPs, especially in bad harvest years.	The forest is not a main source of local people's livelihood. Most people of the district have incomes only in the form of wages. Income comes from forest-related activities is mainly brought about by jobs for hire at a forest enterprise. Only some individual local poor people get income from picking and selling NTFPs.
1-4. Social groups in villages with respect to participatory forest management	From the point of view of being involved in PFM, villagers can be selected from the following groups: 1. formal village head 2. customary (adat) community leader 3. religious group 4. small-scale loggers 5. women's group as main NTFP users 6. youth group	There are two stakeholders in the village: 1. the village elite group such as the village leader and village elder's group 2. the poor level villagers.	The residents of small settlements are differentiated from the point of view of being involved in PFM into the following groups (there are three evaluations of opportunity to be involved in PFM—large, not large, middle): 1. forest workers (not large) 2. businessmen of big companies and small businessmen (middle) 3. managers including community leader (large) 4. office workers (not large) 5. retired people (middle) 6. housewives (not large) 7. students of universities and colleges (not large)

Table 1. Continued

Main points for comparison	Indonesia	Laos	Russia
1-4.			8. school children (middle) 9. unemployed (not large)
1-5. VAGs			
Main goals of the village action guidelines	<p>1. VAGs aimed at helping the village community to enhance their role in the management of local forests.</p> <p>2. VAGs are useful for village decision-makers to develop village policy, programmes, and action plans in forest management.</p> <p>3. VAGs can be used by the district government to develop policies and programmes to support the participation of local people in forest management.</p> <p>4. VAGs are useful for supporting organisations and individuals, such as NGOs, academics, and others, to develop collaboration and facilitation plans.</p>	<p>1. VAGs aimed at helping village authorities to enhance their role in the management of forests.</p> <p>2. VAGs are useful for village decision-makers to develop village policy.</p> <p>3. VAGs can be applied by DAFO to develop the implementation of the policy to support the participation of local people in forest management.</p> <p>4. VAGs are useful for supporting organisations and individuals, such as foreign donors and NGOs, to develop collaboration or facilitation plans.</p>	
Main problems in village forests ²²	<p><i>Forest and forestland condition</i></p> <ul style="list-style-type: none"> - Rapid degradation of forest due to fires, agriculture, and logging. - Existing forests are prone to fires. - Concentration of agricultural activities may cause over-exploitation of land. - Boundary disputes difficult to settle. - Illegal logging and illegal encroachment by other villages. <p><i>Forest related village economy</i></p> <ul style="list-style-type: none"> - The forest is not the main source of income for the majority of people. - Destruction of forest reduces the complementary income from it. - There has never been considerable management of forest so as to integrate it with 	<p><i>Land use and border issues</i></p> <ul style="list-style-type: none"> - Villagers in the north have insufficient land for swidden agriculture. - Intrusion of village boundaries by adjacent villagers to conduct swidden agriculture because of lack of agricultural land. - Village boundaries were demarcated without respecting the customary village borders at the time of land forest allocation. - Exhaustive cycle of land use and declining soil fertility. <p><i>Livelihoods</i></p> <ul style="list-style-type: none"> - Feasible income-generation opportunities are limited, keeping villagers living at the 	

²² VAGs for Laos include not only problems to be solved but also good examples of PFM, which are considered in the VAGs as actions for application by other stakeholders. Good examples are included in the current analysis as actions.

Table 1. Continued

Main points for comparison	Indonesia	Laos	Russia
<p>1-5. Main problems in village forests</p>	<p>other agricultural activities to boost the people's income.</p> <ul style="list-style-type: none"> - Pressure on forests can be minimized by successful practice of sedentary agriculture. - Small-scale logging benefits a small number of community members. <p><i>Village institutions</i></p> <ul style="list-style-type: none"> - Contested customary laws due to the changes in ecological and social-economic conditions. - Lack of organised activities. Many village authorities do not have the capacity to organise their people. - Lack of participation of women in community decision-making. <p><i>Government policy</i></p> <ul style="list-style-type: none"> - Restriction of villagers' access to forest due to concessions given to companies. - Policy does not secure enduring access to land and forest. - No formal recognition of existing customary forest management practices. - Rapid and frequent change in policy on small-scale logging causes confusion among villagers. - Lack of facilitation from the administration to solve boundary disputes among villages. - Information dissemination of government policy is lacking and usually does not reach the majority of people. 	<p>subsistence level.</p> <ul style="list-style-type: none"> - A widening gap in the living standard may become an obstacle to collective actions and undermine the foundation for participatory activities. <p><i>Institutions (regulations, management systems, decision-making)</i></p> <ul style="list-style-type: none"> - A benefit from trading of marketable NTFPs is distributed only among some of the concerned local people. - The villagers don't have rights to develop rules for forest management in the community forest based on customary law. - Un-permitted use of forest by other villages has led to the degradation of the forest and forest products. <p><i>Human relations (social capital)</i></p> <ul style="list-style-type: none"> - Not all the villagers, including the poor, can participate in government paddy-field expansion programmes without external and government financial and information support. - Ethnic minorities living in the conservation area have few opportunities to receive administrative services because of the long distance from the district center. - Villagers have limited channels to voice their needs and receive support from DAFO. - Some poor households are excluded from participatory decision-making processes of NTFP collection and management. 	
<p>Guideline measures/actions</p>	<p><i>Forest and forestland</i></p> <ul style="list-style-type: none"> - Preventing forest fires - Reforestation and afforestation - Setting up protected forest 	<p><i>Land use and border issues</i></p> <ul style="list-style-type: none"> - Land shortages can be alleviated by making rules on borrowing land by villagers from other villagers or from com- 	

Table 1. Continued

Main points for comparison	Indonesia	Laos	Russia
<p>1-5. Guideline measures/actions</p>	<ul style="list-style-type: none"> - Village/land delineation - Land use planning - Dispute settlement <p><i>Forest-related village economy</i></p> <ul style="list-style-type: none"> - Grow high-economic value trees. - Practice the <i>taungya</i> model of integrating forestry and agricultural activities. - Develop forest-based eco-tourism. - Develop/enhance sedentary agriculture to reduce pressure on forests. <p><i>Village institutions</i></p> <ul style="list-style-type: none"> - Review the customary law and, if necessary, develop new rules. - Improve village leadership capability and management capacity. - Settle internal village conflicts. - Coordinate with neighboring villagers. <p><i>Government policy</i></p> <ul style="list-style-type: none"> - Propose to the concessionaire to allow land use access within the concession area. - Communities to be proactive in communicating with the government. - Make proposals to the government to get recognition of customary forest management such as in the <i>tana ulen</i>. - Improve the village information system. 	<p>munity land.</p> <ul style="list-style-type: none"> - At the inter-village level, land leasing should be negotiated between villages. - Inter-village agreements should be made to avoid village border conflicts. - To put the religious events as official village regulation in statutory form in order to restrict the use of spiritual forest. <p><i>Livelihoods</i></p> <ul style="list-style-type: none"> - Alternative income-generating activities should be sought for the villagers. - Put customary regulation of marketable forest products in statutory form. - Give assistance to villagers to learn good practices of successful livelihood-enhancing forest management. - Include objectives in forest management initiatives that are closely related to the daily needs of villagers in order to motivate them and encourage their participation. - Make special agreements so that the poor and the vulnerable can participate in land and forest allocation (LFA) or forest management, and benefit from these initiatives. <p><i>Institutions (regulations, management systems, decision-making)</i></p> <ul style="list-style-type: none"> - A mechanism should be established to ensure the financial sustainability of villagers by managing the benefits from forest management in the interest of the village. - Establish a participatory decision-making body through regular meetings, where all the households make decisions collec- 	

Table 1. Continued

Main points for comparison	Indonesia	Laos	Russia
<p>1-5. Guideline measures/actions</p>		<p>tively.</p> <ul style="list-style-type: none"> - Specify clearer the forest resources regulated by villagers, especially valuable NTFPs, and establish monitoring systems for effective implementation of rules. - Continue to obey the taboo of not collecting forest products in the rainy season to ensure the sustainable use of NTFPs. <p><i>Human relations (social capital)</i></p> <ul style="list-style-type: none"> - Provide the project information to all villagers including the poor. - Promote administrative service for every kind of ethnic group by building a relationship of mutual trust with DAFO. - Provide more frequent visits of DAFO staff to villages, with an emphasis on remote villages. - Organize training for DAFO staff with the aim of offering technical support to villages. - Mutual learning among villages should be encouraged to improve sustainability. - In new forest management projects, existing social capital should be examined and used to promote other common activities. 	
<p>Main target group (actor) for participation in forest management at the village level</p>	<p>There are three main groups of village decision-makers who can be considered as main actors for PFM:</p> <ol style="list-style-type: none"> 1. formal village head 2. customary (<i>adat</i>) leader of community 3. village parliament 	<p>The main actors are:</p> <ol style="list-style-type: none"> 1. village leader 2. elder's group <p>with some consultation from local officials.</p>	
<p>1-6. Characteristics of the local policy guidelines</p>	<p>The West Kutai District Policy Guidelines for Community Participation in Forest Management were developed as an outcome of the Indonesian studies.</p>	<p>The local policy guidelines were prepared both for north and south areas of Laos, namely, for the Park Beng district of Oudomxay Province and the Phou Xang He</p>	<p>The Comprehensive Guidelines for Local Population Participation in Forest Management in the Southern Part of Khabarovskiy Krai were elaborated as an outcome of the</p>

Table 1. Continued

Main points for comparison	Indonesia	Laos	Russia
1-6.	National Biodiversity Conservation Area of Savannakhet Province.	Russian studies.	
Main goals of the guidelines	<p>There are three purposes of the LPGs:</p> <ol style="list-style-type: none"> 1. To guide the district government in supporting the implementation of the VAGs in promoting community participation. 2. To give input to the third parties to support the implementation of the VAGs. 3. To support the district government in achieving its Forestry Development Vision and exercising its Strategic Forestry Programmes. 	<p>The main objectives of the LPGs are:</p> <ol style="list-style-type: none"> 1. To support local authorities in conducting local forest management using the participatory approach. 2. To support the village authorities in enhancing their role regarding forest management at the village level through implementation of actions taken by local officials and other external stakeholders. 	<p>The guidelines were developed in accordance and in combination with existing krai government and public programmes on the involvement of local people in PFM. The purpose of the guidelines is to investigate the obstacles hindering the process of involvement of local people in forest management and to recommend to the krai and self-governing bodies ways to overcome them.</p>
Main problems at the district level	<p><i>Recognition of local community rights and culture</i></p> <ul style="list-style-type: none"> - Insecure access, control, and ownership of the villagers of the forest resources, especially in potential conflict areas such as in areas rich in coal mines and in plantation areas. - The common view among government officials and other parties that the local people are ignorant and backward and need to be taught and developed. <p><i>Social capital and community organising</i></p> <ul style="list-style-type: none"> - The weakness of customary law in protecting the forests. - The absence of written customary village regulations about forest management and the extraction of the surrounding forest resources. - Lack of village administration's attention to forest fires and excessive forest exploitation problems. - Lack of women's participation in decision-making. - Weak control mechanisms for decision-making in the village. 	<p><i>Land use and border issues</i></p> <ul style="list-style-type: none"> - Weak implementation of forest policy by local officials because of an insufficient number of capable staff and limited budget for implementation and monitoring. - The relocation plan has not been well prepared and managed. - As a result, many families returned and continued to practice shifting cultivation in areas where it has been prohibited, because they don't have any alternative to produce their livelihood. <p><i>Human relations (social capital)</i></p> <ul style="list-style-type: none"> - Not all villagers, especially the poor, can participate in government programmes and projects because of lack information about these projects and shortage of labour. - Villages located far from the center of the district have difficulties in receiving administrative service from DAFO staff because of their limited time and financial resources. - Ethnic minorities living in the conserva- 	<p><i>Legal</i></p> <ol style="list-style-type: none"> 1. Legal documents supporting the rights of local population to participate in forest management do not exist practically. 2. The forms and methods of participation and the rights and responsibilities of the participants are not stipulated. 2. Instability of normative-legal acts as well as non-observance of them by officials. 3. Problems with forest use by indigenous people in the frames of traditional nature use are caused by vagueness of normative acts related to the status of territories of traditional nature use (TTU) as well as the rights of native communities for TTU management. <p><i>Institutional</i></p> <ul style="list-style-type: none"> - The sharp decrease of administrative rights from the top to low levels, especially at the district and community levels. - The long re-organisation of forestry management structure and current unstable status of the leskhozoes, which are the main bodies for the citizens of forest set-

Table 1. Continued

Main points for comparison	Indonesia	Laos	Russia
<p>1-6. Main problems at the district level</p>	<ul style="list-style-type: none"> - Insufficient capability of staff of the district government to support community organising. <li style="padding-left: 20px;"><i>Community access to information</i> - The general public does not consider access to information as an important civil right. - The district government lacks forestry data. - Lack of multimedia information facilities that can be used by the government and by the public. - Government offices have not been active in gathering information from the public. - Information that is passed from the public to the government is often being responded to sluggishly. <li style="padding-left: 20px;"><i>Value and critical education</i> - Lack of government awareness of the importance of value education for the community members and for themselves. - No focused and organised value education at the district level in the field of the environment. <li style="padding-left: 20px;"><i>Social control and law enforcement</i> - Weak control over the forest concessionaires, especially in fulfilling their duty to conduct the Community Development Programme. - The lack of local participation in reforestation projects because of the weakness of local government control. - The insufficient competence of community members to enforce laws and regulations. <li style="padding-left: 20px;"><i>Conflict prevention and resolution</i> - Village boundary conflicts and the question of whether the adat forest is the same as the 	<p>tion area have little opportunity to receive administrative services because of the long distance from the district center and difficult access, especially in the rainy season.</p> <ul style="list-style-type: none"> - The information about district forest policy is limited in rural villages; therefore the local people don't well understand the land and forest use plan. 	<ul style="list-style-type: none"> - tlements to participate in forest management. - The lack of mechanisms that encourage the population to participate in forest management. - The relationship between the local authority and small forest businesses is weak. <li style="padding-left: 20px;"><i>Financial</i> - Low proper income of district budgets as well as the practically complete absence of financial means for rural municipal formation (RMF). This fact weakens the real power of the district heads and rural administrations. - Lack of practices in allocating money for involving the population in forest management at any budget level. <li style="padding-left: 20px;"><i>Communication and information</i> - The population's possession of real information on the situation in the forest sector is very low. - Not all the small rural settlements are provided with modern means of communication, even telephones, which makes modern methods of information dissemination unaffordable. - Underdeveloped road networks as well as a lack of regular transport routes to a number of remote communities are obstacles to bringing together people to discuss the issues of forest management. <li style="padding-left: 20px;"><i>Social</i> - The forest is not a main source of the local people's livelihood. That is why the forest management problems are not as

Table 1. Continued

Main points for comparison	Indonesia	Laos	Russia
<p>1-6. Main problems at the district level</p>	<p>village forest. Is the adat forest similar to the forest that is considered as the property of the people descended from one owner/ancestor?</p> <ul style="list-style-type: none"> - The conflict between the community and a company still exists because of the community forest expropriation by the company, which obtained a forest concession from the central government. - The government has not properly functioned in solving the boundary conflicts between villages. <p><i>Village economic development</i></p> <ul style="list-style-type: none"> - The forest management activities are not the major economic activities, because most of the villagers earn their living from plantations and farming. - In the villages with community logging activities, only particular groups get large profits, while the rest of the villagers get only small fees. - The community members focus more on economic profits rather than forest resources conservation. - The dilemma between the immediate need for subsistence and the demand for long-term reforestation has not been solved by the community. 		<p>high a priority for the population.</p> <ul style="list-style-type: none"> - Public passiveness of the population, which is caused by a loss of trust in authorities. - Social dependence cultivated during the Soviet era. - Preserving of outdated thinking under new socio-economic and ecological conditions, which is peculiar to old people as well as some officials. - The population's alienation from forest management over many years caused the people to not want to take care of the forest. They consider that in reality only private firms get all the benefits from the forests. - The unpromising situation in a number of depressed settlements is also regarded as a social obstacle. - Complicated relations among forest users and forest holders, among large and small firms, as well as among firms and the population. Social tension in the forest sector hinders the involvement of the local population in forest management. - Loss of hunting skills and the adoption of national cultural behaviors by younger generations, in which forests and forest products don't play an important role, influence the forest use of indigenous people.
Main guideline measures / actions	<p><i>Recognition of local community rights and culture</i></p> <ul style="list-style-type: none"> - Find the way to secure people's access and ownership of forest under the district ordinance; involve them in decisions that will have an impact on them; and mediate for them in negotiating with the central gov- 	<p><i>Land use and border issues</i></p> <ul style="list-style-type: none"> - The local authority should continue to request the central authority to increase its budget and provide more technical staff to the district. - A proper relocation plan should be made before making and implementing deci- 	<p><i>Legal measures</i></p> <ul style="list-style-type: none"> - Include articles on mechanisms and forms of the population's participation in forest management into federal and krai laws related to forests. - Initiate adoption of a new law on associations of small forest businesses and the

Table 1. Continued

Main points for comparison	Indonesia	Laos	Russia
<p>1-6. Main guideline measures / actions</p>	<p>ernment.</p> <ul style="list-style-type: none"> - Strengthen the people's rights to forest in any ordinance issued by the district. <p><i>Social capital and community organising</i></p> <ul style="list-style-type: none"> - Promote and facilitate community organising at the village level in order to strengthen the village structure as a whole, prepare village regulations in natural resource management, and cooperate with other villages. - Improve district field officials' capacity and skill in community organising. - Allocate funds for community organising programmes. <p><i>Community access to information</i></p> <ul style="list-style-type: none"> - Build up public awareness of their rights to information. - Provide reliable data. - Promote information disclosure, especially that related to the public's interest and public finances. - Sanction those who hinder the community's access to information. - Establish and maintain information channels for information delivery from the public to the government and vice versa. <p><i>Value and critical education</i></p> <ul style="list-style-type: none"> - Raise the awareness of the ecological, social, cultural, and spiritual values of the forest. - Raise the awareness of the forest and environmental crises. - Form the vision of good forest management. 	<p>sions.</p> <ul style="list-style-type: none"> - Reflect the customary regulations on spiritual forest in the land use plan in the LFA process. - Utilize the concept of spiritual forest in the other type of conservation forest - In the LFA process, local people's intentions can be reflected in the land and forest use plan and map. - The manual for the LFA should be simplified for clearer understanding. - DAFO should demarcate or re-arrange village areas according to population and the need for food security based on results of the LFA evaluation. <p><i>Livelihoods</i></p> <ul style="list-style-type: none"> - Create an agreement about forest management, as well as support the local people's customs. - Recognise the customary regulations about forest products established by two neighboring villages as a useful forest management system, and accept it in the land use plan. <p><i>Institutions (regulations, management systems, decision-making)</i></p> <ul style="list-style-type: none"> - Recognise the customary use of forest products in the rainy season, and approve it as a useful forest management system. <p><i>Human relations (social capital)</i></p> <ul style="list-style-type: none"> - Create an information communication system of rural development projects for the local people. - Make a project that deals with the participation of villagers who have insufficiency of labour and less opportunity. 	<p>forms of their cooperation with authorities and the population in forest management.</p> <ul style="list-style-type: none"> - Make more precise the federal law on the territory of traditional use (TTU) concerning the rights of the indigenous people, and adopt krai law in the TTUs. - Develop amendments to the RF Forest Code to clarify jurisdiction, power, and responsibilities of municipal authorities in the sphere of forest management. <p><i>Institutional measures</i></p> <ul style="list-style-type: none"> - Develop special measures on support and development of small forest businesses. - Search for new niches of activities for small forest businesses, i.e., the use of low-quality wood raw material, production of goods from NTFPs, eco-tourism, etc. - Develop economic activities carried out in TTU in the settlements with a large share of the indigenous people. <p><i>Financial measures</i></p> <ul style="list-style-type: none"> - Include target items into the expenditure parts of krai and district budgets to finance the involvement of the local population in forest management. - Search for additional funds in the shape of grants and sponsors' donations to realise measures on involvement of the population in forest management. <p><i>Informational measures</i></p> <ul style="list-style-type: none"> - Develop and implement programmes of interactive informing of the population about the krai forest sector via the mass media by organising lectures and presen-

Table 1. Continued

Main points for comparison	Indonesia	Laos	Russia
<p>1-6. Main guideline measures / actions</p>	<p><i>Social control and law enforcement</i></p> <ul style="list-style-type: none"> - Create channels for social criticism and sanctions for law violation. - Create a complaints mechanism. - Formulate regulations on external financial contributions to government institutions and individual officials. - Consider the people's "notion of justice" policy. - Develop logging control mechanisms. - Develop control mechanisms on reforestation projects. - Create a mechanism for environmental impact assessment (EIA) of forest concession operations or other logging activities. <p><i>Conflict prevention and resolution</i></p> <ul style="list-style-type: none"> - Land should be delineated through participatory mapping, and the District Land Use Master Plan should be concluded, acknowledging customary rights. - Clarify the notion of adat forest in the Basic Forestry Law and the notions of the village forest and genealogically based forest ownership. - Create a conflict resolution mediation team consisting of all parties concerned. - Establish a mechanism to address community complaints. - Promote "collaborative forest management" or a "joint use area" in disputed forest areas. <p><i>Village economic development</i></p> <ul style="list-style-type: none"> - Formulate regulations to allow equal opportunities for all villagers to benefit from forest resources. - Introduce incentives in the form of suffi- 	<ul style="list-style-type: none"> - Make a plan to supply administrative services to remote villages and make the budget allocation for achieving this. - Make considerations for building a relationship of mutual trust with local people. - The district authority should request NGOs and foreign donors to provide technical assistance to improve its capacity and develop new alternative solutions to protect the forest and improve the living standards of rural people. 	<p>tations, round tables, and so on.</p> <p><i>Social measures</i></p> <ul style="list-style-type: none"> - Develop and implement long-term programmes to increase public activity. - Develop special programmes to involve the population in forest management. - Organise and hold public hearings on projects related to the use of forest resources. - Carry out public environmental assessments of developed projects with the purpose of using the results for the state assessment. - Conclude "agreements of social responsibility" with forest firms and associations with municipal administrations at the same time as permitting use of local forest resources. - Establish working groups of the local population and organise their dialogue with forest users, the krai, and federal forestry officials. - Support NGOs involved in forest management. - Carry out contests for the best organisation in involving the population in PFM, and grant money to the winners for further development. <p><i>Educational</i></p> <ul style="list-style-type: none"> - Establish educational groups, including residents of different ages, willing to participate in forest management, and develop training courses targeted at interactive methods. - Develop special programmes and lesson plans about forest issues for schools.

Table 1. Continued

Main points for comparison	Indonesia	Laos	Russia
<p>1-6. Main guideline measures / actions</p>	<p>cient long-term funding for reforestation activities to villages that are institutionally capable of managing the funds in a responsible way.</p> <ul style="list-style-type: none"> - Find ways to exercise inexpensive reforestation activities, managed by the community members, without waiting for large external funding. - Promote efforts to increase the production and protection of NTFPs. - Support the integration of farming activities and forest management. - Secure the long-term rights of the community to forest and land, particularly the assurance that a particular right will not be spoiled by other economic activities, such as land overlapping allocation for large enterprise activities. 		<ul style="list-style-type: none"> - In the schools of settlements with a high share of indigenous people, develop special programmes to teach traditional forest use, especially hunting and fishing, along with biodiversity conservation. - Develop a system of informing through lectures, first of all via the mass media. - Publish information materials on the forest sector and forest management. - Organise public schools for teaching the local population, especially representatives of indigenous communities, on the principles of small forest business.
Main stakeholders of PMF at the district level	The main stakeholders are the West Kutai District government and third parties such as business enterprises, NGOs, and academics.	The main stakeholders are the District Agriculture and Forestry Office (DAFO) and the Provincial Agricultural and Forestry Office (PAFO) in the provinces of Savan-nakhet and Oudomxay. In addition, other sectors of local officials related with land and forestry (tax section and local administration) should be involved.	The main organisers of involvement of the local population in forest management are the Ministry of Natural Resources of the krai government, the administrations of the raions and rural municipal formations (RMF), as well as NGOs, including associations of indigenous communities.

5. Commonalities and differences between studies

In this chapter, the results of the studies conducted in Indonesia, Laos, and Far East Russia are analysed. The

differences and commonalities of these countries' characteristics are selected following the analytical framework (Table 2).

Table 2. Differences and commonalities between studies on PFM in Indonesia, Laos, and Far East Russia.

Commonalities	Differences
<i>The basic conditions for forest management</i>	
<p>1. According to the basic laws in each country, state ownership of forest land is predominant.</p>	<p>1. According to the law, there is private forest in Indonesia, but its share is very small. Nevertheless, theoretically, some potential legislative possibility may be given for community forest to be transferred to proprietary forest.</p>
<p>2. The classification of forest lands with respect to functions are similar in Indonesia and Russia in general. In Russian classification, protected forest lands are divided into 20 sub-groups, including several sub-groups of forests that provide conservation functions. The exploitable group of forests has the same functions as the production forests in Laos and Indonesia.</p> <p>The forests in Laos and Indonesia are tropical forests.</p>	<p>2. The classification of forests in Laos includes forest land that can be allocated to individual households, which is degraded forest or barren land.</p> <p>The forests in Far East Russia are boreal forests.</p>
<p>3. Community forests exist in Indonesia and Laos in practice, although formally the forests are under state ownership. Among forest-dependent communities both formal forest law as well as customary law is simultaneously in use in Indonesia and Laos.</p>	<p>3. There are no community forests and no customary law officially recognised in Russia.</p>
<p>4. Indonesia, Laos, and Russia are all in a transition period now, although this process has just begun in Laos. There are two branches of authority in Indonesia and Russia: (1) state management consisting of central (federal) government and provincial governments, and (2) regional autonomy (self-governing in Russia) represented by district or municipality governments and village (rural municipal formation in Russia) heads. Relationships between central and local governments have similar features in both countries.</p> <p>In Russia in the beginning of the 1990s, both provincial and district governments were allocated wide rights to manage forest resources. The same process related to district authority is going on in Indonesia. At the end of the 1990s the Russian federal government started the opposite process to deprive the local governments step-by-step of their authority, including forest resources allocation rights. Symptoms of the same process are now emerging in Indonesia.</p>	<p>4. There is state forest management only in Laos. The regional autonomy being enacted in Indonesia means strengthening of district and municipal authority and independence.</p> <p>According to Russian legislation, municipalities and districts are formally independent, but they are financially dependent on provincial governments.</p> <p>Hence, in terms of PFM, Indonesian district governments have the greatest authority to manage this process based on main legislative acts. As for Russia, in reality, the provincial governments act as the main actors for PFM, keeping to principal legislative frameworks. In the case of Laos, the central government determines forest policy mainly for all levels of authority.</p>
<p>5. Top-down decision-making processes are very strong in Russia and Laos. Therefore, the Russian comprehensive guidelines are elaborated following this approach in order to be demanded from local government. The Laos guidelines are also based on the top-down approach.</p>	<p>5. Democracy is a basic feature of the political process in Indonesia, and the development of local forest management is now one of the priorities of state forest policy.</p>

Table 2. Continued

Commonalities	Differences
<i>The basic conditions for forest management</i>	
6. Illegal logging is big problem in Indonesia and Far East Russia. This is a kind of consequence of the transition process.	6. Illegal logging has not occurred on a large scale in Laos, at least not in the target research areas.
<i>Focus of participatory forest management</i>	
The main focus of participatory forest management is on the village level in all three countries.	As for Russia, citizens of large cities and medium-size towns are also included as recipients of the guidelines.
<i>Relationship between local people and the forest with respect to livelihood</i>	
The forest is not a main source of local people's livelihood in all three countries. Nevertheless, they use forest resources as supplementary sources of income and materials.	Agricultural activities conducted by villagers are connected more closely with the forest in Indonesia and Laos.
<i>Social groups in villages with respect to PFM</i>	
Social groups selected from the point of view of being involved in forest management in each country include one common actor, which is the community leader(s). In Indonesia and Russia two similar groups can be identified: small-scale loggers (Indonesia) and small businessmen (Russia). Also, the housewives' group in Russia and the women's group in Indonesia are similar.	Russian classification includes nine groups, while the Indonesian classification consists of six groups, and the Laotian one includes only two groups with one sub-group. Russian classification also contains evaluations of opportunity to involve different social groups in PFM.
<i>Village action guidelines in Indonesia and Laos</i>	
1. VAGs for Indonesia and Laos have similar goals.	1. Laotian VAGs include not only problems to be solved but also good examples of PFM, which are considered as actions to improve forest management in the target areas and can be applied by other stakeholders as lessons.
2. There are four similar main groups of problems in villages in both Indonesia and Laos, even though the names of these groups are a bit different: "forest and forest land condition" (Indonesia)/ "land use and border issue" (Laos); "forest related village economy" (Indonesia)/ "livelihood" (Laos); "village institutions" (Indonesia)/ "institution" (Laos); "government policy" (Indonesia)/ "human relations" (Laos). The last group includes issues of relationships between villagers and officials mentioned in both of the VAGs for Indonesia and Laos.	2. Each group of problems consists of specific issues reflecting local peculiarities related to selected problems.
3. <i>Forest and forest land/land use and border problems</i> include three common ones for both country's issues, namely, overexploitation of land due to agricultural activities, encroachment by other villages, and village boundaries demarcation issues.	3. Forest fires and illegal logging are big problems in Indonesia, while in Laos the most important issue is lack of suitable agricultural land.
4. As for <i>village economy/livelihood problems</i> common in the two countries, they could be defined as lack of diverse income-generation activities to boost people's revenues and reduce pressure on the forest.	4. For Indonesia, unequal distribution of benefits from small-scale logging at the village level is also an important issue. In Laos, a similar issue exists, namely, unequal distribution of benefits from NTFPs, which is included in <i>institution problems</i> .

Table 2. Continued

Commonalities	Differences
<i>Village action guidelines in Indonesia and Laos</i>	
5. There are no common issues in <i>village institutions/institutions</i> .	5. As for the <i>village institutions</i> group in Indonesia, the contesting of customary laws due to changes in ecological and socio-economic conditions is a distinctive feature of village institution problems. In Laos, the notable <i>institutions</i> issue is the un-permitted use of forests by other villages, which has led to the degradation of forests and forest products.
6. Common in the two countries issues in <i>government policy/human relations</i> could be formulated as lack of information from the government related to district policies and programmes for villagers. One more issue that is common in the two countries is no formal recognition of existing customary forest management and absence of rights for villagers to use these customary rules, although in the VAGs for Laos this issue is included in the <i>livelihood</i> group.	6. For Indonesia, restriction of villagers' access to forests due to concessions for companies is one important issue. In Laos, exclusion of poor villagers from participatory decision-making processes and lack of administrative service for remote areas are notable problems.
7. There are four main similar groups of measures to solve the village problems in both Indonesia and Laos, which follow selected groups of problems.	7. Each group of measures consists of specific actions to reflect local peculiarities. Moreover, as mentioned above, in the Laotian VAGs good examples of PFM in some villages are included as actions for application by other stakeholders.
8. There are no common measures to solve <i>forest and forest land condition/land use and border</i> problems.	8. As for offered measures to solve <i>forest and forest land condition/land use and border problems</i> , they are quite different for Indonesia and Laos. Those offered in the VAG measures for the community people in Indonesia have wide opportunities and willingness to manage community forests, including setting up protected forest, village and land delineation, land use planning, and dispute settlement. The guidelines for Laos offer measures to alleviate the land shortage through land-leasing agreements both at the intra-village and inter-village levels, including restricting the use of spiritual forest by making the religious rules into official village regulations in statutory form.
9. <i>Forest related village economy/livelihood measures</i> are focused on the similar goal of extending income-generation activities of villagers to increase their living standard.	9. In the VAGs for Indonesia, the actions that are supposed to solve these problems are mainly for the villagers themselves by offering them new directions of income-generation activities such as growing high-economic value trees, integrating forestry and agricultural activities based on customary rule, and developing eco-tourism and sedentary agriculture. In Laos, most actions are supposed to be realised by the wide participation of local officials or other outsiders. The villagers are considered as recipients of these actions. The search for new income-generation activities is proposed only in the VAGs.
10. Measures to solve the <i>village institution</i> problems include actions aimed at improving intra-village relationships in both Indonesia and Laos.	10. As for solving the village institution problems, different actions are supposed to be used in Indonesia and Laos. The VAGs for Indonesia include the review of customary law, improving village leadership capabilities and management capacity, and settlement of internal vil-

Table 2. Continued

Commonalities	Differences
<i>Village action guidelines in Indonesia and Laos</i>	
	<p>lage conflicts. The VAGs for Laos offer detailed mechanisms and forms to establish participatory relationships by managing the benefits from forest resources in the interests of the village.</p>
<p>11. Measures for solving <i>government policy/ human relations</i> problems are aimed at making the relationship between local government and community people more tied together and open both in Indonesia and Laos.</p>	<p>11. The VAGs for Indonesia offer to make a proposal to the government to get recognition of customary forest management. As for Laos, the actions are aimed at providing training programmes for local officials to provide technical support to villages, because the top-down approach is peculiar to this country. In addition, mutual learning among villages is supposed to be encouraged.</p>
<p>12. Formal village leaders are ones of the main actors for PFM at the village level both in Indonesia and Laos.</p>	<p>12. Customary village leaders and village parliaments have strong power in Indonesia, while in Laos the elder's group is one of the main actors of decision-making with consultation from local government.</p>
<i>Local policy guidelines for Indonesia, Laos, and Far East Russia</i>	
<p>1. The main goals of the LPGs are similar in general for the three countries, because they are aimed at supporting local government and third parties in involving local people in participatory forest management through investigating obstacles in this process and offering ways to overcome them.</p>	<p>1. The guidelines for Russia and the LPGs for Laos were developed for the province as well as the district level, while the LPGs for Indonesia are elaborated for the district level only. One of the goals of the LPGs for Indonesia is to support local governments in realising their forestry programmes. One of the goals of the LPGs for Laos is to help the village authorities enhance their role in the management of forests through implementation of actions by outsiders.</p>
<p>2. There are two similar groups of problems in the Indonesian and Russian classifications: (1) <i>communication and informational</i> (Russia)/ <i>community access to information</i> (Indonesia); and (2) <i>legal</i> (Russia)/<i>recognition of local community rights and culture</i> (Indonesia). A similar group of problems can also be selected in the LPGs for Laos and Indonesia: <i>social capital and community organising</i> (Indonesia)/<i>human relations (social capital)</i> (Laos). However, there are no common issues in these groups.</p>	<p>2. The guidelines for Russia include five groups of problems for the involvement of the local people in forest management. The guidelines for Indonesia include seven groups of problems, while the LPGs for Laos have two groups. Each group of problems consists of several issues, and some of these issues are similar, although they are combined in groups in different ways in the Indonesian, Lao-tian, and Russian classifications, depending on authors' interpretation.</p>
<p>3. The <i>communication and informational/ community access to information</i> group contains similar issues. In the guidelines for Laos, we have also selected two informational issues, even though they are included in different groups of problems. Thus, the common informational problems in the three countries are as follows:</p> <ul style="list-style-type: none"> – The population's access to information about the forest policy of the local government and the situation in the forest sector is limited by officials. – Lack of information facilities, especially modern means of communication. – Undeveloped transportation service and bad roads hinder people in remote areas from getting timely information. 	<p>3. Besides, in the LPGs for Indonesia, lack of data about forestry in the district government and the passiveness of officials in gathering this information from the population are issues that need to be solved. The LPGs for Laos select as a very important issue the lack of information in villages about government aid programmes and projects for supporting local people.</p>

Table 2. Continued

Commonalities	Differences
<i>Local policy guidelines for Indonesia, Laos, and Far East Russia</i>	
<p>4. We could not select other common groups of problems and common <i>issues</i> in these groups. Nevertheless, it is possible to formulate other similar <i>issues</i> for the three countries regardless of their location in different groups of problems. These are as follows:</p> <ul style="list-style-type: none"> – Lack of community (aboriginal community's) rights to forest land (Indonesia and Russia) – The forest is not the main source of local people's livelihood. That is why the forest management problems are not as high a priority for the population (Indonesia and Russia). – Weak implementation of forest policy by local officials because of insufficient staff capability (Indonesia and Laos) and limited budget for implementation (Laos and Russia). – Conflicts between local people and logging companies, small loggers, and big logging companies in respect to getting benefits from the forest (Indonesia and Russia). – Lack of mechanisms to encourage the population to participate in forest management (Indonesia and Russia). – Weak control over logging companies, especially in fulfilling their duty to conduct community development programmes (Indonesia and Russia). – There is no formal recognition of customary village regulations on forest management (Indonesia and Laos). 	<p>4. In addition to the common issues for the three countries, there are specific issues highlighted in each set of guidelines.</p> <p>The guidelines for Russia pay considerable attention to the lack of legal documents and mechanisms to involve local people, especially indigenous communities in participatory forest management. Also, one of the big problems is public passiveness and the social dependence of the Russian people because of the long-time influence of totalitarian ideology.</p> <p>The LPGs for Indonesia are directed mostly at highlighting the village boundary conflicts (triggered by adat forest issues) and the lack of women's participation in decision-making. They also pay attention to the biased opinion among officials and other parties that local people are backward and in need of development.</p> <p>The LPGs for Laos are aimed at showing the problems in the relationship between local government and villagers with respect to PFM.</p>
<p>5. The guidelines for each country elaborate a structure of <i>measures</i> to involve people in PFM according to the structure of problems selected above. Each group of measures contains several actions.</p>	<p>5. The guidelines for Russia include six groups of measures to involve local people in PFM, plus one more <i>educational</i> group.</p> <p>The structure of the measures developed in the LPGs for Indonesia is the same as the structure of problems and includes seven groups.</p> <p>In the LPGs for Laos four groups of measures are selected, even though there are only two groups of problems. Two additional groups, namely <i>livelihood and institution</i>, include actions based on good examples of PFM in some villages.</p> <p>Actions are combined in groups in different ways depending on authors' interpretation.</p>
<p>6. It is possible to find and formulate common <i>actions</i> in each set of guidelines:</p> <ul style="list-style-type: none"> – Develop programmes of interactive education of the population and a rural information communication system on forest management (Indonesia, Laos, and Russia). – Strengthen people's (indigenous communities) rights to forest use in legal acts (Indonesia and Russia). – Form awareness of the ecological, social, and cultural values of the forest among local people, especially indigenous people, through development of special edu- 	<p>6. Even though it was possible to define similar actions for the three countries, most of them are rather <i>specific</i> to each country, because these actions have been developed taking into account each country's peculiarities in legislative and administration systems.</p> <ul style="list-style-type: none"> – The guidelines for Russia pay attention to developing legal instruments to involve local people, including indigenous communities, in PFM and to support the development of small forest businesses in communities. Several measures of the guidelines include the development of special local government programmes to

Table 2. Continued

Commonalities	Differences
<i>Local policy guidelines for Indonesia, Laos, and Far East Russia</i>	
<p>cational programmes (Indonesia and Russia).</p> <ul style="list-style-type: none"> – Allocate money in the local government budget for visiting remote areas as well as for providing involvement of the population in PFM and for community organising programmes (Indonesia, Laos, and Russia). – Improve district officials' capacity and skills in community organising (Indonesia and Laos). – Develop logging control mechanisms through public hearings on projects related to the use of forest resources (Indonesia and Russia). – Create a mechanism of public environmental assessment of logging projects and use the results for government analysis (Indonesia and Russia). – The customary forest use regulation for villages can be reflected in the land use plan by the local government (Indonesia and Laos). 	<p>increase public activity, using different methods of involving local people not only in PFM but also in public life.</p> <p>Measures in the LPGs for Indonesia are aimed mostly at acknowledging community rights and to prevent conflicts connected with land use. They also pay considerable attention to developing social control mechanisms.</p> <p>The guidelines for Laos pay considerable attention to elaborating measures for acknowledgement of customary regulations in formal law and to create good relationships between local people and local officials.</p> <ul style="list-style-type: none"> – The guidelines for Laos and Russia are based on national laws, while the LPGs for Indonesia are based mostly on district legislation. For example, the guidelines for Indonesia offer to elaborate the district legal laws in respect to acknowledging community rights to forest use, while the guidelines for Russia are aimed at developing amendments to the federal and provincial laws because of the specific legislative system in Russia. – The guidelines for Indonesia were constructed mostly based on feedback between local government and the community, while the guidelines for Russia and Laos were developed with the top-down direction of sending information in mind, which reflects the peculiarities of decision-making processes in these countries.
<p>The main stakeholders of the LPGs are local governments.</p> <p>In Russia and Laos, the main stakeholders are not only district governments but first of all the provincial (krai) government.</p> <p>In Indonesia and Russia, NGOs are also one of the main stakeholder groups.</p>	<p>The village administration is one of the main stakeholders in the Russian guidelines.</p>

6. Conclusion—some findings

In order to achieve the purpose of this report, namely, to find the commonalities and differences in the studies for local participatory forest management in Indonesia, Laos, and Far East Russia, we have carried out a comparative analysis based on the elaborated analytical framework. The findings of this investigation are as follows:

1. The target countries are quite different in their natural-economical conditions, legislative and administrative systems, and historical, cultural, and national traditions.
2. Nevertheless, we can find some commonalities among the basic conditions of the three countries:
 - State ownership of forest resources is predominant

in these countries.

- All of them are now in a transition period, although Laos is only in the beginning stages. There are some similar unsustainable processes forming in their legal systems during the transition period, a phenomenon also reflected at the local level and even more remarkably.

There are more commonalities between Indonesia and Laos than between these two countries and Russia:

- Indonesia and Laos have tropical forests while Far East Russia's forest is boreal.
- Community forests and customary laws exist in Indonesia as well as in Laos, but they do not exist in Russia.

There is also a similarly shared feature in Russia and Indonesia: the forests in these two countries have high commercial value because their timber is being exported

in large volumes to the Asia-Pacific timber market. That is why illegal logging is a big problem in both Indonesia and Far East Russia, while in Laos illegal logging occurs on a much smaller scale.

There is another commonality between Russia and Laos: top-down decision-making processes are very strong in both countries, which means there is a strong dependence by district and municipal authorities on central and provincial governments, while in Indonesia the regional autonomy reforms provide remarkable independence of district and municipality authorities.

3. Some of the problems in villages selected in the village action guidelines for Indonesia and Laos share similar features that allow generalization, as follows:
 - overexploitation of land due to agricultural activities
 - encroachment by other villages
 - village boundary demarcation issues
 - lack of diverse income-generation activities to reduce pressures on the forest
 - lack of information from government related to district policies and programmes for villagers
 - no formal recognition of existing customary forest management
4. It should be stressed that measures and actions to solve problems have been developed in the VAGs for Indonesia and Laos, taking into account each country's peculiarities in legislative and administration systems, and it is rather difficult to select common actions for both countries. That is why we succeeded in generalizing only three actions for both Indonesia and Laos, as follows:
 - Extend income-generating activities to villagers for increasing their living standard.
 - Improve intra-village relationships.
 - Make the relationship between local government and community people more tied and open.
5. The VAGs for Far East Russia were not elaborated because of the specific situation in forest management and the peculiarities of the decision-making process in Russia. Instead of VAGs and LPGs, the Comprehensive Guidelines for Local Population Participation in Forest Management—combining provincial, district, and village levels—were developed and compared with the LPGs for Indonesia and Laos.
6. The main common problems for the three countries that can be formulated for informational issues specifically are mentioned below:
 - limited population's access to information on forest policy;
 - lack of information facilities, especially modern means of communication; and
 - under-developed transportation services and bad roads that hinder people from remote areas in get-

ting timely information.

As for other issues, we could formulate eight common issues, but only for two countries: either for Indonesia and Russia (5 common issues), or Indonesia and Laos (2 issues), or Laos and Russia (1 issue). These issues are connected with similar basic conditions in forest management. For instance, the problem of illegal logging in Indonesia and Russia raises the issue of conflicts among local people and logging companies.

Indonesia and Russia:

- Lack of community (aboriginal community's) rights to forest land.
- Forest management problems are not as high a priority for the population.
- Conflicts between local people and logging companies, small loggers, and big logging companies in respect to getting benefits from the forest.
- Lack of mechanisms to encourage the population to participate in forest management.
- Weak control over logging companies, especially on their duty to conduct community development programmes.

Indonesia and Laos:

- There is no formal recognition of customary village regulations on forest management.
- There is weak implementation of forest policy by local officials because of insufficient capabilities of staff.

Laos and Russia:

- Weak implementation of forest policy by local officials because of limited budget.

7. As mentioned above, the measures and actions for both the VAGs and LPGs have been developed by taking into account each country's peculiarities in legislative and administration systems. It is also rather difficult to select common actions for all three countries in the LPGs. At least we succeeded in generalizing and formulating the following two common actions for all three countries:

- Develop programmes of interactive informing of the population and develop a rural information communication system and forest management.
- Allocate money in the local government budget for visiting remote areas, as well as for providing for the population's involvement in PFM and for community organising programmes.

As for other actions, we could only generalize and formulate them separately for two countries at a time: for Indonesia and Russia (4 actions) and for Indonesia and Laos (2 actions).

Indonesia and Russia:

- Strengthen people's (indigenous communities) rights to forest use in legal acts.
- Raise awareness of ecological, social, and cultural values of the forest among local people, especially indigenous people through development of special educational programmes.

- Develop logging control mechanisms through public hearings on projects related to the use of forest resources.
- Create a mechanism of public environmental assessment of logging projects, using the results for government analysis.

Indonesia and Laos:

- Improve district officials' capacity and skill in community organising.
 - The customary forest use regulation for villages can be reflected in the land use plan by the local government.
8. This analysis has shown that as for VAGs there are some common features in both Indonesian and Lao-tian villages. But as for LPGs, we succeeded in finding more commonalities between Indonesia and Far East Russia than between Indonesia and Laos.

Thus this analysis has shown that it is difficult to generalize completely the research outcomes for the three countries because of the different political and administrative systems, national and cultural traditions, as well as traditions of decision-making processes in each country. Even though similar features in guidelines of target countries have been found, any attempt to generalize them will invite justifiable criticism.

It is possible to generalize and apply to other countries single characteristics only—mainly the education and information problems and the measures to solve them. As usual, many external donors and funds working in forest management have been focusing mainly on education and information spheres, because these do not demand large changes in political, administrative, and legislative systems.