Background and Flow of the Workshop

Background

The fourth IGES International Workshop on Forest Conservation in the Asia-Pacific region was held as the last of a series of workshops and policy dialogues in the first phase of IGES strategic research programs (1998-2001). It concluded and integrated the results of research done by the four sub-themes of IGES Forest Conservation Project: Structural Analysis of Forest Loss, Timber Trade, Participatory Forest Management, and Legal and Administrative Analysis.

The previous three international workshops were held in Hayama (July 1998), Singapore (November 1998), and the University of Tokyo, Tokyo (September 1999). Before the fourth international workshop, the FC Project had also held three workshops/policy dialogues. These were held in Jakarta, Indonesia, in collaboration with the Indonesian Institute of Science (June 2000); in Vientiane, Laos, in collaboration with the National University of Laos (August 2000); and in Khabarovsk, in the Russian Far East, in cooperation with the Economic Research Institute, Khabarovskiy Krai Administration, Russia, Far Eastern Forestry Research Institute, Russia, Ecodal, Russia, Friends of the Earth Japan, Forest Trends, USA, and Far Eastern Representative of World Wildlife Fund/RFE-WWF (September 2000).

The main output of this fourth international workshop is the IGES Policy Recommendations list developed from the perspectives of the four sub-themes mentioned above.

Workshop Flow

The workshop was held on 17 January 2001, preceded by intensive discussions between IGES staff and local Japanese collaborators on the preceding day. The workshop was divided into three sessions.

First, the morning session was to discuss the results of the first phase of research with invited participants from overseas and Japan. Second, in the afternoon the discussions were open to the public. At this time, IGES outputs were presented and comments were added by the participants from the ITTO, Indonesia, and Laos. At the end of this session, IGES presented an outline of FC Project plans for the IGES second phase of research. The plan concentrates on participatory forest management, with specific objectives to develop guidelines and policy recommendations for participatory forest management at the local and national level. (The day after the workshop, intensive discussions were conducted on the plan.)

In the third session, the workshop concluded with a seminar in which panelists presented their perspectives on and experiences in doing research and promoting

participatory forest management. Presentations came from JICA, ITTO, CIFOR, the government of Indonesia (Indonesian Embassy in Japan), and IGES. These presentations ranged from international to national and local experiences. These presentations were intended to provide a broad perspective on participatory forest management, which will be the focus of the second phase research.

A total of 110 people participated in the afternoon session. They were from universities (students, professors), private companies, research institutes, Ministry of Environment, Forestry Agency of Japan, and NGOs. Morning session was arranged for intensive discussions among IGES staffs, collaborators, and invited participants from ITTO, CIFOR, and Indonesia.

Executive summary of IGES policy recommendations

Introduction

The IGES Forest Conservation Project (FC project), launched in April 1998, has carried out research on forest strategies, including policy analysis and on-site surveys, under a three-year research plan that comprised the first phase of research. In order to develop forest conservation strategies the FC project research includes four major issues: structural analysis on forest loss, timber trade, participatory forest management, and legal and administrative systems related to forest management.

The research on each issue identifies obstacles for sustainable forest management and clarifies necessary actions for sustainable forest management and to overcome the obstacles.

The following summaries consist of two parts. The first part includes recommendations for sustainable forest management containing the actions clarified in the research. These recommendations indicate the directions where progress must be made to overcome the obstacles for sustainable forest management. The second part includes measures for ensuring implementation of these recommendations in the legal and administrative systems related to forest management.

Part 1
Recommendations

Section 1

Recommendation based on the Study of Structural Context of Forest Loss in the Asia-Pacific Region

♠ *By Structural Analysis sub-team*

I. Introduction

The research team conducting the "Structural Analysis of Forest Loss" of the IGES Forest Conservation Project focused mainly on the Underlying Causes (UC) of recent forest loss (deforestation and forest degradation) in the Asia Pacific Region (APR). The Underlying Causes, in line with major Proximate Causes, are sorted out by identifying common elements among target regions, as well as the uniqueness of the

countries and sub-regions. In other words, the team attempted to trace a reliable chain of causation. This procedure provides a clear picture of the structural context of recent forest loss in the APR and desirable directions for overcoming it.

For these purposes, two approaches were employed in the team's research activities: country studies and active collaboration in the Intergovernmental Forum on Forests (IFF) UC/NGO Asian Process. In the first approach, such areas as Indonesia, the Philippines, the Mekong River Basin covering Thailand, Lao P.D.R., Vietnam and Cambodia, and the southern part of the Russian Far East were selected as target areas. The team conducted structural analysis of causes of recent forest loss following an analytical framework proposed by Hirsch (2000). In the second approach, the team co-organized several meetings of the Asia regional process within the IFF-UC/NGO initiative. Mr. Yoichi Kuroda was in charge as an Asia regional focal point, collaborated with Ms. Mia Siscawati (Indonesia) and attended a series of meetings at several large conferences. IGES also co-organized a preliminary meeting for the Asia Regional Workshop and the IFF-UC/NGO Asian Regional Meeting aimed at effectively providing the discussion results as input into the IFF process.

II. Addressed Key Causes of Forest Loss in the APR

As for the proximate causes of recent forest loss in the region, the research team reconfirmed various causes, including logging; conversion; planting; direct destruction; and lack of management of forests, resulting in modification or conversion into degraded forests and other land use. They also confirmed that such means of forest development are often conducted on the basis of commercial logging, conversion to cash cropping/plantations, industrial plantations, land clearance for self-sufficiency in rice production, shifting cultivation, and land clearance for incoming migrants, hydropower development, etc. In terms of key agents/actors of such forest loss in target areas, the following domestic and foreign elements were identified:

- **Domestic agents/actors**: Central/local government, domestic logging companies/ industry, military authority, politically powerful people, and local people;
- **Foreign agents/actors**: timber-importing countries, foreign capital from importing countries, and foreign aid institutions.

After these preliminary analyses the team examined the structural context or underlying causes connected to such prominent cases of forest loss as unsustainable logging for foreign exchange, failure of industrial plantations, frequent (large-scale) forest fires, etc.

As a result, the leading underlying causes of recent forest loss were addressed using the following five criteria:

- The lack of recognition of the real value of forests;
- The impacts of market forces under incomplete market systems;
- Economic or forest development policies with an industrial emphasis;
- Insufficient legal/administrative basis of sustainable forest management; and

- Political and economic instabilities.

III. Recommendations or Directions to Overcome Forest Loss in the APR

Based on the researches mentioned above the sub-team proposed the following recommendations under five headings, which are necessary to be considered in order to overcome forest loss in the APR

1. Respect for the multiple functions of Forests

In the target areas of this research most recent forest developments leading to forest loss have been conducted aiming to maximize monetary benefits, by employing unsustainable means. On the other hand the multiple functions of forests that produce various values have been almost ignored. Conversely, the cost of restoration after forest loss is rarely covered. Forest loss has resulted in not only economic impacts but also impacts on the environment and livelihoods, land conflicts and land alienation. In many cases such impacts of forest loss have exceeded the economic profits gained from forest development. Thus there is a need to clarify the real value of forests and develop conservation measures for these multiple values. The following are examples of the tasks that require attention to move in this direction:

a) develop of methods to evaluate the multiple functions and values of forests;
b) address traditional knowledge of forest resource use;
c) take into account all social, environmental and economic costs, when considering the benefits of any land or forest development and the price of timber products;
d) require all proposed developments affecting forests to complete an Environmental Impact Assessment (EIA) and a Social Impact Assessment; and
e) ensure compatibility of land use allocation with the local communities who use or need access to the same land or resources on that land.

2. Sustainable Consumption of forest goods produced

Unsustainable forest development has accelerated amidst strong demand for natural resources from forests and from land converted from forest use. Illegal or uncontrolled forest extraction also arises, in many cases, due to a strong demand from consumer countries, coupled with a lack of forest governance in supplier countries.

The following suggestions could help control consumption of forest products and promote sustainable forest production:

a) Consumer countries should encourage principles of resource use, such as the reduction of the volume of resources use, the promotion of recycling, and the re-use of materials. For such changes, more efficient techniques of resource use should be actively developed and employed. In addition, consumer awareness and education are essential;
b) Trade in forest product trade should be controlled under the principles of forest sustainability. To make progress in that direction, economic mechanisms, such as voluntary certification, should be examined and introduced.

c) Central and local governments, in addition to major importers of timber, should take the responsibility to exert strict controls to monitor the origin of imported wood products, and refuse transactions involving timber from illegal origins and unsustainably managed forests. Non-certified timber should not be imported from any countries. Efforts should be made to build administrative capacity for effective monitoring and to control illegal trade.

3. Reforming Economic/Forest Policy towards sustainable forest management

Forest loss in the target areas has occurred directly or indirectly through a top-down style of forest development that has ignored people's rights and customary uses of forests and lacked adequate forms of governance. Thus, in order to move towards sustainable forest management in the target areas, economic and forest policy reforms should consider the following policy options, with a special emphasis on good governance under a participatory approach.

a) Central governments should continue to show the political will to regulate and monitor the forestry situation with strong measures, allowing a balance of state, business and local community interests. They should follow master plans for appropriate, sustainable and equitable development.
b) Central and local governments should allow for transparency and consultation in all decisions regarding the forestry sector, and provide for participatory processes that actively engage a wide range of stakeholders.
c) Central and local governments should recognize the rights and ability of local communities to take on management responsibilities of land and forest, and should work towards institutional and policy reform to cover and safeguard these community rights.
d) The central government must play a regulatory and also a facilitative role, and should concentrate on the capacity building of local authorities that will be better able to facilitate community resource issues;
e) Central governments should promote vigilance in the involvement of local governments because in some countries the regional elite classes have been known to manipulate local governments. The intervention into forest management of these elites seeking special concessions is prone to lead to undesirable results from the perspective of resource management by local people.
f) Governments should close down the parallel shadow economy under which illegal logging has thrived. This effort is a prerequisite to creating a properly functioning judiciary and law enforcement agencies.
g) Foundations should be built for community forestry, including the authorization for individuals or associations to access and use forest lands by entering into contractual agreements with the government.
h) Appropriate forest zoning should be conducted in order to create a basis for sustainable forest use. The establishment of protected areas of adequate size, along

with the appropriate management infrastructure, would be a key measure to strike a balance among the various functions of forests.

i) Central governments should enact appropriate measures to mitigate the impacts of neighboring countries on forest management, i.e. areas that require reform or policies relevant to forest use.

4. Reforming the legal and administrative base towards sustainable forest management

Our study suggested that an effective legal and administrative foundation is an essential precondition in order to recognize rights, knowledge and the participation of local communities in forest management and forest development. In addition, our study showed that a legal and administrative foundation for effective fire control is also an urgent need, in view of the significant impacts of large-scale forest fires in the target areas of the study, including both tropical and boreal forests.

For community forestry and participatory forest management:

a) Central governments should provide efficient coordination for faster solution of inter-ministerial conflicts.
b) Administration of national and local forest fire control should be strengthened, and coupled with national fire control policies and programs.
c) Legal mechanisms should be developed for recognizing traditional land-use practices and systems of customary tenure, in order to protect the rights of indigenous peoples.
d) The procedure for granting concessions should be transparent and preservative, with consultation of all affected parties, in particular the local communities and local authorities.
e) Land with traditional social, economic and cultural significance should be delineated and excluded from the concessions. It should be given to communities located within concessions through an equitable recognition of customary rights. Such areas should be carved out and excluded from concession contracts so that the ownership and use rights of forest communities are not compromised.
f) Intensive efforts and effective measures should be used to overcome contradictions between the customary land utilization based on customary laws.
g) In existing concessions, areas of cultural, economic and social importance for local communities should be mapped out with the participation of the local communities.
h) National governments, in close co-operation with the provincial authorities and the local communities should conduct long-term monitoring of logging operations, as well as log transport and exports. Village monitoring groups should be encouraged and provided training.

For fire control:

i) Well-balanced forest control measures should be established, with attention to both advanced technology and practical equipment.
j) Sufficient financial and human resources should be allocated to local fire control stations.
k) Development activities should be more rigorously controlled, in particular, intentional burning for land clearance.

5. Regional coordination for realizing forest conservation

The market force of strong demand for forest products has major impacts on forests. In addition to forest developments that lead to forest loss, the economic and forest policies of importing countries and foreign aid institutions also affect forests. Another important factor is the absence of appropriate coordination relating to trans-boundary issues. The research led to a number of recommendations.

a) The international community should place increased emphasis on the importance of community involvement and participation in approaches to forest conservation, natural resource management and land planning.
b) Pledges of loans or grants by the international community should be made conditional on the basis of respect for human rights and sustainable management of natural resources, in agreements that are informed and transparent to the public. Compliance with such written conditions should be closely monitored and the government should be held accountable for its policies.
c) The international community should assist governments in developing community forestry or joint-forest management systems, thus encouraging local communities to continue to value forest resources through increased involvement in their management.
d) The international community should continue to support initiatives providing accurate information on forestry and land use issues from the local level, particularly concerning human rights, indigenous rights and forest management within a country.
e) The international community should make the best use of past experiences of forest loss in forest-depleted countries such as the Philippines and Thailand. In its move toward promoting people's participation in forest management, the Philippines are on the leading edge compared to other East Asian countries. The Philippines and the international community should share their experiences with countries so as avoid repeating the mistakes of the past. The lessons of Thailand could contribute to understanding the impacts or results of rapid deforestation on communities and a national economy.
f) The international community should support education on forest-related issues for journalists. In order to avoid "stereotypical" reporting on causes of deforestation, it might be effective to encourage the journalists to learn more about forest-related issues, especially the underlying causes as key subjects to be considered.

g) International cooperation for fire control and expansion of international aid should be promoted under the full support of developed countries in the Asia-Pacific region.
h) The international community's monitoring of the restoration of burned sites is very important. Without scrutiny, these areas tend to be converted into plantations for economic benefit, causing the deterioration of bio-diversity in the long-term, leading to serious adverse effects on ecological systems.

Section 2

Recommendations for Timber Trade Policy to Support Sustainable Forest Management

♠ *By Timber Trade Sub-team*

1. Introduction

The target of this sub-team studying timber trade policy (TT) is to advocate appropriate strategies to form timber trade policy leading to sustainable forest management. The study program is composed of four sections. First, framework and data availabilities for forest resource accounting will be studied. Second, sustainable forest management will be discussed from the viewpoint of the measures of forest /timber certificate. Third, timber trade structures and policies of major timber-trading countries will be clarified from their historical perspective. Especially, econometric analyses using time-series data in the third section will reveal impacts of customs duties and non-tariff barriers on international timber-trade. Finally, a spatial equilibrium model for timber trade of Asian Pacific region will be built to simulate regional timber trade in order to assess various policy measures. Based on the research, the following findings and recommendations emerged.

1. Findings

2.1. Forest Resource Accounting

In Agenda 21, the action program that was adopted at the UN Conference on Environment and Development held in Rio de Janeiro in 1992. It is explicitly stated that all members should develop environmental accounts. The purpose is to show the impacts of economic activities on the natural environment.

It is important to construct forest resource accounts as a consistent framework in order to consider the relationship between socio-economic factors and the natural environment in the forest sector. It is obvious that much difficulty exists to construct that system, because many developing countries have not collected much environmental information. However it may be a shorter way to solve the problem for forest conservation.

2.2 Forest Certification Scheme

Initially, the Forest Stewardship Council's (FSC) interests focused around tropical forests, but more recently it has shifted toward temperate forests. The main reasons behind this shift may be:

2.2.1. tropical countries fear that constraints on timber production from tropical forests bring unfair trade restrictions,
2.2.2. the Food and Agriculture Organization (FAO) pointed out that one of most important causes of tropical deforestation was not from timber production but from conversion to agricultural lands, and
2.2.3. the fact that timber from temperate forests comprises about 80% of the total world timber trade.

Although in the Asian region the majority of countries have forested areas, only a few have forest/timber certification systems. Seven countries in the region had FSC certification as of September 2000. Their number of certifications represents 2.9% of the world total, or 0.8% in terms of the area of forest certified.

Records reveal that the Rain Forest Alliance has granted the most certifications in number, and SGS has granted the most certifications in terms of area certified. Certifying institutions have different positions, which reveal themselves in certifications granted. For example, the Rain Forest Alliance attracts communal, non-industrial and private clients, while SGS attracts industrial clients, probably because the former is a non-profit non-governmental organization but SGS is a profit-seeking business enterprise.

3. Recommendations

3.1. Forest Resource Accounting

Objective: To consider the relationship between socio-economic factors
and the natural environment in the forest sector.
(1) Action 1: Collect environmental information.
(2) Action 2: Construct forest resource accounts.

3.2. Forest Certification Scheme

Objective 1: Conduct research into the trade (import/export) of certified products.

Forest certification is a "soft" policy instrument, different from command-and-control types of policy. It operates through incentives in the markets in place of strict regulations. It saves costs through modifying costly forest management, counterbalancing the costs of certification and providing non-monetary benefits. To make certification schemes efficient, certification should be carried out as spontaneous process by independent institutions according to objective criteria. All the participants from production to distribution should share the benefits of certification in order to make the scheme efficient and effective. Theoretically the benefit comes from the higher price premium paid by consumers as a consideration for getting products from appropriately managed forest. This incentive program stands at the core of certification schemes. There are two merits in certification schemes. The first is a price premium. Consumers agree to pay more for the environmentally friendly products. An important

point here is that they should recognize the certification process to be reliable and that they should support the forest management system that is certified through the scheme. The second is to save additional costs that would occur if the government should have to place more stringent restrictions for the sake of environmental protection.

Currently the most important markets for certified products are Europe and North America. Asian countries do pay attention to the sustainability of forest resources, but the demand for the purchase of certified products is not as great. Certified timber products in the market are still limited in quantity. The total roundwood production is 53 billion cubic feet worldwide. Only around 0.6% (318 million cubic feet) is certified through the FSC. In addition, only a fraction is traded as certified products. One of the main reasons for these small ratios stems from inefficiency in the chain of custody (CoC). Even though a forest may be certified, unless the entire process of production and distribution is appropriately monitored until the point when final consumers take delivery of the products, a certification scheme fails to function completely. If the chain is broken at just one place, the integrity of the certification system fails.

Most of certified products at present are hardwood products, used to make products such as guitars, furniture, and wooden fittings that require relatively little wood. The demand for certified softwood is to increase in the future.

Action needed:

(1) Market research in the Southeast Asian region. The research should take into account both importing and exporting countries, the flow of certified products at the entire national level market, and case studies on certified forests of individuals, enterprises, and public entities (by conducting interviews and questionnaire surveys).

(2) In Southeast Asia, national and local governments and environmental NGOs should take initial steps. Investigations are needed regarding preferable measures to promote forest certification and trade of certified products. In Europe and America buyers groups play an important role.

Objective 2: Develop an effective strategy for certification processes and timber trading in each region or country.

Action needed:

Many forestry industrialists are hesitant to participate in organizations with environmental protectionist characteristics. It is said that this is one of the reasons why FSC certification is low in participation. Another is that FSC criteria and indicators are too difficult to understand in context, and too rigid to apply in the field.

In Southeast Asia, in order to promote acceptance of forest certification schemes, the following should be done:

(1) construct standard evaluating criteria and indicators among certifying institutions and carry out certifying operations with them,

(2) construct domestic criteria and indicators, based upon those of the FSC, and
(3) establish Asian certifying institutions (so far, established institutions are based in Europe and North America, and they are not apt to certify in Asia).

Section 3

Policy Recommendations for Participatory Forest Management

♠ *By Participatory Forest management sub-team*

1. Methodology to elaborate policy recommendations

Policy recommendations were elaborated, based on our own research results and comments given at international workshops in Jakarta and Vientiane, in accordance with the following framework and principles.

1-1. Framework to elaborate policy recommendations

The IGES team working on the sub-theme of Participatory Forest Management conducted a comprehensive process that led to the preparation of policy recommendations. First of all, in the target countries (Indonesia, Thailand, the Philippines, Vietnam, and Laos) we identified the **external constraints** on local participation in forest management by means of clarifying the gaps and contradictions between national land/forest policies and **customary land rights and forest/land management by the local people.** Second, we identified the **internal constraints** immanent in the local communities, in terms of economic, social, and cultural aspects. Third, **possible main actors** were identified by means of evaluating the local realities and national forest policies. In addition, we identified the lessons learned from public participation in developed countries.

We elaborated these draft policy recommendations by considering how to overcome the internal and external constraints, and suggested the main actors to carry them out.

1-2. Principles to elaborate the policy recommendations

Our policy recommendations follow the 11 standpoints listed below:

Standpoint 1: People's participation is very important in achieving success in sustainable forest management with lower transaction costs, as well in avoiding social conflicts over forest utilization, which in themselves increase management costs.

Standpoint 2: In the tropics, the concept of local participation is more useful today than the concept of public participation.

Standpoint 3: Our concern is to show what is an ideal forest management *system* in terms of local participation, rather than to indicate a concrete *procedure.*

Standpoint 4: The "participatory top-down approach" should not be included in the strategy for PFM.

Standpoint 5: Both collective forest management and individual-based forest

management are considered to be included in PFM for the time being.

Standpoint 6: The policy recommendations should be based on a recognition—which can be shared by developed and developing countries—of the importance and validity of participation.

Standpoint 7: Diversity—of legal status of land and main actors—is an important aspect of PFM in order for the local people to make good choices in accordance with the local conditions.

Standpoint 8: The planting of trees is likely to be practiced mainly by individuals; conservation of the forests should be done collectively by village communities and fundamental groups; and the government is likely to bear the responsibility for protection, sometimes entrusting the local people with the daily activities.

Standpoint 9: The policy recommendations should be elaborated by making use of the results of our own research. It is not necessary for them to be so comprehensive as to cover all the aspects of PFM.

Standpoint 10: Our policy recommendations should be elaborated from the viewpoint of the local people.

Standpoint 11: The policy recommendations are to consist of several sets of **objectives** and necessary **actions** aimed at local people, the governments, non-governmental organizations (NGOs), and international organizations.

2. Policy recommendations

2-1. Indonesia

Indonesian forest policy is now being reformed drastically in accordance with the movement of democratization and decentralization of power. Every proposal made by various stakeholders, including our recommendations, can be put on the platform of the policy discussion.

Objective 1: Ensuring the participation of local people in general

Action 1-1: The government and NGOs should work together to establish the mechanism of a “green safety net” to secure the minimum level of forest conservation.

Action 1-2: All the parties should recognize and have a high regard for the perspective of conservation perceived by the local people.

Action 1-3: The provincial government should take the actual state of land use and socio-economic conditions into consideration for forestland classification.

Action 1-4: The national government should define clearly, in the form of a decree or law, the involvement of local people and NGOs in forest management.

Action 1-5: The national government should revise the Forest Village Social Development (PMDH) program as a basis for facilitating local participation.

Action 1-6: The national government should establish rules to obligate local governments to ensure local participation and to report publicly on the condition of PFM in cooperation with NGOs.

Action 1-7: NGOs should cooperate with the provincial governments to encourage them to use a bottom-up decision-making process in the management of national parks and the demarcation of forest areas. NGOs should cooperate with the district (Kabupaten) government to be involved in the activities of reforestation and re-greening, the management of protection forests and private forests, the control of hunting and collecting of non-wood forest products, and extension activities.

Action 1-8: All the parties should recognize the importance of power sharing as well as that of benefit sharing between the local people and other stakeholders.

Action 1-9: The government should elaborate the guideline to define the local people (i.e. Who are the local people?) who have the rights to manage their forests, in cooperation with NGOs and the local people themselves.

Objective 2: Operationalize the management of the Customary Forest (Hutan Adat) as prescribed in the new Forestry Law

Action 2-1: The government should evaluate the customary law fairly in terms of collective forest management in cooperation with various stakeholders such as local communities, local governments, NGOs, and academics.

Action 2-2: NGOs and the governments should persuade the local people to modify their customary forest utilization where the need exists to develop appropriate technology for sustainable forest management.

Action 2-3: The government should issue a decree to show the process for designating the Customary Forest even in the conservation areas.

Action 2-4: As a next step, the government should consider the release of the Customary Forest (Hutan Adat) from state-owned forests under certain regulations.

Objective 3: Facilitate collective forest management

Action 3-1: The government should give priority to the permission of community forestry (IPHKM) over other consent for natural forest management, man-made forest management, mixed plantation management (prescribed in August 1999), and tree felling for the purpose of developing oil palm plantation and transmigration areas.

Action 3-2: The local people should organize themselves, discuss the rules for forest utilization, and conclude agreements for forest management in cooperation with external agencies such as NGOs and the local government.

Action 3-3: The government and state forest corporation (Perum Perhutani) should give the Permission of Community Forestry (IPHKM) in Java. Community Forestry should be open to Java.

Objective 4: Facilitate individual- or household-based forest management

Action 4-1: The government and state forest corporation shares the profits from planted trees between the local people who participate in the Tumpang Sari (or the Perhutanan Sosial program), and the national forestry corporation (Perum Perhutani) in Java.

Action 4-2: The State Forest Corporation (Perum Perhutani) should plant tree species suitable for use as fuel wood by the local people on sites of an improved Tumpang Sari or Perhutanan Sosial program in Java.

Action 4-3: The government and NGOs should help the local people to patrol the forest areas they manage.

Action 4-4: The government should introduce an individual- or household-based sharecropping forestry program in the degraded production forest areas on national land in outer Indonesia.

Action 4-5: The State Forest Corporation (Perum Perhutani) should devolve to local people the rights of forest management on some national land.

Action 4-6: NGOs should help the local people to obtain land ownership for tree plantations.

2-2. The Philippines

Actually the objectives mentioned here seem to have been satisfied in a sense, by the preparation of the policy framework for participatory forest management. The most important question at present is how the implementation should be ensured in the Philippines in order to achieve sustainable forest management.

Objective 1: Ensure the participation of local people in general

Action 1-1: The government should legalize the Executive Order 263, which declares the Community Based Forest Management (CBFM) as a national strategy.

Action 1-2: The government should ensure a financial basis and human resources, and build an organizational capacity.

Action 1-3: The government and NGOs should work together to establish a mechanism of a green safety net to secure the minimum level of forest conservation.

Action 1-4: The government officers should change their attitude towards the local people, and regard them not as tools of the government but as equal partners.

Action 1-5: The project managers and planners should carefully consider the local conditions before introducing a forestry project, such as customary utilization of the land and forests, people's dependence on forest resources for their livelihood and the local value systems.

Action 1-6: The government should define clearly, in the form of a decree or law, the involvement of local people and NGOs.

Objective 2: Facilitate collective forest management

Action 2-1: The local people should recognize that the function of the village community is different from that of the cooperatives as Peoples Organizations (PO) for CBFM.

Action 2-2: The government should consider the possibility of transferring the authority for forest management to the village community as well as cooperatives.

Action 2-3: The cooperatives should commit themselves to representing the interests of the local people, rather than being agents to implement governmental programs.

Action 2-4: The local people should leave the rights of forest management to the executive bodies of their cooperatives.

Action 2-5: The government should permit selective logging by the cooperatives under certain conditions.

Action 2-6: The government should give greater priority to Certificates of Ancestral Domain Title (CADT) or Certificates of Ancestral Land Title (CALT) provided by Republic Act No. 8371, compared to mining concessions provided by the Mining Act of 1995 or Republic Act No. 7942.

Action 2-7: NGOs should help the local people and the government to take the actions proposed here.

Objective 3: Facilitate individual-based forest management

Action 3-1: The CBFM cooperatives should recommend that local people acquire Individual Property Rights (IPR) from the cooperatives for managing the forests within the area of CBFMA.

Action 3-2: The government should conclude a Socialized Industrial Forest Management Agreement (SIFMA).

Action 3-3: NGOs should help the cooperative and the government to take the actions proposed here.

2-3. Laos

The government of Laos is now preparing the relevant decrees and regulations for forest management. Our recommendation will support the efforts of the government for the purpose of promoting local participation and sustainable forest management.

Objective 1: Secure the participation of local people in general

Action 1-1: The government and NGOs should work together to establish the

mechanism of a green safety net to secure the minimum level of forest conservation.

Action 1-2: The government should issue laws or decrees on forest classification, forest use planning, and land/forest allocation to integrate existing decrees.

Action 1-3: The local governments should remind themselves that forest classification is based on the actual utilization of the land where village territory overlaps with the area of "conservation forest," "production forest," and "protection forest" that are basically controlled by the government.

Action 1-4: The government should revise policies to allow some "regeneration forest" to be allocated to villages or villagers, as is already done with "degraded land."

Action 1-5: The government should clarify the criteria for demarcation among core zones buffer zones of the National Biodiversity Conservation Areas (NBCAs) and other village land.

Action 1-6: The government should either draw official lines of demarcation between the buffer zones of NBCAs and village land, based on the actual land utilization by the local people, or draw tentative lines that should be reexamined in the near future.

Action 1-7: The government should not implement PFM projects all at once in the country, but introduce pilot projects, using a step-by-step approach.

Action 1-8: International organizations and NGOs should support the government to implement the actions mentioned above.

Objective 2: Facilitate collective forest management

Action 2-1: The government should legalize natural forest management by the village for the purpose of timber production, even though, in some cases, only local authorities are permitted to sell timber according to a 1999 prime ministerial decree.

Action 2-2: The government should ensure local people's participation in the decision making process of the planning of natural forest management in Joint Forest Management (JFM).

Action 2-3: Local authorities and NGOs should help village communities to decide on regulations, to keep watch on forest utilization, and to punish offenders who violate the regulations.

Objective 3: Facilitate individual-based forest management

Action 3-1: The local government should not pressure villages to rush to demarcate between forest and agricultural land in accordance with the national governmental instruction.

Action 3-2: Local authorities and NGOs should assist the people in experimentation to develop alternative land use techniques such as rotational agro-forestry or array cropping systems involving trees in the uplands where demarcation lines are nominal and tentative.

Action 3-3: The government should legalize a system to support tree-planting

activities consisting of reforestation and afforestation by individuals or households.

Action 3-4: The government should prepare a system to provide quality seedlings, assign roles to the public and private sectors, and improve access to degraded forest land.

Action 3-5: The local authorities should establish good partnerships with villagers to promote a better understanding of their rights and duties in the buffer zones of NBCAs, and employ villagers to patrol the NBCAs.

2-4. Vietnam

The Vietnamese government is trying to promote the participation of local people in forest management. Our recommendations will support those efforts and are intended to facilitate the further involvement of the local people.

Objective 1: Ensure the participation of local people in general

Action 1-1: The government and NGOs should work together to establish the mechanism of a green safety net to secure the minimum level of forest conservation.

Action 1-2: The government should clarify the authority and responsibilities of local authorities and national government.

Action 1-3: The government should clarify the criteria and indicators for forest classification.

Action 1-4: The government should strengthen the extension and training activities, especially at local level.

Objective 2: Facilitate collective forest management

Action 2-1: The government should issue a decree or create a program to promote community forestry that is practiced by village communities, especially in protection forests and special-use forests.

Action 2-2: Village communities (*thon*) should settle regulations to manage the forests by themselves in accordance with the national criteria for sustainable forest management, in cooperation with existing women's unions, youth unions, peasant unions, etc.

Action 2-3: Village communities should recognize the customary rights and consult with national park offices for sustainable forest management.

Objective 3: Facilitate individual-based forest management

Action 3-1: The government should accelerate efforts for land allocation.

Action 3-2: The government should indicate the criteria for sustainable land/forest utilization.

Action 3-3: The government should reinforce agricultural and forestry extension activities.

Action 3-4: The government should encourage local authorities and collective associations such as women's unions and youth unions to take part in activities producing tree seedlings, especially the use of genetically improved planting stock.

Action 3-5: The government should allocate larger budgets for tree planting in critical and very critical protection forests.

Action 3-6: The government should officially permit local people to collect fuel wood and non-timber forest products (NTFP) in return for concluding protection

agreements such as "protection agreements in critical protection forests."

Section 4

Recommendations of Legal and Administrative System on Forest Conservation and Participation in the Asia- Pacific

♠ *By Legal and Administrative sub-team*

I. Elements of Participation of Local People

There are various legal and administrative systems related to forest conservation in the Asia-Pacific region, depending on the situation in each country. Hence, it is difficult to grasp the overall situation accurately. On the one hand, some countries are trying to change their economic system. The other hand, some countries face economic crisis. Even though the actual situation in each country is different, there are not only problems but also progress. In particular, many countries are changing, or have changed, their forestry laws in recent years. The reformation focuses on several issues.

At the global level, it can be said that promoting community forestry is one of the important issues. In order to promote community forestry several measures are taken. Besides, many international treaties related to forest conservation have already been adopted at global and regional levels; these treaties also recognize the participation of local people as an important issue. Two elements of participation can be found in these treaties.

The first one is composition of participants. There are many stakeholders related to forest conservation. Since the stakeholders can include local communities, people who live in urban environments, NGOs and companies, they can be categorized in to four groups: the public in general, the public affected or concerned, the local community or people, and indigenous people. These categories are determined based on who participates in the forest management process.

The other category is the level of participation. The level can be categorized into three parts: access to information, participation in the decision-making process, and access to means of redress. This category is based on how to participate in the forest management process and how to ensure it works.

According to these elements, anyone who wants to participate can do so. However, almost all treaties that require contracting parties to ensure participation don’t mention the necessary legal measures in order to ensure that participation. Administrative measures are needed if these legal measures are to fulfill their intent. The decision of which measures should be adopted depends on each contracting party.

This report examines legal and administrative systems on forest conservation and participation at the national and international levels based on research conducted by the

IGES forest conservation project (1998-2001). Results of the examination have provided us with a perspective to grasp the current situation in the Asia-Pacific. In addition, the research has identified current problems that need to be overcome. Recommendations have emerged from the research, as described below.

II. Recommendations

(1) Enhancing compliance with existing treaties

There are many existing international legal instruments relevant to forest conservation, yet there is still no consensus for establishing a new international convention on forest conservation. Therefore, it is necessary to consider measures on forest conservation at the international level while keeping three points in mind:

1). It is important to enhance compliance mechanisms on existing instruments.
2). Coordination among these instruments and dispute settlements will be important in existing compliance mechanisms.
3). When developing new compliance mechanisms it is important to keep in mind the differences in the characteristics of instruments that exist for nature conservation compared with instruments concerned with other issues.

(2) Ensuring local people's participation

Pubic participation is indispensable for the sustainable use or management of natural resources. It is clear that it has become one of the legal principles in some international instruments, but the specific contents of the principle depends on the characteristics of the natural resources in question. Research has revealed several important principles of public participation as follows:

1). The participation of local people and indigenous people should be respected and ensured.
2). Forest management systems should adopt the "Subsidiary Principle," a general principle of governance that means making and implementing decisions at the lowest effective level of government or organization. Not only central governments, but also international treaties and organizations should support local people and indigenous people's participation. The former should act in a subsidiary role and as a safety net when problems cannot be solved by local and indigenous people themselves.
3). Based on learned experience, several elements are necessary to ensuring local people's participation:
    i. Ensure their economic benefit.
    ii. The right to consult by advice provided from experts with the concession company should be secured by law.
    iii. Disclosure of information to people at least relevant to forest conservation and management systems in order to create public awareness.

iv. Support from the central government for the local government in order to ensure local and indigenous people's participation.
v. Coordination and cooperation among these organizations.
vi. Capacity building is indispensable for realizing sustainable forest management.
vii. Awareness of local people and government officials of the necessity of realizing sustainable forest management is important.
viii. Ensuring access to remedy when the rights of local people are violated.

(3) Necessity of dispute settlement mechanisms

Concerning dispute settlements, the following components should be considered to design a mechanism for solving conflicts over forest management:

1). The right of local and traditional community/people, including tenure over forest land, right of access, ownership, control and harvesting, should be recognized, guaranteed and stipulated clear enough to be invoked in a court or public forum when the problems based on the rights are in question.
2). The local community/people should be informed in the decision making process of regulations, legally binding normative instruments as well as plans, projects and policies on forest. The procedure should include reasonable time frames for the different phases, allow sufficient time for informing the public, and provide for early participation.
3). Access to the information by local people should be guaranteed, especially at the early stage. If a request for information has been ignored or inadequately answered, they should have access to a review procedure.
4). Once conflict occurs, the settlement process should be established upon request by a party concerned. The process should be transparent.
5). In the settlement mechanism, three components should be included: first, an objection mechanism that allows the public to respond or object to the government; second, a reliable dispute settlement mechanism, or ombudsman, which is truly independent; third, the option to chose/agree to conduct the settlement through legal processes or out of court.

Most of these elements have been mentioned and discussed widely at international forums. However, although the importance of these elements has been recognized, few concrete measures have been taken to realize these concepts at the national or sub-regional levels.

Part 2

Measures for Sustainable Forest Management and Effective Participation of Local People

Introduction

Sustainable forest management is one common goal of the international community in order to ensure sustainable society. However, the current situation is far from sustainable forest management due to numerous obstacles. One of the major obstacles is a gap between the legal or administrative systems related to forest management, and the actual situation of forest and land use. In order to eliminate the gap, legal and administrative mechanisms properly suited to actual forest and land use is necessary.

The actual patterns of forest and land use differ place by place because of the diversity of ecosystems, cultural, social and economic situation in each area. Hence, legal and administrative systems require flexibility and decentralized approaches.

In addition, the participation of local people is also necessary in order to adapt existing laws and systems to the actual local situation of forest and land use and ensure effectiveness of the system.

The following sections show the necessary legal, administrative and other measures for sustainable forest management based on the understanding set out above.

I. Forest Laws and Plans

> Laws related to the forest should be harmonized and coordinated to attain the sustainable use and management of forest. Plans or programs for the better implementation of such laws should be developed and carried out.

A. Where appropriate, new laws on sustainable forest management should be enacted or existing laws should be amended. (WHC Article 5, Ramsar Convention Wise Use Guidelines, PM Recommendation Indonesia 1-4, The Philippine 1-1, Laos 1-2, ST Recommendation 4-3a))

(1) Laws of different sectors related to sustainable forest management should be harmonized and an integrated approach should be taken. (ST Recommendation 4-4a), LA Recommendation (3)2))

(2) Management or a control of forests or land should be based on their current use. Where appropriate, a traditional forest management system and a tenure right should be authorized by law (CBD 8(j), PM Recommendation Indonesia 2-1, ST recommendation 4-1b),f)4-4a),f) LA Recommendation (3) 1))

(3) Protected areas should be established and managed under a law. (ST Recommendation4-3h),4-4e))

B. Forest plans should be developed in order to implement effectively the laws related to sustainable forest management. (CBD Article 6, Ramsar Convention Article 3(1), WHC Article 5a, CCD Article 4(2)c, PM Recommendation Indonesia 1-1, The Philippine 1-3, Laos 1-1, Vietnam 1-1)

(1) Effective coordination among ministries and authorities relevant to the sustainable forest management should be encouraged and promoted. (ST Recommendation4-3h), LA Recommendation (2)3)úD)

a. Inter-ministerial forum for sustainable forest management should be established within the central government. (ST Recommendation4-3h), LA Recommendation (2)3)úD)
b. Such coordination mechanisms should also be introduced between the national and the local governments and the activities of the local governments should be supported by the central government. (ST Recommendation4-3h),LA Recommendation (2)3)úCj

(2) A national minimum of the sustainable forest management, called "a green safety net," should be developed. (CBD Article 6, Ramsar Convention Article 3(1), WHC Article 5a, CCD Article 4(2)c, PM Recommendation Indonesia 1-1, The Philippine 1-3, Laos 1-1, Vietnam 1-1)
(3) Criteria and indicators for sustainable forest management should be developed. (PM Recommendation Vietnam 3-2)
(4) Criteria for demarcation of forestland should be clarified and published. (PM Recommendation Indonesia 1-3, Laos 1-3, 1-4, 1-5, 1-6, 3-1, Vietnam 1-3)
(5) Forest land zoning should be, where appropriate, based on the current situation of land use and the social/economic situation relating to the forestland. (PM Recommendation Indonesia 1-3, 2-1, Laos 1-3, 1-4, 1-5, 1-6, 3-1, Vietnam 1-3, ST Recommendation 4-1e),4-4e))
(6) Traditional forest management systems, land use by local people, and their traditional rights should be ensured to the greatest extent possible. (ST Recommendation4-1b),4-4f))
(7) Forest plans should be implemented in a flexible way.
    a) A step-by-step approach should be adopted when a new plan is introduced. (PM recommendation Laos 1-7)
    b) A forest plan should be reviewed periodically. (ST Recommendation 4-3a))

(8) Sufficient financial basis and human resources for the forest plan should be prepared and provided. (WHC Article 5, PM Recommendation the Philippine 1-2, Vietnam 3-5)

C. Neighboring countries should be consulted in advance of forest-related activities, in order to promote concerted management of the forests crossing over national boundaries. Bilateral or sub-regional agreements on sustainable forest management should be developed. (Ramsar Convention Article 5, WHC Article 5 (3), CBD Article 3, 14(C), (d) ST Recommendation 4-3 i))

II. Supporting Measures

Laws and plans related to the forest management cannot be implemented effectively without relevant supporting measures for promotion of public awareness, improvement of prior assessment procedures, dissemination of information, and so on.

A. Educational programs should be organized in order to promote public awareness of the necessity and importance of forest management. (LA Recommendation (2) 3) úF)

B. Environmental Impact Assessments (EIA) should be carried out in order to avoid negative environmental impacts caused by plans and activities related to forest management, including international aid, plans and projects of governments and projects of private companies. Also a monitoring system on forest management should be carried out by international organizations, governments and NGOs. (ST Recommendation 4-1c),d)4-5b) ST Recommendation 4-4f),)

(1) In the EIA and monitoring procedures, cultural and social aspects should be assessed and monitored. (ST Recommendation 4-4f))
(2) Activities related to forest management should be assessed and monitored using a long-term perspective. (ST Recommendation4-5h))
(3) The participation of all stakeholders should be ensured in the EIA process and the monitoring system. (ST Recommendation 4-1c),4-4f))

C. In order to ensure the meaningful participation of people, basic information should be widely disseminated. (ST Recommendation 4-5d))

(1) The information related to forest management should be disseminated. In addition, the right of access to information should be guaranteed by the law. (ST Recommendation 4-3b), LA Recommendation (2) 3)úB)
(2) Information related to forest management, including “good practices” and "negative experiences," should be exchanged among stakeholders in order to share useful experiences of success and failures of forest management. (ST Recommendation4-5e))

D. Trade in forest products should be controlled under the principle of forest sustainability and mitigation of degradation of natural forests. Three principles of re-using, reducing and recycling should be the basis for promoting the sustainable exports and production from sustainable agriculture and forestry. (TT Recommendation, ST Recommendation 4-2a))

(1) Methods of evaluating forest's value should be developed by way of constructing "forest accounts." (TT Recommendation, ST Recommendation 4-5a))
(2) Certification systems to support sustainable forest management should be established in order to ensure reliability. Legal and administrative systems to monitor the certification systems and punish forgery should be developed. (TT Recommendation, ST Recommendation 4-2b)).
   a) Compatible evaluating criteria and indicators among certifying institutions should be developed. (TT Recommendation).
   b) National criteria and indicators for forest certification should be developed. (TT Recommendation).
   c) An Asian Forest Certification Institute should be established with an initiative by local people and NGOs in order to adapt certification for the current situation of the Asia-Pacific region. (TT Recommendation).

III. Participation of Local People

For effective implementation of laws and plans, the active, free and meaningful participation of local people is indispensable.

A. Participation of local people in a process of the sustainable forest management should be assured by a law. (CBD Article 8(j), CCD Article 5d,Article 10f, Ramsar Convention Wise Use Guidelines, WHC Guidelines, PM Recommendation Indonesia 1-2, 1-4, 1-8, The Philippines 1-6, Laos 2-1, CCD Article 10 (2)f, PM Recommendation Indonesia 1-4, ST Recommendation 4-3b)).

B. Appropriate administrative measures should be taken by governments in order to ensure effective participation of local people in the decision making process, in the management process of the protected area, in the planning and implementation process of international aid programmes, and in the process of granting forest concessions. (WHC Guidelines, ST Recommendation 4-5b), 4-3c), 4-4c), PM Recommendation Indonesia 1-2, PM Recommendation Indonesia 1-7, Lao 3-5LA Recommendation (3) 2))
   (1) Administrative programs related to the participation of local people should be developed, coordinated and revised periodically. (PM Recommendation Indonesia

1-5)

(2) Establishment and implementation of legal and administrative systems ensuring the participation of local people in forest management in developing countries should be supported. (ST Recommendation 4-5a),c) d))

(3) The participation of local people should be secured by national law, and national governments should direct, instruct and encourage local governments to take every necessary measure. Necessary supporting measures, including financial, technical and human resource assistance, should be taken by national governments. (PM Recommendation Indonesia 1-6,ST Recommendation4-3e))

(4) (4) Opportunities for expressing views should be given to local people in the process of forest planning. Their views should be properly taken account of in the plans. (PM Recommendation Indonesia 1-2)

(5) A system for providing sufficient advice from experts should be established. In addition, financial supporting measures for the payment of the administrative costs of that system should be made available to local people. (LA Recommendation (2)3)úA, (3) 2),)

C. Training programs should be organized in order to enhance implementation of the legal and administrative systems of forest management. (CCD Article 19, LA Recommendation (2)3)úE, PM Recommendation Laos 3-2, Vietnam 1-4, 3-3 , ST Recommendation 4-3d)

(1) Training programs for government officers, members of NGOs, journalists and local people should be organized. (PM Recommendation The Philippines 1-4, Vietnam 1-4,3-3,ST Recommendation 4-5f)

(2) Recognition of values of forest and the necessity of participation of local people should be included in the training programs. (PM Recommendation The Philippines 1-4, ST Recommendation 4-3d)

C. Benefits of local people should be ensured. (CBD Article 8 (j), PM Recommendation Indonesia 1-8, LA Recommendation (2) 3)ú@).

(1) Collective forest management by local people should be encouraged and supported. (CBD Article 10 (c), (d), PM Recommendation Indonesia 3-2, Laos 2-2,)

a) Collective forest management should be authorized by the law. Village communities, cooperatives and forest user groups may be authorized as management bodies. (PM Recommendation the Philippines 2-2, ST Recommendation 4-3c),))

b) The collective forest management by local people should be a given priority over the large-scale forest management by corporations, in the process of granting forest permission by the relevant governments. (PM Recommendation Indonesia 3-1, The Philippines 2-6, Vietnam 2-1)

c) Where appropriate, the collective forest management bodies should be

authorized by the relevant governments to carry out the necessary regulations. Collective management bodies should also be included to provide technical support. (PM Recommendation Indonesia 2-2, Vietnam 2-2, Laos 2-3)

d) Ministries and authorities related to collective forest management should coordinate among themselves in developing the forest plans. Not only within national governments but also within and among local governments and between national governments and local governments, coordination measures should be taken. (ST Recommendation4-3h)

(2) Support for individual-based forest management

a) The right to benefit, the right to manage, and property rights of local people who participate in reforestation and afforestation activities should be assured by the law. (PM Recommendation Indonesia 4-1,4-5,4-6, The Philippines 3-1,ST Recommendation 4-3c),))

b) A plan for supporting tree planting and for distribution of benefits should be established. (PM Recommendation Indonesia 4-4, Laos 3-3, 3-4)

E. Dispute settlement system including an informal mechanism should be established or modified in order to secure the rights of local people. (PM Recommendation Indonesia 1-9)

(1) A reliable and independent informal dispute settlement mechanism or ombudsman system should be established. (LA Recommendation (2)3)úG, (3) 4), (3) 5))

(2) The procedures for objection or appeal should be established in order to ensure the public's right to raise objections to government decisions. Information related to the objection procedures should be widely disseminated. (LA Recommendation (2)3)úG, (3) 4), (3) 5))

(3) An option to chose/agree with a dispute settlement mechanism, through a legal forum or out of the court, should be ensured. Recourse to traditional conflict resolution mechanisms should be considered in deciding which mechanisms are appropriate for the resolution. (LA Recommendation (2)3)úG, (3) 4), (3) 5))

(1) In order to promote the use of such mechanisms, information related to such mechanisms should be sent to all stakeholders. In addition, the necessary advice from experts and, as appropriate, financial assistance should be provided for them.

IV. Specific Issues

Some specific causes of the forest degradation in the Asia-Pacific region are identified and they need specific counter measures.

A. Eradication and Prevention of Illegal Logging. (ST Recommendation4-2a))

(1) Laws on the prevention of the illegal logging should be enacted or amended. In addition, plans should be developed in order to enforce such laws effectively. The plan may include the following measures. (ST Recommendation 4-3g))
   a) An inspection system of forestry-related factories including surprise inspections should be developed and carried out in order to ensure that the factories do not use timbers derived from illegal logging. (ST Recommendation 4-3f))
   b) The import of the timber derived from the illegal logging should not be accepted by importing countries. (ST Recommendation 4-2c))

(2) A network or a mechanism for monitoring the flow of timber, involving NGOs and local people, should be established in order to grasp the situation of illegal logging. (ST Recommendation 4-2c), PM Recommendation Indonesia 4-3)

(3) Training programs for government officials, members of NGOs and local people should be organized in order to enhance the capacity of relevant persons. (ST Recommendation 4-2d))

B. Control of Forest Fires

(1) When necessary, a law for prohibition of activities that cause forest fires should be enacted or amended. At least, a plan controlling such activities should be developed and implemented by governments. (ST Recommendation4-4b), I), k))

(2) In order to ensure the effectiveness of laws or plans for forest fire control, an appropriate technology and sufficient equipment should be provided to governmental local branches or local governments that implement the law or plan at the field site. (ST Recommendation4-4I), k))

(3) Alternative techniques for the forestland clearance using fire should be provided to local people. (4-4k))

(4) Assistance for activities or projects related to fire control should be given a high priority in international aid programs and in national or local budgets. (ST Recommendation 4-4j), 4-5g))

C. Improvement of Forest Concessions (regulating concessions)

(1) Information related to the examination and decisions about forest concessions should be disseminated. (ST Recommendation 4-4d))

(2) Participation of local people in the process of examination and decisions on the granting of concessions should be ensured. (ST Recommendation4-4d), e))

(1) Areas of cultural, social and ecological significance should be excluded from forest concessions. (ST Recommendation 4-4e))

Tranquility in the rainforest

Comments on the Four Research Themes of the IGES Forest Conservation Project

By
Ma Hwan Ok

The subject of the sustainable management of tropical forest is of global concern because tropical forests are being destroyed or degraded very rapidly due to various causes, the most serious being over-population and poverty. In the 21st century, where global warming is one of the great challenges, global environmental strategies should be enhanced to promote the multiple functions of tropical forests such as carbon sinks and the conservation of biodiversity so that remaining tropical forests can be protected for future generations.

I recognized that, as a global environmental research institute, IGES conducted very important research in the area of forest conservation within four main topics; structural analysis on forest loss, timber trade, participatory forest management and legal and administrative system related to forest management.

Structural Context of Forest Loss in the Asia-Pacific Region

This study analyzed the main causes of forest loss in the Asia-Pacific Region with intensive case studies in the Philippines, Indonesia, Thailand, Lao, Vietnam and Cambodia. I noted that the main causes reported were well documented and that five recommendations were identified in support of a reduction of forest loss and an overall slowing of the late of loss. I would like to strongly support the recommended actions, in particular the development of a method to assess the full value of forests which would support strengthening of political awareness for conservation and management of forests with senior policy and decision makers at the national level. I believe that political will and raising public awareness on issues of forest conservation is one of the most important preconditions to stop or slow deforestation and forest degradation in developing countries.

I think that there is an urgent need to develop an internationally accepted methodology to evaluate the carbon dioxide absorbing capacity of forests, because this would facilitate the implementation of economically and environmentally sustainable forest management. We are well aware that how to handle forests was a key item on the agenda of COP-6, the sixth Conference of the Parties to UN Framework Convention on Climate Change held in November 2000 in the Hague. Although the rules for counting emissions reductions from carbon "sinks" such as forests were not resolved in the meeting, a resumed COP-6 to be held in late May 2001 in Bonn may agree rules relating

International Tropical Timber Organization (ITTO), Yokohama, Japan.

to carbon sinks. It was noted that inclusion and calculation of the carbon dioxide absorbing powers of forests would have a major impact not only on Japan or other developed nations who act to reduce greenhouse gas emissions (*The Japan Times*, November 14, 2000, page 3) but also on developing countries in tropical regions with more internationally assisted forest conservation and sustainable forest management projects.

Recognizing that one of the major causes of forest degradation in the Asia-Pacific Region was export-oriented unsustainable commercial logging, I felt that international and regional assistance to restructuring wood-based industries in the region would be urgently required. For instance, Indonesia's current wood industry is a product of three decades of development characterized by ineffective planning. Based on 1997 figures the wood based industrial capacity was 58 million m3 (log equivalent) while the formal annual log production from selective cutting and forest conversions was about a half of this. The raw material deficit will be widening in the next decade as log availability declines. The widening gap between supply and demand will put greater pressure on forest sustainability. Therefore the wood processing industry needs restructuring aimed at an environmentally friendly as well as a more profitable industry, in order to fit with resource capacity and comply with critical requirements of multilateral trading arrangements. The promotion of value added production in tropical timber from sustainably managed sources would allow less harvesting of tropical forests and more economic benefits to the society.

Further, I felt that there was also an urgent need for the development or revision of national plans for the sustainable management of forests with the participation of all stakeholders in a participatory process. The course of action would include securing of permanent forest areas and allocation of protection/conservation areas; promotion of the sustainable forest management concept; establishment of partnerships between public and private stakeholders at all stages and promotion of private sector in SFM; training of forestry personnel; and implementation of an efficient approach given constraints of time and resources.

Timber Trade Policy to Support Sustainable Forest Management

I felt that the recommendations on the subjects of (i) forest resource accounting and (ii) forest certification schemes were well formulated in support of the development of timber trade policies to improve the management of forests. The recommended action for market research in the South Eastern Asian region was highly commendable because there has been too little analysis of the market demand for and supply of certified timber products in the region. The genuine customer-driven demand for certified timber products is uncertain. This knowledge gap should be narrowed. Demand analyses on the major timber markets in the region such as Japan, China and Korea should be carried out in order to capture the real customer responses to certified timber products. This research would provide updated market information on certified timber products so that timber-exporting countries can follow the identified demand.

With regard to the recommended actions 1 and 2 of Objective 2 “Develop an effective strategy for certification process and timber trading in each regions or countries,” my opinion is that the construction of homogeneous evaluating criteria and indicators among certifying institutions would be difficult to achieve. At present, there is no global consensus on the scope and viability for any single system of certification to be applied in tropical forests. It is unlikely that there will ever be one global system. It is recommended that individual countries and companies should pursue the development of their own national certification systems or choose one of the existing systems. At the international level, the Forest Stewardship Council (FSC) and International Organization for Standardization (ISO) have provided the most prominent schemes.

I would like to point out that although timber certification and labeling schemes, calling for sustainable forest management, gained an unprecedented strong media presence in the timber business in the 1990s, the sustainability objective will not be reached by means of certification and labeling alone because of low share of roundwood entering international trade (15-20% of total logging volume), which means all timber-producing countries are not heavily dependant on export markets.

Participatory Forest Management

I noted that policy recommendations made for Indonesia, the Philippines, Laos and Vietnam were well formulated and comprehensive for the promotion of sustainable forest management based on a participatory process. They are very clear recommendations for each target audience in each country. However, in the definitions, the mechanism of a “Green Safety Net” to secure the minimum level of forest conservation was not clear.

There are 11 Principles to elaborate the policy recommendations in enhancing participatory forest management. The main purpose of these principles was not clear. I felt that many of the principles were just simple definitions. For instance, Principle 2 (In the tropics, the concept of “local participation” is more useful today than the concept of “public participation”) was just comparing two concepts. A more fundamental concept should be presented as a set of principles and recommended actions since a conventional format of most international standards comprises principles and recommended actions which are the outward messages to target audiences. In order to be an international reference standard for participatory forest management, it is recommended that the current version should be reformulated to help promote participatory forest management and to help solve existing problems from policy development to operational activities.

The lessons learnt by international and national agencies show that local communities may have more immediate or pressing interests in the provision of income or improved social facilities than in the objectives of any individual project itself. Noting that poverty alleviation is one of the most urgent tasks in developing countries, an integrated forestry project, based on the perceived needs of the community, combined with the improvement of social conditions in local communities, would be essential for

promotion of participatory forest management. For instance, in relation to forest degradation and, as identified in recommended action 4-2 for Indonesia, a fuelwood or bio-energy project would be important in Third World countries because fuelwood accounts for at least half of all the wood used in the world each year and for more than 85 percent wood used in Third World countries. No other source of energy is available on a large enough scale to satisfy the billion people who depend upon fuelwood.

Legal and Administrative System on Forest Conservation and Participation in the Asia-Pacific

Although there are many good elements under the three sub-titles for recommendations of the above topic, they seem insufficient to present concrete recommendations to reform the legal and administrative systems in the target countries. Attention should be given to the analysis of the current forest laws in the target countries to find existing legal problems in forest conservation and constraints to participatory forest management such as land tenure, property rights and long-term user rights. Further, focus should be given to the analysis of institutional capacities in the target countries to implement sustainable forest management. Institutional strengthening would be an important condition for conservation, management and use of tropical forests, including the promotion of more cooperation between government and private sector, to enhance the contribution of tropical forests for poverty alleviation in developing countries.

Measures for Sustainable Forest Management and Effective Participation of Local People

I noted that this paper summarized well the most important parts of each research and identified three specific issues causing the forest degradation in the Asia-Pacific Region along with their counter measures. With regard to three issues such as (i) prevention of illegal logging, (ii) control of forest fire and (iii) improvement of forest concession, I fully endorse the importance of urgent actions to overcome these issues. In this regard, I would like to recommend that cooperation between IGES and relevant international organizations, including ITTO, should be further strengthened.

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Brief comments on recommendations of IGES first phase research results (1998 - 2000)

By
G. Simon Devung

These brief comments are based on the Recommendations given in the Executive Summaries of Part 1, and are arranged Section by Section for convenience. The Recommendation Number/Part refers to the same Number/Part in the respective Section.

A. Part 1 - Section 1: Structural Analysis Sub-Theme (ST)

No	Ref. No. /Part	Stated Recommendations	Comments and Notes
1	III.1.a)	Development of method in order to evaluate multi-function/value of forests	Who are really expected to develop the method? ♣Who would ideally be the intended initiators?
2	III.1.b)	Addressing the traditional knowledge on forest resource use	In the method being developed or when considering the benefits of land, forestry development and price of timber products? ♣ Consider the inclusion of this part in 1.a) or 1.c)
3	III.1.e)	Ensuring compatibility of land use allocation with the local communities who use or need access to the same land or resources on that land.	Not only the local communities who use or need the same land but also the local communities who use or need the land in the adjacent area ♣ Consider the ecosystem interrelation.
4	III.2.c)	The central and local government, in addition to major importers of timber, should take responsibility to exert severe	It is quite doubtful that such recommendations would be effective for the importers of timber ♣ In many cases the

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		control over the origin of wood products that are imported, and refuse transactions of timber of illegal and non-sustainable origins. Non-certified timber should not be imported from any countries. For effective monitoring or to control illegal trade capacity.	importers do take benefits from the transactions of timber of illegal origins
5	III.4.k)	The restriction of development activities, in particular, intended burning for land clearance, should be reinforced more strictly.	More attention should be paid to the land clearing contracts which are in many cases sub-contracted to some smaller sub-contractors ♣ Lower sub-contracted payment and more limited time for the sub-contracted land clearing works have normally urged the sub-contractors to choose the short-cut practices of intended burning
6	III.5.b)	Pledges of loans or grants made by the international community should be carefully conditioned on the basis of respect for human rights and sustainable management of natural resources, in agreements that are informed and transparent to the public. Compliance to such written conditions should be closely monitored and the government should be held accountable for its policies	The monitoring of the compliance to agreed conditions of the loans or grants is often difficult to undertake in the case of the fast changing political environment such as in Indonesia in this decade ♣ There have been quite a number successive turn-over of related government officers

B. Part 1 - Section 2: Timber Trade Policy Sub-Theme (TT)

No	Ref. No./ Part	Stated Recommendations	Comments and Notes
1	3.1. (1) Action 1 (2) Action 2	Objective: considering the relationship between social economy and natural	Could Action (2) be undertaken by merely undertaking Action (1) to meet the stated Objective?

		environment in forest sector (1) Action 1: collecting environmental information (2) Action 2: constructing forest resource accounts	♣In my opinion: collecting social economy information would also be needed, and planned as Action (2), while the current Action (2) should be put as Action (3), after Action (1) and Action (2) have been undertaken.
2	3.2 (1) Action 1	Action Market research in the South Eastern Asian region. Taking importing and exporting countries, flow of certified products in the entire national level market, and case studies on certified forests of individual, enterprise, and public entities (interviews and questionnaire survey).	Why only flow of certified products to be the concern, and not all of exported and imported products? ♣ Consider the "should not" aspects of the conditions for the Forest Certification Scheme

C. Part 1 - Section 3: Participatory Forest Management Sub-Theme (PM)

No	Ref. No./ Part	Stated Recommendations	Comments and Notes
1	2-1 Indonesia Objective 1 Action 1-6.	The national government should establish rules to obligate local governments to ensure local participation and to report publicly on the condition of PFM in cooperation with NGOs.	Why not involving the local people as well? ♣ onsider the common "formality" reports and "red plate" NGOs in Indonesian context
2	2-1 Indonesia Objective 2 Action 2-2	NGOs and the governments should persuade the local people to modify their customary forest utilization where the need exists to develop appropriate technology for sustainable forest management.	Not only persuade but also facilitate. ♣Particularly during the transition periods
3	2-1 Indonesia Objective 4 Action 4-2	The State Forest Corporation (Perum Perhutani) should plant tree species suitable for use as	Not only fuel wood but also fodder and simple building materials ♣pt to the real

		fuel wood by the local people on sites of an improved Tumpang Sari or Perhutanan Sosial program in Java.	condition in the villages in Java
4	2-1 Indonesia Objective 4 Action 4-3	The government and NGOs should help the local people to patrol the forest areas they manage.	With the support of sufficient financial /material /livelihood incentives arrangement. ♣ Otherwise local people will tend to involve in illegal logging organized by the outsiders who commonly offer more incentives

D. Part 1 - Section 4: Legal and Administrative System Sub-Theme (LA)

No	Ref. No./ Part	Stated Recommendations	Comments and Notes
1	II (3) Necessity of dispute settlement mechanisms between 2) and 3)	1). The right of local and traditional community /people, including tenure over forest land, right of access, ownership, control and harvesting, should be recognized, guaranteed and stipulated clear enough to be invoked in a court or public forum when the problems based on the rights are in question. 2). The local community /people should be ensured in the decision making process of regulations, legally binding normative instruments as well as plans, projects and policies on forest. The procedure should include reasonable time frames for the different phases, allow sufficient time for informing the public, and	It would be worth to explicitly state as one of the components: the common agreement on the arrangement of stipulated dispute settlement, at the early stage of the interaction between or among parties concerned ♣ Put this component as no. 3). The existing no. 3), 4) and 5) would then be no.4), 5) and 6) respectively.

		provide for early participation. 3). Access to the information by local people should be guaranteed, especially at the early stage. If her or his request has been ignored, or inadequately answered should have access to a review procedure. 4). Once conflict occurs, the settlement process should be established upon call by a party concerned. The process should be transparent. 5). In the settlement mechanism, three components should be included: first, an objection mechanism allows the public to respond or object to the government; second, a reliable dispute settlement mechanism, or ombudsman, which is truly independent and third; option to chose/agree with to conduct the settlement through legal forum or out of court.	

Comments on Reports of the 4th IGES International Workshop On Forest Conservation Strategies in Asia-Pacific

By
Xeme Samountry

1. Introduction

First, let me congratulate IGES for organizing the concluding workshop of its three-year research activities for forest conservation. Forests have been one of the most important international issues that have been discussed at a number of forums for more than a decade. However, many of the discussions are highly political and sometimes conflicting among groups of countries or organizations. I understand the approach taken by IGES is more fields oriented and constructive. It is strongly hoped that this final Workshop of IGES come up with a set of policy recommendations which contribute to formulation of workable and feasible policy and strategies of each country.

Secondly, let me express my deep apology for not being present at this very important international workshop. I sincerely wish I could be in Tokyo and exchange views with participants for forest conservation in general and for better understanding of forest and forestry in Lao PDR in particular. I hope the Workshop finds following comments useful for discussion.

2. Overview of Forest Management in Lao PDR

Lao PDR is a landlocked and mountainous country and still relatively rich in forest. Forests play very important roles in the national economy, society and environment, especially in people's livelihood in remote areas. Most of local people are subsistence farmers heavily depending on forest for food, shelter, medicines and cash incomes.

Forest land and natural forest resources are national property and the State represents the nation in management of forests and allocation to organizations and individuals. There are so far about 2.5 million ha of State Production Forest (SPF) and 3.3 million ha of National Biodiversity Conservation Areas (NBCA) which are designated and directly managed by the government of Lao PDR.

Local people's customary right to collection of forest produce for their own use is recognized by Forestry Law and is allowed in certain forest areas which are identified and recognized through participatory land and forestry allocation exercise in villages. In the land and forest allocation parcels of degraded land which are still suitable for agriculture and tree planting are allocated to farmers for long term use/investment at

Director General, Department of Forestry, Lao PDR

the same time village forest are classified into some categories for rational use and conservation. Many villages located within SPFs and NBCAs are also allocated forest land for their use through the land and forest allocation.

However, being one of the least developed countries, laws and regulations concerning forest and forestry are not yet fully developed. Not all of the regulations for field implementation of the Forest Law are in place yet. For example, there are more than a couple of government instructions concerning classification and use of village forest. And, the implementation of laws and regulations at field level is still insufficient due to weak institutional and staff capacity and division of responsibilities concerning management of forest is still in the process of development. There are also cases of unsound logging and collection/sales of prohibited species.

The government of Lao PDR recognizes these weakness and deterioration of forest resource base including wildlife. We are determined to overcome these weaknesses one by one with international support. It has initiated preparation of "Strategic Vision on Forest Resource Management to Year 2020" in order to formulate strategies and policy including international cooperation which the government have to follow in the 21st century for maximum and sustainable contribution of the sector to the national economy, society and environment.

3. Lao PDR's experience in Forest Loss and Participatory Forest Management

Forest loss

In 1990 the forest cover was estimated at 47%, a 2% reduction compared to 49% in 1982. A recent study in the central and southern part of the country shows further decrease of forest cover. Although an in-depth analysis of the data has not been made yet, it can be said as follows concerning forest loss in Lao PDR.

With a high rate of population increase and necessity oh socio-economic development it is inevitable to convert forest into agriculture and infrastructure uses. Especially in the central to southern part, which is the rice basket of the country and home to a couple of hydropower projects, much of forest loss can be attributed to necessary conversion to agriculture and infrastructure land. This region is also the center of log production. Much of logs are coming from construction sites, thus this kind of logging is not the main reason of forest loss. They come from SPF and other forests, too. It is known uncontrolled logging causes a lot of damage to young stands and soil leading to forest degradation and it induces unplanned influx of settlers leading to forest loss.

The slash and burn cultivation, which is widely practiced in the northern part and one of the main causes of forest loss, has been steadily stabilized mainly due to the land and forest allocation policy. It is envisaged that many ha of fallow land or degraded land will rejuvenate back to forest and provide local people with rich forest produce.

Participatory Forest Management

As stated above forest land and forest within village boundaries are under the management of villages and villagers based on agreement with local authorities except log production for sale. However, it is reported that resource base has been still deteriorating mainly due to over use or unauthorized uses by outsiders.

Still at the very low developmental stage most of villagers are concerned with tomorrow's food for their families. With more technical and financial assistance by the government and international society it is envisaged that villagers will gradually participate in more active management of their resources and take more responsibilities for protection of them.

4. Specific Comments

(1) Structural Context of Forest Loss

Lao cypress

The government is concerned with forest resource and wildlife degradation. In the Prime Minister's Decree No. 10 on Control of Forest Operation and Timber Business, Oct 4, 2000, logging of five species including Lao cypress is banned along with other provisions ordering strict enforcement of regulations concerning harvesting and sales of logs in general.

Effects of War and UXOs

As stated in the report the Indochina War and bombing by US had resulted in tens of thousands of refugees and destruction of forest by the bombs themselves and by the refugees. Vast areas remain still barren and remaining UXOs deny access to rehabilitation of them or management of existing forests.

(2) Policy Recommendations for Participatory Forest Management

Village forestry for timber production

The government of Lao PDR has a clear policy that management of forest for timber production/sales should be under strict control by the state taking into account high technical standard necessary for sustainable management of SPF and uneven distribution of them.

Classification of forest, especially Degraded land and Regeneration forest

These two categories of forest are expected to be identified and determined in the land and forest allocation exercise at village level. Some part of fallow land can be

classified as village use forest for collection of various forest produce and some other as regeneration forest for temporary restriction of use until the it becomes rich forest.

Discussion of IGES Policy Recommendations

17 Jan 2001 (Morning Session)

Dr. Ma Hwan Ok

Note: Dr. Hwan's presentation was based on his handout. Please refer to it if necessary.

1. Structural contexts of forest loss: The main causes reported were well documented and those five recommendations were enumerated to decrease the speed of deforestation (e.g. the development of a method to assess the full value of forests). There is an urgent need for constructing a methodology to evaluate the CO2 absorbing capacity of forest. Moreover, export-oriented unsustainable commercial logging is one of the main causes of forest degradation, and the promotion of value added production in tropical timber from sustainably managed sources would allow less harvesting of tropical forests. Furthermore, there is also an urgent need for the development of national plans for the sustainable management of forests with the participation of all stakeholders in a participatory process.
2. Timber trade policy: It is too difficult to achieve homogenous evaluating criteria and indicators, so it is better for each country to develop his own criteria and indicators.
3. Participatory FM: The definitions of "green safety net" are not clear. Also the main purpose of eleven principles is not clear. Income generation and social facility is important to support PFM.
4. Legal and administrative system: In spite of many good elements, they lack specific recommendations to reform the legal and administrative systems. For instance, finding existing legal problems such as land tenure should be addressed. Further, the analysis of institutional capacities to implement sustainable forest management should be focused.

Mafa Chipeta

(General points)

1. I enjoy the contents: valid, not temporary issues.
2. Audiences of recommendations are not very clear.
3. The number of comments (recommendations) is quite large and priority should be necessarily put.
4. It is necessary to integrate all aspects of the four programs.
5. How do we explain well enough the fact that what we have done is important?

(Specific points)

6. Trade policy: Domestic trade is much more important because international uses less than national one. Asia-Pacific aspects should be included in the analysis.
7. Legal and administrative:
8. Participatory Management: The participatory forest management should consider importance of benefit for local people.

9. Structural analysis: I would like to include causes of deforestation as well as how deforestation will be solved in the report.

Simon Devung:
Note: Mr. Devung's presentation was based on his handout. Please refer to it if necessary.
Generally, IGES's recommendations are pretty comprehensive.
P.1 No.3 Put stress on land use not by only the local communities who use or need the same land or resources, but also by the local communities who use or need the land in the adjacent area. Consider the ecosystem interrelation.
No.4 Price incentives are very crucial.
P.2 A No.5 We should think of the sub-contractors world.
C No.1 Why not involving the local people as well as NGOs?

Natalia Antonova:
Sometimes the central government does not take into account the necessity of sustainable forest management. A risk arises from the transfer of the function of the Federal Forest Service to the Ministry of Natural Resources. The risk is that the importance of bio-diversity and forest preservation is considered simply as the second target by new forest management structure and the use of forest resources will prevail.
Hence, it is necessary to develop a legal system of decision-making process of the central government. For this purpose lobby in the parliament is useful.
The recommendations for establishing an inter-ministerial forum for sustainable forest management are necessary. It is very important, especially for such a big country, to develop a coordination mechanism between national and local governments

Hiroji Isozaki:
(Dr. Ma and Chipeta) Concerning the classification of audiences, it must be noted that there are two levels in the analysis: one is an international level and the other is domestic level. In the first phase, we needed to set up and propose guidelines, so it is natural that the contents were broad. But in the second phase, the specific countries (regions) will be investigated. Also it is important how to operate of these recommendations (how to follow up).
(Dr. Ma) In the second phase, we need to show how to implement (to assure) enforcement of laws or other systems.

Masanobu Yamane:
1. (To Dr. Ma) Concerning the development of the methodology, we would like to emphasis the careful implementation of development of socio-economic indicators because we have to decide output solved, but there are big differences of scale in the Philippines.
2. (To Dr. Simon) Concerning illegal trade issues, it is very difficult to control illegal transactions of timber because of insufficient administrative capacity. Without

collaboration with neighboring countries, appropriate certification systems cannot be constructed.

Shin Nagata:
(To Dr. Ma and Mr. Chipeta) Our focus is the international trade, but the internal production and consumption is utilized in studying the international trade; so we do not ignore internal trade data. There is a reason why we focused on international trade: we think that the international trade has heavier impacts on forest degradation than the internal trade.
(To Mr. Chipeta) Although it would be interesting to broaden our study in the Asia-Pacific region, there are time constraints to do so. International trade between the USA, New Zealand and Asian countries, for example, should be considered if we broaden the area of our study.
(To Dr. Ma) As Dr. Ma pointed out, we should study more about certification schemes and more on non-certified products.
(To Mr. Chipeta) As Dr. Ma pointed out, we should focus more on issues of exporting deforestation.

Makoto Inoue:
(To Dr. Ma) 3 questions.
1. The concept of the green safety net indicates a function of the central government. First, it implies that central governments do not have to maintain political power and transfers the power to the local government. Secondly, it implies that central governments still maintain a part of authority. (E.g. conservation of national minimum amount of conservation forest)
2. As Prof. Isozaki pointed out, we should change the terminology of "principle" to "basic standpoint."
3. (About audiences) Please refer to page 23. There is a statement on the national government and NGOs.
(To Mr. Chipeta) Not all the forest is to be managed by local people. We still think it is needed for a part of forest to be managed by companies.
(To Mr. Simon) As you pointed out, we should have mentioned participation of not only NGOs as well as that of local people.

(To Dr. Ma) Concerning Laos, the Mekong River region is being studied. Neighboring countries adjacent to the Mekong River, such as Cambodia, Myanmar, and Thailand should be included in the analysis of the second phase. Also we can propose participatory forest management of these countries. In Phase 2, particular areas will be focused on. Therefore, it is best that IGES cooperate with other groups that are also tackling environmental issues.

Atsuko Hayama:
In the first phase, no scientific data related to ecological studies was used (such as the

amount of extractable timber for sustainable forest management). I hope that the scientific data of ecological studies for forest management will be included in the second phase.

The International Tropical Timber Organization - by *Efransjah*

- **was created by the ITTA, 1983**
- **currently operates under the ITTA, 1994**
- **has a secretariat of 32 people based in Yokohama**

The International Tropical Timber Council

- **is the Organization's governing body**

- **meets every six months to discuss policy issues and to set the project program**

International Tropical Timber Organization

ITTO

Purpose

The Organization is dedicated to the sustainable development of tropical forests through trade, conservation and best-practice forest management

Membership

- **brings together tropical timber producers and consumers**
- **currently has 56 member countries and the EU**

ITTO membership represents:

- **90% of world tropical timber trade**
- **76% of the world's tropical forests**

ITTO Funded Projects:

- **Developing Forest Resources through Community-Based Forest Management in Nueva Viscaya, the Philippines [PD21/97-F]**

- **Rehabilitation Degraded Forest Through Collaboration with Local Communities , in Ghana [PD30/97-F]**

ITTO Funded Projects:

- Reforestation of the Abutia Plains by Indigenous Communities in the Volta Basin, in Ghana [PD 48/98-F]
- Participatory Tropical Forest Development by Women in Indigenous Communities, in Ghana [PD 49/98-F]
- Management of Missahoe Reserve Forest with Participation of the Rural Communities, in Togo {PD9/99-F]

Barriers to successful community participation

- The people may have not had the ownership or control of the forest;
- if they do have rights to the forest, factions within communities may exploit others, or the community as a whole may be exploited by outsiders
- the forests may be degraded due to clearing for agricultural or poor logging practices

Barriers to successful community participation

- The rewards from new plantations or rehabilitated secondary forests may seem too slow in coming to be worth striving for;
- the community may not be interested in maintaining forest cover, preferring to clear it for agriculture or to make fast money from logging;
- participatory decision-making can be cumbersome;
- lack the technical skills, insufficient capital

ITTO Guidelines for SFM:

- “Sustained timber production depends on an equitable distribution of incentives, cost and benefits, associated with forest management, between the principal participants, namely the forest authority, forest owners, concessionaires and local communities”

ITTO Guidelines for SFM:

- “The success of forest management for sustained timber production depends to a considerable degree on its compatibility with the interest of local populations

ITTO Guidelines for SFM:

Provisions should be made :

- for consultation with local people starting in the planning phase before road building and logging commences
- for continued exercise of customary rights
- for concession agreements and other logging permits to cover the extent of assistance, employment, compensation,etc to be provided.

ITTO Criteria and Indicators for SFM:

- Extent to which tenure and user rights over the forest are documented and recognized;

- Extent to which forest planning and management practices and processes consider and recognize legal or customary rights with respect to indigenous people and local communities, forest dwellers and other forest-dependent communities;

ITTO Criteria and Indicators for SFM:

- Extent of participation by indigenous people and local communities, forest dwellers and other forest-dependent communities in forest-based economic activities;

- Number of agreements involving local communities in co-management responsibilities.

Crucial Elements :

- Land tenure arrangements
- Demarcation of permanent forest land
- Demarcation separating the forest zones from other non-forestry zones in a permanent landscape- land-use.

Concluding remarks:

- ITTO is much more than a commodity organization
- It is a commodity and resource development organization working to ensure the sustainability and conservation of tropical forest resources through local community involvement and people participation.

Concluding remarks:

- It is our view that any plan adopted to address community participation must address the issues of poverty and land tenure, and the expectation of the local communities to uplift their standard of living.

PRESENTATION NOTE ON PARTICIPATORY FORESTRY RESEARCH AT THE CENTER FOR INTERNATIONAL FORESTRY RESEARCH (CIFOR)

By
Mafa E. Chipeta

INTRODUCTION

This note is not comprehensive. In places, it is prepared in telegraphic style for brief information. In its presentation, the material on participatory forestry research is preceded by an abbreviated overall presentation on CIFOR and its programme. After introducing the overall programme of CIFOR, the note focuses on the programme on participatory forestry, giving its goals and purpose and a partial listing of its activities. Given the particular interest of IGES in the Asia-Pacific region, there is reference to possible future priorities in the agenda for research on people's interaction with forests, the exact items retained being dependent on the sub-region or country in question. The note concludes with a listing of some pitfalls researchers seem to face in carrying out participatory forestry research. The point is made that there is need for permanent learning since conditions are always changing and diversity of local circumstances is almost limitless.

CIFOR is one of 16 centres under the umbrella of the Consultative Group on International Agricultural Research (CGIAR). Its mandate is to undertake and promote research on all aspects of forest management. In practical terms, CIFOR has interpreted this mandate broadly to include biophysical as well as social-economic, policy and institutional research. CIFOR has also decided to orient its entire research towards people and their relationships with forests and therefore participatory modes of forest management underpin the entire research agenda. At present, the 6 core programmes of CIFOR research (normally carried out in partnership with national institutions such as NGOs, universities or governmental institutes) are:

- *Underlying Causes of Deforestation (UCD)*
- *Adaptive Co-Management of Forests (ACM)*
- *Sustainable Forest Management (SFM)*
- *Forest Products and People (FPP)*
- *Biodiversity and Genetic Resources (BIO)*
- *Plantation Forestry on Degraded or Low Potential Sites (PLT)*

A further two programmes cut across all the above six:

- *Policies, Technologies and Global Changes (GLC)* – to maintain a comprehensive

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overview of the state of the world's tropical forests, closely follow major global trends relevant to the condition of forests and their management, and to provide research support to international fora and negotiations while in turn drawing upon international dialogue in identifying priority research areas for the future.

- *Research Impacts, Priorities and capacity evaluation (IAP)* – aimed at increasing the research impact for CIFOR and its partners and at improving research and research management capacities.

Furthermore Indonesia has offered CIFOR use for research of the 300,000ha *Bulungan research forest* in East Kalimantan. This is an ideal open-air laboratory where CIFOR integrates in practice its research. So far, among the most active programmes there has been ACM.

Notwithstanding the orientation of the whole programme towards people, CIFOR has, in order to give particular focus to participatory forestry, launched a specific programme called *"Local People, Devolution and Adaptive Co-Management of Forests,* often abbreviated into *Adaptive Co-Management of Forests (ACM)."* ACM serves as focal point for research in methodology development, testing and formulation of best practice. However, significant research closely related to participatory forestry also features under the programmes on *Forest Products and People (FPP)* and *Plantation Forestry on Degraded or Low Potential Sites (PLT).* Under FPP, much attention goes to non-timber products of particular value to local livelihoods; under PLT, focus is on small-scale plantations and trees in farming systems (at the interface with agroforestry) and on improving the relationships of local communities with industrial-scale forest plantations.

This note avoids going into detail about individual research activities – information on these can be accessed from the CIFOR website or publications.

THE PARTICIPATORY FORESTRY RESEARCH PROGRAMME AT CIFOR

Goal, purpose, orientation

The *Adaptive Co-Management of Forests* programme has for its goal to achieve more sustainable and equitable management of forest resources and human well-being in a multi-stakeholder environment via the development or identification a set of models, institutional arrangements, methods, tools and strategies to empower local communities.

The research aims at finding out what works best and under what conditions. It asks the what, where, how and who of participation. It recognises that forests involve diverse and sometimes conflicting interests of many stakeholders of varying knowledge and power and is directed at seeking improvements not only at the level of forest-based or forest dependent groups but also at policy level so that the environment is conducive to participation.

CIFOR is driven by the desire to see forests managed sustainably but in such a way as to contribute to livelihoods.

A guiding principle is that participatory management cannot run on blueprints. Therefore it should be *adaptive.* In order to measure adaptation, measures of change against known criteria and indicators (C&I), including social criteria and indicators. C & I research is thus an integral part of the ACM programme.

The research products are tailored to a range of audiences, including resource managers (industrial or local people), NGOs, scientists, policy makers at various levels, as well as donors/development assistance agencies and their projects.

There is a growing body of evidence that local people's knowledge of their environment, their organisational capabilities, their institutions, and their creativity have been underused in the past and therefore that existing local "social capital" has not been adequately recognised and used in improving forest management. CIFOR research aims to improve forest management by developing strategies that address these deficiencies.

The ACM research agenda – an abbreviated profile

The participatory forestry research covers resources management, livelihoods from utilisation of forest goods and services, and methodologies related to both. To capture the range of diversity, CIFOR research covers many sites, often in several regions in the developing world. In a diverse world, an important output is identification of principles rather than prescriptions.

A particular attribute of the CIFOR research that is probably unique is the integration of criteria and indicators into participatory forestry. This approach includes social considerations in assessing progress towards sustainable forest management.

Annex 2 gives some examples of ACM projects in the past and now, some of which have already published results. In addition to the work of the ACM programme, research under the *Underlying Causes of Deforestation*, *Forest Products and People*, and *Plantations* programmes includes activities listed in Annex 3

PITFALLS IN PARTICIPATORY FORESTRY RESEARCH

CIFOR has existed since 1993 and has during the entire period since then operated in all developing regions: Africa, Asia-Pacific, and Latin America. Its research remains a work in progress; there are still new experiences and society is evolving so fast (and differently yet also similarly) in all these regions that one is always learning. Many important results have come out and some are being tried. It is best to view these in the CIFOR publications, lists of which are on the CIFOR Website.

Experience also leads to recognition of some elements of potential difficulty which researchers in this field might like to watch. They are temptations facing the researcher which the unwary may trip over:

- Dogmatism
- Temptation towards advocacy and loss of professional distance
- Generalising the specific

- Unquestioning praise for traditional forest-based lifestyles and livelihoods
- Failure to bridge traditional with modern knowledge and best practice
- Compartmentalisation of participatory management approaches
- Restricting local communities to marginal forest-based livelihoods
- Generalists versus specialists
- The qualifications gap between researchers and researched
- Inadequate attention to biophysical reality and economic fundamentals
- Disengagement of research from application: unfulfilled local expectations and community fatigue.

Annex 1 elaborates briefly on each of these. The reason for drawing specific attention to these matters is that professional credibility is important for the long-term support necessary for research regarding people's participation or responsibility for managing forests. A situation where researchers might be seen as being advocates rather than implementers of systematic enquiry may for some time attract support but eventually can cause loss of faith.

POTENTIAL HIGH-PRIORITY ISSUES FOR PARTICIPATORY FOREST RESEARCH IN ASIA-PACIFIC REGION

The particular interest of IGES in the Asia-Pacific region calls for a note on future directions for research in the region. Ideally, the agenda for research on people's interaction with forests needs to be informed by analyses of development prospects for the economies and societies of the Asia-Pacific region. A wide range of annual or less frequent studies are carried out by the Asian Development Bank and other multilaterals on general development. For the forestry sector, the most recent comprehensive look is FAO's *Asia-Pacific Forestry Towards 2010* study published in 1998.[1] From a study of its magnitude, each reader may come up with a somewhat different set of priorities but the following are almost certain to be among them, depending on the specific country or sub-region:

1. **Changing interactions between forest dwellers and forests**: in proportion to total population in the region, the numbers of indigenous forest dwellers are small but in absolute terms, Asia-Pacific has the largest numbers and in some countries (India, Indonesia probably among them). These minorities may need specific efforts to accommodate their continuing traditional demands on forests even while assessing how such dependence is changing as expectations change and more opportunities may be coming within reach. Intimately linked to this is the relationships with *in-migrants into forest areas* (whether under official transmigration (Indonesia) or spontaneous (Philippines). Both for the indigenous people and for migrants, research supportive of real income capture by them has so far been neglected (rather

[1] FAO (1998): Asia-Pacific Forestry Towards 2010 [Report of the Asia-Pacific Forestry sector Outlook Study]. Vol 1: Executive Summary Vol 2: Main report. Food and Agriculture Organisation of the United Nations (FAO), Rome 1998.

than relegation only to what – like minor non-timber products – industry does not want or has rejected).

2. **Forest and tree dependency of fast-growing poor populations in urban Asia:** Unlike cities in the west where the residents are generally above the direct dependency on tree products such as fuelwood and charcoal, there are many cities – especially in South Asia (India, Pakistan) – where urban links with the forest go beyond amenity to livelihoods. Exit from this may take time and if no action is taken, considerable hardship may result for many.
3. **National parks and conservation areas under conditions of growing human pressure:** The setting aside of large areas of forest for conservation is unworkable in countries or parts of countries where land pressure will remain high until industrialisation siphons off people. Coexistence of people with conservation deserves systematic study and trial for best practice to emerge. In much of China, Java in Indonesia, Bangladesh, and India, conditions require radical departure from conventional wisdom on wildlife/biodiversity conservation.
4. **Systematic incorporation of trees outside forests (many on agricultural lands) into livelihoods of the poor:** The momentum has been lost on fuelwood but also on other trees near human settlements for the poor and which bear more utilisation pressure than realised for helping the poor. This is particularly so for South Asia (Bangladesh, India, Pakistan) but may also apply in parts of Java.
5. **Forests in mountain economies:** There is a direct link between mountainous areas and poverty. In mountain areas (even in industrialised Japan) incomes are lowest but these regions also tend to have forests as most commercially (potentially or actually) accessible natural resource for households. Policies are in place to support such populations in some cases but more systematic policy research on the potential of forests to support then people and how appears to be needed. Sample areas for this include Western China, Vietnam, the Himalayan countries, the highlands in the Philippines.
6. **The human cost to the forest-dependent of withdrawing or severely restricting industrial harvest in natural forests (for conservation/environmental reasons):** This policy is in place in more countries in the developing Asia-Pacific than any other region. Livelihood dislocations have resulted from policy adoption without prior assessment of alternative livelihoods or ways for local transition to gentler forest utilisation. Partial policy research is underway in FAO on the trade implications ("exporting deforestation") of these policies but the human livelihoods dimension is completely ignored. Example countries include China (the west, north-east), India, Thailand, Vietnam.
7. **Integrating indigenous knowledge and intellectual property (including that related to biological resources) into modern management of forests:** Screening and sifting remains almost completely uninitiated of what parts of traditional knowledge have potential to be mainstreamed without the poor being cheated out of their share of benefits.
8. **Wastelands and tree-based livelihood opportunities for the poor**: A revisiting of

old concerns (focused in earlier decades on India) particularly if new carbon-based opportunities prove a realistic opportunity.

Annex 1

Selected pitfalls and areas of difficulty in carrying out research for participatory forest management

Dogmatism

CIFOR is aware of the pitfalls of dogmatism in participatory forestry. Like communism in its heyday, the very idea of *participation by the people* has a compelling attractiveness and an unchallengeable "goodness" about it that can easily trap researchers into conventional wisdom. The greatest threat to research is in fact the possibility of researchers assuming that because participation is a desirable goal therefore it necessarily works better than any other approaches. Concern for efficiency can be lost and the people are the losers in the end if they get empowerment but lose productivity and other practical gains in the process.

Temptation towards advocacy and loss of professional distance

Participatory forestry can become a belief and article of faith – a gospel. Researchers are not immune from the temptation to drift into advocacy and away from scientific observation from some professional distance. It is not all scientists that have the discipline to recognise this pitfall and so avoid having interpretation of research being coloured by desired as opposed to actual outcomes. Where this happens, science tends to follow conventional wisdom (including sometimes wishful thinking) rather than providing an analytical or sound empirical basis for action.

Generalising the specific

Temptation to generalise the specific rather than the normal logic of interpreting the general for application to specific circumstances is another danger. Experience shows that local circumstances even within one country are influenced by so many human, biophysical, econ9omic/political and other considerations that to arrive at generalised conclusions in participatory forestry requires extreme care. CIFOR seeks to ensure this by using its global presence to have trials in as wide a diversity of situations as possible; it presents its results in such a fashion that the general principles and commonalities are shown separately from what can only have local validity in each research site or country.

Unquestioning praise for traditional forest-based lifestyles and livelihoods

Glorification of traditional ways of life without offering room for adaptation and

mainstreaming in new ways is another potential pitfall. Nowhere is this more so than in dealing with indigenous communities. CIFOR is trying, and not always successfully, to carry out research that looks not only at what works under conditions of original indigenous lifestyles but among communities that have been more touched by "modernisation." In this way the adaptation of societies in their relationships with and management of forests during changes in lifestyle can be tracked. A guiding consideration is that the indigenous people should have the right to adapt other options of livelihood if circumstances give them this possibility.

Failure to bridge traditional with modern knowledge and best practice

These days, no one seriously doubts that the traditional forest-related knowledge of local people represents a significant resource for progress towards sustainable forest management. Furthermore few would deny that local knowledge of the environment, local organizational capabilities and institutions, and creativity can be most important. Therefore, existing local "social capital" has not been adequately recognized and used in improving forest management. However, it often appears to be implied that such knowledge alone is necessary and sufficient to achieve progress. Inadequate efforts are being applied, including in research in this field, into adapting traditional knowledge to rapidly evolving socio-economic circumstances, to bridge it with scientific approaches and to expose indigenous knowledge to some scientific rigour. Consequently, there is still only limited merging between modern and traditional approaches with mutual suspicion among researchers preferring each side; often the biophysical scientists show wholesale skepticism of traditional knowledge while social scientists may over-compensate the other way.

Compartmentalisation of participatory management approaches

CIFOR has made a people-oriented agenda a basic tenet of its work. Participatory approaches feature in almost all research programmes so that the *Adaptive Co-Management of Forests* programme serves only as a focal point rather than an exclusive locus for participatory forestry research.

Restricting local communities to marginal forest-based livelihoods

Cases often arise where even in cases where local people live in rich and highly-productive forests, researchers and participatory forestry development practitioners select only marginal livelihood opportunities for the people: use of residues left by industrial logging, non-timber forest products outside the market mainstream, limited share of income from ecotourism etc. There is little research going on today on how local communities can be empowered to engage in more central industrial or commercial utilisation of forests, i.e. true economic empowerment rather than political capture of rights to be consulted on marginal matters.

Generalists versus specialists

There is still a learning process on how best the generalists who dominate participatory forestry research (many with social-science backgrounds) can best draw upon specialised biophysical skills and the reverse. Holistic approach to research is yet to be achieved.

The qualifications gap between researchers and researched

Many researchers have university backgrounds and they work with people that are barely literate, with consequent contrasts in perceptions and breadth of knowledge/exposure. The degree to which rural people do their own research upon which scientists can draw appears to be limited.

Inadequate attention of biophysical reality and of economic fundamentals

Cases exist, including in some of CIFOR's own work, where institutional, policy and sociological research is undertaken without securing adequate biophysical underpinning or with proposed solutions that fail to reflect market or other economic realities. This is a side effect of inadequate awareness or appreciation of what other disciplines have to offer.

Disengagement of research from application: unfulfilled local expectations and community fatigue
Long periods of research can lead to questionnaire fatigue among rural people and also to disillusionment with researchers where the people start off with expectations of developmental benefits.

Annex 2

Listing of main participatory research projects under ACM programme of CIFOR

Completed or approaching completion

Towards enabling local community forest management and planning through Geographic Information and Multi-Media technologies. (Scenario-building based on diverse information, including oral narration and images).

Madagascar – advancing community tenure security. (In the context of integrating national park management with socio-economic development in surrounding areas).

Ongoing projects

Institutional considerations and differentiation in ACM. (***Africa*** review of successes and failures in devolved control of forests and identification of decision-making arenas).

ACM Brazil. (Defining differences in ACM approach when privately owned forests are involved; comparative work with Africa and Asia).

Multiple interests, social learning and equity. (multi-stakeholder negotiations, focus on ***Indonesia*** – Bulungan research forest).

Assessment of rural development trends and future policy options on people dependent on the forest. (Bulungan research forest - ***Indonesia***.)

The impacts of devolution and accommodation of multiple interests. (Core countries ***China, India, Indonesia, Philippines***).

Planning for sustainability of forests through adaptive co-management. (Asia focus – ***Indonesia, Philippines, Nepal***).

Developing a criteria and indicators based monitoring system for the adaptive co-management of forests. (Including criteria for social dimensions such as gender and diversity); parallel foci in Asia (***Indonesia, Nepal, Philippines***), Africa (***Cameroon, Ghana, Malawi, and Zimbabwe***. Latin America being considered).

Developing indicators-based collaborative monitoring arrangements to promote adaptive community based forest management. (cost-effective criteria and indicators

based information for SFM; ***Zimbabwe and Malawi*** – Africa). A tropical humid forests replicate project covers ***Cameroon, Ghana***.

Assessing the sustainability of community managed forests. (Tests C & I for specificity and capacity for generalisation as well as acceptability to many stakeholders; ***Brazil, Cameroon, and Indonesia***).

Institutional arrangements governing the management of miombo woodlands. (Study of woodlands governance during rapid rural social, economic and political transition; ***Malawi, Tanzania, Zimbabwe***).

Development of decision support software based on the CIMAT (Criteria and Indicators Modification and Adaptation Tool) platform. (CIMAT is a computer programme that helps users tailor C&I to their local conditions). Applied in ***Indonesia, Zimbabwe*** but CIMAT training also in ***Thailand, India, Philippines, China, Nepal*** and for ***ITTO***.

New Projects

Multiple stakeholders and the shaping of SFM policies. (Indonesia decentralisation related study, with comparative work on ***Nepal, Philippines***).

Stakeholders and biodiversity in the forests of the future. (Scenario building – builds on earlier work in ***Madagascar***, with cross-references to ***Indonesia*** (Bulungan), ***Bolivia, Vietnam, Zimbabwe***).

Annex 3

Participatory forestry related research under CIFOR's Underlying Causes of Deforestation, Forest Products and People, and Plantations programmes

Study of local authorities and Natural Resource Management in Northern Nicaragua.

Comparative study on the role of local governments in forest management in Bolivia, Brazil, and Central America

Analyses the causes of changes in forest condition and the livelihoods of people in forested areas. The analysis should improve prediction of policy impacts on forests and people under different social and economic conditions and the formulation of more appropriate policies.

Involvement of women in non-timber forest products trade in Cameroon Humid Forest Zone of Cameroon and in neighbouring countries. New work is focussing on understanding the factors that encourage intensified management (planting/domestication) of forest products.
In response to the effects of the Asian economic crisis, work continues to examine the impacts on small farmers and forest resources in the outer islands of Indonesia.

Investigating the changing role and potential of managed non-timber forest products (rattan and benzoin) under highly dynamic socio-economic conditions.

Research on NTFP extraction and trade systems in the Bulungan research forest.
Bamboo sector in China, with focus on trade-offs between productivity and environmental objectives, and the evolution of policies for environmental protection.

Site management and policy options which improve the choices and chance of success for smallholder involvement in plantation forestry;
A review of the Indonesian and Philippines experience in implementing out-grower schemes in plantation forestry;
New communication tools and methods in the context of forest plantation development with multiple stakeholders. The multi-agent technology will be adapted to this specific context;
Methods, criteria and indicators to assess decision processes in the context of small-scale forest plantations.

A review of the Indonesian and Philippines experiences in out grower schemes in

plantation forestry.

CASE STUDY OF JICA

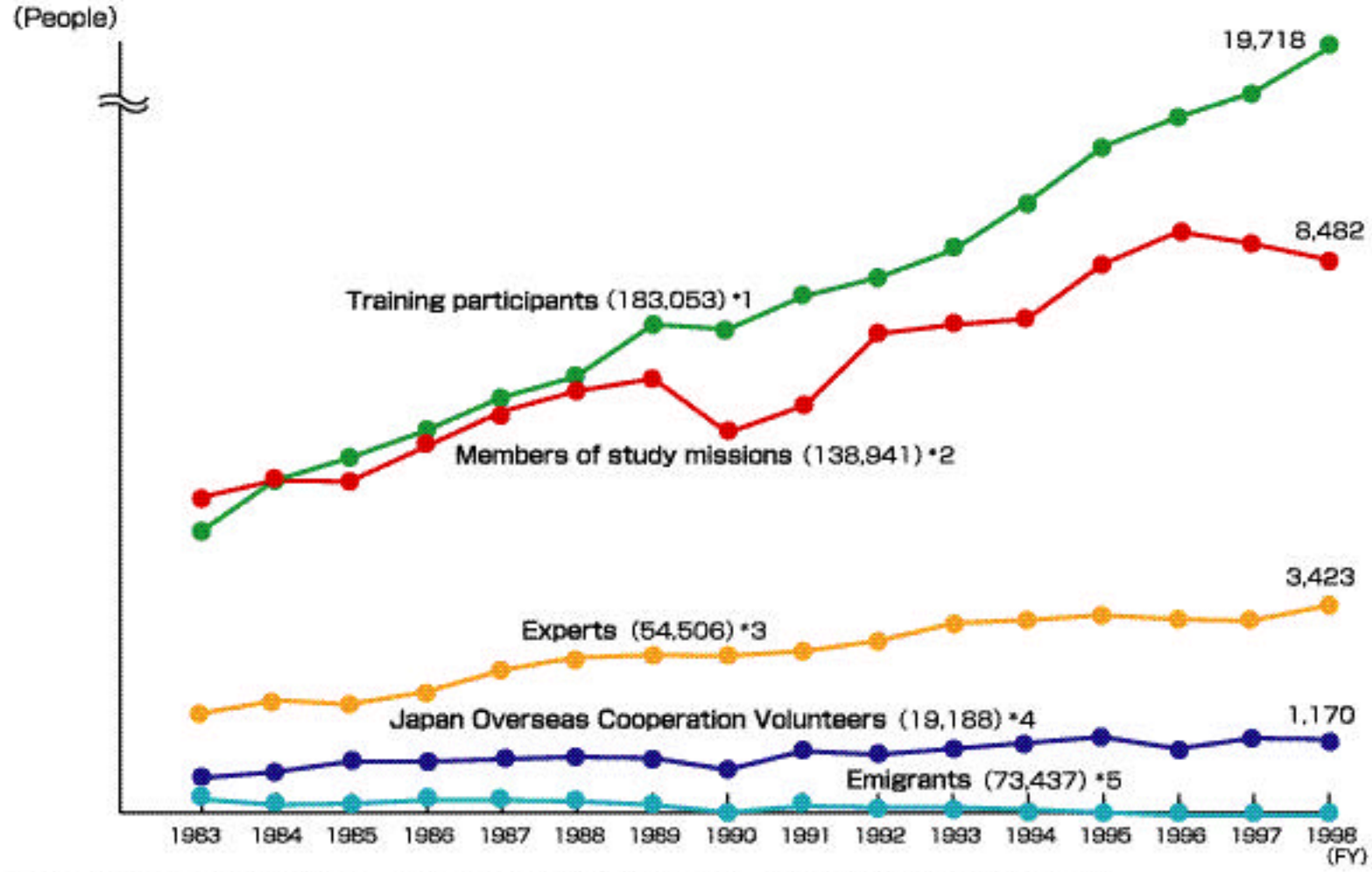
ON PARTICIPATORY FOREST MANAGEMENT

Yoshiaki KANO

Managing Director of Forestry and

Natural Environment Department

Changes in number of persons per type of cooperation



*1···Cumulative total 1954-1998 *2···Cumulative total 1957-1998 *3···Cumulative total 1955-1998
*4···Cumulative total 1965-1998 *5···Cumulative total 1952-1998

Japan's ODA Charter ①

Cabinet Decisions: June, 1992

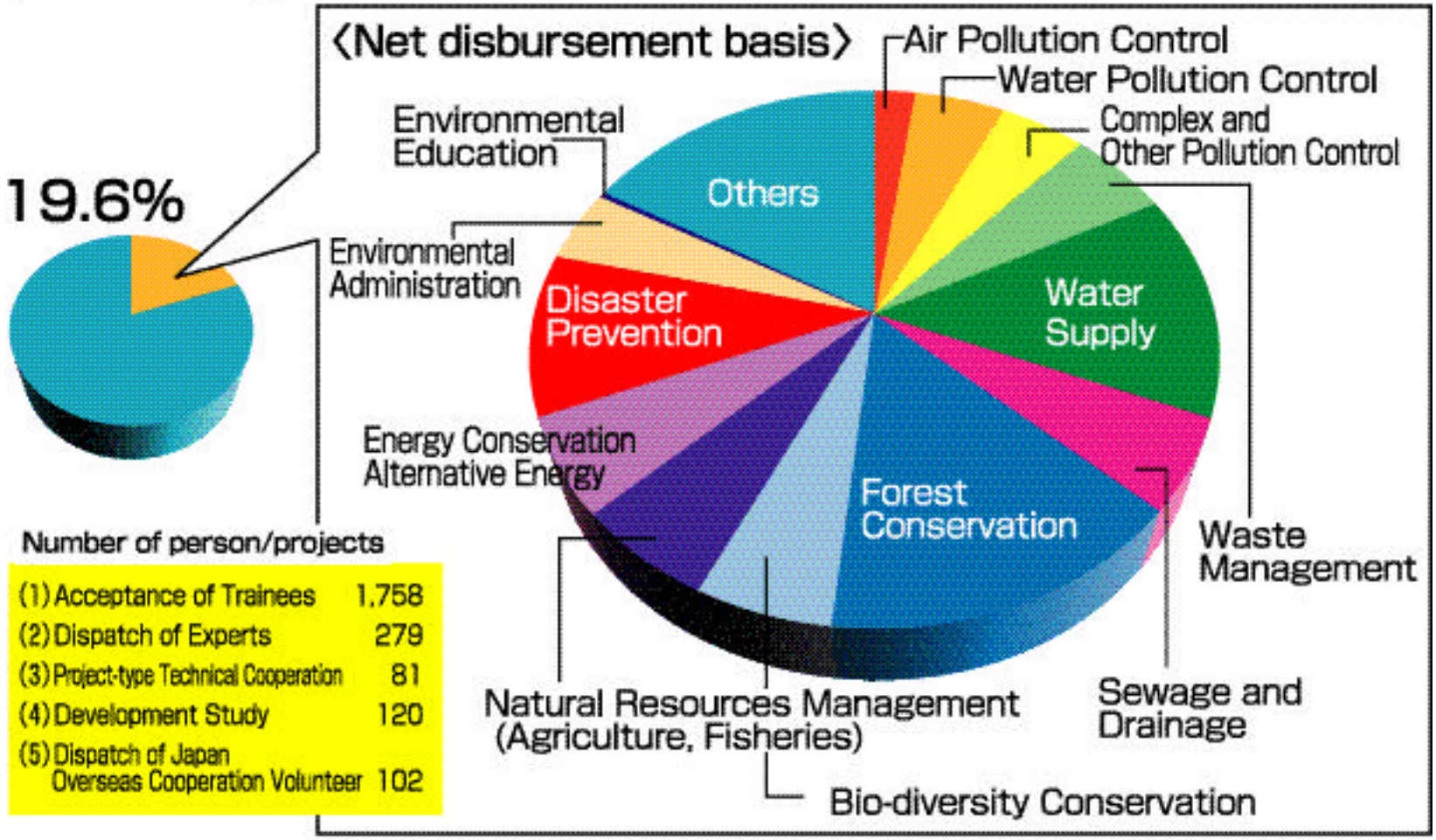
Explain Japan's basic thought and direction concerning ODA

Basic Philosophy

1. Humanitarian viewpoint
2. Recognition of the fact of interdependence among nations
3. Environmental conservation
4. Support for self-help efforts of developing countries

Proportions of JICA's expenditure per Issue (FY 1998)

[Environment]



Number of person/projects

(1) Acceptance of Trainees	1,758
(2) Dispatch of Experts	279
(3) Project-type Technical Cooperation	81
(4) Development Study	120
(5) Dispatch of Japan Overseas Cooperation Volunteer	102

Development Study

(Example of on-going projects)

- Watershed management in Mantasoa and Tsiazonpaniry.
  (1998-, Madagascar,F/S)
- Cartography inventory and management of classified forest. (1998-, Benin, M/P)
- Watershed rehabilitation in Middle Shire. (2000-, Malawi, M/P)
- Forest survey in the Gwaai and Bembesi areas.
  (1999-, Zimbabwe, Resource survey)
- Forest management plan in central highland. (2000, Vietnam, M/P, F/S)
- Critical land and protection forest rehabilitation at Tondano.
  (2000-, Indonesia, M/P,F/S)
- Reforestation plan in the eastern region. (2000-, Paraguay, M/P)
- Degraded land restoration in the State of Para. (2000-, Brazil, M/P)
- Mangrove revival and extension project. (2000-, Thailand, M/P)
- Reforestation in Anning watershed in Sicuan. (2000-, China, M/P, F/S)
- Watershed management in the upper area of the Sabana Yegua Dam.
  (2000-, Dominica, M/P)
- Community-based reforestation in New Georgia Group.
  (2000-, Solomon Islands, M/P)

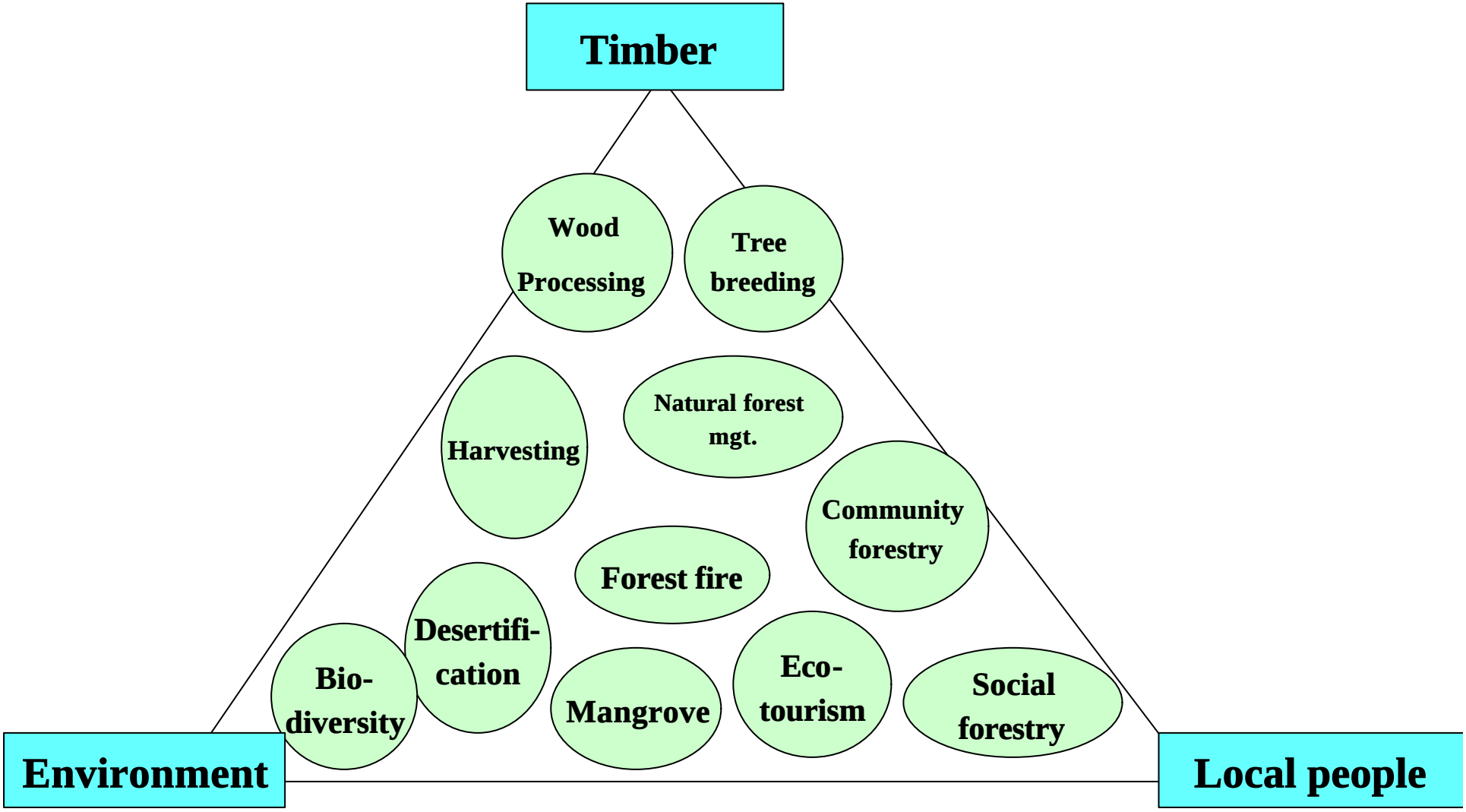
Principle of Project - type Technical Cooperation

1. Human Resource Development
2. Ownership (Recipient Countries)
3. Partnership (Donors and Recipient Countries)

Three Factors of Forestry / Nature Conservation Cooperation

1. Timber Production
   - Economic Infrastructure
2. Environmental Protection
   - Green Issues
3. People‘s Welfare
   - Basic Human Needs

Triangle of Forestry Cooperation



5. Extension and Training Project

- **Social Forestry Extension Model Development (1985 - 2002, Kenya)**
- **Central Forestry Development Training Center Project (1990 - 2001, Myanmar)**
- **Integrated Reforestation and Extension Project in Northern Thailand (1992 - 98, Thailand)**
- **Forestry Extension Project in Eastern Region (1996 - 2001, Paraguay)**
- **Re-afforestation Technical Development and Training Project (1994 - 2000, Panama)**

3. Project for Forest Protection & Nature Conservation

- Bio-diversity Conservation Project (1995 - 2003, Indonesia)
- Mangrove Forest Conservation Project (1992 - 2003, Indonesia)
- Watershed Conservation and Afforestation Project for Semi-arid Zone (1992 - 98, Chile)
- Forest Fire Prevention Management Project (1996 - 2001, Indonesia)
- Afforestation and Erosion Control Project in Tarija (1998 - 2003, Bolivia)

2. Project for Social Forestry, Participatory Method , Community Development, etc.

- Forest Conservation and Afforestation Project (1996 - 2003, Laos)
- Community Development and Forest / Watershed Conservation Project (1991 - 2004, Nepal)
- Kilimanjaro Village Forestry Project (1991 - 2000, Tanzania)
- Social Forestry Extension Model Development Project for Semi-arid Areas (1985 - 2002, Kenya)
- Integrated Community Forestry Development Project (2000 - 2005, Senegal)
- Panama Canal Watershed Conservation Project (2000 - 2005, Panama)

COMMUNITY DEVELOPMENT and WATERSHED CONSERVATION PROJECT in NEPAL

COOPERATION PERIOD 1991-2004

JICA EXPERT(LONG TERM) 5 PERSONS ANNUALY

(SHORT TERM) 4-5 PERSONS ANNUALY

C/P TRAINING IN JAPAN 30 PERSONS (~2000)

LOCAL COST SHARING 1.9 MILLION US$ (~2000)

EQUIPMENT APPROXIMATELY 150,000 US$(~2000)

Project Profile

- Project Purpose

  A model, which is applicable in hill areas Nepal, of participatory community resources management on an equitable and sustainable basis.

- Project period

  Phase 1: July, 1994- July, 1999

  Phase 2: July, 1999 - July, 2004

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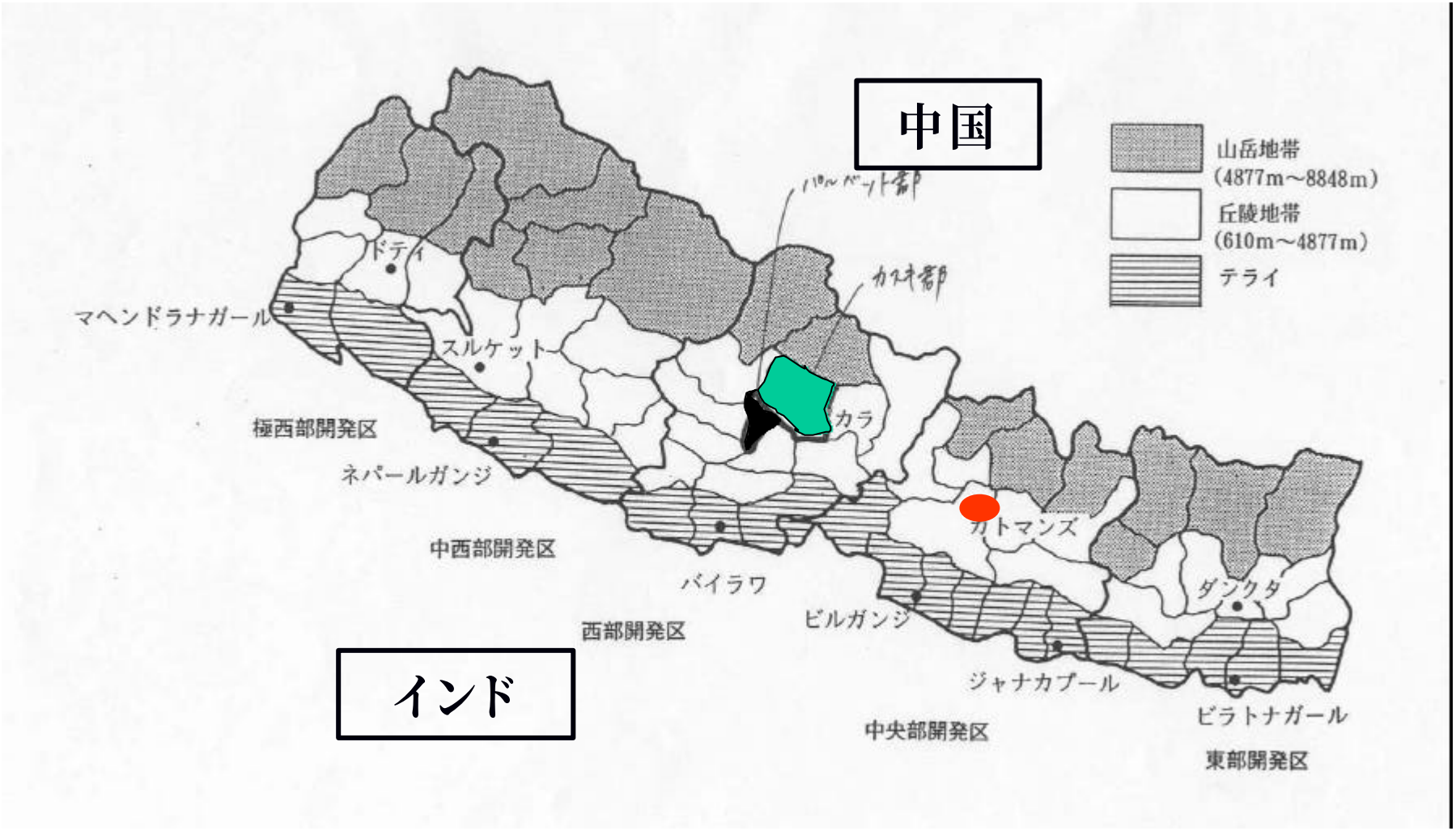
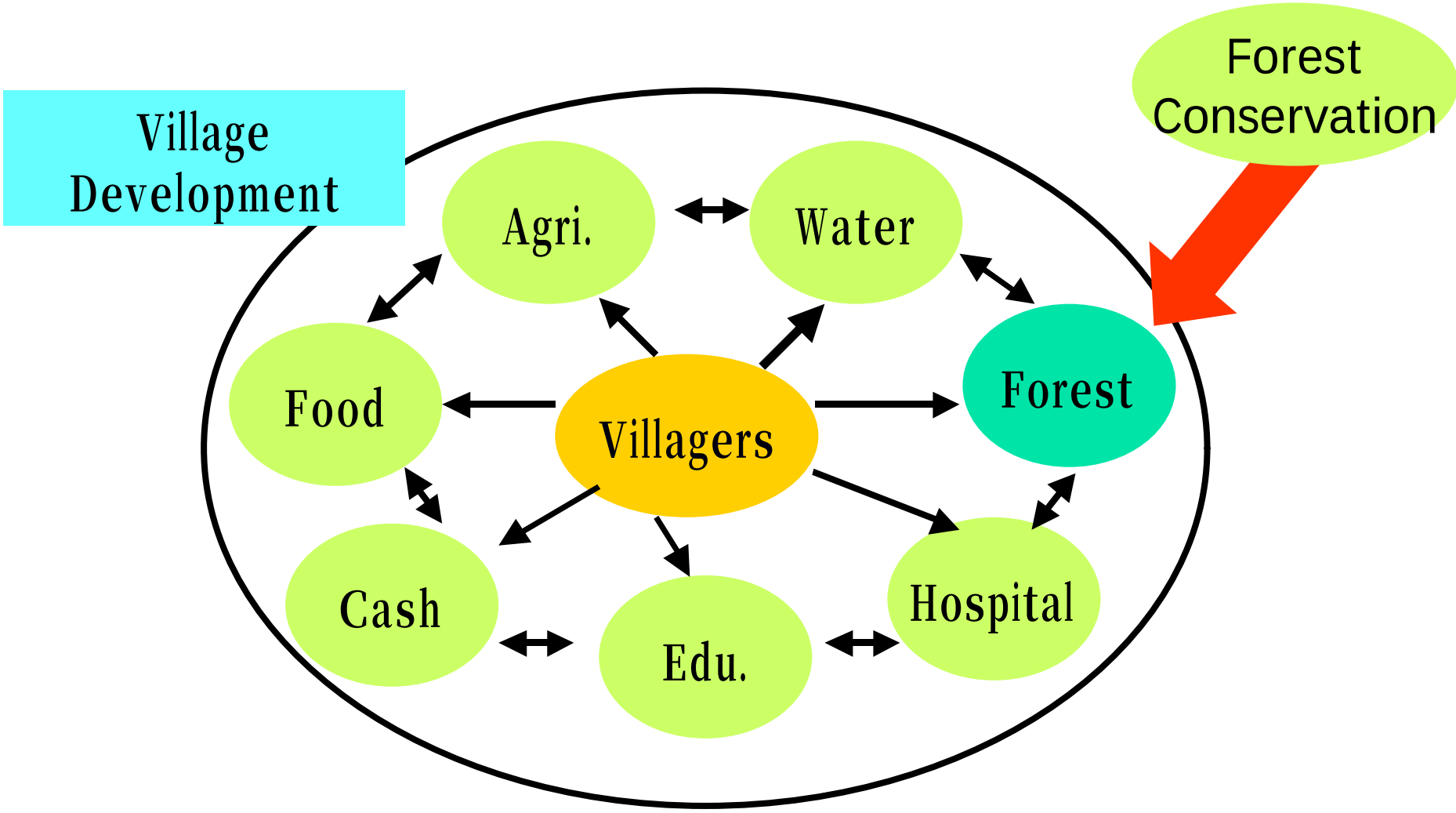


山間部の村落

Background


Village Development
Forest Conservation
Agri.
Water
Food
Villagers
Forest
Cash
Edu.
Hospital

Forest watershed construction

Landslide control

Plantation

Infrastructure Activities

Foot trail construction

Water tank construction

Income Generation Activities

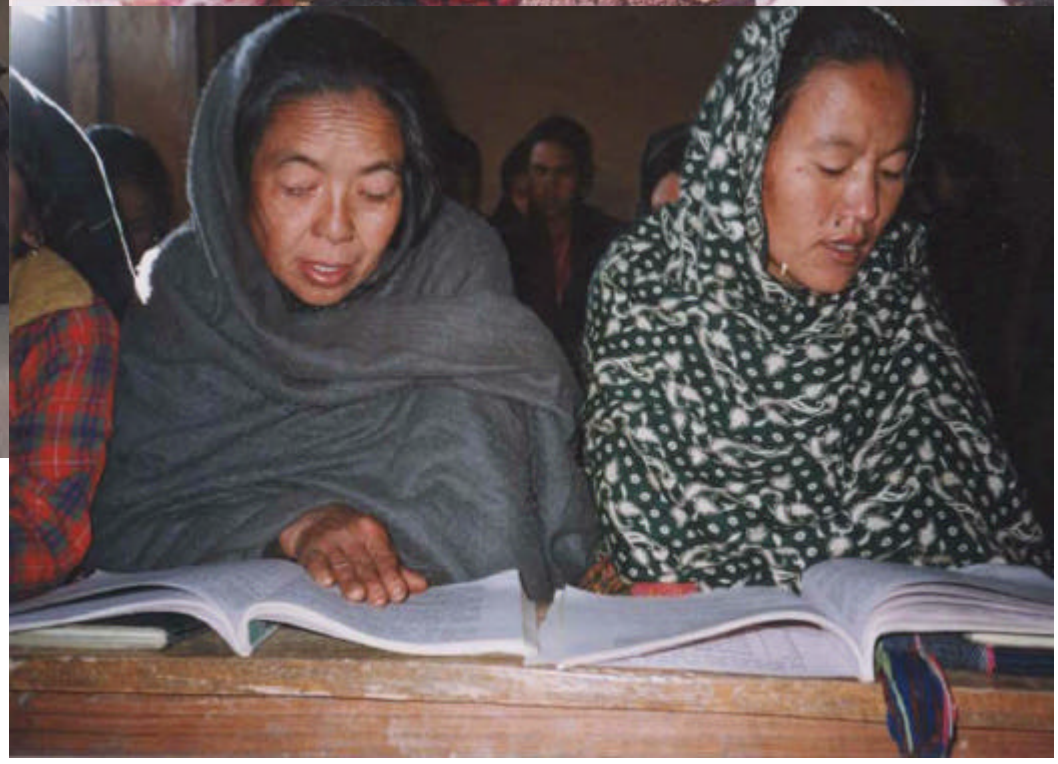
Goat Raising

Kitchen garden

Capacity Building

Study Tour

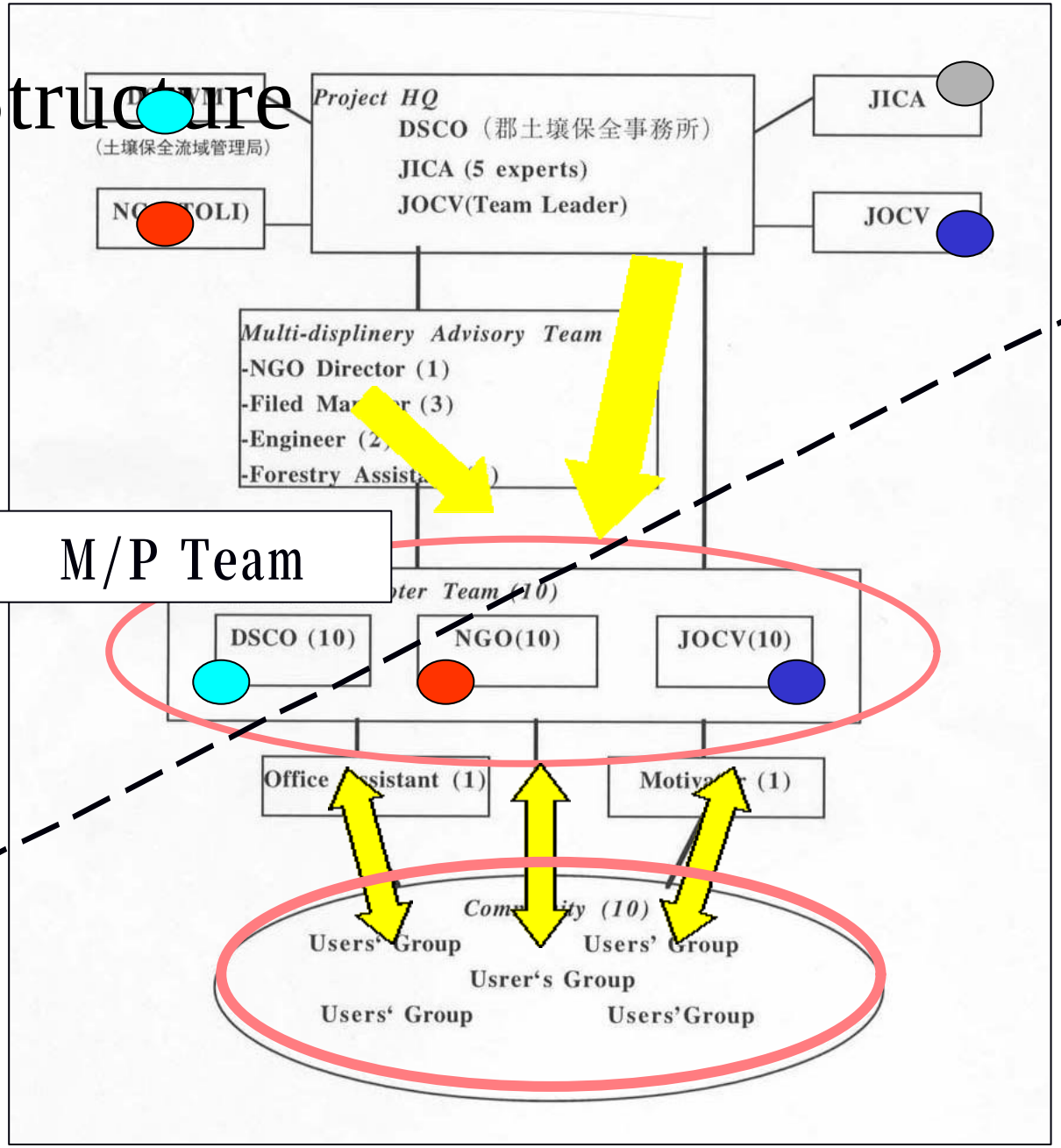
Improved Stove



Literacy

Project Structure

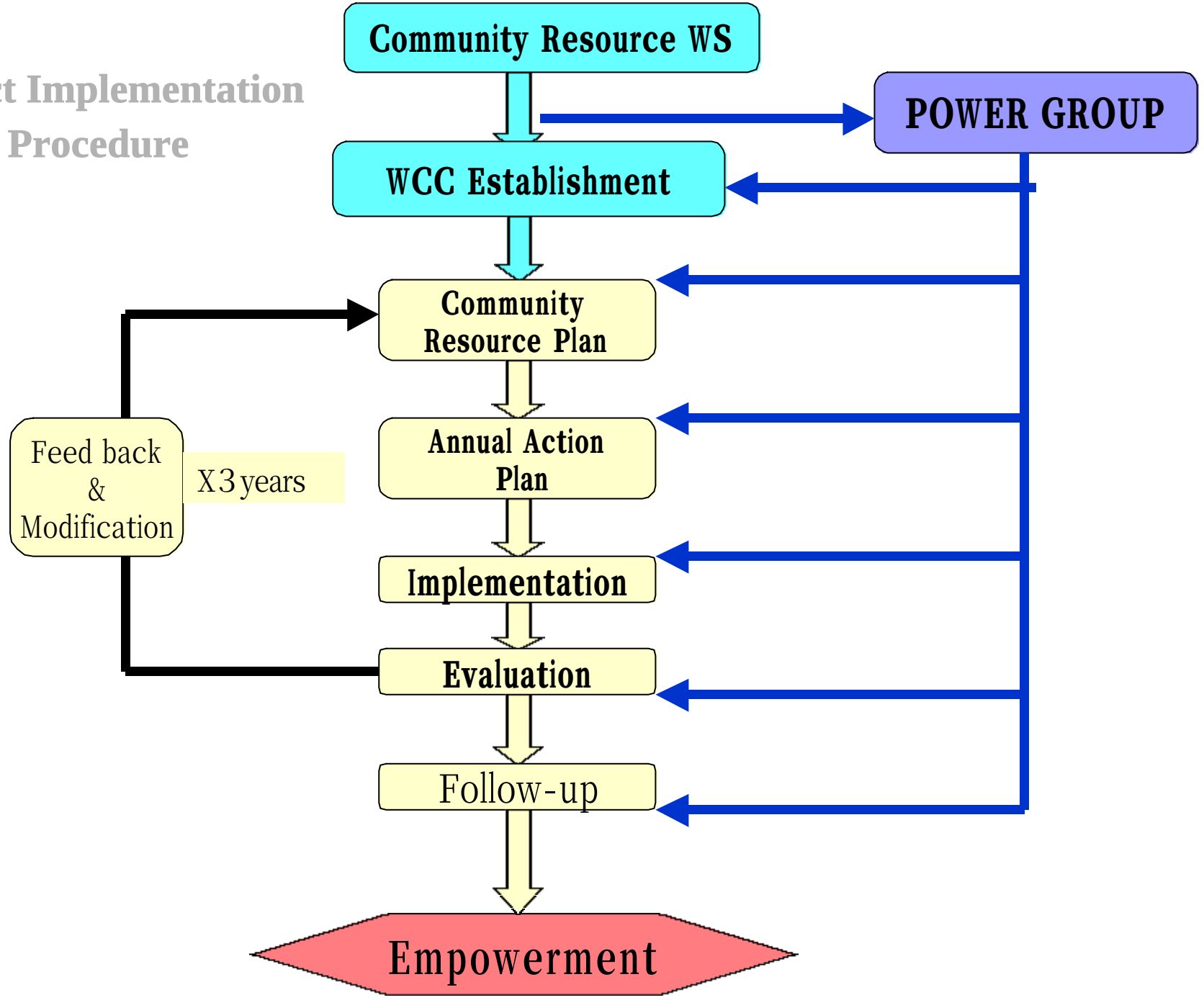
HQ: Pokhara



M/P Team

Villagers

Project Implementation Procedure



Gender Consideration

- 50% of staff should be women
- 50% of users committee should be women
- 50% or the participants of training, WS, study tours should be women
- Priority will be given to activities focusing to women and socially disadvantaged people

Indonesia's Experiences in Promoting the Participatory Forest Management

By
Tachrir Fathoni

Forestry Attache, Embassy of the Republic of Indonesia to Japan

4th IGES International Workshop on Forest Conservation Strategies in Asia-Pacific

The Situation of Forestry in Indonesia

In the last three decades, tropical forests have been under heavy pressures to support the nation's development:

- Overly exploited to provide raw material for forest based industry;
- Conversion to non-forest sector developments;
- Centralized and top-down approach forest policy;
- Timber extraction is the main objective in managing the forests;
- The alarming rate of deforestation
- Forest fire and illegal logging

Forest Area in Indonesia

Total forest land in Indonesia is now:121 million Ha

(in1960s: 164 million Ha) It consists of:

- Conservation Forest : 20.6 million ha
- Protection Forest : 33.9 million ha
- Permanent Production Forest : 58.5 million ha
- Convertible Production Forest : 8.0 million ha

All of these forest areas belong to the government.

Responsibility of Ministry of Forestry and Latest Issues

- Management all forestlands under the government jurisdiction;
- Soil conservation and management guidance of man made forests in the private lands;
- Conflict between the government and the common rights;
- Forest fire and illegal logging;
- Conservation of biodiversity.

These problems are complicated, need coordination, cooperation and public participation.

Objectives of Forest Policy Reform (since May 1998)

- To reflect the movement of democratization,
- IMF recommendations
- The need for people's participation

People's participation means:

- Forest management is carried out jointly (society and the government)
- Strengthening its partnership with NGOs, Community Based Organizations, Cooperative etc.
- Promoting greater people's participation in the decision-making

New Regulations related to People's Participation in Forest Management

- Forestry Act No.4/1999, replacing the Act on Forestry Basic Provision No 5/1967. People involvement and participation is clearly stated in Article 67 to 70;
- The Gov. Regulation No. 6/1999, opportunity to obtain forest concession rights. More than 74 Cooperative Organizations have proposed this right.
- The Government Regulation No 25/2000 on the decentralization. Management of production and protection forests has been given to the district and provincial government. Conservation forests are still under central government.
- New proposal for managing all forest lands in outer island as a State Company with more justice distribution of the benefits:
  - for the provincial and district (60%),
  - for local people surrounding the forest (10%),
  - for central government (30%).
- Ministry of Forestry decrees have been launched recently, highlighting the people participation in forest management.

People's Participation

People's participation = Social Forestry Programs

These programs carried out on both national forest lands and non-forestlands. Examples of promoting social forestry programs:

Social Forestry Programs on National Forest land:

Programs on production forest

Tumpang Sari in Java

- Tumpang Sari = Intercropping Agroforestry, practiced in Perhutani
- It also has been legalized on protection forest in Lampung
- The farmers are responsible for the safety of the trees in their areas.
- They do not have any rights to the trees

Forest Village Social Development Program in Forestry Concession Areas

Forestry concession with forest village development plan (1991)

Revised into “Forest village social development program (PMDH)” (1995).

Logging companies’ duties (Using diagnostic RRA):

- Construction of village facilities (roads, elementary schools, clinics, churches mosques etc).
- Introduce agroforestry systems,
- Buying local agricultural products
- Planting fast growing species.

Under this program, local people are not involved in the management of the forests.

In the new regulations, people can propose forest concession right

(74 Cooperative’s proposals are now under consideration).

Tumpang Sari and Transmigration in Industrial Tree Plantation Areas

- Even though tumpangsari system was introduced for the benefit of the people, it is only a temporary measure at best.

- Under the HTI-Trans program, the people are viewed as low-cost laborers.

- With both programs, the local people cannot be involved in forest management.

Community Forest Program

Established in 1995 and revised in October 1998.

Community forestry is practiced by the people through "community forestry concessions."

The concession is valid for 35 years,

Involves production forests, protection forests and conservation areas

Community forestry activities involve:

- producing wood and non-wood forest products,
- marketing for the purpose of village consumption

Conversion some industrial tree plantations for community forestry is to avoid conflicts between the companies and the people (example in Marubeni)

Local people are allowed to have concession areas of production forests, industrial tree plantations, recreation areas in national parks and recreation forests

Social Forestry Programs on Non - Forest land

Private forest (Hutan Rakyat) programs are practiced on private land

The main focus: regreening or afforestation.

Paraserianthes falcataria is planted and subsidized
by a reforestation fund.

This program is mainly practiced successfully in Java and Lampung.

Community-Based Forest Management (CBFM)

- Community-based forest management = customary forest management systems by the local people, especially the indigenous peoples

- The people take the initiative to form organizations to develop customary regulations. This has been practiced in Lempur, Jambi.

- In Kerinci National Park, WWF establishing demonstration plots for developing CBFM especially in the buffer zone.

- In the conservation areas, the community forestry concession can be approved in the utilization zone

Conclusions

- We learned our first mistakes in managing forest resources.
- Better understand that bottom up planning policy is necessary for people's participation in sustainable forest management.
- It was apparent that Ministry of Forestry can not manage the forests without participation from other stakeholders.
- It is imperative to involve all stakeholders in managing forest resources, in order to reap maximum benefits for the parties involved and for the sustainable forest management.
- These efforts need full support and commitment from all stakeholders at district, provincial, national and more importantly international level.

Thank you.

Enhancing the Community's Role in Forest Management: A Reference to Some Indigenous Communities of East Kalimantan

By
Martinus Nanang

For many people Kalimantan (Indonesian Borneo) is almost synonymous with forest. However, the forests of Kalimantan have been rapidly deteriorating, and urgent actions are needed to save them. Here the role of local people is crucial. In East Kalimantan they have traditionally taken responsibility for managing the forests, but under the current situation it appears that the role of local people has been minimized or even neglected. The forests would benefit if local people could regain and enhance their role as caretakers of the forests.

Present Situation

1. Major threats to forests and biodiversity

Forests in Kalimantan are under serious threat. There are four major threats to the forest: forest fires, commercial logging, big plantations, and large-scale transmigration. Forest fires have been a recurrent phenomenon in recent years, destroying millions of hectares of forest. The threat of fire is very real in the future and whenever drought

Research fellow, Institute for Global Environmental Strategies (IGES).

strikes, forest fires will likely occur in the area. The possibility is even greater because forest areas have become drier than before because of the opening of the forest canopy due to previous fires and logging activities. There is no guarantee that the fires will not happen again.

Burnt cocoa trees

Large-scale commercial logging and mining activities have been known as forest destroyers. Since a lot of information on these matters already available, I will not present more on this matter. However, recent developments need to be noted, particularly with regard to commercial logging by local people. Under the decentralization scheme (Decentralization Law No. 22/1999 and Forestry Law No. 41/199) the local government at the district level is authorized to allocate forest resources and to issue tree-felling permits. As a result many people are engaged in timber harvesting recently. This practice has been criticized as unsustainable and as giving more benefits to powerful villagers. In some cases fees that should be paid to villages from the timber harvesting are not properly paid or village officials improperly use them.

Mining road

In the past transmigration was serious a cause of deforestation and forest degradation. Transmigrants are needed to provide cheap labor for timber or oil palm estates. The government has already stopped the planned transmigration programs, but spontaneous migration is encouraged.

2. Forests and local people's livelihood

Swidden agriculture

More detailed information on people's livelihoods can be read in the report of my research in Matalibaq and Muara Tae villages.[1] The main findings are summarized here.

Most local people depend on swidden agriculture for their livelihood. In many cases swidden agriculture does not provide enough for the household's annual subsistence needs.

[1] See "A Step Toward Forest Conservation Strategy (1): current status on forest in the Asia-Pacific region." Interim Report 1998, Forest Conservation Project, The Institute for Global Environmental Strategies (IGES); and "A Step Toward Forest Conservation Strategy (2): Research on a desirable forest management system." Interim Report 1999, Forest Conservation Project, The Institute for Global Environmental Strategies (IGES); Homepage: http://www.iges.or.jp.

Therefore, people seek complementary sources of income, such as cutting trees, planting and harvesting rattan, wage labor, making handicrafts, and livestock. Swidden agriculture provides only for subsistence needs, and alternative sources of livelihood have not been well developed to replace the main swidden activities.

As mentioned above, only a handful of people really benefit from natural forest for cash income. Timber is widely cut at present, but only a few people with enough capital reap the biggest benefits, and others are simply labors. In areas with bird nests, people who own the nest cave can be very rich, but others are poor. Moreover, conflict over nests is high, even leading to killings in certain areas.

Wood

In many communities, particularly between the Benuaq and Bentian ethnic groups, rattan has traditionally been very important for household income. Even when the rattan price dropped to a minimum level, rattan contributed a considerable amount of cash. Most rattan is sold as raw material for handicrafts. But in some Benuaq villages where the stock of raw rattan is low, handicrafts still flourish.

Rattan

Fruits and other non-timber forest products, such as medicinal plants, sugar palm, game animals, and honey, etc. contribute less to cash income, but they are very important for people's diets. Therefore deserve protection and conservation.

3. Traditional system, norms, and social relations

Since the adoption of a single system of village government based on Village Government Law No. 5 of 1979, all villages have lost their traditional village governing system, which were not necessarily homogenous among native communities in East Kalimantan. This situation has caused a lack of internal unity and order. Due to several reasons many communities are in conflict with their neighboring villages, with companies operating in their territory, and also with the government backing the companies.

During the studies, I found both strict and loose norms on land tenure. Strict norms generally apply to household and/or individual rights (e.g. rights over fruit gardens, rattan gardens, and swidden farms); loose norms apply to public or communal rights such as the right over primary forests.

It is recognized that in many communities social relations have changed and cooperation has become loose. The principle of familial relationships is still in favor, but it is gradually fading. Economic-based social relations have become more dominant in recent decades.

Constraints and Opportunities

1. Constraints

Any effort to promote or enhance the role of local people in forest management in East Kalimantan faces the following obstacles. First, there is a problem of land tenure security. Land tenure of the native people is based on traditional norms, which have not gained strong recognition in the national legislation. The government may convert the land use of local people to other uses, unless the state system becomes democratic. This situation makes it difficult to develop any long-term forestry program because such a program would require stable ownership or control. Second, competition is increasing over forest resources. Big companies have encroached into the jungle and exploited resources; but local people have become "resource hungry" as well. The practice of tree cutting based on local authority permits indicates how the people compete over forest resources. Third, internal conflict and disorder make it difficult to develop any community-wide forestry program. Fourth, the lack of market opportunities means that people do not have a strong incentive to be involved in alternatives to forestry activities, particularly to plant trees and fruits. At present the price of wood is relatively high, but rattan and fruit prices are low and offer little market opportunities. Five, the lack of technical skills makes it difficult for the people to increase their productivity. For example, people have asked how to straighten tree trunks and how to make rambutan or mango bear fruit twice or three times a year, but lack the knowledge to do so.

2. Opportunities

Aside from constraints mentioned above, we can identify some opportunities. First, although the recognition of traditional land tenure is lacking, there is some provision in national legislation, which mentions that local people should be allowed to benefit from the forests, with priority to cooperatives and small entrepreneurs. This principle has gained strength in the newly launched decentralization scheme. Within this decentralization policy (Law No. 22/1999) each village is allowed to have its own "parliament" which is called the *Badan Perwakilan Desa* (BPD). The BPD functions to set up rules for the village and to control village headman and officials. There is hope that the communities can be better organized with facilitation from NGOs. The more organized a community, the more equity can be reach in benefit sharing within the community.

Forest sustainability-oriented activities gain much support from NGOs and international organizations. Therefore, we can expect that the people will finally be able

to overcome the constraints. I have also noticed that these people are eager to learn from outsiders.

Existing LFM Practices

These forest management practices are evident among indigenous communities of East Kalimantan: traditional fruit gardens, rattan forestry, tree planting, and communal protection forests. Traditional fruit gardens, which are called *simpukng lepuun* by the Bahau, are by the Benua' and and grow wherever there multi-cropping gardens semi-permanent have been permanent or swidden fields. They settlements, even in fruit trees (rambutan, consist of a mixture of coconut and durian, etc.). mango, jackfruits, developed among the Rattan forestry is well groups. However, as Benua' and Bentian potential has been mentioned above, it's constraints. The people hampered by market have also planted trees, although this is not very common. Some communities, like the Bahau community of Mataliba', have communal protection forests (*tanah kaso* or *tana belahan*). These practices can and should be maintained and developed more.

Fruit garden

Necessary Arrangements

Finally, I list some arrangements or directions necessary for future improvements of forest conservation-related activities in the area. These arrangements require that forestry development should be placed in the broader context of development:

1. The need for community organizing.
2. Mapping to clarify demarcation/boundaries and land use, as a step towards land tenure security.
3. The need for fair conflict resolution mechanisms. In particular local people need to be facilitated in their negotiations with powerful business and government officials. In addition, external facilitation is often needed to resolve internal conflicts.
4. Development of complementary sources of income. In the long run such activities can develop into main sources of livelihood.
5. Provision of market information and expansion of market opportunities. Here infrastructure is very important.
6. Provision of quality seedlings/or improvement of local seedlings to increase productivity.

Medicinal plant

Discussions on the Perspectives of Participatory Forest Management

17 January 2001 (Afternoon Session)

14:00-45 Comments
Refer to the morning edition.

15:35- Presentations

Efransjah (ITTO): ITTO is dedicated to the sustainable development of tropical forests through trade, conservation, and appropriate forest management. ITTO has supported the participatory projects on forestry management (e.g., Nueva Viscaya in the Philippines). The participatory forest management must address issues of poverty, land tenure, and the standard of living.

Mafa E. Chipeta (CIFOR): (Implications) Participatory forest management should not be carried out so quickly, and it must be noted that development (poverty) is the real issue of forest destruction in developing countries.

Tachrir Fathoni (Forestry Attache of the Indonesian Embassy in Japan**)**: It is true that the Indonesian government has made a mistake of managing forest resources though top-down methods. Therefore, participatory management that involves all stakeholders is imperative.

Yoshiaki Kano (JICA): JICA has a participatory project in Nepal from 1991 to 2004.

Nanang (IGES): For further improvement of the participatory forest management, the following six arrangements should be considered:
1. Building community organizing
2. Mapping to clarify the boundaries and land use as a step to tenure security
3. Offering a well-developed mechanism to resolve conflicts in the community, among communities and with companies
4. Offering complementary sources of income

5. Including the broader context of development such as “market information” and “infrastructure”
6. Providing high quality seedlings

16:40- 17:30 Discussion:

Efransjah: In the past, there was a failure of any participant community programmes conducted in Indonesia. This is due to a very heavy top-down style as well as a fact that Indonesian forest resources are very high in diversity. These are the lessons we should take into consideration very seriously to develop anything in the future related to the guidelines about community programmes. All of our reports were very shy to admit, that poverty is the root of issues related with deforestation: illegal logging, forest fires are caused by the poor who want to uplift their standard of living.

Nanang: In Indonesian law, it is said that cooperative and small independence will be given more opportunities to benefit from the forest. However there is a problem in reality that most local people (at least in east Kalimantan) do not have good cooperatives. Second, market incentives for forest products are very important. Third, that customary rights are admitted in Indonesian law under a very strong condition that they cannot contradict national and local regulations. In the future, these rights have to be admitted without strong constraints.

Chipeta: First, there is no end point in either research or indirect development support to participatory forestry because local people have new ambitions and expectations, which are shifting day by day. Even the people in the most remote rural areas are not satisfied with their current lifestyles. Although a lot of literature insists that these people are content with traditional lifestyles, I’d like to beg to differ. No one can be satisfied with life expectancy which is less than two thirds of national average. These people want to change, and they are not going to be patient with any attempts for participatory forestry we want to keep them that way. Second, something is wrong with the fact that outsiders go into areas with rich forests, and take away all variable materials. We have to correct that problem, otherwise things will continue.

Morishima : There is no end point of research for forest conservation, but as a presentation of IGES, I cannot guarantee that the project will continue forever. So project members should work very hard and produce good achievements every 3 years.

Kano: It is a big issue how a participatory programme should be carried out. I think the size of areas properly managed by local people is not very large. Also participatory forestry programmes are not always beneficial for local people; therefore, the programmes should be implemented in cooperation with other areas such as farming and livestock.

Fathoni: In Indonesia decentralization has proceeded, and it will be difficult for the central government to administrate over all the forests in Indonesia. So I would make several suggestions for IGES future research in Indonesia. First, the way of formulating sustainable units in local government should be considered. Without this unit management level, forest management would not be sustainable. The second recommendation is that indicators (criteria) should be included in the form of laws by the national government, so that the national government can push local governments to obey guidelines of formulation of the criteria and indicator of sustainable forest management. The third thing is the suggestion on what a kind of laws are needed for management of forest. This is may be important for the research to complement the existing law of the government.

Morishima: Now we have completed the second round, now we enter the third round (comments from audiences).

Okazaki (Friends of the Earth, Japan): The price of forest products from tropical countries is too low. The price of forest products should be higher. I would like to ask if there is any opinion about this topic.

Efransjah: There is something wrong that the price of timber does not reflect actual value. For instance, tropical timbers share only 10% of global market, compared to 90% by non-tropical countries. ITTO and other international organizations are struggling even to maintain this 10%. The market is very tough and ITTO does not have mechanisms of controlling the global market. We just consult on the management to promote sustainable supply, and strive to enhance market transparency. Although the price is too low, we should not kill forests. Otherwise they would be converted into non-forestry purposes.

Morishima: (To Okazaki) Concerning this problem, the relationship with WTO should

be considered.

Sonehara (Sumitomo Cooperation): I have two questions: (1) What do the presenters think about forest carbon sinks in COP6? (2) Is clean development mechanism (CDM) feasible in the context of participatory management?

Morishima: Sinks must be considered from two perspectives, both of which must be distinguished clearly. One is that an introduction of sinks will be useful for improving the global environment. The other is that using sinks are a good method to solve reduction target flexibly. Concerning the CDM system, Japanese companies have already been promoting activity in forestation. However, there is a difficulty in calculating the influence of reforestation on the CO2 emissions because forest products such as timber can absorb CO2 in the short term, but emit CO2 in the long run. Aside from that, Japanese companies seem to be promoting reforestation efforts.

Watanabe (Sakura Institute of Research):
There are two questions as follows: Q1.What is the definition of the participation? Q2. (To Dr. Inoue) Local communities are chosen as a target of your future research. I would like to know what the 'local community' specifically means in your context.

Inoue (Univ. of Tokyo): In my plan, not "local communities" but "local people and the local government" are used. Therefore these two bodies are the specific targets for our research in the second phase. In the first phase, it was clarified who were stakeholders and who should be stakeholders for appropriate forest management. In the second phase more detail on this issue will be shown in the local guidelines. Participation might have a different degree of participation in different levels. Concerning strong participation, outsider and experts just help local people proceed with their own forest management projects, a form of endogenous participation. On the other hand, there is a forced type of participation (weak participation), in which authorities just hire local people as laborers. Furthermore, there is another level of participation (moderate participation), where foresters can work with local people to draft plans together and the draft will feed back to the local residents. In IGES's second-phase research, moderate participation will be carried out.

Kitamura (Overseas Environmental Cooperation Center): Although traditional management at the local level is important, this way is not perfect all the time. This is

because the traditional management has both merits and demerits and there is no simple answer which is the best, judging from economic, social and environmental aspects. I would be grateful if there are some objective or scientific criteria to evaluate whether the customary way is good or not.

Efransjah: It is very difficult to say, but my feeling is that local and indigenous people change (e.g., a village captain in Mindanao who wore Nike-brand shoes, and local people in Kalimantan drinking Coca-Cola imported from Malaysia). The problem is that most traditional or conventional foresters are not well equipped regarding social and economic dimensions. Now, there is a strong tendency to involve aspects of anthropology into the sustainable forest management.

Chipeta: We should not protect tradition from the ethical perspectives. What is required is not to protect tradition, but to learn traditional ways with scientific viewpoints that are necessary for things to become more replicable. If we follow only transactions, the management will become more location-specific and transaction costs became high.

Kobayashi (Sumitomo forestry): (To Fatoni) You recommend to make a guidelines in the second phase, but it seems that capacity building at local levels is also necessary at the same time. I would like to ask you what kinds of capacity building programmes at the local levels the ministry of forestry is planning in Indonesia.

Fathoni: The Indonesian government is now facing problems of decentralization. Many people see that the local government is not ready to handle human resource management until now, so we need a project to enhance human resource management at the provincial and district level. A few years ago, the minister stated that 24,000 people of the ministry of forestry would transfer from the central government to the local government. However, some of the workers persisted with working at the ministry of forestry. I agree with importance of the capacity building at the local government level, but I think the first thing for the moment is to make the guidance for forest management, to build sustainable unit of forest management and indicators (criteria), and to produce certification.

Mase (The World Bank): I would like to know the impacts (problems) of monoculture planting on the surrounding areas.

Chipeta: It must be noted that specialization has contributed to a rise in productivity in general; therefore, I do not agree with the sector which goes away from the principle of specialization. From this viewpoint, we cannot easily ignore the advantages of the monoculture planting. If the monoculture planting is carried out under sustainable management, this will give us many benefits.

Efransjah: The plantation is basically not so attractive because of the long-term return. For the purpose, the monoculture somehow can reduce the return to be more feasible. If the original was the degraded land, the monoculture can be more useful than open-land, so the monoculture will increase biodiversity. Also I would like to give some caution to Indonesia. We must be careful about empowering people in terms of forestry, because the empowerment may give a detrimental impact to forests. If the local people were empowered and entitled lands were distributed to them, forestlands would be converted to small patch of forests. This is dangerous because forests need a certain minimum size to maintain forest ecosystem. Everybody notices this caution, but people are shy to say. So I hope that IGES next year to be careful about this empowerment in terms of forestry.

Morishima: I am grateful to all the panelists for giving us a very exciting discussion, and we have to close this discussion right now. The IGES Phase 2 is starting from April 2001, so we are eager to get further cooperation from panelists and audiences Thank you very much today.

Paper 1

Addressing Structural context of forest loss in the Asia-Pacific Region[1]

Introduction

The forest areas in the region account for a quarter of the world's forests. In the region, there are various types of forests ranging from tropical and temperate to boreal forests, which include rich forest resources and bio-diversity. The forests in the region are facing a serious crisis with accelerated forest loss (deforestation and the degradation of forest). Consequently, the region has lost almost ninety-five percent of its frontier forests. The amount of deforestation in the region during the 1980's was smaller than that in Africa and Latin America; however, the region lost almost a million hectares in the period, and had the highest rate of annual changes of forest and other wooded land (-0.6 percent per year). This rate is similar to that of Latin America (-0.5 percent per year). As for boreal forests in the region, the degradation has rapidly became worse.

During the last decade, especially after the Earth Summit in 1992, forest loss in many regions has received strong attention and led to many initiatives by governments and intergovernmental agencies. However, most efforts have failed to achieve effective results. Many researchers and experts have analyzed the possible explanations why these recent activities have failed to progress. These seems to be broad agreement that these initiatives have focused too much attention on the proximate causes of forest loss, and have largely ignored the underlying causes of these problems.

Forest loss is caused by natural factors. However, the forest loss stemming from various kinds of human activities has been increasing during the last 30 years. In this study we will deal with forest loss directly or indirectly caused by human activities.

In this paper, the term "forest loss" means not only the decline of forest (replacement or deforestation) land but also the decline of the forest's quality (modification or the degradation of the forest), including its healthiness, ecosystem, and bio-diversity. The term "deforestation" describes the complete, long-term removal of tree cover. In a definition from the FAO publication, "Forest resources assessment 1990: Tropical countries", the term deforestation refers to change of land use with depletion of

[1] This part is drafted by YAMANE Masanobu in cooperation with the following collaborators of the sub-team: Mr. MATSUMOTO Satoru (Mekong Watch Japan), Mr. NOGUCHI Eiichiro (Friend of Earth Japan), Dr. KAKIZAWA Hiroaki (Hokkaido Univ.), Dr. INOUE Makoto (The Univ. Tokyo), SEKI Yoshiki (Waseda Univ.), Ms. OKAMOTO Sachie (Japan Indonesia NGO Network), Dr. SASAKI Shiro (National Ethnology Museum), Mr.. TAGUCHI Hiromi (The Univ. Tokyo), Mr. NAKAI Takafumi (ROTOBO), Dr. MORIMOTO Kazuo (Archaeological Institute of Chiba Pref.), Mr. CHANTHIRATH Khampha (FORCAP Lao PDR), Dr. LU Wenming (Chinese Academy of Forestry), Mr. NEWELL Joshua Peter (Friend of Earth Japan), Dr. Sheingauz Alexander (Economic Research Institute, Russia), MS. SISCAWATI Mia (Indonesian Institute for Forest and Environment, Indonesia) and Dr. HIRSCH Philip (Univ. Sydney, Australia)

tree crown cover to less than 10 per cent. Changes within the forest class (from closed to open forest) which negatively affect the stand or site and, in particular, lower the production capacity are termed forest degradation. There are many activities modifying forests that can be accurately described as forest degradation. In the ECE/FAO publication, "The Forest Resource of the Temperate Zone", the term "replacement" and "modification" are used in place of "deforestation" and "degradation". The term "replacement" means replacement of natural forest or other wooded land by another land use. The term "forest modification" means the modification, which may be regressive (degradation), or progressive (recovery or enhancement).

The frequency and intensity of human intervention determines the degree of human impact on forest loss. Continued forest uses such as the repeated overharvesting of resources may lead to significant damage. Extreme degradation can, of course, lead to total forest replacement. Thus we should consider how to use forest resources in a sustainable way to prevent serious forest degradation. In this context we need to grasp the relation between the degradation/replacement of forest and deforestation/ modification, that is the process of forest loss.

Forest loss can be attributed to many different causes or factors. Some causes operate directly on the forest itself and are often easily recognizable in the field. These causes are referred to as "direct causes" (E/CN.17/IPF/1996/2). Behind these direct causes it may lie a whole sequence of causes, each more indirect or remote than the on the one which precedes it. These causes are referred to as "underlying causes"(E/CN.17/IPF/1996/2).

(1). Methodology

The team conducting the “Structural Analysis of Forest Loss” of IGES Forest Conservation Project focused mainly on the Underlying Causes of recent Forest Loss (UCLF) in the Asia Pacific Region (APR). The Underlying Causes, in line with major Proximate Causes, are sorted by identifying common elements among target regions, as well as the uniqueness of the countries and sub-regions. In other words, the team tried to trace a reliable chain of causation. This procedure provides a clear picture of the structural context of recent forest loss in the APR and desirable directions for overcoming forest loss in the region.

For the purpose, two approaches were employed in the team’s research activities: country studies and active collaboration in the Intergovernmental Forum on Forests (IFF) UC/NGOs Asian Process.

With respect to the first approach, country studies consisting of studies of Underlying Causes, data collection and studies of international linkages of forest resource use from the UC perspective, were conducted. Target study areas which were investigated were the insular Southeast Asian sub-region, Indonesia and the Philippines. For the Mekong River basin region, Thailand, Lao P.D.R., Vietnam and Cambodia were selected. In Northeast Asia, studies in the southern part of the Russian Far East were mainly conducted and preliminary studies for China were carried out. For these target

areas, members of four research groups for country studies collected information through available literature and workshops, as well as by carrying out field studies.

In this study, the authors attempted to clarify the structural causes of forest loss, mainly in relation to recent major proximate causes and their underlying factors. This is because a clear understanding of causation among the causes of forest loss is useful to identify concrete directions and actions that could halt forest destruction. As a main analytical framework, the team employed an explanatory model of forest loss proposed by Hirsch (2000), which was developed based on existing studies addressing the causes of forest loss. This model is a schematic representation of the ways and modes of explaining deforestation (Fig. 1). The diagram shows the different ways in which more immediate causes are framed in terms of means, purposes and agents or key actors in the process of deforestation or the degradation of forests. It is also showed how underlying causes are identified with reference to contextual and developmental factors. Demonstrating the relationships between the means and purposes of forest loss makes it easier to find out the key actors in forest loss. For example, in terms of the commercial logging of timber, which has been pointed out as a leading causes of tropical forest loss, many studies revealed the different roles of such various actors as foreign timber importing companies, government and military, concession holder, etc. Underlying causes can be identified with reference to contextual and developmental factors. Contextual factors include such economic and social factors as land/forest tenure, inequality, poverty, demand, economic growth, foreign exchange, and insurgency. In addition, physical conditions of the forest ecology such as soil, climate, and geography are also significant contextual factor. For example, some tree species and agriculture products grow up in specific conditions, leading to forest development. In developing countries, traditional forest use often was destroyed due to economic developments such as the transition to a market economy. On the other hand, in under-developed areas, serious forest destruction due to over harvesting of firewood and overgrazing is widely observed. These are examples of “developmental factors”.

In the second approach, the team co-organized several Asian regional meetings within the IFF-UC/NGOs initiative that were aimed at international policy dialogue. Non-governmental organizations (NGOs) and indigenous peoples’ organizations (IPOs), in cooperation with governments and intergovernmental agencies, took the initiative (IFF-UC/NGOs Process) to contribute to one of the most pressing issues—the Underlying Causes of Deforestation and Forest Degradation—and started a research project after the UN Special Session. IFF organized a global workshop on this matter in January 1999, in addition to case studies, which were conducted by government and international NGO research teams. Mr. Yoichi Kuroda, in charge of the Asian regional focal point, collaborated with Ms. Mia Siscawati (Indonesia) and attended a series of meetings at several large conferences. IGES also co-organized a preliminary meeting for the Asia Regional Workshop and the IFF-UC/NGOs Asia Regional Meeting with the goal of effectively implementing the discussion results into the IFF process.

(2). Proximate Causes of Forest Loss in the APR

Proximate causes in the target areas, which were listed up by the team, are indicated in the table 1. Sorting out these causes in terms of means, it is obvious that deforestation and the degradation of forest have progressed through various processes such as logging, burning, forest fire, and physical extraction.

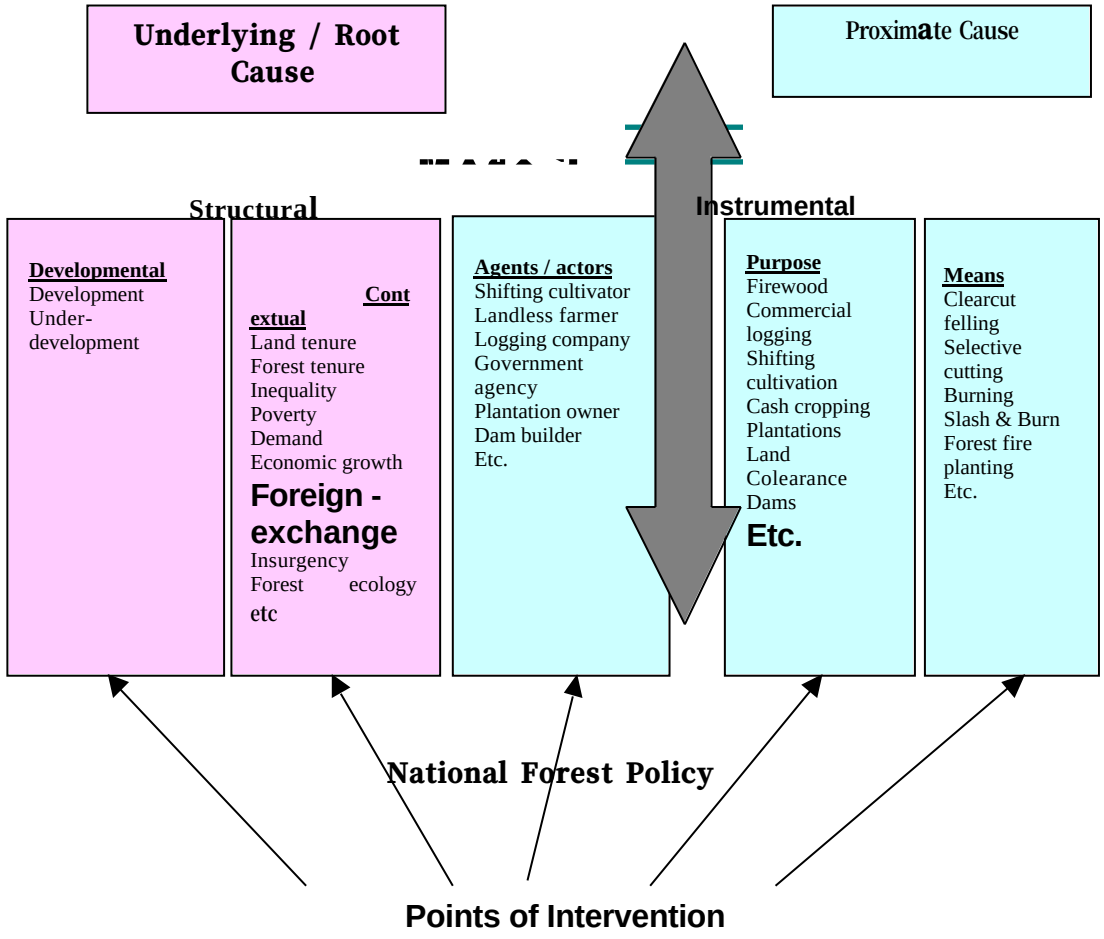


Figure 1. Explanatory modes of Underlying Causes of Forest Loss
Source: Modified the diagram proposed by Hirsch (2000)

Much of the forest loss in the target areas generally started with logging of

primeval forests. The logging caused degradation of forests, but is not connected directly with the major deforestation. Often logging is only the first stage of forest loss. Most logging operations target valuable timber for commercial purposes. In the pre-stage of forest conversion in every tropical country factors such as settlement programs, agricultural farm development (in many tropical countries), hydropower development (in Lao PDR), mining (in Indonesia), settlement (in all tropical countries), and many extensive large-scale logging operations were observed.

After logging, forestlands are degraded or deforested via three processes: the absence of management, planting, and conversion. When logging sites are not managed, the forestland of both tropical and boreal zones progresses into secondary forest and finally, usually more than one or two hundred years later (if allowed), into climax forest with almost the same structure as the original forest. However, cut-over land in tropical forests in the target study areas quite frequently experienced an invasion of settlers who came along with the road for the logging operation. Settlers began slash and burn agriculture or non-traditional swidden farming (shifting cultivation). Forests, where non-traditional swidden farming was conducted often turned into unproductive land due to natural causes such as the ecological properties of tropical forest soils, the vulnerability of soil to erosion and meteorological factors. Without careful fire control, forest fires occurred frequently, and as a consequence, forests occasionally transformed into grasslands or barren lands. In this sense, the increase of non-traditional swidden farming that originated from natural forest extraction is a key proximate cause of deforestation.

In many cases where cut over areas were planted with seedlings followed logging, large-scale tree plantings of fast-growing species for industrial purposes was promoted in many cases. Since forest conversion projects largely degrade the ecological and production functions of a forest, industrial tree plantings are activities that can lead to further forest degradation.

There are many activities that can occur when a cut over area is converted into other land uses. One shared activity among tropical countries is reclamation for paddy fields or croplands. These developments have preceded and been tightly connected with settlement policies. In the Mekong River Basin, the physical destruction due to regional and internal war contributed greatly to forest loss. In Lao PDR during the Second Indochina War, large forests were bombed along the Ho Chi Minh Trail and in Vietnam, the United States Air Force had a deliberate policy of destroying forest cover by chemical defoliation[2].

When the schematic diagram described above is used to explain the processes of forest loss in the target areas, we can point out that the process of forest destruction in the S-RFE, for example, is rather simple. The forest loss in the S-RFE progressed through a combination of unsustainable commercial logging and frequent forest fires. By contrast, tropical forest countries in the southeast region experienced more complex

[2] According to the comment from Mr. Xeme Samoutry, Director General Department of Forestry, Lao PDR (Xeme 2001), the Indochina War and bombing by US resulted in ten thousands of refugees and destruction of forest by bombs themselves and by refugees. Vast areas still remain barren and remaining UXOs deny access to rehabilitation of them or management of existing forests.

processes. Thailand and the Philippines, which experienced serious forest loss in the past, have gone through most of processes shown in the diagram. Indonesia also has passed through almost all the processes for forest loss, excluding destruction by war. As for Lao PDR and Cambodia, the move from logging to planting has not been established in earnest, but all other routes are identified.

These means of forest development mentioned above often depended on the purpose of local use such as commercial logging, conversion to cash crops or plantations, industrial plantations, land clearance for rice self-sufficiency, shifting cultivation, land opening for migration, and hydropower development.

Table 1. Recent Major Proximate Causes of Forest Loss in the Target Areas Addressed
The structural contexts of the underlined causes were analyzed.

Area	Recent Major Causes
Philippines	*Export-oriented unsustainable commercial logging, the failure of industrial plantations, frequent forest fires caused by local people,* Mining operation, Forest conversion for agricultural expansion, Upland farming, and Government programs such as Dams, land opening for the landless, etc.
Indonesia	Export-oriented unsustainable commercial logging, logging for domestic plywood industry, transmigration projects and paddy field development projects, untraditional shifting cultivation, industrial tree plantations, *frequent large-scale forest fires and oil-palm plantation development*
Thailand	Logging, forest clearance for cash crops, shifting cultivation, rubber plantation, shrimp farming, land zoning and expansion of protected areas.
Lao PDR	Direct and indirect impacts of the Second Indochina War, land clearance for rice self-sufficiency, shifting cultivation, hydropower development and *Commercial logging.*
Vietnam	Direct and indirect impacts of the Second Indochina War, land clearance for rice self-sufficiency, in-country migration, coffee plantations, shifting cultivation, financial resources for the military from logging.
Cambodia	Land clearing for crops, logging under the protection of powerful people and the military.
S-RFE	*Export-oriented unsustainable commercial logging* and *large-scale forest fires.*

Forests in the all target areas have played important roles in the local economy. Forests often were a base of the local social structure and environment and the basis of the livelihood of indigenous peoples. Forests have been extracted for *local/household purposes*, but the impact is rather low compared with commercial logging.

In the target areas *commercial logging* of primary forests has been conducted widely both in tropical and temporal areas. This is because timber resources are a key natural resource for foreign exchange and timber extraction is one easy means to acquire

it. In many cases commercial logging is conducted through the allocation of a logging concession by paying a forest-use charge to the national treasury. However, many past timber extractions were financial sources for powerful people and members of the military with tight connections to domestic and/or foreign forest industries because forests are usually state-owned and managed by government authority. Commercial timber harvest operations often have been undertaken in a large-scale and extensive way in order to gain enormous profits. These operations have favored special groups, without any consultation with local people. In many cases in the Philippines, fires resulting from arson originated in land conflicts between local people and concession holders or logging companies. In Indonesia, commercial logging were conducted to produce materials for the domestic plywood industry after the exportation of raw logs was banned. In the S-RFE, local forest management bodies often harvested timber illegally, in the name of forest management or pest control, to compensate for serious budget shortfalls. Extensive commercial logging had strong connections directly or indirectly with forest fires due to the drop in forest humidity after logging, the careless handling of fire by logging workers and the increased number of small fires started by citizens.

Plantation developments such as rubber (in Thailand), coffee (in Vietnam) and oil palm (in Indonesia) have also brought large-scale forest conversions. Additionally, the conversion of forest lands to commercial ranches (in the Philippines) and shrimp farms (in Thailand) is also identified as a major proximate cause. Since land clearing in these activities often employs low-cost intentional burning, escaped fires frequently cause forest fires (in the Philippines and Indonesia). As a result, vast grassland and unproductive lands appeared due to repeatedly occurring forest fires. In the target areas forest conversion was closely connected with commercial timber extraction and various kinds of loopholes and illegal acts were widely observed. In many cases, since the company's real objective is to use the wood, the company abandons the site after logging. The common feature of these forest conversions is that products from the newly developed land are aimed at acquiring foreign currency, supported by strong demand in consumer countries

Industrial tree plantations were promoted actively when natural forest resources were depleted (in the Philippines and Indonesia). Large companies proceeded forcibly with industrial tree plantations in the Philippines, without consulting with local people and stakeholders. As a result, forest fires started by local people due to land conflicts occurred frequently. For land clearing on project sites in Indonesia, low-cost intentional burning was employed broadly, and frequently caused forest fires even after an official circular prohibiting burning was circulated. In short, forest conversion projects become a key proximate cause leading to deforestation if the procedures and controls are inappropriate.

Land Clearance for Rice Self-sufficiency has grown in Indonesia, Lao PDR and Vietnam since 1975 along with the notable population increases of these countries. There is a shared feature, which is that this activity has been prompted by national policy in each country.

Shifting cultivation is often pointed out as a leading proximate cause of forest loss in tropical areas. However, many studies revealed that shifting cultivation has been a traditional way of forest use in tropical forests and never destroyed forests. These activities have only recently been viewed as questionable, for example, since the 1960's in Thailand, and after 1975 in Vietnam. In general, increasing population pressure or competition with other land use due to social and economic development has made traditional shifting cultivation transform in an unsustainable way, leading forest loss (e.g. Lao PDR).

Not only governmental programs of in-country colonization and settlement but also spontaneous settlements due to population pressure or competition for land use, have prompted this cause. In the Philippines, the clearing and settlement program continued until 1978. The impact of the government's clearing and settlement policies occurred not only through official settling, but also through spontaneous settling. It is estimated that 1.2 million persons in total moved to Mindanao from other islands from 1948 until 1960. In Indonesia, the program called "Trans-migration" started in 1983 and continues today. More than 724,000 ha were estimated to have been converted from 1994 to 1997 (Inoue, 1998). In the Mekong River Basin, in-country migration, which was planned as government policy, was prompted resulting in forest opening became serious for the first time since the Second Indochina war.

In the Mekong River Basin, many large-scale dams were constructed and planned, leading to the extraction of vast forests. In Lao PDR, hydropower development started with construction of the Nam Ngum Dam in the 1960's, while development accelerated in the 1990's. It was often observed that logging concessions for planned sites for dam development was provided. Such permission is said to provide favorable opportunities for extensive timber extraction.

There are various kind of domestic agents involved in activities leading to forest loss, actors such as central and local governments, domestic logging companies and industry, military authorities, powerful people and local people. At the same time, foreign agents and actors such as import countries, foreign capital from importing countries, and foreign aid institutions also play very crucial roles.

The roles of governments vary between target areas but they can be classified according to their functions: planner and executor of economic development policies; planner of forest policies; and bodies responsible for forest management. In terms of the design and implementation of economic development policy, all central governments promoted timber logging as a major means of acquiring foreign exchange and recognized forestland as a source to be converted for agriculture and other land uses, which then progressed to forest conversion projects. Such large-scale forest development programs were done with a top-down approach and pushed forward forcibly without consultation with local people and other stakeholders, because in many cases the forests are owned by the state. Government has strong authority. Besides forcible forest development, governments also promoted a set of policies aimed at industrialization and transition to a market economy. As forest policy planners, natural resource policies aimed at extracting valuable wood were promoted in every area. In these policies of forest exploitation the

logging operations were extensive, yet reforestation programs were not included. The governments wielded enormous power in the allocation of logging concessions. When natural forest resources became depleted, many governments aggressively promoted large-scale industrial tree plantations. These forest policies were frequently implemented forcibly under a top-down approach without environmental impact assessments (EIA), social impact assessments or consultations with affected parties, in particular the local communities and local authorities. As the body responsible for forest management, governments often fail because they allow corruption and the violation of rules. Insufficiencies in management resources are common indirect causes of forest loss in target areas. The concrete effect of the inability of governments to manage their forests appears in logging concessions (in the Philippines, Indonesia and others) forest conversion projects (Indonesia), and illegal logging (in Indonesia, Cambodia and the S-RFE).

Domestic Logging Companies/Industry, connected tightly with the government, military authority and power people, have played a leading role in forest loss in many places. In many cases, logging companies conduct forest extractions through the allocation of logging concession by paying forest-use charges to the national treasury. Large forestry concessions to companies were allocated in a very opaque way, while proper monitoring and control by forestry administrative bodies was quite limited. Many logging companies employed a "cut-irresponsibly-and-get-out" strategy, which became the most efficient way to maximize their profits (the Philippines [Seki, 2000], Indonesia, the S-RFE). Even in forest conversion projects such as oil palm plantations in Indonesia, in many cases the company's real objective was forest extraction, leaving many cut over areas abandoned after logging [Okamoto, 2000].

In Indonesia, the military authority had strong power to allocate logging concessions, and they promoted many natural forest extractions because of their tight connections with the domestic forest industry, Chinese merchant capital and foreign capital from importing countries. In Vietnam (Hirsch, 2000) and Cambodia (Bottomley, 2000), the forest has been legally and illegally exploited as a financial resource by the military. These activities were identified as the most serious causes of forest loss in the area.

Powerful People are also key domestic actors. In the Philippines, in the past, members of Congress would establish forest policies and forest regulatory systems that enabled logging companies to obtain enormous profits (Seki, 2000). Many of the politicians were concession holders profiting from logging at the same time that they held political positions. In Indonesia, powerful people such as Chinese merchants, who were closely connected to government and military authorities, proceeded with natural forest extraction and established a domestic plywood industry and oil palm plantation developments, leading to large scale forest loss from the 1970's to the present (Araya, 1998; Siscawati, 2000).

Local people have played a very significant role in the occurrence of forest fires through not only non-traditional swidden farming but also through local conflicts and the careless handling of small fires. However, they seem to be passive actors affecting

various social and economical underlying causes. In terms of the increase of non-traditional shifting cultivation, various factors involved are identified in our studies, such as poverty and population increases in rural areas, political instability, in-country migration (internal colonization), timber extraction from land, clearance of community forests, and others. Local people are the major culprits of arson, causing frequent forest fires as a result of land conflicts (in the Philippines [Seki, 2000]). In the S-RFE, citizen's and local people's careless handling of small fires (such as bonfires) and cigarettes have greatly contributed to recent large-scale fires (Yamane, 2000).

Many studies have indicated that foreign actors such as *Importing Countries and foreign capital* have played significant roles in forest destruction because if the strong demand for forest products in consumer countries. The extraction of teak is a typical example, with Laos Cypress forest extraction in Lao PDR (Yamane & Chanthirath, 2000) a special case. Moreover, it is difficult to talk about forest development in the Philippines and Indonesia without mentioning the strong demand in import countries, in particular Japan, and the Japanese investor's contribution (Kuroda, 2000). It is well known that Japanese investors have extracted valuable timber resources, depleted them and then shifted production to another country, one after another. When the supply of tropical raw logs decreased greatly or faced import restrictions, the Japanese plywood industry shifted from tropical countries to Russia. The rapid increase of demand in consumer countries has contributed greatly to the recent expansion of forest conversion projects aimed at industrial plantations in the Philippines [Seki, 2000] and in Indonesia [Siscawati, 2000b]. In terms of drastic increases in oil palm plantation development in Indonesia, the strong demand in importing countries has been boosted by corporate image strategies claiming that vegetable oils are good for the environment and health (Okamoto, 2000). Besides these cases, intervention in adjoining countries, such as policy changes leading to a decrease of domestic timber production under strong wood consumption (for example in China [Lu, 2000]), has accelerated forest development in supplier countries. The effects of such intervention were found in the recent increase in border timber trade from the RFE to China (Yamane & Lu, 2000) and from Lao PDR and Cambodia to China and Thailand (Hirsch, 2000). Such regional trade will be more active in the near and middle term perspectives.

Many NGOs have already pointed out that "*foreign aid institutions*" have played a negative role leading to forest loss in developing countries. Our studies confirmed two causes leading to forest loss: "structural adjustment programs" and "individual project support." Both in Indonesia (Okamoto, 2000) and the S-RFE (Sheingauz, 2000a), the "structural adjustment programs" by the IMF and the World Bank forcibly pushed ahead hasty economic policy reforms, including forest policy reforms. Our study of oil palm plantation development indicates that the "improved" policies still contain various defects, which bring about still more forest destruction (Okamoto, 2000). Studies in the S-FER also showed that structural adjustment programs have led to serious economic crises and consequently deterioration of the forest sector then leading to an acceleration of forest loss (Yamane, 2000). In terms of "individual project support," the case of international aid for industrial tree plantations

in the Philippines is interesting (Seki, 2000). After the Aquino government came to power, developed countries provided "environmental aid," and the introduction of participatory forest policy was connected with this funding. On continental Southeast Asia, "The Greater Mekong Sub-regional Cooperation Program," promoted by the Asian Development Bank along with support from many bilateral and multilateral agencies, also belongs to this category. This project prompted large-scale infrastructure development (Hirsch, 2000) and the expansion of regional road networks increasing the rate of log extraction and, more generally, encouraging settlement and land clearance for cash crops. Hydropower projects prompted under the same program are encouraging further forest clearance. The Market Development Program promoted by the Mekong program also put pressure on forest products previously used mainly for local subsistence purposes. In more than a few cases, foreign aid programs for natural resource extraction such as mining functioned indirectly to promote forest destruction.

(3). UCFL Country Studies

The results of structural analysis on six leading proximate causes of forest loss from country studies areas, which were conducted according to the analytical framework mentioned earlier, are as follows.

In *Case of Unsustainable Logging for Foreign Exchange*, we have many observations from such places as the Philippines, the S-RFE, and Mekong Basin (Thailand, Vietnam, Cambodia and Lao PDR). Clear felling and wasteful and/or intensive selective felling are major means of foreign exchange and financial sources of the military and forest authorities. In these cases, many domestic and foreign actors are mutually related. Logging companies, central government authorities, the military, powerful people, concession owners and local forest management authorities are the domestic a*ctors*. Foreign actors include import and/or consumer countries and foreign cooperation from timber-importing countries. The state of forest loss resulting from this cause and the state of UCFL in each of the target countries are as follows.

In the Philippines, the demand for tropical timber from import countries such as Japan has increased. As a result the country has become a key log supplier. The sharp increase in log export timber has made timber exports a main source for the acquisition of foreign currency. In cooperation with these trends, the government established a logging concession system, which enabled logging companies to obtain enormous profits and to employ "cut-and-run" strategies. The close relations between the Congress, the army and the bureaucrats enabled them to accumulate wealth, as has already been pointed out. The intensive market demands of timber import countries (especially Japan), and "*market forces,*" under the "*insufficient legal and administrative base,*" have been identified as leading underlying causes of the use of "cut-and-run" strategies.

In the S-RFE, logging operations in the region are quite extensive and wasteful, seeking to harvest high quality logs. This is why there are very few wood-processing facilities for low quality wood. Unreasonable pricing of timber has amplified the extensive and wasteful logging. Insufficient controls on the violation of rules were also

an underlying factor. Under the current economic situation, the devaluation of the ruble has created favorable conditions for exports because logging is now the easiest way to acquire foreign currencies, especially from APR. Recently, the timber exports to China have been increasing at a rapid pace due to the reduction of domestic timber production after China's launch of the Natural Forest Protection Program. With respect to UCLF, the increase in unsustainable (wasteful) commercial logging was mainly due to such internal and external "*market forces*" as the demand for foreign currency and the increased timber demand of the APR, especially Japan and China. Various underlying causes of widespread unsustainable logging operations— originating from such ultimate causes as "*economic and political instability*" after the collapse of Soviet Union, and economic crises in 1998, and an "*insufficient legal and administrative base*" for sustainable forest resource use—are closely and mutually connected.

In Thailand, commercial logging started with British teak concessions in northern part from the early twentieth century, though the period of intensive logging lasted from the 1960's until the closure of the forest concessions in 1989. Until 1989, logging concessions covered large parts of the forest area that lay outside national parks and wildlife sanctuaries. Concern over the effects of legal and illegal logging led to a logging ban in 1989, after disastrous floods in southern Thailand led to heavy losses of life. These floods were attributed in part to the clearing of land for timber.

In Vietnam, economic reforms since 1986 have encouraged the military to secure its own sources of finance from logging, mainly in the central Highlands. Relations with Cambodia and Laos also give the military an advantage in border area timber exploitation and trade.

In Cambodia, over the last thirty years forest resources have been exploited intensively, especially during the post-UNCTAC period since 1993. Most of the country's forests are under concession licenses, including the heavily forested provinces. Logging under the protection of powerful people and the military is dominant over the country. Log production in 1997 reached its highest level, with 4.3 million cubic meter (7 million ha in area). Illegal timber felling accounted for at least ninety-two percent of the total production.

In Lao PDR, the exploitation of Lao cypress is one of the leading causes of the degradation of primary forests[3]. Lao cypress has been logged and exported, mainly for Japan, since the 1980's, without any effective conservation measures. The exploitation of the Lao cypress has undoubtedly been aggravated in recent years, and several Lao cypress habitats are on the verge of depletion. If Lao cypress logging is conducted at the same pace in the same, unsustainable way, the Lao cypress is likely to be extinct in less than 100 years.

With respect to UCFL in the Mekong River Basin, the power of the military in the political structures of countries due to continuing war and political rivalry ("political

[3] According to the comment from Mr. Xeme Samoutry, Director General Department of Forestry, Lao PDR (Xeme 2001), in the Prime Minister's Decree No. 10 on Control of Forest Operation and Timber Business, Oct 4, 2000, logging of five species including Lao cypress is banned along with other provisions ordering strict enforcement of regulations concerning harvesting and sales of logs in general.

instabilities") is a recent leading underlying cause. In addition, trade to increase the amount of foreign exchange, demonstrated by the strong regional demand of Thailand and Vietnam ("market forces"), and a lack of funds, institutional capacity and willpower on the part of central and local-level authorities ("insufficient legal and administrative base") has fueled this situation. In the case of Lao cypress in Lao PDR the degradation of Lao cypress forests have various underlying causes of both domestic and foreign origin. However, the strong demand and consumption of Lao cypress in Japan appear to be the ultimate cause. The "*insufficient legal and administrative base*" has allowed the unsustainable resource exploitation.

In conclusion, the increase of commercial logging in the areas has been caused by such internal and external "*market forces*" as the demand for foreign currency and the increase of timber demand in consumer countries. Various underlying causes of widespread unsustainable logging operations - originating in such underlying causes as "*economic and political instability*", "*insufficient legal and administrative base*" and "economic and forest development policy" - are closely / mutually connected and prompted unsustainable logging operations.

The "*failure of industrial plantation*" with large-scale reforestation of fast-growing tree species in the Philippines is a very instructive case. Foreign aid institutions played significant roles, along with domestic actors such as *g*overnmental forest authorities and local people. The largest forest-related project, the Contract Reforestation Program (CRP), was controlled by the central government, based on the principle of state control of plantations. However, large-scale restrictions on local people's access to land intensified land conflicts, and the enormous flow of project funds spread corruption, leading to the non-payment of contract fees to plantation workers. At the same time, the DENR promoted the government-managed CRP and Industrial Forest Management Agreements (IFMAs), and leased several thousand hectares to one company. When an unbroken area of several thousand hectares is granted to one company, it is almost impossible to avoid conflicts with local people's land use. It's only natural that, as with the CRP, the IFMAs have not produced good reforestation results. The failure of industrial plantations stemmed from the defects in forest policy that used a top-down project to establish large areas for plantation lands, while disregarding forest use by local people. Moreover, the shortage of good governance is thought to have led to a lack of appropriate control over the projects. In the background, the behavioral patterns of authorities leading to the centralization of power and profit seeking, conspicuous during the Marcos-era, were still prevalent. In conclusion, an "*insufficient legal and administrative base*," which disregarded forest use by local people, led the failure of industrial plantations in the Philippines.

Frequent (large-scale) forest fires are one of the recent significant proximate causes of forest loss in the APR. The cases of the Philippines, Indonesia, and the S-RFE will be discussed and analyzed below. In this case, local people played a prominent role, along with logging companies and local forest management authority.

In the Philippines, the development of logged land for agricultural use was not legally sanctioned; nevertheless, logged land is often used for commercial ranching.

"Pasture fires" were a common means to open up forests for commercial ranching. As a result of repeated fires, secondary forests were converted to grasslands covered with herbs such as cogon (*Imperata cylindrica*), and vast grasslands have emerged in the country. The fires from pasture burning spread beyond the limits of the commercial pastures and over a wide area of the surrounding second-growth forests, with a devastating effect on the forests. In the Philippines, conflict over public forest use between the government and local people was a major secondary cause of frequent forest fires. In many cases, local people, angry about having their access to forests restricted by the government, set fires. The greatest number of forest fires occurred in the man-made plantations. There were many conflicts between local people and the government about restrictions on local peoples' access because of commercial logging and industrial plantation projects. The UCFL in the countries originated in past forest policies which promoted commercial logging, commercial ranching and industrial plantations. These policies not only disregarded the rights of land possession and of forest resource use of public forestland, but also directing the profits of the projects to specific parties such as logging companies. These forest development projects went against the reality that indigenous people and pioneers from the lowlands had inhabited public forestland since after World War II, and that they had used various forest resources there.

The RFE has also been severely affected by forest fires. Many areas in the RFE have suffered fires every year. Middle to large-scale forest fires have also occurred frequently. The forest fires of 1998 in Khabarovsk were the worst since 1954 and 1976, and more than 1.9 million hectares of forests were burnt that year. After the collapse of the Soviet Union, the fire control system has weakened remarkably due to a substantial decrease in the budget from the federal government for the fire control system. The increase in small fires in forest areas was another proximate cause. Recent motorization has brought more citizens into forest areas than before, seeking products for their daily use, and their careless handling of cigarettes and fires have become the main artificial cause of the fire. In the area, political and economic instability in Russia has resulted in serious shortages in budget allocations to local fire control bodies. The increased number of citizens' visit to forests has been another key underlying factor. An "insufficient legal and administrative base" has lead to inadequate forest institutions and regulation. The wasteful resource use policy, which is a legacy of the Soviet era, is also a significant underlying cause. These two root causes were mutually connected to increased "forest fire area" and "high risk logging sites for fires," amplifying the problems of the "weak fire control system," and causing frequent forests fires on a large scale. Forest management operations, which mainly depend on natural regeneration, might also accelerate forest degradation.

In Indonesia, there was a big forest fire on the island of Borneo in 1983. At the time it was thought to be the biggest forest fire in history. The combined effects of fire and drought destroyed 25,500 km^2 of primary and secondary forest and a further 7,500 km^2 of settlement areas. Since then, the cycle of forest fires in Borneo appears to be increasing and fires were reported to be larger than ever before during 1994. FAO

estimates in SOFO (FAO, *State of the World's Forests 1999*) that around two million ha of Indonesian forest area was burned in 1997 and more than that was burned in 1998. The fires caused great damage to human health, to the forests and natural ecosystems, including wildlife habitat, and to the social and cultural dimensions of forest-dwelling people, and will evidently quicken the global warming process by CO^2 emissions. In conclusion, recent large-scale forest fires in Indonesia were caused mainly: a) national economic development policies promoting large-scale forest conversion projects with an inappropriate land allocation policy, supported by strong demand for forest products in consumer countries, b) insufficient enforcement of fire prevention in the forest development programs, and c) insufficient forest fire control systems.

The case of *"forest conversion for the purpose of (rubber, oil palm and coffee) plantations and/or cash cropping"* through land-clearance by intentional burning or clear-felling were widely observed in Indonesia, Thailand, Lao PDR and Vietnam. The causes included both domestic and foreign actors such as government, conglomerates, logging companies, domestic and foreign consumers, and foreign aid institutions.

In Indonesia, the development of palm oil plantations is a recent key proximate cause of forest loss. This forest conversion has not only led to deforestation but also the activities have strong connections with forest fires. Moreover, the large-scale use of agricultural chemicals has led to not only people's health being damaged, but also to the degradation of forest and the loss of bio-diversity, because repeated use of herbicides causes environmental pollution. By 1997, the total area under palm oil cultivation, which has increased remarkably since 1978, reached 2.5 million ha. Conglomerates now dominate the sector, with eight of them owning land banks totaling 2.1 million ha out of 5.4 million ha officially allocated for palm oil. The number of new plantations is still expected to grow. Most of Indonesia is suited to palm oil cultivation, and there are vast available lands that could be converted to plantation sites. On the other hand, the area under cultivation in Malaysia, currently the world's top producer, has reached the saturation point and cannot be expanded. Accordingly, such natural factors, along with the rapid demand growth in consumer countries and favorable domestic policies which do not pay enough attention to the realities of current land use, even after policy reforms due to the IMF's recommendation, have brought strong pressure for conversion. The introduction of rubber and eucalyptus industrial tree plantations in the so-called "degraded forests", and shrimp farming in cleared mangrove forests, is recognized as one of major causes of deforestation in the Mekong River Basin.

In Thailand, clearance of land for commercial dry-land crops increased rapidly from 1960's and slowed noticeably after the late 1980's, with the enforcement of forest reserve status. Shrimp farming boomed in the late 1980's, following the collapse of the Taiwanese shrimp industry, mainly along the Gulf of Thailand coastline. This has had a severe impact on mangroves, most recently along the Andaman Sea coastline.

In Vietnam, logging has increased dramatically in the Central Highlands, as has the clearing of land for cultivation. Until recently, coffee and other cash crops were being grown in plantations. Shrimp farming provinces in the far south of the country have had a particularly strong influence on the rate of mangrove clearance. In the Mekong River

Basin, industry ignores the local subsistence use of natural resources, which is as much of a leading underlying cause as strong demand in consumer countries. In conclusion, *domestic economic development policies with industry emphasis* associated with *strong demand in consumer countries* has led to increased rates of forest conversion to plantation and cash cropping.

"*Direct / Indirect Destruction Caused by War and/or Local Conflict*" was observed in Lao PDR and Vietnam, causing massive destruction through the use of heavy firearms, and forest loss through the influence of governments, militaries and refugees. In Lao PDR, during the Second Indochina War from 1964 to 1973, 3 million tons of bombs were dropped on Laos, causing not only massive destruction of human life and settlements, but also of forests along the country's eastern border areas neighboring Vietnam and in Xieng Khouang province. Indirect effects have lasted up to the present day through a high rate of population movement following the uprooting of established communities. In Vietnam, during the Second Indochina War, from 1965 to 1973, the United States Air Force had a deliberate policy of destroying forest cover for the communist forces in the South. This led to destruction of at least two million hectares of forest in the Central Highlands and of mangrove forests along the southern coasts. It is apparent that "political instability" is a key underlying cause of the Second Indochina War. The war also had an indirect impact, which was the internal settlement of refugees and repatriates, which was closely connected with national policy.

In case of *"Land Clearance for In-Country Migration ("Internal Colonization")"* reported in Vietnam and Lao PDR, central government, landless farmers, refugees, and repatriates were key actors. Laos has always had population movement associated both with traditional agricultural and inheritance practices and due to insecurity, but migration has been particularly great during and since the Second Indochina War (i.e. since the 1960s), in part because of government policy for highlanders to resettle in more accessible areas. The massive internal refugee problem after 1975, when one-quarter of the country's population had been displaced by US bombing, led to clearing of new land. This was—and continues to be—exacerbated by the problem of unexploded ordinance, making the cultivation of otherwise fertile lowland areas impossible, and requiring further clearance. The Lao PDR government has urged upland ethnic minorities to migrate down to the lowlands for rice cropping, while the Vietnamese government has encouraged the lowlanders to migrate up to hills in the Central Highland for cultivation. Such policies have created the conflict over the use of forest resources, which might lead to unsustainable forest management. They are related to both the historical background and its policy on ethnic minorities. In Vietnam, after 1975, overcrowded cities and more densely settled rural areas sent up to 6 million people to New Economic Zones, a policy which continues today. However, the main period of movement was during the late 1970's and 1980's. The Central Highlands were the destination of several million lowland Vietnamese. Then the forests in the area were opened to intensive harvesting. This team does not have an intensive analysis of the situation, but the rapid population growth of cities and incomplete policies for internal colonization were leading underlying causes. In conclusion, incomplete "economic/forest

policies," which disregarded the impact on the targeted forest areas, led to forest loss in the two countries.

(4). UCFL Addressed in the IFF-UC/NGOs Asia Process

From the intensive discussion in the IFF-UC/NGOs Asia Process, the major UCLF in the Asian region were summarized in eight headings: a) The lack of recognition of the real value of forests, b) The development paradigm, based on over-consumption of timber; c) Subsidies and inappropriate incentives that created inappropriate governmental policies and control, d) Shortcomings in political and governmental systems, e) Lack of decentralization, participation and transparency in government decision-making; f) Inadequate land and resource allocation systems that do not take adequate account of the various stakeholders under the occurrence of population growth, migration and poverty g) Lack of appropriate knowledge of forest bio-diversity, ecosystem management and traditional forest use among the parties concerned with forest use; and h) Negative effects of international financial and aid institutions, and private capital investment.

(5) UCFL in the APR

Based on these two approaches mentioned above, IGES FCP addressed five key underlying causes of forest loss (UCFL), which are closely related to recent major proximate causes of forest loss in the region. The first UCFL is the lack of recognition of the real value of forests. Actors related to forest development have, in many observed situations, ignored the real value of forests, including their environmental functions and their function as the base of the local community. Instead, they have attempted to maximize economic profits from the development of the forests, ignoring the real value of the exploited forests. In the background, the lack of appropriate knowledge and measures of forest biodiversity, ecosystem management and traditional forest use among the parties concerned seems to have encouraged narrow-minded resource use policies. The second UCFL is the impact of market forces under incomplete market system. IGES FC studies frequently observed that the forest developments in target areas were driven in unsustainable ways that centered on monetary benefits, in particular foreign exchanges, and on market forces which originated in strong consumer demand for products, especially in importing countries. The studies also indicated that "economic and forest development policies with an industrial emphasis" have been a leading cause of forest loss in the region. So far, forest policies have used the benefits of timber extraction and forest conversion as a means of obtaining foreign exchange or as a financial source for powerful people. Moreover "an insufficient political will and shortage of compliance" to stop destructive forest development was recognized as a key UCFL of ongoing forest loss. Many institutional causes, such as an insufficient legal and administrative base for sustainable forest management, incomplete public forestland policy and insufficient attention to local people's rights, can be extracted from this

UCLF. Although IGES FC studies did not examine it in detail, it is certain that many direct or indirect causes of forest loss were strongly affected by "political disorder and economic difficulties". This UCLF has brought about many causes of forest loss such as inability to govern the forests, the expansion of rule violation and corruption, the increase of poverty and the consequent rise of non-traditional shifting cultivators. Moreover, various impacts of forest loss themselves have often brought on more political, social and economic instability. In this sense, the progress of forest loss itself is an UCLF.

Recommendations -Directions to Overcome Forest Loss[4]

Based on the research mentioned above the sub-team proposed the following recommendations under five headings, which are necessary in order to overcome forest loss in the APR.

(1). Respect for the multiple functions of forests

In the target areas most of the recent forest developments employing unsustainable means leading to forest loss have been conducted with the goal of maximizing monetary benefit. On the other hand, the multiple functions of forests have been almost completely ignored. Forest loss has not only had an economic impact, but also an impact on the environment and people's livelihoods, and created land conflicts and land alienation. In many cases the impacts of forest loss exceeded the economic profits from forest development. Thus we should clarify the real value of forests and develop conservation measure for these multiple values. To achieve this, the following are examples of steps which must be taken:

1). The development of a method for the evaluation of the multiple functions and values of forests, including the traditional knowledge uses of forest resources, should be urgently promoted under the initiative of international communities such as UNFF. Developing an internationally accepted methodology to evaluate the carbon dioxide absorbing capacity of forests, as well as social and economic indicators, is an urgent need;
2). Take into account all social, environmental and economic costs when considering the benefits of any land or forest development and the price of timber products;
3). All forest development projects must be required to complete an Environmental Impact Assessment (EIA) and a Social Impact Assessment, which would focus on the social impacts of proposed development; and,
4). Ensure the compatibility of land-use allocations with the local communities and neighboring communities who use or need access to the same land or resources on

[4] This part was drafted based on individual recommendation proposed in ST sub-team related papers and revised based on discussions and comments at the occasion of IGES-LIPI workshop on forest conservation, IGES-NUOL workshop on Forest Conservation and IGES FC International Workshop on Forest Conservation Strategy in the Asia Pacific.

that land, taking into consideration the interrelationships within the ecosystem.

(2) Consuming forest goods produced in sustainable way

Unsustainable forest development has accelerated because of strong demand for natural resources, both from forests and forest-converted land. Illegal or uncontrolled forest extractions originate in many cases from strong demand from consumer countries, coupled with the inability of supplier countries to govern their forest resources. Thus, the following steps towards the control of forest product consumption and sustainable forest products shall be considered:

1. Consumer countries shall encourage principles such as the reduction of resource use, promotion of recycling, and re-use. More efficient techniques of resource use shall be developed and employed. In addition, consumer awareness and education is essential;
2. The forest product trade shall be controlled under the principle of forest sustainability. Economic mechanisms such as voluntary certification should be examined and introduced as steps in this direction.
3. The central and local governments of timber exporting countries, in addition to major importers of timber, must take responsibility and exert control over the origin of wood products that are imported, and refuse transactions of timber of illegal and non-sustainable origin. For effective monitoring and to control illegal trade, the capacity of relevant officials in the institutions of both producing and consuming countries shall be promoted.

(3) Reforming Economic / Forest Policy towards sustainable forest management

Forest loss in the target areas has been directly and indirectly promoted through top-down forest development which ignores the customary rights and uses of forests, and provides insufficient governance. To move towards sustainable forest management in the target areas, economic and forest policy reforms should consider the following policy options, with a special emphasis on strong governance using a participatory approach.

1). The central government must continue to show the political will to regulate and monitor the forestry situation with strong measures, and balance the interests of the state, business and local communities with a master plan for appropriate, sustainable and equitable development;
2). The central and local governments must make decisions transparently, consult stakeholders on all decisions regarding the forestry sector, and provide for participatory processes that actively engage a wide range of stakeholders;
3). Central and local governments must recognize the right and ability of local communities to manage lands and forests, and work towards institutional and policy reforms to protect and safe-guard these community rights;
4). The central government must play a regulatory, as well as a facilitative role, and

should concentrate on building the capacity of local authorities, so that they will be better able to facilitate community resource issues;

5). The central government shall regulate the involvement of local governments, because the regional elite class can easily manipulate local governments in some countries. The intervention into forest management of these elite, seeking special concessions, is likely to lead to undesirable results in resource management, from the perspective of local people;
6). Closing down the parallel shadow economy under which illegal logging has thrived is a prerequisite to the creation of properly functioning judicial and law enforcement agencies;
7). The Community Forestry legal base shall include the provision that individuals or associations may access and use forest lands by entering into contractual agreements with the government;
8). Appropriate forest zoning can be a base for sustainable forest use. Protected conservation areas should be allocated enough size to give them an appropriate management base, allowing the proper balancing between the various functions and interests of the forest; and,
9). When reforming or establishing policies related to forest use, the central government should enact appropriate measures to mitigate the impact to the forest management of neighboring countries and areas.

(4) Reforming the legal and administrative base for sustainable forest management

Our study suggested that the legal and administrative base must effectively recognize the rights, knowledge and participation of local communities in forest management and forest development. In addition, because of the significant impacts of large-scale forest fires on forest loss in the target areas, including both tropical and boreal forests, an effective legal and administrative base for fire control is also urgently needed.

For community forestry and participatory forest management:

1). The central government must provide early, efficient coordination of inter-ministerial conflicts;
2). Legal mechanisms shall be developed which recognize traditional land-use practices and systems of customary tenure in order to protect the rights of indigenous peoples;
3). Procedures for granting concessions must be transparent, with consultation of all the affected parties, in particular local communities and local authorities;
4). Lands with traditional social, economic and cultural significance shall be delineated and excluded from the concessions. These lands must be given to communities located within the concessions through an equitable recognition of customary rights. Such areas must be carved out and excluded from concession contracts so that the ownership and use rights of forest communities are not compromised; and,

5). Long-term monitoring of logging operations, as well as log transport and export, is needed by the national government in close co-operation with the provincial authorities and the local communities. Village monitoring groups shall be encouraged and provided training.

For fire control:

6). Administration of national and local forest fire control, coupled with the national fire control policy and programs, shall be strengthened
7). Well-balanced forest control measures, with attention to both advanced technology and practical equipment, shall be allocated in the system;
8). Moreover, sufficient financial and human resources shall be allocated to the local stations; and,
9). The restriction of development activities, in particular, intended burning for land clearance, shall be reinforced more strictly, and sufficient payment and time shall provided to the sub-contractors in the field. In many land-clearing contracts, insufficient sub-contracted payments and limited time for the work have invited sub-contractors to choose the short-cut practice of burning.

(1) Regional Coordination realizing forest conservation

In addition to the impact of market forces, with a background of strong demand for forest products, forest development leading to forest loss has been caused by interventions such as economic and forest policies in importing countries and foreign aid institution, as well as the absence of appropriate coordination on trans-boundary issues.

1). The International community shall place increased emphasis on the importance of community involvement and participation in its approaches to forest conservation, natural resource management and land planning;
2). Pledges of loans or grants made by the international community shall be carefully conditioned on the basis of respect for human rights and sustainable management of natural resources, in agreements that are informed and transparent to the public. Compliance with such written conditions shall be closely monitored in order to avoid corruption. Officers and government officials must be held accountable for their policies;
3). The International Community shall assist governments in developing community forestry or joint-forest management systems, thus encouraging local communities to continue to value forest resources through increased involvement in their management;
4). The International Community shall support initiatives providing accurate information on forestry and land use issues at the local level, particularly concerning human rights, indigenous rights and forest management within a country;
5). The International Community shall make the best use of forest loss experiences in forest-depleted countries such as the Philippines and Thailand. In its move toward people's participation in forest management, the Philippines is on the leading edge,

compared to other East Asian countries. The Philippines and the international society shall disseminate information about their experience to other countries so the same mistakes are not made twice. The lessons of Thailand could contribute to understanding the impact and result of rapid deforestation on communities and a national economy;

6). The International Community shall support education on forest-related issues for journalists. In order to avoid "stereotyped" reporting on the causes of deforestation, journalists should be encouraged to learn more about forest-related issues, especially the underlying causes of deforestation, as key subjects to be considered;

7). International cooperation for fire control, and the expansion of international aid, shall be promoted with the full support of developed countries in the Asia-Pacific region; and,

8). International community's monitoring of the restoration of burned sites is very important, because the areas tend to convert into plantations for economic benefit, and because the bio-diversity of the sites will deteriorate in the long-term, leading to serious adverse effects on ecological systems.

Paper 2

Strategy for Timber trade policy to support sustainable forest management[1]

1. Target

The goal of the sub-theme studying timber trade policy (TT) is to advocate appropriate strategies for the formation of timber trade policies leading to sustainable forest management. The study program is composed of four sections. First, the framework and data availability for forest resource accounting will be studied. Second, sustainable forest management will be discussed from the viewpoint of the measures of forest and timber certificates. Third, timber trade structures and the policies of major timber-trading countries will be clarified from their historical perspective. The econometric analyses in this section, using time-series data, will reveal the impact of customs duties and non-tariff barriers on international timber-trades. Finally, a spatial equilibrium model will be created for the Asia-Pacific timber trade, to simulate regional timber trade, and to assess various policy measures.

Recently, the structure of the global timber trade has been changing drastically, from trade in logs to trade in wood products. This change reflects the worldwide environmental movement and the exhaustion of useful forest resources. Considering the shifts in the timber trade, we believe that an orderly timber trade is necessary for sustainable forest management.

2. Methodology

An examination of the global situation of forests reveals increases in forest area in many developed countries, and decreases in virtually all the developing countries. Although we should not overlook new kinds of forest decay in Europe, the situation in developing countries is so poor that we would summarize the over-all view of the developing world as "devastated."

This cross-sectional view can be demonstrated through a time-series setting. At the onset of economic development, the natural forest may exist abundantly. People live in rich forests in harmony, utilizing and collecting necessities from the forest. As people cultivate land, they convert forests into farmland. Agricultural production enables the human population to grow, accelerating deforestation. Industrialization hastens the

[1] This part is drafted by NAGATA Shin in cooperation with the following collaborators of the sub-theme YOUN Yeo-Chang, Ruperto P. Alonzo, SHIMAMOTO Mihoko , YAMAMOTO Nobuyuki, MINOWA Yasushi, and TACHIBANA Satoshi. The original draft was examined at international workshop at Jakarta held in 2000 and international seminar held in January 16-18, 2001 at Tokyo. This is the final report grounded on the comments made by various stakeholders such as governmental officers, NGOs, researchers, international organizations at the workshops and seminar.

speed of deforestation, because the increased human population can achieve greater agricultural production through the use of chemicals and mechanization. But in the course of economic development, the pressure on deforestation descends. Historically, perhaps because of comparative advantages, industrialized economies import forest products in exchange for industrial products. Thus they do not need to use their own forests as sources of timber. Despite their degraded forests due to past overuse, developed countries are able to restore healthy forests. They change the focus of their forest policy from development to reforestation and protection.

We admit that the above description is greatly oversimplified, but that there is nevertheless some truth to this story.

In the course of their economic development, many of today's developed countries imported timber from other countries to lessen the pressure on their own forest resources. Now, many deforested developing countries could import timber from the restored forests of developed countries. We cannot overlook the importance of timber trade policy on forest resource management.

Uruguay Round Trade Results

Uruguay Round Trade Agreement has led to the following results:

1). The tariff reduction agreement has reduced global tariffs by an average of one-third from their base rates.
2). Commodity sectors where tariffs were eliminated by the major trading partners of the agreement include beer, brown distilled spirits, pharmaceuticals, steel, construction equipment, agricultural equipment, medical equipment, toys, furniture, and paper and paper products.
3). The agreement called for tariff reductions to be made over five years, in equal annual staged reductions, although in some cases, such as pulp and paper, the reductions are being implemented over 10 years.
4). The agreement of the pulp and paper subsector in the zero-for-zero initiative for wood products was between the United States, European Union, Canada, Japan, Korea, Finland, Austria, New Zealand, Hong Kong, Singapore, Australia, Brazil, and Chile.
5). In the lumber and wood products subsector, the Uruguay Round did not achieve the zero-for-zero initiative for wood products. The United States, Canada, European Union, Hong Kong, New Zealand, Singapore, and Sweden supported the agreement, but Japan did not.
6). In the furniture subsector, the Uruguay Round achieved a zero-for-zero agreement between key countries, with tariffs to be eliminated over five years.

The History of **APEC and ATL** (Accelerated Tariff Liberalization) is as follows. In 1994, APEC leaders agreed to the goal of free and open trade in the APEC region by 2010 for developed countries, and by 2020 for developing countries. In 1997, APEC leader nominated fifteen sectors, including forest products (which was nominated by US, Canada, NZ, Indonesia), for Early Voluntary Sectoral Liberalization (EVSL). Forest Products was also selected as one of the nine sectors for immediate action. The

proposals of Forest Products EVSL Initiative by four countries were merged, and each country was assigned the study of four elements (Tariff initiatives, Non-Tariff Measures, Standards and Conformance, and Economic and Technical Cooperation). At the APEC summit in November 1998, APEC leaders agreed to move the tariff portions of the sectoral EVSL initiatives to the WTO, in order to reach a critical mass of support for concluding an agreement in all eight sectors (because telecommunications MRA didn't contain a tariff component) by the end of 1999. Work on the other elements of the sectoral EVSL initiatives continues within APEC.

The ATL initiative includes further reductions, and acceleration in the timing of reductions, of tariffs agreed to as part of the Uruguay Round. Because of the existence of the Uruguay Round zero-for-zero agreement on pulp, paper, and printed materials, different disciplines were proposed for these commodities than for the other products covered by the proposal. The proposal is for the elimination of tariffs on wood chemicals, wood, rattan, and wood furniture by developed countries by January 1, 2002. The proposal suggests that developing countries should strive to meet the same targets, but accepts that in special circumstances and on a case-by-case basis, elimination could be delayed until January 1,2004. For pulp, paper, and printed products, existing parties to the Uruguay Round zero-for-zero agreement would accelerate tariff removal to January 1, 2000. Others would attempt to remove tariffs by the same date, but developing countries could delay tariff removal until January 1, 2002, on a case-by-case basis for a limited number of specific products.

3. Forest Resource Accounting

Agenda 21, the action program which was adapted at the UN's Conference on Environment and Development held in Rio de Janeiro in 1992, explicitly states that environmental accounts should be developed by all members. The United Nations, through its statistical secretariat UNSD (United Nations Statistical Division), which is responsible for the standards of the SNA (System of National Accounts), provides a satellite system to the SNA and SEEA (System of integrated Environmental and Economic Accounts). The purpose of SEEA is to show the impact of economic activities on the natural environment.

SEEA consists of several different parts, with both physical and monetary accounts. The first step is to link environmental data expressed in physical units with the national accounts system. The second step is to make monetary accounts, which are based on the physical accounts, in order to evaluate the impact in economic terms, allowing the estimation of, for example, the costs of the damage caused by emissions. Furthermore, an accounting system requires that data compilation be made in terms of balanced accounts.

A close study on natural resource accounts has been made at Nordic and western European countries. The development of natural resource accounts started in Norway as early as the 1970's. Since Nordic countries have large forest areas, and produce much output of forest products, forest resource accounts have been one of main

fields of study since its early days. Forests are one of the crucial themes in natural resource accounts even now.

We shall explain briefly the general structure of forest resource accounts. What are forest resource accounts? In brief, they can be defined as consistent accounting frameworks that adjust forest-related resource and environmental information. Figure 1 geographically presents the place of each account, which compose forest accounts. Forest resource accounts comprise four accounts: (1) forest accounts, (2) forestland accounts, (3) forest product accounts, and (4) forest management accounts.

Forest accounts represent the initial stock, period flow, and final stock of trees growing in forests, as the tree volume. What must be noticed is that increases and decreases of tree volume are caused not only by tree growth, but also by changes in forestland area. In order to solve this problem, we can adopt forestland accounts.

Forest product accounts use weight, volume, and other physical terms to describe the varied uses, from raw logs to waste. Forest resource accounts include two accounts: a forest sector/product balance table and a forest mass balance table. When we combine forest accounts and forest product accounts into one united account, we can describe a consistent system from forest growth to the abandonment of wood residues.

Forest management accounts use monetary terms to show the flow of funds used in managing forests. Various monetary flows, such as subsidies, taxes and investments, are described in these accounts. All monetary flows represented in these accounts are real money that is transacted in actual markets.

Within forest resource accounts, forestland accounts serve to directly link forest accounts with forest management accounts, and provide for their consistency. Input and output for forest management necessarily reflect the current state of forests and forestlands. In these systems, the most difficult question is linking forest accounts with forest management accounts, because it requires the linking of land accounts and economic accounts, that is, the linkage of physical accounts and monetary accounts. In order to construct forestland accounts, it is appropriate to utilize GIS (Geographic Information Systems) or LIS (Land Information Systems).

1. Recent Trend of Free Trade of Forest Products

Points of Support by the Spatial Equilibrium Models in the Report of the USTR concerning Tariff Elimination are summarized as follows:

1). The absence of significant changes in production and consumption, at the world scale. For both models, and all products, production and consumption change by less than 1%, and typically by less than 0.5% compared to the baseline, in 2010.
2). Changes in the commodity composition of trade (a shift toward more processed products), and in geographic patterns of production and trade, Both models indicate that the ATL is likely to increase production in, and exports from, northern Europe, Oceania (Australia and New Zealand), South America (Chile), and Asia (Indonesia and Malaysia).
3). The likelihood of changes in U.S. trade (both imports and exports), accompanied

by little or no net effect on U.S. production and consumption. Both models indicate the likelihood of reductions in U.S. exports of logs and increases in exports of some processed products.

4). Finally, both models suggest that the ATL is likely to change timber harvests in a number of countries, but both models indicate the likelihood that the net effect at the world scale will be small, less than 0.5% increase in timber harvests for industrial products.

The other points supporting the tariff elimination by the USTR are as summarized below.

5). Competition will encourage the development of cost- and resource-efficient manufacturing technologies, and increasing use of recovered fiber in the manufacture of paper and paperboard.

6). Decreases in timber harvesting will be concentrated in primary forests and the increases will be concentrated in secondary forests and plantations.

7). Trade liberalization generally, and the package of ATL initiatives in particular, may contribute to higher incomes, especially in developing countries. There is also widely-accepted evidence that increasing income in developing countries will eventually contribute to greater investments in environmental protection, and a reduction in consumption of fuelwood.

Defects of the Model used in the supportive simulation of tariff abolishment are as listed below:

8). Shortages in the analysis about the effects of the changes in trade on the forest resources of each country, for example the accelerated rate of harvesting in natural forests, and incentives of reforestation or plantation

9). Shortages in the analysis of the structure of the forest products industries, for example the monopolistic or oligopolistic character of the industries, which will distort free trade principles by preventing the people from receiving the profits of free trade.

10). Shortages in the study and quantitative and qualitative comparisons about the merits of free trade, who will benefit from tariff elimination, who will lose profits, and who will suffer the disadvantages in the case of forest products.

The real situation of south East Asia varies from place by place. In the Philippines and Thailand, which have already lost large parts of their natural forest, reforestation projects by government cannot cover and maintain the forests in the countrywide. Therefore, economic incentives are necessary to encourage planting and tending by the private sector. Additionally, domestic log markets (which do not compete in the international market) and domestic forest industries will be needed. In Indonesia, the exploitation of natural forests is ongoing, the shortages of materials to satisfy the production capacity of the processing industries are being observed. During the transition period from the Suharto era, the country needed liberalization in the domestic industrial structure, but they were concerned about excessive intervention from the IMF and multinational corporations. For example, in 1997, the IMF made the government reduce the tariff rate on log exports, and in 1998, the IMF recommended the auction of

concessions (i.e. opening the concession market to foreign companies). The result of the IMF requirements would be the opening of the forest resources (material) to exploitation. The development of processing industries, from the viewpoint of employment and earning of foreign exchange, the improvement of the efficiency of recovery rates, and the exploitation of forest resource for themselves are beneficial for Indonesia. Therefore, the domestic processing industries, as an infant industry, should be restricted to domestic competition or competition with non-monopolistic companies.

5. Country Case Studies of Timber Trade Policy

Malaysia: In peninsular Malaysia, the forest-related policies are based on federal policies, such as the National Forestry Policy (1978) and the First and Second Industrial Master Plans of Malaysia (1986-). Forest exploitation of peninsular Malaysia has begun to convert forests into rubber and palm oil plantations in the early twenty-first century. As a result, peninsular Malaysia has plentiful rubber wood plantations, which are processed into furniture and other products. The log export ban has been enforced since the 1960's. Peninsular Malaysia has been promoting furniture, MDF and the molding industry. The current forest-related situation of peninsular Malaysia is good, making it important for them to continuously promote wood-based industries, especially for high value-added products. It may also be necessary to examine the situation of the next material to be used for wood products, e.g. palm.

In Sabah State, the forest-related industry is dependent on federal policies. Forest exploitation has expanded since the 1960's because of the high quality logs in the region. Sabah State revenue is heavily dependent on timber related royalties, especially on export logs. As the result of rapid forest exploitation, Sabah's forest resources have been decreasing drastically since the 1970's. The current state of forest resources is deteriorating, as demonstrated by the scarcity of wood materials, decrease of old growth forest and increase in secondary forests. Promoting wood-based industries such as plywood and timber, Sabah has restricted log exports through the following actions since the end of the 1980's: executing log export quota from 1989 to 1992 and since 1996, and banning the export of logs from 1993 to 96. The state needs to diversify its wood-based industries in order to improve its monocultural economy. It is also important for the state to plant trees intensively and immediately. The decrease of forest resources in Sabah is a serious problem for both the local economy and the global environment.

In Sarawak State, the forest-related industry is dependent on federal policies. Forest exploitation of the state began in the 1980's because of the lower quality, and because of export restrictions of Indonesia and Sabah. Therefore, Sarawak has comparatively rich forests. Sarawak created a log export quota in 1992, and tightened it in 1993 to encourage wood-based industries. Sarawak developed some timber processing zones during the 1990's. The state has promoted forest-related industries on the whole such as logs, plywood, wood residue products and pulp and paper. We concluded that the current situation of Sarawak is good. Its timber processing zones will play an important role for its development of forest-related industries and state economy. It, however, is necessary for Sarawak to sustain its forest resources through reforestation.

The Philippines: It is important to grasp the past, present and future situation of the forest resources in the Philippines in order to analyze the Philippine forest product industries. But it is quite difficult to get sufficient data about forest areas and growing stock in the Philippines. Time series data about woodland areas defined by the national government exists, but it does not assure that trees are actually standing. Therefore the only way to describe the resource situation is by integrating the fragmented data.

The total land area of the Philippines is about 30 billion ha. The forest area was about fifty percent of the total land area in 1950, but it was only eighteen percent in 1996. The records show that the depletion of forest resources in the Philippines began shortly after World War II, and that the largest part of the domestic old growth forest resources had already disappeared. In 1992, all logging in virgin forests was banned, so since 1991, old growth areas of dipterocarp have stopped decreasing in the statistical data. But other natural forests are still continuing to degrade.

With respect to log production and trade, the peak of log exports in the Philippines was seen in the first half of the 1970's. Although log production exceeded 10 million cubic meters early in the 1970's, after that it began to decrease drastically. In 1980, production was 6.4 million cubic meters; in 1985, it became 3.6 million cubic meters. Log exports also dropped, from 8.4 million cubic meters in 1970, to 0.76 million cubic meters in 1980. In 1986, log exports were finally banned, and in 1987 the government announced that it would not issue any new TLA (Philippine's timber concessions). At the same time, imports of logs began to increase. In 1996, the amount of imports exceeded the production quantity. The largest share of imported logs were sawlogs and veneerlogs, and from the production volume of wood, pulp and pulpwood imports totaled around 240 thousand cubic meters. Major exporting countries are Indonesia, Papua New Guinea, and New Zealand, but other Pacific-Rim countries export as well. The Philippines import from African and Latin American countries, as well. These countries exported more than 10 thousand cubic meters to the Philippines in 1995. The CIF prices of imported logs from these countries, in 1995, were around 100 US$/m3, but there are rather large differences among these countries.

Domestic producers of forest products are now at critical point, which will determine whether or not they can survive. Because the supply of cheap, high-quality materials from natural forests has been depleted, they cannot compete with cheap, high-quality imported goods by using their old facilities and techniques. Therefore producers are focusing on the following issues.

First issue is tariff reduction. Forest products producers in Philippines have strong concerns about reductions in the tariff rate for imported forest products, because the high tariffs protected the producers from international competition. In the case of plywood, the tariff rate was fifty percent until 1995. However, the Philippines signed the Common Effective Preferential Tariff (CEPT) Agreement in ASEAN in 1992, which requires member countries with tariff rates above twenty percent on products to reduce the tariffs to that level within a five to eight year period after 1993. Thereafter, tariffs are to be reduced further to a level of zero to five percent within a seven year period. In accordance with this agreement, from 1996 to 1997, the tariff rate on plywood decreased to thirty percent, and in 1998 it dropped to twenty percent. As mentioned in section 4.5, the gross profit rate of plywood has been extremely low recently. If the tariff rate goes down to ten percent, domestic plywood companies will be endangered. As for lumber, the tariff rate was twenty percent until 1997, and was scheduled to be reduced to ten percent in 1998. The Philippines Wood Producers Association requested a moratorium on the reduction to ten percent until 2000, to allow producers to

restructuring the industry. Domestic producers are also waiting for the price of wood material from plantation forests, which are now in the growing period, to drop.

The second issue is the future of the supply of cheap domestic wood materials. One of the most important issues for the domestic lumber and plywood producers is how they can obtain cheap materials from domestic forests or foreign markets. Supplies from foreign natural forests are shrinking gradually, meaning that domestic producers can look forward to increases in the supply of cheap wood material from domestic plantation forests. The following estimates demonstrate that the domestic plantation forests will be able to supply cheap wood material. By NFDO (1997) the reforestation costs of a governmental project in the Luzon in 1996 are 20,463.28 pesos/ha. The estimate of the average yield of fast growing species is 160m3/ha, which will be able to be harvested in 8 years. Under these assumption the reforestation costs are 127.9 pesos/m3, which means 480.8 pesos/m3 in present value, eight years later. The harvesting and transportation costs are 750 pesos/m3 for the plantation forests, meaning that the supply price will be 1230.8 pesos/m3, or 29.5 US$/m3 at present exchange rates. These are the estimates of government projects, so in the case of industrial plantations the costs will be slightly lower. But domestic producers still have to wait several years for the increased supply of domestic wood material. There is another problem, which is how to change the material of face panels of plywood into the plantation species, although there are some species can be used.

Now that the natural forests have been completely depleted, Philippines is in a transitional period, where the forest products industry is changing into an industry which relies on plantation forestry. One possible scenario is that the Filipino domestic forest products industry will be supported in order to recover the degraded forestlands through reforestation. This situation is similar to that of Japan. It will be necessary to reconsider the tariff reductions and the free trade system of forest products based on this point of view.

Korea: The changes in North American forest policy for biodiversity conservation reduced the supply of coniferous logs on the international market, and induced an increase in the international price of coniferous logs. Consumers in the Korean log market subsequently changed their source of log imports from North America to New Zealand and Chile. The elasticity of Korean coniferous log demand with respect to its own price was -0.4, while that of tropical hardwood logs was 0.256. The consumption of timber in Korea will continue to rise, while the domestic production of logs will increase slightly. Therefore, the supply of timber from foreign countries will still be important to Korea.

The import of tropical hardwood timber has been also affected by international environmental policy, which stresses the conservation of tropical forests. The conservation of tropical forests reduced the supply of tropical timber, raising the price. The relative (to that of softwood) price of tropical timber effectively reduced the demand for tropical timber in Korea, and induced an increase in demand for softwood. The higher relative price of hardwood, which will exist in coming decades, implies that long-term forestry investment should be changed from the present softwood-oriented

policy to one for hardwood production.

This study has not paid enough attention to the potential of timber certification as an incentive for sustainable forest management. As discussed in international forest policy forums, the impact of timber certification systems on the timber market should be addressed in future studies.

In terms of recommendations, forest resources need to be enriched. Forest resources are now increasing in volume, but their utilization, either for timber or other material uses, or for recreational uses, is still developing. The following concrete steps in this direction should be undertaken.

1). Construct forest planning schemes in accordance with sustainable forest management,
2). Promote forest resource utilization, both in terms of material and recreational use,
3). Propagate understanding of the importance of forest resources among the public,
4). Encourage forestry which contributes to sound forest management and the sustainable utilization of forest resources through such measures as tax and subsidy schemes, encouraging the recruitment of forestry workers, promoting forest road construction and maintenance and enhancing mechanization.
5). Promote sustainable forest management in the forest product industries,
6). Shift the majority of responsibility for forest management to the public sector,
7). Revitalize rural mountainous villages through the encouragement of the forestry industry,
8). Carry out research towards the fulfillment of sustainable forest management.

2. Forest Certification Schemes

Initially FSC's interests focused on tropical forests, but these days they have shifted towards temperate forests. The main reasons behind the change may be: a) Tropical countries fear that constraints on timber production from tropical forest lead to unfair trade restrictions, b) FAO pointed out that one of the most important causes of tropical deforestation was not from timber production but from conversion to agricultural lands, and c) The fact that timber from temperate forests constitutes about eighty percent of the world timber trade.

Although the Asian region has a large number of countries and forest areas, there are only few forest and timber certifications. As to FSC certification, there were seven countries with the certification in September 2000. Their share of the world total is 2.9%, for the number of certifications, and 0.8% of the total area of certification.

Past certification records reveal that the Rain Forest Alliance, in terms of the number of certifications, and SGS in terms of the area of certifications, rise above the common herd. One of the reasons why certifying institutions have certain tendencies is that they have different positions. For example, the Rain Forest Alliance takes communal, non-industrial, and private clients, while SGS takes industrial clients, probably because the former is a non-profit NGO, while SGS is a profit-seeking business enterprise.

Forest certification is a "soft" policy instrument, not a order-and-control type of policy. It operates through incentives in the markets, in place of strict restrictions and efficiency. It saves through modifying costly forest management, counterbalancing certification costs, and provides non-monetary benefits. To make certification schemes efficient, certification should be carried out as a spontaneous process by independent institutions, according to objective criteria. All the participants from production to distribution should share the benefits, in order to make the scheme efficient and effective. Theoretically, the benefit comes from the higher price premium paid by consumers as a consideration for getting products from appropriately managed forests. This incentive program stands as the kernel of certification schemes.

There are two merits to certification schemes. The first is the price premium. Consumers agree to pay more for environmentally sound products. An important point here is that they should recognize the certification process is reliable, and that they should support forest management systems which are certified through the scheme. The second is the savings in additional costs that would occur if the government was forced to place more stringent restrictions, for the sake of environmental protection.

Currently, the most important markets for certified products are Europe and North America. In Asia, they pay more attention to sustainability of forest resources, but not as much to the purchase of certified products. Certified products do not make up a large share of the world market. Total round wood production is 53 billion cubic feet in the world. Only around 0.6% (318 million cubic feet) is certified through FSC, and only a fraction is traded as certified products. One of the main reasons stems from inefficiency in the Chain of Custody (CoC). Even though forests themselves are certified, unless the entire process of production and distribution is appropriately absolved until final consumers get the products, certification scheme functions incompletely. If the chain breaks at one place, the entire certification fails. Most certified products at present are hardwoods used to make relatively small products such as guitars, furniture, and wooden fittings. The demand for softwood will increase in the future.

Recommendations

Clarifying the relationship between the social economy and the natural environment in the forest sector is one key step. In order to do this, we should use forest resource accounting. In terms of action, first, environmental information should be collected in accordance with a forest resource accounting framework and information on social economic factors. Then, forest resource accounts, namely, (1) forest accounts, (2) forestland accounts, (3) forest product accounts, and(4) forest management accounts shall be constructed promptly.

Controlling the forest products trade under the principle of forest sustainability and mitigation of the degradation of natural forests is another key step. In terms of concrete actions, trade restrictions may be needed to foster domestic markets for forest products, which encourages afforestation. Additionally, stricter controls, monitoring and punishment forgery, in the forestry and forest products trade, should be encouraged.

Monitoring forest recourses and constructing resource accounting to clarify the relationship between human activities and forest resources should be promoted as well.

Forest and forestry certification schemes may be one possible solution to connect consumers' preferences and sustainable forest recourse management. For development appropriate schemes, market research, both in importing and exporting countries of the southeastern Asian region, which covers the flow of certified products in the national market, and case studies on certified forests of individual, enterprise, and public entities (through interviews and questionnaire survey) should be conducted. In southeastern Asia, national and local governments and environmental NGO's should take the initial steps. Preferred measures for forest certification and the trade of certified products should also be investigated. In Europe and America, buyers groups can play an important role.

Developing an effective strategy for the certification process and timber trading in each region or country is also a key step in the scheme. Many forestry industrialists are hesitant to participate in organizations with environmental protection characteristics. This is one of the reasons why FSC certification participation rates are so low. Another is that FSC criteria and indicators are too normatic to understand, and too rigid to apply in the field. Therefore, in southeast Asia, the following actions should be promoted, in order to make forest certification schemes acceptable. The first is to construct homogeneous evaluating criteria and indicators among certifying institutions, and to carry out certifying operations with them. The second action is to construct domestic criteria and indicators, based upon those of the FSC's. The third action is to establish Asian certifying institutions[2].

[2] So far established institutions are based in Europe and America and they are not apt to certify Asian realty.

Paper 3

Policy Recommendations for Participatory forest management[1]

The original draft of this paper was examined at international workshop in Jakarta held in June and in Vientiane held in August 2000. This is the revision grounded on the comments made by various stakeholders such as government officers, NGOs, researchers, international organizations at the workshops.

1. General Findings

(1) Characteristics of Participatory Forest Management (PFM) Systems in Southeast Asian Countries

In the late 1970's, professional foresters in the tropics noticed that they could not manage the forest sustainably under the principles of conventional and industrial forestry, whereby local people were considered to be obstacles or constraints on forest management. "Social forestry" was recognized as an important norm or principle to produce successful sustainable forest management, even though industrial forestry has been dominant in practice.

Originally, social forestry and community forestry were defined as any situation that intimately involves local people in forestry activities for the purpose of rural development. These days, however, it seems that the term "social forestry" involves a wider range of comprehensive participatory activities, and the term "community forestry" implies collective activities, rather than individual activities such as farm forestry.

In general, social forestry consists of two major components. One of them is participatory forest management (PFM) in the forestry sector. The other includes 1) development of infrastructure such as roads, meeting places, schools, and clinics; 2) agricultural extension; and 3) generation of income sources for rural development, etc. If

[1] This part is drafted by Prof. INOUE, Makoto. The author wrote an original draft in cooperation with Mr. Martinus Nanang, Mr. HYAKUMURA Kimihiko, Dr. OIKAWA Yosei, Ms. HAYAMA Atsuko, Mr. SEKI Yoshiki, Dr. SATO Jin, Dr. TSUCHIYA Toshiyuki, Mr. KITAMURA Noriyoshi, and Dr. KAKIZAWA Hiroaki, based on the collaborative results of the "Participatory Forest Management (PFM)" sub-theme with Mr. Herman Hidayat, Dr. Percy E. Sajise, Dr. Do Dinh Sam, Mr. Le Quang Trung, Mr. Khampha Chantirath, Mr.Khamvieng Xayabouth, and Dr. Pearmsak Makarabhirom. The original draft was examined at an international workshop at Jakarta held in June and at Vientian held in August 2000, and an international seminar held in January 16-18, 2001 at Tokyo. This is the final report based on the comments made by various stakeholders such as governmental officers, NGOs, researchers, and international organizations at the workshops and seminar.

the latter activities prevail without the component of PFM, however, the activities are not necessarily called "social forestry" but the more general term "rural development." It is evident that the core of social forestry is PFM.

The purpose of this section is to clarify the characteristics of the PFM systems in Southeast Asian countries under certain common criteria.

1) Activities of forest management

We placed various activities of forest management into four categories as follows: 1) "tree planting," or man-made forest management consisting of reforestation and afforestation, 2) "harvesting," or natural forest management for timber production, 3) "conservation," including the collection of fuelwood and non-timber forest products (NTFP) and small-scale recreation, and 4) "protection," or preservation of the forest from any kind of utilization. We can assume that the management of protected areas consists of both "protection" and "conservation."

2). Analytical framework

In order to compare the policies, two concepts are applied as an analytical framework or valuation basis: "legal status of land" and "main actors of forest management."

Legal status of land—Generally, possible legal possessors of land and forest are individuals, organizations, villages, outsiders, and governments such as districts, provinces, and the state. The PFM systems can be adopted regardless of the legal status of the land. Provisionally, we recognize land with differing legal status to be "individual land," "organizational land," "village land" (owned by both formal villages and indigenous people's communities), "outsiders' land," and "national land" (owned by the local and national government).

Main actors of forest management—In order to evaluate the character of participation, it is useful to consider who are the main actors—those who have management responsibility and take initiative. In these terms, the main actors are classified as follows: 1) individuals or peasants living in the village and their households (their forest management can be called "peasant forestry" or "farm forestry"); 2) functional groups such as forest users' groups, cooperatives, schools, temples, women's unions and elder's groups ("functional group forestry"); 3) fundamental groups such as groups of relatives, natural villages, and indigenous cultural communities ("fundamental group forestry"); 4) an executive body of the formal village ("village forestry" that includes centralized community forestry); 5) outsiders and corporations ("private forestry"); and 6) local and national governments ("public forestry").

Functional group forestry, fundamental group forestry, and village forestry are included in the concept of "community forestry," since they are based on collective management. Public forestry in cooperation with the local people is called "joint forest

management" (JFM) since it is based on co-management.

3) Characteristics of the PFM systems in targeted countries

The characteristics of the PFM systems in each country are the following: 1) In most of the PFM systems, the land still belongs to the state, and the right to use the land is granted to the local people, 2) Protected areas are mainly controlled by the government, 3) Harvesting and conservation activities are mainly managed collectively, 4) Most of the collective management by the local people is not implemented by fundamental groups but by functional groups, except for the management by indigenous cultural communities and indigenous peoples in the Philippines. Also, fundamental groups may manage village forestry activities in Laos, 5) Several programs assume that collective management can be suitable for planting activities consisting of reforestation and afforestation, even though individual management seems to be suitable for planting activities, rather than collective management, in terms of economic incentives.

Diversification of the actors seems to be advantageous for forest management, in order to achieve ecological sustainability and social justice. The government of each country should devise and improve tenure arrangements, where various types of actors can be involved in all the processes of forest management such as planning, decision-making, implementation, and profiting.

4) Lessons learned from public participation in developed countries

Study of the experiences with policies in the United States, New Zealand, and Japan provided the following useful lessons: 1) PFM is better than an exclusive and centralized management system if the goal is success in sustainable forest management, because this approach reflects local conditions with less cost than other approaches. 2) Public participation in forest management is important for avoiding disputes and reaching agreement among various stakeholders. 3) Complex planning processes make it difficult for people to understand the processes and prevents effective and timely participation in the processes themselves. 4) Mutual communication is essential, and serious discussion should be encouraged among stakeholders and specialists in order to make better decisions and plans. 5) Informal participation supplements the formal participation process, helps to promote mutual understanding, and guarantees the people substantial opportunities to share in decisionmaking. 6) Centralized planning systems are inconsistent with participation from the local people. 7) Participation should be secured in the whole process of forest management, including appraisal, planning, implementation, monitoring, evaluation, and revising of plans.

(5). National Strategies for PFM

1) Methodology to elaborate policy recommendations

Policy recommendations were elaborated, based on our own research results and comments given at international workshop at Jakarta and Vientiane, in accordance with the following framework and principles.

2) Framework to elaborate policy recommendations

The IGES team working on the sub-theme of Participatory Forest Management conducted a comprehensive process that led to the preparation of policy recommendations. First of all, in the target countries (Indonesia, Thailand, the Philippines, Vietnam, and Laos) we identified the "external constraints" on local participation in forest management by means of clarifying the gaps and contradictions between national land/forest policies and "customary land rights and forest/land management by the local people." Second, we identified the "internal constraints" present in the local communities, in terms of economic, social, and cultural aspects. Third, "possible main actors" were clarified by means of evaluating the local realities and national forest policies. In addition, we identified the lessons learned from public participation in developed countries.

We elaborated these draft policy recommendations by considering how to overcome the internal and external constraints, and suggested that the main actors carry them out.

3) Standpoints to elaborate the policy recommendations

Our policy recommendations follow the 11 standpoints listed below:

Standpoint 1: People's participation is very important for success in sustainable forest management with lower transaction costs, as well to avoid social conflicts over forest utilization, which themselves increase management costs.

<*Supplementary explanation*>: Most stakeholders recognize that the forest should be managed in such a way that economic benefits, social justice, and ecological sustainability can be achieved without excluding other stakeholders. The main problem to overcome is the distribution of economic benefits among stakeholders such as local people, cooperatives, timber companies, and governments.

Standpoint 2: In the tropics, the concept of "local participation" is more useful today than the concept of "public participation."

<*Supplementary explanation*>:People's participation consists of "public participation," which refers to the participation of the larger society, including city dwellers and citizens. "Local participation" refers to the participation a smaller subset of society or the local community.

Standpoint 3: Our concern is to show what is an ideal forest management *system* in terms of local participation, rather than to indicate concrete *procedures*.

<*Supplementary explanation*>: Our recommendations should be examined from the perspective of feasibility under present social and political conditions.

Standpoint 4: The "participatory top-down approach" should not be included in the strategy for PFM.

<*Supplementary explanation*>:The term "participation" in this context does not reveal the actual level of participation because the meaning of the term varies widely. The spectrum of participation could be put into three categories (Inoue, 2000) as follows: the "participatory top-down approach" is a blueprint approach where residents are considered to be wage laborers, volunteers, fund providers, etc.

the "professionally-guided participatory approach" is a relatively flexible blueprint approach where drafts of the plan, made by professional planners, are examined by residents and citizens and modified through discussion, workshops, etc. The local people and the government share authority.

the "endogenous bottom up approach" is a learning process approach where professionals act as facilitators. The local people have decision-making rights.

Formal institutional arrangements can be part of the endogenous bottom up approach when customary law is developed in the local community, because the residents can manage their resources well by themselves. On the other hand, application of the professional-guided participatory approach seems to be reasonable when the customary law has not been developed or has already lapsed. In any case the participatory top down approach should be avoided. This approach is usually considered by local people to be nominal and fake.

Standpoint 5: Both collective forest management and individual-based forest management are considered to be included in PFM for the time being.

<*Supplementary explanation*>: It is true that collective forest management by fundamental groups, functional groups, and the executive body of the formal village is the core of PFM. It can safely be said that individual- or household-based forest management on national land, called "peasant forestry" here, is also recognized as a form of PFM. On the other hand, peasant forestry on private land may not be regarded as a form of PFM but as "private forestry." In order to promote PFM, however, it seems better that we provisionally consider it to be a form of PFM.

Standpoint 6: The policy recommendations should be based on a recognition—which can be in common between developed and developing countries—of the importance and validity of participation.

<*Supplementary explanation*>: Key issues in community involvement (Salim and Ullsten, 1999) include the following: defining the community; willingness and ability to have dialogue; presenting scientific information in a form which can be easily understood; reconciling local, national and perhaps global interests; and political will to respect and enforce the conclusions. We believe that these ideas are appropriate for civil societies worldwide, including developing countries.

Standpoint 7: Diversity - of legal status of land and main actors - is an important aspect of PFM in order for the local people to make good choices in accordance with local conditions.

<*Supplementary explanation*> We believe it is beneficial to develop strategies

for facilitating PFM on national land, village land, organizational land, and individual land; and for facilitating PFM by individuals, functional groups, fundamental groups, and executive bodies of the villages. It is desirable that the policies of each country cover every combination of the land ownership with the main actors.

Standpoint 8: The planting of trees is likely to be practiced mainly by individuals; conservation of the forests should be done collectively by village communities and fundamental groups; and the government is likely to bear the responsibility for the protection, sometimes entrusting the local people with the daily activities.

<*Supplementary explanation*>:As mentioned in "Section 1-2. General findings," forest management consists of four activities: "tree planting," "harvesting," "conservation" and "protection." In terms of economic incentives, individuals are most likely to prefer tree planting. In terms of opportunity costs for patrolling the forest, collective management may have the advantage in conservation.

Standpoint 9: The policy recommendations should be elaborated by making use of the results of our own research. It is not necessary for them to be so comprehensive as to cover all the aspects of PFM.

<*Supplementary explanation*>: Even though some of our strategies have already been pointed out, a local-specific strategy based on field studies must be in itself valuable.

Standpoint 10: Our policy recommendations should be elaborated from the viewpoint of the local people.

<*Supplementary explanation*>: Priorities for forest conservation differ when viewed from local, national, and global perspectives. All are legitimate and should be taken into account (WRI, IUCN and UNEP, 1992). We recognize that all stakeholders have a vested interest in conserving their forest, and that the process of facilitating PFM inevitably affects all vested interests to some extent.

Standpoint 11: The policy recommendations are to consist of several sets of objectives and necessary actions aimed at local people, the governments, non-governmental organizations (NGOs), and international organizations.

<*Supplementary explanation*>: One function of the policy recommendations is linking the local reality to the national policy. In each action proposed here, the intended actors for each action are specified clearly.

(3) Current state and constraints of PFM in Four countries

1) Indonesia

a) Policy evaluation using the two concepts

Land ownership in Indonesia is categorized as national land or private land. According to the new Forestry Law promulgated in September 1999, as well as the

Basic Forestry Law (1967), all the forests on national land, except forests on private land registered in accordance with the Basic Agrarian Law (1960), belong to the state, even though the forests have been collectively managed by local communities.

In Indonesia, the term “social forestry” is controversial, because the local people cannot be the main actors of forest management, or cannot be involved in forest management in some of the governmental social forestry programs such as “Tumpang Sari” and the "Forest Village Social Development (PMDH) Program." On the other hand, NGOs have been supporting “community-based forest management systems (SHK),” which are local forest management systems developed by the local people. The new Forestry Law approves the following participatory forest management.

Forest Management for Special Purpose: The government designates the forest for special purposes such as research and development, education and training, and religion and culture in state forests. Management of the forests can be entrusted to indigenous communities, educational organization, research institutes, and religious organizations. The programs can be regarded as "functional group forestry" or "fundamental group forestry" on "national land."

Permission of Community Forest Utilization (*Ijin Pemanfaatan Hutan Kemasyarakatan*): This program is practiced by local people, specifically cooperatives and other people's organizations. The concession, lasting thirty-five years, is granted in the national forests which are free of other rights such as natural forestry concessions (HPHA), man-made forestry concessions (HTHT), mixed plantation concessions (HPH *Tanaman Campuran* prescribed in August 1999), and tree felling rights (IPK) to develop oil palm plantations and transmigration areas. This forest management can be regarded as “functional group forestry” on “national land.”

Permission of Forest Products Collection (*Ijin Pemungutan Hasil Hutan*): Individuals, cooperations, and legal persons may collect wood and non-wood forest products for one year in production forests; the collection of non-wood forest products is banned in protection forests. This management can be considered to be "peasant forestry" or "functional group forestry" on "national land."

Management of Customary Forest (Hutan Adat): In the new Forestry Law, the important points in terms of local participation are in Article 1, where the law defines the “Customary Forest” (Hutan Adat) inside the state forests, and Article 67, which prescribes “the community which practices customary law (Masyarakat Hukum Adat).” Under this law, the community shall have the rights to: 1) collect forest products for daily needs; 2) undertake forest management in accordance with prevailing customary laws; and 3) be empowered to improve its welfare. Accordingly, we conclude that the management of Customary Forests can be regarded as “fundamental group forestry” on “national land.”

Individual Forest (Hutan Rakyat) Program: This program is controlled by the provincial government and practiced on private land. The people hold a certification of land ownership outside the national forest. The main activity of the Individual Forest Program is re-greening or afforestation, and *Paraserianthes falcataria* is planted by many people. The program can be regarded as “peasant forestry” on “individual land.”

b) Recent policy reforms

A great deal of effort has been put into the reformation of forest policy. However, the following steps and clarifications would help move PFM further toward full implementation:

Although it is beneficial that the government issued a decree of Director General of Reforestation and Land Rehabilitation (041/Kpts/V/1998) where socio-economic and cultural conditions are included as data to be collected in making field technical plans for land rehabilitation and soil conservation, such a policy should be applied to the whole process of demarcating forests.

The Local Government Law (UU No.22, 1999) promulgated in May 1999 and the governmental regulation for the authority of the government and province (PP No.25, 2000) in May 2000, asserted autonomy of villages based on the customary law and devolution of sovereignty to the province (Propinsi) and district (Kotamadya/ Kabupaten) government. It should be noted that decentralization is not equivalent to the promotion of local participation.

The rights of the people to Customary Forests (Hutan Adat) can be recognized under the condition that the customary laws do not contradict the national law and local regulations. It is clear that the possibility of local participation depends on how customary laws will be evaluated, and who will do the evaluation.

In a draft of the "National Development Program (PROPENAS) 2001-2005" published on 20 March 2000, the "Program to enhance the role of the Public in the management of natural resources and environment" is recommended as one of the important policy strategies. But local participation should be ensured in the process of implementation.

c) Customary land rights and forest/land management by local people

Field studies in East Kalimantan, characterized by rich forests, in Southeast Maluku, characterized by the strict customary law, and in Central Java, characterized by high population density and prevailing private land, identified the following facts:

Forest/land utilization is controlled by customary law called "hukum adat" throughout Kalimantan, even though the rules vary from community to community.

In East Kalimantan, the Dayaks or indigenous people recognize private property rights and communal property rights.

In East Kalimantan, under the traditional land category in Dayak villages, reserved forest (tana mawa), utilization forest (tana belahan), sacred land (tana to'), graveyard (tana patai) and other primary forests (tana' kaso) are considered communal property, while swiddens (tana luma') and agroforests (tana lepu'un) planted by individuals are considered private property.

In East Kalimantan, the customary rights of the village to primary forest and natural resources are rather loose; customary rights of individuals and households are rather

tight.
In Southeast Maluku, customary land (petuanan) is divided into three categories: private land, lineage (marga) land, and village land.

In Southeast Maluku, people are prohibited from entering certain lands during certain periods, to protect resources such as sago palm, under the local resource management system (sasi, yutut).

In Central Java, the land is categorized into homesteads planted with various perennial and annual crops (pekarangan), mixed gardens mainly planted with perennial crops (kebun), dry fields mainly planted with annual crops (tegalan), paddy fields (sawah), sloping dry fields (pereng), swiddens (ladang), and state lands (alas) including grasslands (padang rumput) and forests (hutan)
In Central Java, the land consists of private land, national land, and village land (tanah bengkok) that are mostly used as paddy fields. Communal forests do not exist.
In Central Java, the phenomenon of "gardenization" can be seen. This is an evolution of land use in a way which expands tree gardens planted with various perennial crops.

People have been using the forests for swidden agriculture, sources of diet (hunting, fishing, collecting nuts, fruits, and wild vegetables), and materials for construction and handicrafts (iron wood, rattan, Shorea spp., etc.).

The poor people are more dependent on a variety of forest products and hence are more vulnerable to sudden changes in the provision of such products and their price.

d) External constraints on local participation

The rights of the local people to utilize and manage the forests have been neglected by the government.

Logging or timber companies, including the national Forestry Corporation (Perum Perhutani), usually apply top-down decision making, and local needs are often neglected.
The government classifies forestland into five functional categories, but the actual state of land utilization and socio-economic aspects are totally neglected in this classification, because the main criteria for the classification used are the degree of slope, fragility to soil erosion, and strength of rainfall.

In Central Java the recent economic crisis triggered many young migrant workers to return to their home village because they had lost their jobs in Jakarta. Since then, some have started illegal logging and illegal cultivation.
Especially in Java, organized illegal logging can be a great obstacle to sustainable forest management by local people as well as by the national forest corporations.

e) Internal constraints on local participation

In a village where a customary forest management system does not exist in East Kalimantan, loose norms cannot function as a sound basis for enforcement, and as a protective wall against external pressures.

In such villages, weak collaboration makes it difficult to develop any form of village-wide forestry program, and high competition for forest products, particularly timber, has caused the people to be more careless about sustaining the forests.
In two villages of East Kalimantan, village leadership based on the law of village government does not generate local participation and tends to disintegrate the communities by serving the governmental interests.

In Southeast Maluku, the younger generation tends to cut trees in the customary forests to get money for commodities and frivolities.

In Central Java, illegal logging can be seen in the national forests (managed by the national forestry corporation, Perum Perhutani) probably conducted by local people who own little or no farmland and cannot work outside the village. They may log to obtain firewood to be used to produce brown sugar from coconut palms.

f) Main actors for participatory forest management

In a village in East Kalimantan where a customary forest management system does not exist, “households” play an important role in swidden agriculture, rubber gardening, rattan forestry, and candle nut forestry. “Individuals” play a role in logging, hunting, fishing, and gathering. Collective management of the forests seems to be difficult because customary rules concerning village property are too loose and the village leadership does not support the collective work.

In a village where a customary forest management system exists in East Kalimantan, the “village community” can manage the communal forests as it has in the past.

In Southeast Maluku, the “village community,” headed by elder men, plays an important role for customary forest management; “individuals” and “households” play important roles for agriculture and hunting.

In Central Java, the “household” plays an important role for forest management in the Tumpang Sari plantation area on national land as well as in the tree gardens on private land.

2) The Philippines

a) Policy evaluation using the two concepts

Land categories in the Philippines by land ownership are: “private land” owned by individuals and organizations; “public land (domain)” owned by the state; “ancestral land” of which Indigenous Cultural Communities (ICCs) or Indigenous Peoples (IPs) have the rights of de facto land ownership but the right of disposal is limited to the members of ICCs and IPs; and “ancestral domain” of which ICCs or IPs have the rights of utilization but do not have the right of disposal. Public land consists of "non-forest lands" (alienable or disposable lands or A&D land), and "forest lands"

which include "permanent forests (forest reserves)" and "public forest (unclassified public land)".

Forest policy in the Philippines consists of three components: Community-Based Forest Management (CBFM) for the purpose of conservation and production; industrial forestry for the purpose of timber production; and National Integrated Protected Areas Systems (NIPAS) for the purpose of conservation. Participatory forest management can be seen in the CBFM, the Socialized Industrial Forest Management Program in industrial forestry, and management of the protected areas in NIPAS.

Community-Based Forest Management (CBFM): Under the CBFM, two types of forest management are employed. Under the first type, ICCs or IPs acquire a Certificate of Ancestral Domain Claim (CADC) or Certificate of Ancestral Land Claim (CALC) and make the Ancestral Domain Management Plan (ADMP) in order to gain control and manage the forest. ICCs/IPs have the right to claim ownership of land, to develop land and natural resources, to stay in the territory, and to govern and empower themselves. This type is basically regarded as "fundamental group forestry" on ancestral land and domain or "village land."

Under the second type of forest management, the residents living in the upland and coastal lands in a public domain that includes permanent forest make up a People's Organization (PO), conclude a CBFM Agreement (CBFMA), or twenty-five year production-sharing agreement, with the government, and produce a Comprehensive Resource Management Framework (CRMF). Individuals can manage the forest within the area of CBFMA after acquiring the Individual Property Right (IPR) from the People's Organization or Certificates of Stewardship Contract (CSC) from the Department of Environment and Natural Resources (DENR). This management type is regarded as "functional group forestry" and sometimes "peasant forestry" on public domain or "national land."

Socialized Industrial Forest Management Program: This program allows individuals or families and associations or cooperatives to participate in forest plantation development in forest areas ranging in size from one to ten ha, and from ten to five hundred ha by providing them security of tenure through the issuance of a Socialized Industrial Forest Management Agreement (SIFMA). The program is regarded as "peasant forestry" and "functional group forestry" on forest lands or "national land" for the purpose of wood production.

Management of the protected areas in NIPAS: According to the National Integrated Protected Areas System Act (Act No.7586, 1992), the DENR shall have no power to evict Indigenous Cultural Communities (ICC) from their present occupancy, nor resettle them to another area, without their consent. ICCs can manage their surroundings within the restrictions as a result of an agreement between the local people and the government. The management of protected areas by ICCs can be regarded as fundamental group forestry on ancestral land and domain or village land.

In the same way, the "tenured migrant" who has actually and continuously occupied an area for five years prior to its designation as part of a protected area is eligible to become a steward of a portion of the protected area. Their activities, however,

are governed by the guidelines prescribed in the management plan, as well as the prohibitions set out in the Act. In this case, the management by tenured migrants can be regarded as "public forestry," in cooperation with local people, on the public domain or "national land."

b) Customary land rights and forest/land management by local people

Field studies were conducted in the municipality of Banaue, recognized as an ancestral domain, with relatively well-preserved forests in the Province of Ifugao, and in the northern Sierra Madre mountain region in the Province of Isabela, where commercial logging activities have operated until recently. The studies identified the following facts:
In Banaue, the landscape consists of eight major land forms: terraces for rice production, drained fields for vegetable production, swidden areas for sweet potato production, low grasslands, high grasslands, community forests, private forests, and housing lots.
In Banaue, the lower elevation of the community forests (*inahalan*) is allocated for swidden agriculture, and the higher elevation is preserved as watershed forests where swidden agriculture is customarily prohibited.
In Banaue, there have not been any regulations in resource extraction in the community forest. As a result, most of the trees suitable for woodcarving and house construction have already been taken and many woodcarvers have to find trees outside Banaue.
In Banaue, private forests (*pinugo, muyong*) or man-made forests scattered in the rice terraces secure water for irrigation and protect against landslides and erosion.
In Banaue, people make use of forest products such as firewood, construction material, and woodcarving materials for their livelihood.
In Sierra Madre, villagers usually categorize the land as "lowland" or "alienable or disposable land" where land titles were officially recognized, and "upland" or public timber land where land titles were not recognized by the government.
In Sierra Madre, however, customary laws for utilizing forest resources were not evident to researchers, because communities (*barangays*) here were formed recently—after the Second World War.

c) External constraints on local participation

A major external constraint on PFM appears to be an attitude that imposes government-designed forest projects on upland communities, where local people are requested to follow them, to act as tools of the government.
In most cases, these projects do not consider local conditions such as land use, people's dependence on forest resources for their livelihood and the local value systems.
Requiring local people to participate in the government-designed reforestation projects brings about adverse effects, including resistance and conflicts between the government and local people, as well as among the local people themselves.

NGOs may be expected to play substantial roles, not as instruments of the government, but as catalysts to empower the local people in formulating solutions on

their own to existing problems.
Most small-scale loggers think the forests are still controlled by the government, because logging in all CBFM sites was suspended in 1988.

d) Internal constraints on local participation

In Banaue, few internal constraints of social and cultural aspects towards forest management can be identified.

In Banaue, even though the people have a desire to improve the stand quality in private forests by planting trees, particularly trees for woodcarving, they do not intend to do so if they have to pay for seedlings.

In Banaue, planting seedlings for woodcarving materials in the community forests is hardly expected, because it may be difficult to find witnesses of the plantation activities in the community forest, since they are necessary in order to claim one's ownership of planted trees.

In Sierra Madre, there are some conflicts between the cooperative program (an executive body of CBFM) and illegal loggers, and between the cooperatives and new migrants. Even the members of the cooperative expect benefits from the cooperative rather than self-sacrifice, because the cooperative is a kind of functional group.

In Sierra Madre, the policies of the cooperative sometimes fluctuate, because the requests of the government and the villagers contradict each other.

d) Main actors for participatory forest management

In Banaue, the blood kinship group is regarded as the main actor of PFM in private forests, because close blood kinship groups actively manage co-owned private forests.
In Banaue, the village community can be an actor to regulate loosely the use of community forests.
In Sierra Madre, the cooperative seems to be the best actor for natural forest management.
In Sierra Madre, individuals seem to be the best actors for reforestation activities.

2) Lao P.D.R.

a) Policy evaluation using the two concepts

Based on the Land Law enacted in 1997, Laotian land is classified into eight categories, such as land for agriculture, forest, and construction. Forest land is classified, based on the Forestry Law enacted in 1996, into the following five categories: 1) protection forest to conserve watersheds, to guard against soil erosion and to protect dense forests, etc.; 2) conservation forest, to conserve wild animals and plants; 3) production forest, to produce wood and non-wood forest products (NWFP); 4) regeneration forest, or the young fallow to regenerate forests; and 5) degraded forest land, or barren land. Among these types, it is only on degraded forestland that organizations

or individuals can be granted usage rights. On the other hand, protection, conservation, and production forest may be under the direct management of either local or national governments.

On land for which the right of utilization has been granted, organizations and individuals have the right to possess, use, profit, transfer and inherit the land. However, in a legal sense, the right to utilize land in Laos differs from land ownership in capitalist countries in that buying and selling are prohibited. Nevertheless, the system works as if land is actually purchased and sold, and the duration of the rights is not definitively stated. As a result, in Laos, the right to utilize land is in fact nearly equivalent to land ownership in capitalist countries. This is an important factor when considering the legal status of land, and has been the basis of participatory forest management systems that have been implemented since the early 1990's.

Joint Forest Management (JFM): Under this program, the local government manages forest in cooperation with the local people. However, villagers are sometimes not involved in the decisionmaking and planning process. They play the role of subcontractors for implementation of the plans made by the government, or take part in simply as laborers. We conclude that JFM can be regarded as "public forestry," mainly for the purpose of timber production on "governmental land" covered by rich natural forests.

Village forestry: Village forestry is defined as forest utilization and management by a village community or organized villagers inside a territory of the village. All forestry activities, including conservation, protection, planting, and harvesting are permitted. Village forestry is not connected with land allocated to individuals and other juridical entities. We conclude that village forestry can be regarded as "functional group forestry," "fundamental group forestry," and "village forestry" for all forest-related activities on "village land."

NGO-supported Community Forestry: The Community Forest Development Project (CFDP) in Khammouane province is supported by the Japan International Volunteer Center (JVC), a Japanese NGO, and is active in eighteen villages. Five of the eighteen villages prepared simple forest management plans after the village boundaries were delineated and land-uses were mapped through a participatory approach. The villagers also developed rules to control forest management. We conclude that these projects can be regarded as "village forestry" on "village land" mainly for the purpose of conservation.

Tree planting by villagers: People living in the villages can plant trees such as teak and fast-growing species on allocated land. This activity is considered to be "peasant forestry" on "individual land" mainly for the purpose of commercial timber production.

Buffer zone management of National Biodiversity Conservation Areas (NBCAs): It is thought that NBCAs are included in conservation forest defined in the Forestry Law. NBCAs are mainly divided into two categories: total protection zones (TPZ), or core zones, and controlled use zones (CUZ), or buffer zones. Local people are permitted to use the forest products in the buffer zones within certain limits. This

utilization can be considered as "peasant forestry" on "governmental land."

b) Customary land rights and forest/land management by local people

Field studies were carried out in Vang Vieng district and Sang Thong district, both in Vientiane province, and in Phalanxai district of Phou Xang Hae NBCA, Savanakhet province. These field studies identified the following facts.

In Vang Vieng, the Lao Theung (specifically the Khamu), who live at the middle altitudes of the mountains, classify their land into several categories: dense forest (patae bree kut), old fallow (patae reng kae), young fallow (patae reng kha nhom), former swidden (patae re tu), present swidden (patae re), protection forest (patae bree haksa), cemetery (patae raman), utilization forest (pataebree kui xay), and house lot (patae koun), etc. The Lao Loum, who settle in the lowlands, categorize their land in a similar way.

In Vang Vieng, customary private rights are permitted on young fallow, old fallow, firmer swidden, present swidden, and house lots, etc. in the village territory.

In Vang Vieng, protection forest, cemetery, and utilization forest are managed collectively by the village community in accordance with governmental instructions.

In Sang Thong, customary rights to use forest resources for individuals and families have been granted within village boundaries.

In Sang Thong, the villagers have conserved a few patches of communal forests for protection of the water catchment, prevention of soil erosion and maintenance of cemeteries. Villagers stated that these communal forests are very useful to them, although no clear rules and regulations related to them exist.

In both Vang Vieng and Sang Thong, forest products collected by the local people, consisting of wood and non-wood forest products, comprise their main cash income sources.

In Phalanxai, part of a village territory overlapped with a new NBCA, but land allocation programs were able to provide paddy fields to most of the people whose swidden agriculture was prohibited in the area of the NBCA. Especially for the poor, forest products are important in daily life.

c) External constraints on local participation

- Decrees or implementation ordinances to enforce the Forestry Law have not yet been issued. According to the government officer who participated in the workshop, the government issued Decree No. 198 in 1998. But we have not examined the decree.
- When converting from an existing land classification allowing use by the local people to official land under the Land Law and Forestry Law, the important points are whether the present land/forest utilization and ownership are officially approved or not.
- Application of the official land use classification to the land, such as swidden land, customary conservation forestland and dense forestland, is said to be difficult.
- The swidden land at present includes land under cultivation, fallow, and grassland. Officially, however, land presently regarded as degraded is classified as degraded forest land, land regarded as young bush fallow is classified as regeneration forest,

and land regarded as old forest fallow is classified as village-managed protection forest, conservation forest or production forest.

- The problem concerning the land to be classified as degraded forestland is the high possibility of afforestation of degraded forestland, although the local people are harvesting NWFP even from grassland.
- The problem concerning the land to be classified into regeneration forest (village-managed) is the probability that the fact that the local people have customary tenure rights for all swidden areas, including the fallow land, will be neglected.
- The classification of swidden land into degraded and regenerated forest land is based on the presupposition that swidden agriculture should be abandoned, even though most of the local people make their livelihood by swidden agriculture.
- The problem arisen from the classification of felling-prohibited forestland and dense forestland into protection, conservation, and production forest is the probability that customary forest utilization will not be permitted, even though the local people harvest forest products from the forestland covered with vegetation.
- Criteria for demarcating core zones and buffer zones in NBCAs are not clearly defined. The local people do not understand the restrictions on forest utilization in core and buffer zones.
- In reality, production forests, agricultural land, and even house lots are included in the buffer zone of NBCAs. This fact is inconsistent with the purpose of NBCAs to conserve biodiversity.

d) Internal constraints on local participation

A lack of flat land suitable for sedentary agriculture, and the land ' s low productivity force the local people to practice swidden agriculture on the degraded uplands. The non-agricultural economic sectors are not sufficiently developed to provide adequate income sources, and the market system is also not well developed. As a result, local people are forced to depend on the forest products.

The local people do not understand their rights and duties in managing forests in the village territories. As a result they sometimes do not enrich or regenerate the forest areas after land or forest allocation has occurred.

Actual forest utilization by the local people does not change even after establishing NBCAs.

Customary forest utilization cannot automatically be regarded as sustainable.

e) Main actors for participatory forest management

Village communities or organized villagers are regarded as the main actors for Village Forestry programs, and can be considered as co-agents for Joint Forest Management.

Village forest volunteers serve as executive bodies for patrolling the village forest for conservation and protection. Individuals or households are regarded as main actors for tree planting on degraded land.

4) Vietnam

a) Policy evaluation using the two concepts

Based on the 1993 Land Law and a 1994 decree, the government started to allocate land and forests to individuals, households, villages, organizations such as forest management committees, seed stations, enterprises, the Peoples Army, and schools. As a result, local people can now hold the right to use allocated land and forest. Alternatively, they may obtain a "red book certificate" for twenty years in annual crop production, and for fifty years in perennial crop production.

The Vietnamese forests are classified into "production forests," for producing wood and non-wood forest products, "protection forests," for watershed protection, and "special-use forests," for biodiversity conservation and tourism, in accordance with the Law of Forest Resource Protection and Development enacted in 1991. PFM systems are embedded in tree planting and conservation programs in each forest category.

Protection Agreement in Ecological Rehabilitation Zone of Special-use Forests: The Special-use Forest Management Board (SFMB), having a red book certificate, concludes protection agreements with households, which acquire "green book certificates" prohibiting them from intercropping but permitting them to plant trees. As for tree planting (Plantation Program), each household earns one to two million Vietnamese dong per hectare, and has an obligation to protect the planted trees for three years on two to four hectares of forest land, on average. As for natural regeneration (Protection Program), each household annually earns forty to fifty thousand Vietnamese dong per hectare for the protection of ten to twenty hectares of forest, on average. The systems are regarded mainly as "public forestry" on "national land" for protecting the forests.

Management of Buffer Zone around Special-use Forests: In order to decrease the pressure on special-use forests, the government provides assistance to holders of red book certificates, such as the extension of agricultural and forestry technology and assistance with the planting of fruit trees. These systems are regarded mainly as "peasant forestry" on "national land" for protecting the forests.

Protection Agreement in Critical Protection Forests: People having a red book certificate can conclude protection agreements similar to those in ecological rehabilitation zones with the Management Board for Protection Forests (MBPF), and can acquire a green book certificate. They are permitted to introduce agroforestry systems and to collect non-wood forest products and fuelwood. The systems are regarded as "public forestry" on "national land" for protecting the forests.

Tree planting on allocated land in Production Forests: Individuals, households, and organizations can receive land allocations and obtain red book certificates in production forests. The land area allocated to them varies from place to place. For example, each household receives three to five hectares of land on average in a mountainous region, while households receive more than fifty hectares in other regions. These activities are regarded mainly as "peasant forestry" or "functional group forestry"

on "national land" for the purpose of producing timber.

b) Customary land rights and forest/land management by local people

Field studies were carried out in "Son Duong" district, Tuyen Quang province, parts of which are designated as buffer zones in Tam Dao National Park, and "Mai Son" district in Son La province. These field studies identified the following facts:

It seems that community forests or the forests managed in a traditional manner based on communal relationships do not exist, because local people, especially the Kinh, may have forgotten customary forest management systems.

In Son Duong, the most important forest product is firewood. Less important ones include birds, bats, squirrels, and medical plants.

In Son Duong, the poor collect firewood every day in the mountains; the middle class collect it three or four times a week; the rich have already stopped collecting it, and substitute branches from the plantation forest or fruit trees and residues of rice or maize for firewood.

In Son Duong, most of the people do not recognize that they live in the Buffer Zone of the National Park and they do not know the location of the park borders. Nevertheless, they understand the concept of a national park where some practices are prohibited such as tree felling, swidden agriculture, and hunting.

In Mai Son, timber is taken from natural forests for building houses, and making beds, cupboards, tables, chairs, etc. Firewood is taken from natural and planted forests or gardens for cooking and heating. Bamboo is taken from natural and planted forests as building materials. Other forest products include bird and animal, rattan, bamboo shoots, and medical herbs.

In Mai Son, dependence on the forest products varies by ethnic group. The Kinh depend little on natural forest products; the Muong and Thai usually collect timber and firewood; the Mong, Kho Mu, and Xinh Mun depend almost entirely on forest products.

c) External constraints on local participation

Bureaucracy and centralized top-down decisionmaking at the local level can be obstacles to participation of the local people.

Although forests should be classified into three categories, there are no authentic criteria and indicators for forest classification.

The budget and human resources to implement land/forest allocation programs are limited. As a result, the local authorities cannot conduct this work effectively.

Local authorities have not paid attention to the fact that for local people, swidden agriculture is essential during transitional periods.

Arrangements and agreements on jurisdiction between the local authorities and national government seem to be insufficient.

There is no effective system or program to promote PFM by fundamental groups and villages, even though villages can undertake contracts to protect natural forest in national parks.

The national park system conflicts fundamentally with the livelihoods of local people.

d) Internal constraints on local participation

People believe that the collection of forest products is legal, even though it is illegal in ecological rehabilitation zones of special-use forests and critical protection forests.

The custom of exchanging ideas and experiences is not mature, which makes it difficult for people to acquire new ways of thinking and doing, such as legitimate PFM.

The linkages among households have been very loose, and group of households have not worked together to accomplish common goals.

e) Main actors for participatory forest management

Forest management boards are actors in protected forest and protected area management.

Traditional village communities (*thon*) are actors in natural forest and plantation management.

Collective associations such as women's unions, youth unions, peasant unions, and ex-servicemen's unions have the potential to play roles in PFM, because these associations are reliable.

Households, churches and temples, and other organizations, including the army, can be regarded as actors to manage small-scale natural secondary forests and plantations.

Forestry companies and joint ventures can be regarded as actors for industrial plantations.

State forest enterprises can be regarded as main actors in natural forest and plantation management.

Recommendations- Policy recommendations for Participatory Forest Management

Based on the findings and analysis of PM sub-theme, the policy recommendations for Participatory Forest Management in the four countries are as follows:

(1). Indonesia

Indonesian forest policy is now being reformed drastically, in accordance with the movement towards democratization and decentralization of power. Once this is achieved, proposals made by various stakeholders, including our recommendations, can be put into the policy discussion platform.

a) Objective 1: Ensure the participation of local people in general

Action 1-1: The government and NGOs should work together to establish the mechanism of a "green safety net" to secure the minimum level of forest conservation. This action will provide a foundation for PFM in terms of forest conservation, because a "green safety net" consists of minimum regulation by the national government to ensure sustainable forest management and forest conservation.

Action 1-2: All the parties should recognize and have a high regard for the perspective of conservation perceived by the local people. This action will ensure full participation of local people. The compulsion of outsiders' perspectives on conservation will spoil the self-confidence of the people.

Action 1-3: The provincial government should take the actual state of land use and socio-economic conditions into consideration for forestland classification. This action will enable the government to identify the forest areas that should be managed by the local people. At present it seems to be difficult for the government to ascertain the actual state of land use under certain socio-economic contexts. In the process of land classification, the government should actively involve the local people and NGOs by way of participatory rural appraisals (PRA), etc. Although the importance of this action has been pointed out for more than a decade, ongoing efforts are still necessary.

Action 1-4: The national government should define clearly, in the form of a decree or law, the involvement of local people and NGOs in forest management. This action will ensure the process of fair evaluation of local customary laws and existing local forest management systems. The importance of this action has been pointed out before, and the need to take action continues to exist.

Action 1-5: The national government should revise the Forest Village Social Development (PMDH) program as a basis for facilitating local participation. This action will improve the livelihood of the local people, which will encourage them to participate in forest management.

Action 1-6: The national government should establish rules to obligate local governments to ensure the local participation and to report publicly on the condition of PFM in cooperation with local people and NGOs. This action will prevent the local

government from top-down decision-making and centralized forest management.

Action 1-7: NGOs should cooperate with the provincial governments to encourage them to use a bottom-up decision-making process in the management of national parks and the demarcation of forest areas. NGOs should cooperate with the district (*Kabupaten*) government to be involved in the activities of reforestation and re-greening, the management of protection forests and private forests, the control of hunting and collecting of non-wood forest products, and extension activities. This action will accelerate the people's participation in accordance with the devolution of authority for forest management to each level of local government.

Action 1-8: All the parties should recognize the importance of power sharing, as well as that of benefit sharing, between the local people and other stakeholders. This action will encourage the local people to have a stronger will to manage their forests.

Action 1-9: The government should elaborate the guidelines for defining the rights of local people (who are the local people?) to manage their forests, in cooperation with NGOs and the local people themselves. This action will avoid disputes among the people.

b) Objective 2: Operationalize the management of the Customary Forest (*Hutan Adat*) as prescribed in the new Forestry Law

Action 2-1: The government should evaluate the customary law fairly in terms of collective forest management in cooperation with various stakeholders such as local communities, local governments, NGOs, and academics. This action will guarantee the fair judgment of the customary law. Under the new Forestry Law, the rights of the local community can be recognized under the condition that the customary laws do not contradict the national laws and local regulations.

Action 2-2: NGOs and the governments should persuade the local people to modify their customary forest utilization where the need exists to develop appropriate technology for sustainable forest management, and facilitate these modifications.--> This action will help the local people avoid being excluded from official approval of customary forests.

Action 2-3: The government should issue a decree showing the process for designating Customary Forests, even in conservation areas. This action will facilitate customary forest management in and around the conservation areas and will secure sustainable forest management. These results can be expected because most of the customary forest must be covered with relatively rich forests that have a high possibility of being designated as conservation areas.

Action 2-4: As a next step, the government should consider the release of the

Customary Forest (Hutan Adat) from state-owned forest under certain regulations. This action will solve the latent conflicts and accelerate the decentralization and devolution of forest management. It will provide the basis for the complete integration of a community-based forest management system (SHK) with the management of Customary Forests (Hutan Adat).

c) Objective 3: Facilitate collective forest management

Action 3-1: The government should give priority to the permit for community forestry (IPHKM) over other permits for natural forest management, man-made forest management, mixed plantation management (prescribed in August 1999), and tree-felling for the purpose of developing oil palm plantation and transmigration areas. This action will allow local people to obtain concessions on high-quality forests; otherwise they will be allocated only degraded forests.

Action 3-2: The local people should organize themselves, discuss the rules for forest utilization, and conclude agreements for forest management in cooperation with external agencies such as NGOs and the local government. This action may reform the local leadership and provide villagers with incentives to participate in the process, even in areas where community-based forest management does not yet exist. Although the importance of this action has already been pointed out, the former political regime made implementation impossible. Now is an opportune time to take action.

Action 3-3: The government and state forest corporation (Perum Perhutani) should give the Permission of Community Forestry (IPHKM) in Java. Community Forestry should be open to Java. This action will effectively prevent illegal logging by outsiders because of the self-protection by the local people.

d) Objective 4: Facilitate individual- or household-based forest management

Action 4-1: The government and state forest corporations should share the profits from planted trees between the local people who participate in the Tumpang Sari (or the Perhutanan Sosial program), and the national forestry corporation (Perum Perhutani) in Java. This action will provide the participants economic incentives to manage the forest until trees (such as teak and pine) are harvested.

Action 4-2: The State Forest Corporation (Perum Perhutani) should plant tree species suitable for use as fuelwood, fodder, etc. by the local people on the sites of an improved Tumpang Sari or Perhutanan Sosial program in Java. This action may reduce illegal logging of fuelwood for making brown sugar from the Aren palm, and encourage the people to take part in the management of fuelwood plantations on national land.

Action 4-3: The government and NGOs should help local people patrol the forest areas they manage through financial and material support. This action will prevent illegal

logging by outsiders.

Action 4-4: The government should introduce an individual or household-based sharecropping forestry program in the degraded production forest areas on national land in outer Indonesia. This action will motivate the local people to plant tree species, even on national land, similar to the individual forest (Hutan Rakyat) program on private land in Java. Individuals or households could sub-contract with the executive bodies responsible for community forest management under the Community Forestry (Hutan Kemasyarakatan).

Action 4-5: The State Forest Corporation (Perum Perhutani) should devolve the rights of forest management on some national land to local people. This action will promote the process of "gardenization" practiced by the local people.

Action 4-6: NGOs should help local people obtain land ownership of tree plantations. This action will provide the basis for introducing Individual Forest Programs (Hutan Rakyat) on private land.

2). The Philippines

The objectives mentioned here seems to be satisfied in a sense, through the preparation of a policy framework for participatory forest management. The most important remaining question is how to ensure implementation in the Philippines in order to achieve sustainable forest management.

a) Objective 1: Ensure the participation of local people in general>

Action 1-1: The government should pass a law enacting Executive Order 263, which declares CBFM as the national strategy. This action will ensure the use of CBFM as a national strategy, because the EO, as an administrative order, is not a sufficient legal basis.

Action 1-2: The government should ensure a financial and human resource basis for CBFM, and build its organizational capacity. This action will facilitate participatory forest management, based on the existing framework of participation.

Action 1-3: The government and NGOs should work together to establish the mechanism of a "green safety net" to secure minimum levels of forest conservation. This action will provide the foundation for PFM in terms of forest conservation, because a "green safety net" is a minimum regulation by the national government to secure sustainable forest management and forest conservation.

Action 1-4: Government officers should change their attitudes towards local people, and regard them not as tools of the government, but as equal partners. This action will fill

the gap between the intentions of the government and the impressions of the local people. Although the importance of this action has been pointed out for more than a decade, ongoing efforts are still necessary.

Action 1-5: The project managers and planners should carefully consider local conditions before introducing forestry projects, such as customary utilization of the land and forests, people's dependence on forest resources for their livelihood and the local value systems. This action will enable the project managers and planners to set up appropriate project plans. At present, it seems to be difficult for planners to ascertain the actual state of local conditions. In this process, the project planners should actively involve the local people and NGOs through the use of participatory rural appraisals (PRA), etc. Although the importance of this action has been pointed out for more than a decade, ongoing efforts are still necessary.

Action 1-6: The government should define clearly, in the form of a decree or law, the involvement of local people and NGOs. This action will ensure a fair evaluation process for determining local conditions and existing local forest management systems.

b) Objective 2: Facilitate collective forest management

Action 2-1: The local people should recognize that the function of the village community is different from that of the cooperatives as Peoples Organizations (PO) for CBFM. This action will make them recognize the potential role of cooperatives. The village community is a fundamental group dealing with every aspect of their livelihood. Cooperatives could serve as a functional group for the purpose of managing their forests.

Action 2-2: The government should consider the transfer of authority for forest management to the village community, as well as cooperatives, as a possibility. This action will allow the local community to act more flexibly.

Action 2-3: The cooperatives should commit themselves to representing the interests of the local people, rather than acting as agents to implement governmental programs. This action will create trust among local people toward the executive bodies of the cooperatives.

Action 2-4: The local people should leave the rights of forest management to the executive bodies of their cooperatives. This action will guarantee that the executive bodies manage the forests as effectively as private timber companies.

Action 2-5: The government should permit selective logging by the cooperatives, under certain conditions. This action will sustain the livelihoods of the local people who work for the cooperatives, and also sustain timber resources because of reduced illegal logging. An evaluation system, to check the sustainability by the third party, seems to be necessary.

Action 2-6: The government should give greater priority to Certificates of Ancestral Domain Title (CADT) or Certificates of Ancestral Land Title (CALT) as provided for by Republic Act No. 8371, compared to mining concessions provided by the Mining Act of 1995 or Republic Act No. 7942. This action will facilitate the collective management of natural forests.

Action 2-7: NGOs should help local people and the government take the actions proposed here.

c) Objective 3: Facilitate individual-based forest management

Action 3-1: The CBFM cooperatives should recommend that local people acquire Individual Property Rights (IPR) from the cooperatives for managing the forests within the area of CBFMA. This action will promote individual management of plantation forestry, but the cooperative will still play a leadership role in terms of promoting sustainable agriculture and forestry techniques, collection of market information, etc.

Action 3-2: The government should conclude a Socialized Industrial Forest Management Agreement (SIFMA). This action will promote tree plantations in private forests, fostering individual practices of socialized industrial forest management.

Action 3-3: NGOs should help the cooperative and the government to take the actions proposed here.

3). Laos

The government of Laos is now preparing the relevant decrees and regulations for forest management. Our recommendation will support the effort of the government for the purpose of promoting local participation and sustainable forest management.

a) Objective 1: Secure the general participation of local people.

Action 1-1: The government and NGOs should work together to establish the mechanism of a “green safety net” to secure the minimum level of forest conservation. This action will provide the foundation for PFM in terms of forest conservation. A "green safety net" is the minimum level of regulation by the national government necessary to ensure sustainable forest management and forest conservation.

Action 1-2: The government should issue laws or decrees on forest classification, forest use planning, and land/forest allocation to integrate existing decrees. This action will clarify the criteria for demarcation, the process of land/forest classification, and the responsibilities of national, provincial, and district authorities.

Action 1-3: The local government should remind themselves that forest classifications

are based on the actual utilization of the land where village territory overlaps with the "conservation forest areas," "production forests," and "protection forests" that are controlled by the government. This action will reduce villager dissatisfaction and confusion that often result when new designations are made of the main forest areas controlled by the government.

Action 1-4: The government should revise policies to allow some "regeneration forests" to be allocated to villages or villagers, as is already done with "degraded land." This action will resolve contradictions between policy and actual land utilization. The land to be designated as regeneration forest is already being utilized by villagers in the same way as land designated as "degraded land."

Action 1-5: The government should clarify the criteria for demarcation between core zones, buffer zones of the National Biodiversity Conservation Areas (NBCAs), and other village lands. This action will help local authorities to demarcate NBCAs, and to reach agreement with villagers on demarcation.

Action 1-6: The government should either draw official lines of demarcation between the buffer zones of NBCAs and village land, based on the actual land utilization by the local people, or draw tentative lines that will be reexamined in the near future. This action will solve contradictions between existing laws/ordinances and the fact that agricultural land and house lots are already located inside buffer zones.

Action 1-7: The government should not implement PFM projects all at once in the country, but introduce pilot projects, using a step-by-step approach. This action is reasonable under present human resources, budget, and organizational conditions and constraints.

Action 1-8: International organizations and NGOs should support the government in implementing the actions mentioned above. This action will accelerate the reform process.

b) Objective 2: Facilitate collective forest management

Action 2-1: The government should legalize natural forest management by villages for the purpose of timber production, even though, in some cases, only local authorities are permitted to sell timber, according to a 1999 prime ministerial decree. This action will encourage village management of existing natural forests. However, the government should examine the management objectives, methods of promoting the ability to manage the forest, the appropriate scale of forest management, and the proper use of revenue.

Action 2-2: The government should ensure local people's participation in the decisionmaking process, in natural forest management planning for Joint Forest Management (JFM). This action will increase the people's will to participate in JFM.

Action 2-3: Local authorities and NGOs should help village communities decide on regulations, keep watch on forest utilization, and punish offenders who violate the regulations. This action will enable village communities to manage their forests, especially for conservation and protection activities.

c) Objective 3: Facilitate individual-based forest management

Action 3-1: The local government should not pressure villages to rush to demarcate between forest and agricultural land in accordance with the national governmental instruction. This action will give local people a grace period for the transition towards the development of alternative land utilization and income sources. At the proper time, the villages can propose tentative or formal demarcations.

Action 3-2: Local authorities and NGOs should assist the people with experiments to develop alternative land use techniques such as rotational agroforestry or array cropping systems involving trees, in the uplands where demarcation lines are nominal and tentative. This action will shorten the transition period from customary land use to officially recognized land use. Clear demarcation can be completed at a later point in time.

Action 3-3: The government should legalize a system to support tree-planting activities consisting of reforestation and afforestation by individuals or households. This action will encourage local people to plant trees on allocated forest land for their own revenue. A profit sharing system (PSS), tested in trials by the Japan International Cooperation Agency (JICA), may be one useful system.

Action 3-4: The government should prepare a system to provide quality seedlings, assign roles to the public and private sectors, and improves access to degraded forest land. This action will encourage the local people to plant trees on allocated forestland.

Action 3-5: The local authorities should establish good partnerships with villagers to promote a better understanding of their rights and duties in the buffer zones of NBCAs, and employ villagers to patrol the NBCAs. This action will prevent the villagers from conducting illegal activities. Although the importance of this action has already been pointed out, continuous efforts are still necessary.

4). Vietnam

The Vietnamese government is trying to promote the participation of local people in forest management. Our recommendations will support their efforts, and are intended to facilitate further involvement by the local people.

a) Objective 1: Ensure the general participation of local people in general.

Action 1-1: The government and NGOs should work together to establish the mechanism of a "green safety net" to secure a minimum level of forest conservation. This action will provide the foundation for PFM in terms of forest conservation. A "green safety net" is the minimum level of regulation by the national government necessary to ensure sustainable forest management and forest conservation.

Action 1-2: The government should clarify the authority and responsibilities of local authorities and the national government. This action will encourage collaboration on the implementation of various programs between the local authorities and national government.

Action 1-3: The government should clarify the criteria and indicators for forest classification. This action will enable the local authorities to conduct forest classification properly.

Action 1-4: The government should strengthen extension and training activities, especially at the local level. This action will help local people participate in forest management.

b) Objective 2: Facilitate collective forest management

Action 2-1: The government should issue a decree or create a program to promote community forestry that is practiced by village communities, especially in protection forests and special-use forests. This action will provide a legal basis for existing activities by village communities to harvest forest products or protect the forests.

Action 2-2: Village communities (*thon*) should settle regulations to manage the forests by themselves, in accordance with the national criteria for sustainable forest management, in cooperation with existing women's unions, youth unions, peasant unions, etc. This action will enhance the autonomy of the village in terms of sustainable forest management, in ways that do not contradict to national policy.

Action 2-3: Village communities should recognize customary rights and consult with national park offices on sustainable forest management. This action will legitimize the activities of forest management by local people.

c) Objective 3: Facilitate individual-based forest management

Action 3-1: The government should accelerate efforts for land allocation. This action will encourage local people to plant trees on the allocated land.

Action 3-2: The government should indicate the criteria for sustainable land/forest utilization. This action will reduce unsustainable land/forest utilization.

Action 3-3: The government should reinforce agricultural and forestry extension

activities. This action will allow the criteria mentioned in Action 3-2 to take root at the household level. Although the importance of this action has already been pointed out, continuous efforts are still necessary.

Action 3-4: The government should encourage local authorities and collective associations such as women's unions and youth unions to take part in activities producing tree seedlings, especially the use of genetically improved planting stock. This action will allow local people to obtain better seedlings more easily.

Action 3-5: The government should allocate larger budgets for tree planting in critical and very critical protection forests. This action will give more incentives to local people to take part in protection activities.

Action 3-6: The government should officially permit local people to collect fuelwood and NTFP in return for concluding protection agreements such as "protection agreements in critical protection forests." This action will provide more incentives to the local people. In this case, the activities by the local people can be regarded as "conservation," something that is preferred by them, rather than "protection."

Paper 4

Legal and administrative system on forest conservation and participation in the Asia-Pacific countries[1]

1. Introduction -Elements of Participation of Local People

Because of the diversity of its countries' situation, the legal and administrative systems related to forest conservation in the Asia-Pacific region vary greatly. Therefore, it is difficult to properly describe the overall situation. Some countries are attempting to change their economic systems. On the other hand, some countries face an economic crisis. Even though there are many problems in each country, there are not only problems but also progress. In particular, many countries are changing forestry laws or have changed them in recent years. Legal reforms are focusing on several issues. One of the major issues in reform is the promotion of participatory forest management.

At global level, it can be said that promoting community forestry is one of the most important issues. In order to promote community forestry, several measures have been taken. In addition, a number of international treaties related to forest conservation have already been adopted at the global and regional level. These treaties recognize that the participation of local people is an important issue. Two elements of participation can be found in these treaties.

The first element is the composition of participants. There are many stakeholders related to forest conservation. Since stakeholders can include anyone ranging from local community members to people who live in urban areas, NGOs and companies, they can be placed into four categories: the general public, the affected or concerned public, local communities and people, and indigenous people. This element is based on who participates in the forest management process.

The other element is the level of participation. The level of participation can be divided into three categories: access to information, participation in the decision making process and access to means of redress. This category is based on how the actor participates in the forest management process, and how their participation may be ensured.

[1] The report is drafted by Prof.Isozaki Hiroji, in cooperation with Mr. Komatsu Kiyoshi and Ms.Yamauchi Makiko, based on the collaborative results of the "Legal and Administrative supporting measures (LA)" sub-theme with Prof. Iwama Toru, Prof. Wang Xi, Ms.Loudes. E. Tolentino, Dr Nakano Ari, Dr. Pearmsak Makarabhirom, Mr. Mas Achmad Santosa, and Dr. S. Sothi Rachagan. The original draft was examined at an international workshop at Jakarta held in June and at Vientiane held in August 2000, and an international seminar held in January 16-18, 2001 at Tokyo. This is the final report, based on the comments made by various stakeholders such as governmental officers, NGOs, researchers, and international organizations at the workshops and seminar.

According to these elements, anyone who wants to participate can do so. However, almost all treaties, which require the contracting parties to ensure their participation, do not mention the necessary legal measures and articles to ensure their participation. Administrative measures are afforded, if these measures can meet their requirements. Decisions on which measures should be adopted depend on each contracting party.

Therefore, this report examines the legal and administrative systems for forest conservation and participation at the national and international level, based on research conducted by the IGES FC project (1998-2001). Results of the research will provide us the perspective to grasp the current situation in the Asia-Pacific region. In addition, the report indicates current problems, which must be overcome. Finally, based on the research, some recommendations are made.

2. Examination of legal and administrative systems at the national level

1) Legitimacy based on property rights or the right to use lands and forests

a) Rights to forest and land use

In order to ensure the legitimacy of participation, several measures can be used. One measure is to ensure participation by authorizing property rights or forest use rights. Some countries enacted legislation which authorized tenure rights for local communities and people. Other countries authorize individual rights to use forests and land.

The constitution of Papua New Guinea (PNG) stipulates that land and forests are owned by their customary owners. Custom is defined as "the custom and usages of indigenous inhabitants of the country existing in relation to which the matter arises, regardless of whether or not the custom or usage has existed from time immemorial." Hence, almost all land and forests are owned by local people, or kinship groups, based on custom. Exploitation of land and use of forests requires their consent. The Forestry Act, which came into force in 1992, is legislation directly related to forest management. Under the Forestry Act, the state reserves the exclusive right to reach Forest Management Agreements with landowners. If landowners approve the conditions, Forest Management Agreements are concluded. The National Forestry Board selects a forest industry, and recommends that the Minister grant a timber permit. When consensus is not achieved, landowners cannot exploitation the land. Accordingly, the government cannot grant the timber permit without the approval of the local people and community.

On the other hand, land, including forests and other natural resources, is owned by either the state or the collectives, according to the Constitution of the Peoples Republic of China. People are authorized to use land by the Constitution. A similar system exists in Vietnam and Lao P.D.R. In the case of China, the Forestry Law encourages people to participate into afforestation activities by rewarding contributions. Contributions can take several forms such as: voluntary tree plantings, eco-agriculture,

cooperation between nature reserves and local communities in managing nature reserves, wasteland contracts and individual afforestation contributions.

Wasteland contracts rent bare land in mountainous areas to farmers, and to unemployed people in urban area. Based on the contract, tenants are given the right to manage and use the lands protected by the Forestry Law. Those who are given the right to use bare land can plant trees in the area and generate benefits from tree plantations. Contracts have fifty-year terms, and the benefits of activities based on the contract are tax-free during the term. Throughout these measures, the Forestry Law encourages participation in afforestation activities, and ensures the people's benefit.

b) Problems

Even though people have tenure rights, or the right to use land and forests, the lack of a system providing opportunities for participation is an obstacle to ensuring participation. In case of PNG, the National Forest Plan, which provides a detailed policy on forest management at the national and provincial level, does not require public participation in the planning process. In addition, the lack of awareness and understanding of the necessity for sustainable forest management prohibits the realization of sustainable forest management. In case of China, although awareness of the necessity for forest conservation is increasing, insufficient recognition of the necessity for forest conservation can be found at the local level. Moreover, insufficient consultations between government and landholders are a clear problem. Although landholders' consent is indispensable for Forest Management Agreements, meaningful consultations between PNG government and landholders are rare. The landholders are consulted without advice from experts, in particular, lawyers. Inconsistencies among national forest policies and other relevant policies such as environmental policies exist within the government, and the political will to commit to sustainable development is often lacking. Inappropriate advice that ignores the real situation also prevents sustainable forest management.

2) Legitimacy of rights authorized in environmental law or other relevant law

a) Legislation related to the participation of local people in conserving the environment and protecting indigenous peoples

In the Philippines, customary rights can be recognized in other ways. The old Civil Code stipulated "where no statute is exactly applicable to the point in controversy, the custom of the place shall be applied, and in the absence thereof, the general principles of the law." This stipulation was changed when the Civil Code was revised (A new Civil Code took effect in 1950). Despite this change, judges still may recognize custom as a supplementary source of the law, and may apply customs of the place, or in the absence of custom, the general principles of the law. Moreover, the Philippines have enacted legislation related to participation by local people since 1992. In the National Integrated Area System Act, local people can participate in the management processes of protected areas. Ancestral lands within protected areas, and customary

rights to these lands can be recognized. In 1997, "The Indigenous Peoples Rights Act of 1997" was approved by Congress. The purpose of this legislation is to ensure the rights of indigenous peoples. The legislation does not generally ensure participation, but opens the door for the participation of local people in each issue, such as management of protected areas, protecting the rights of indigenous people.

Environmental legislation provides opportunities to participate greater than those existing as a result of forestry laws. For example, laws related to forestry in Indonesia did not take into account the voices of local people or communities before the economic crisis. (After the economic crisis, forestry laws were revised, and the new legislation included articles on participation by local people.) However, legislation environmental conservation allows participation in the decisionmaking process. In particular, the environmental impact assessment system (EIA) provides local people and communities the opportunity to participate. Even though there are many problems with the current EIA system, it is a good case were opportunities to participate were provided, and the interests of the local community were protected. Hence, EIA became an indispensable tool to ensure participation.

b) Environmental Impact Assessments and participation

Environmental Impact Assessments (EIA) are recognized as important tools to ensure the participation of local people in environmental management systems. In the Asia-Pacific region, many governments have recognized the importance of EIA and local participation, and as a result, many EIA systems in this region include provisions concerning participation by local people. Fortunately, in some cases, EIA provide local people opportunities to express their opinions concerning forest management to their governments. However, at the same time, many problems with existing EIA systems have been pointed out.

c) Influence of international society

Since the 1970s, several countries (e.g. the Philippines, Thailand) established framework laws for the conservation of the environment which included some provisions regarding EIA systems, but in some cases no prescriptions were given on how to implement them. One of reasons these countries established the laws was to take action on the declaration of the United Nations Conference on the Human Environment. Most of these countries made these provisions to demonstrate to other countries—especially developed countries—and multilateral aid organizations their commitment to address environmental issues.

It has been pointed out that this legislation achieved its purpose simply by its existence. With a few exceptions, these provisions were not implemented for some time; however, the situation has been changing since UNCED (the Earth Summit held in Rio de Janeiro) in 1992. Most of the countries (e.g. Malaysia, the Philippines, Thailand) concerned began to implement these provisions after UNCED by prescribing EIA procedures. Similar progress was also made in some economies in transition. In Vietnam, training and case studies began during the 1980’s and in 1993, the government

established a law on environmental protection and made a decree prescribing procedures for implementation. Considering these cases, one could conclude that international society affected the attitude toward the environment in these countries. In addition, it has been pointed out that multilateral and bilateral aid organizations have been playing important roles in these countries. As these organizations fund or implement a large number of large-scale projects, their funding activities sometimes have a considerable impact on the environment. Each organization has prepared its own procedures or guidelines on EIA in order to avoid negative impacts on the environment, and criticism from environmental non-governmental organizations (NGOs). In the case of Lao P.D.R., these procedures and guidelines have affected the country's EIA system. Laos P.D.R does not yet have an official EIA system in place, but in fact EIAs are implemented on an informal basis. Because the procedures and guidelines of the organizations noted above provide good examples of EIA, the government of Laos refers to them in EIA activities. As this case shows, these organizations can provide useful models and references for developing countries.

d) Importance of regional cooperation

Although the Association of South East Asian Nations (ASEAN) Agreement on the Conservation of Nature and Natural Resources was adopted in 1985, it is not yet being enforced due to the reluctance of member countries to establish legal obligations to conserve the environment, and the low priority given to environmental conservation in each nation's policies. However, like the example above, international society can affect these countries' attitudes, and it appears that the Rio Summit also influenced ASEAN countries. In 1994, ASEAN adopted its Strategic Plan of Action on the Environment. This Strategic Plan requires ASEAN countries to take actions such as, "1.1 Continue to support the documentation of regional EIA experiences, leading towards the harmonization of procedures;" "1.2 Initiate activities that will make use of natural resource and environmental accounting studies and approaches;" and "1.3 Establish procedures that would initiate the integration of environmental concerns in the various ASEAN programs and activities," in order to "Support the development of a regional framework for integrating environment and development concerns in the decisionmaking process." There are many similar national Strategic Plans in ASEAN countries. Although the Strategic Plan is not a legal instrument, countries are free to make improvements in their national policies. It is possible that even non-legal instruments can be effective in ASEAN countries, and be good tools to improve their EIA systems.

e) Current situation in each country

Various types of EIA systems exist in the Asia-Pacific region, reflecting the diversity of each country's situation. Almost all countries in this study (Indonesia, Malaysia, the Philippines, Thailand, and Vietnam) had provisions regarding EIA in their legislation. In case of Lao P.D.R, although no legislation yet exists concerning EIA per se, EIA is included as a procedure for approval of foreign investments. In any case, these countries are presently carrying out EIA in some form. As mentioned above,

various types of EIA exist, but there are some common characteristics. It has been seen that many countries tend to extend the scope of EIAs. In Vietnam, almost all projects must conduct an EIA in order to obtain approval from governments, other than a few exceptions where serious environmental impacts cannot be expected. In Thailand and Indonesia, the scope of EIAs has been growing. Almost all countries require project proponents to execute EIAs before starting projects, and the results of EIA are referred to when the government makes decisions on whether or not to approve a project.

f) Ensuring local people's participation

Most developed countries recognize the importance of local people's participation in decisionmaking and have tried to ensure their participation. This recognition also affects international society, and evidence exists that this is true in southeast Asian countries, where many provisions in legislation refer to local people's participation (Indonesia, Malaysia and the Philippines). In Vietnam, where national law does not yet require EIAs, attempts are made to include public participation at the city level (e.g. Ho Chi Minh City, and Hanoi).

A Malaysian case demonstrates effective participation by local people. In the case of the Penang Hill development project, many local people made comments for an Environmental Assessment, and an NGO involved in a review process claimed that there were many flaws in the assessment process. In the end, the review committee did not accept the environmental assessment, and the development project was canceled. While this case is a good example of participation by local people, many problems with the process were also pointed out.

g) Case of Environmental Impact Assessment

In a case on environmental impact assessment in Malaysia, local people initiated a lawsuit seeking the extension of an exemption from EIAs issued by the government. The Environmental Quality Act enacted in 1974 as federal legislation, included a provision on EIA. However, provisions on EIA in the Act were not precisely prescribed. The Environmental Quality Order was made for the purpose of defining EIA processes in 1987. In the case of projects listed in the Order, project proponents should implement EIAs before starting a project, and in the EIA process, project proponents are required to provide opportunities for local people to participate.

The Malaysian federal government declared that projects proposed in Sarawak state were exempt from the duty to implement EIAs. Since 1993, the Bakun Dam project had been proposed in Sarawak state, and a serious impact on the environment was anticipated. At the time the proponent announced the project, EIA procedures were just being prepared. According to a declaration, the project proponent did not need to implement an EIA, but three residents claimed that they had the right to obtain a copy of the EIA concerning the Bakun Dam project, and they also had the right to representation. The first trial ruled that "The EQA was enacted to be applicable to the entire nation. Subsidiary legislation was permitted to give full effect to the EQA. Under the guidelines prescribed by the project proponent … it cannot be made without some form of public participation … For this is a right vested with the plaintiffs…" However, this judgement was reversed by an appeal court.

h) Problems

Cases exist where the public was allowed to participate in EIAs in the Asia-Pacific region. Whether positive or negative, they indicate that these countries are gaining experience in the implementation of EIAs. Looking beyond these cases, one can identify current problems and challenges which southeast Asian countries face with

EIAs: Coordination between central and local governments and among the relevant ministries in central government have been a problem. Overlapping jurisdiction may allow some parties to escape from the duty to implement an EIAs. Experienced experts are necessary for implementing EIAs, however a shortage of experts exists—not only scientific experts but also facilitators of local participation. In addition there are shortages in local government staff. Implementation of EIAs is sometimes too costly. In some cases, this has become an obstacle to the effective implementation of EIAs. Many people are not aware of the existence of EIA regulations, and even if they are aware, they may not know how EIAs can be utilized. This shortcoming can be a hindrance to public participation. Some cases indicate problems of appropriateness and fairness in EIA processes controlled by the government. One problem is that the decision to start an EIA process depends on the governmental administration. Another problem is the absence of judicial procedures to check decisions made by the administration.

3. Conflict Resolution in Sustainable Forest Management: With special reference to Indonesia and Thailand

As mentioned above, there are several ways to ensure the participation of local people. It is necessary for the protection of their rights, when their rights are violated, to set up mechanisms for remedying injustices. Courts are one important tool to remedy injustice. Recently, other tools have appeared, such as ADR systems. In any case, appropriate conflict resolution mechanisms are necessary in order to protect their rights.

1) Analysis from country studies in Indonesia.

Four cases, which occurred in remote areas of Kalimantan and Sumatra, are analyzed. Generally, their settlement patterns and processes were not satisfied, even though the government conducted administrative action or promised to take follow-up measures. In most cases, the parties concerned were the central government, as licenser, local government, as the field supervisor apparatus, plantation entities, as forest concession holders, and traditional or local communities.

From cases in Indonesia, the causes of conflicts that occur in forest management can be summarized as follows:

Various problems in the filed of forest management have occurred, as a result of the implementation of forest concession rights which are granted by the government.

For example, the location of forest concession rights often overlap with traditional and residential areas of the local community. Exploitation based on forest concessions have threatened the life of the local community by cutting trees and making plantations, without any compensation payments.

Inappropriate allotment of forest concession rights are the major cause of conflict.

Delays in the government's responses to community objections have caused conflicts to accumulate, become more complicated, and more difficult to settle. Many of the worst cases have been completely neglected.

Decisionmaking processes are not transparent. The decisionmaking process for allocating forest concessions and distributing natural resources barely involves local communities and people who live in the place in question. Therefore, the interests of local community are not recognized and are almost always neglected. This weakens the position and influence of local people and communities, both politically and economically, compared to the company or entity holding the concession right. Neglect of the interests of local communities is based on the lack of legal recognition of the rights of local communities.

The involvement of parties which have no relevancy to the case has been another problem. Military intervention is one example.

Another important factor in the settlement process is the lack of neutral and independent mediators which are not indebted to the parties in the community, as well as the concession holders and the government. Neutral third parties having the skill and capacity to settle conflicts can greatly influence the settlement process.

2) Conflict resolution according to the current Indonesian legal system

In 1993, a Ministry of Forest decree authorized the harvesting of forest produce, including timber, by traditional communities within concession areas if they obtained permission from the concession holder and authorization from the minister of forests (Ministry of Forest Decree No. 251). This development is a potentially significant, but limited, step toward negotiating partnerships with forest communities and ensuring that incentives exist for local people to promote sustainable forest management. On the other hand, generally speaking, Indonesia's current legal forest tenure system works against the nation's forests and the livelihoods of many local forest communities. In most cases, the remoteness of areas under timber concessions can overwhelm the government's ability to collect reliable data, set boundaries, and watch concession-holders.

In 1999, the new law on the management of productive forests was issued, to reform the enforcement of the law and to enhance the participation of the local people[2]. Chapter six of the new law stipulates that the indigenous people have the right to harvest forest products to meet their daily needs. In addition, the involvement of indigenous people and local communities in the process of forest industrialization is given a high priority. The people are also allowed to participate by sharing their inputs on the use of forests. This minimizes and reduces conflicts over forest management.

Through a growing debate over forest tenure issues in Indonesia, the importance of public participation and benefit-sharing has been recognized.

[2] Direst laws and Regulations on Public Participation are as the followings: Law No. 5/1967(Basic Regulations on Forestry), Law No. 5/1990 (Conservation of Bio-nature Resources and its Ecosystem), Law No. 24/1992 (Spatial Planning), Law No. 5/1994 (Ratification of the UN Convention on Bio-diversity), Law No. 23/1997(Environmental Management),Govt. Reg. No. 28/1985(Forest Protection), Govt. Reg. No. 69/1996(Spatial Layout),Presidential Decision No. 32/1990 (Management of Protected Area)

1) Suggestions from international treaties related to rights of community in forest management

The International Labor Organization's Convention No. 169 Concerning Indigenous and Tribal Peoples provides that: The rights of ownership and possession of the peoples concerned with the lands which they traditionally occupy shall be recognized. Government shall take steps as necessary to identify the lands which the people concerned occupy, and guarantee effective protection of the rights of ownership and possession. Adequate procedures shall be established within the national legal system to resolve land claims by the peoples concerned.

Principle 22 of the Rio Declaration affirms the vital role of the communities in environmental management and development, but it provides no guidance on how to ensure effective participation.

Article 8 (j) of the Convention on Biological Diversity requires parties to "respect, preserve, and, and maintain the knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant to the conservation and sustainable use of biological diversity. This provides a framework for international legal protection for certain types of local community forestry management systems. However, the section is stipulated "subject to legislation," which weakens its effectiveness.

Chapter 32 of Agenda 21 is directed at the interests of farmers, which are identified as "all rural people who derive their livelihood from activities such as farming, fishing and forest harvesting." It calls upon national governments to give effective land tenure to these groups. It also notes that the absence of legislation on land rights has been an obstacle in taking action against land degradation in many farming communities in developing countries.

The Desertification Convention recognizes the rights and interests of community-based resource users, as well as the participation of these groups, as essential for sustainable resource management. Article 10 stipulates that "effective participation at the local, national, and regional levels" in policy planning and implementation should be provided for.

These instruments indicate not only the need for participation by local people, and assures their rights, but also the recognition by international society of the importance of participation by local people. In order to ensure the rights of local people, the European Council adopted a new convention in 1998, the Convention on access to information, public participation in decision-making and access to justice in environmental matters (Aarhus Convention). The Convention requires public participation in decision on specific activities (article 6); public participation concerning plans, programs and policies relating to the environment (article 7); public participation during the preparation of executive regulations and/or generally applicable legally binding normative instruments (article 8); and access to Justice (article 9).

4) Necessary mechanisms for conflict resolution

In designing conflict resolution mechanisms for sustainable forest management, the four factors below shall be considered:

The rights of local and traditional communities and people, including tenure over forest land, and rights of access, ownership, control and harvesting, shall be recognized, guaranteed and stipulated clearly enough to be invoked at court or public forums, when problems based on the rights come into question.

The local community and people shall be included in the decision-making process of regulations, legally binding normative instruments as well as plans, projects and policies on forests. The procedure shall include reasonable timeframes for the different phases, allow sufficient time for informing the public, and provide for early participation.

Access to the information by local people shall be guaranteed, especially at the early stage. If her or his request has been ignored, or inadequately answered, that person shall have access to review procedures. Once a conflict occurs, the settlement process shall be established once invoked by a concerned party. The process shall be transparent.

In the settlement mechanism, three components shall be included: First, an objection mechanism, allowing the public to respond or object to the government; second, a reliable dispute settlement mechanism or ombudsman, which is truly independent; and third, the option to choose to conduct the settlement through a legal forum or out of court.

4. Examination of legal and administrative system at international level

1) Current situation of international instruments related to forest management

There is no consensus on building a new international treaty, such as a "Convention on Forests," in international society. Discussions are still continuing, and results of the discussions will depend on each state's willingness.

Sustainable forest management (SFM) has been recognized as a key concept in documents which resulted from IFF and IPF discussions and other frameworks for forest conservation since the Rio Summit. Accordingly, SFM might be the purpose of the proposed Convention.

Many other legally international binding instruments already exist, and those which are concerned in some way with SFM include: the Convention on Biological Diversity (CBD), the Kyoto Protocol of the United Nations Framework Convention on Climate Change (Kyoto Protocol), the Convention on Wetlands of International Importance Especially as Waterfowl Habitat (Ramsar Convention), the Convention Concerning the Protection of the World Cultural and Natural Heritage (WHC), the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), and the International Tropical Timber Agreement (ITTA). Moreover, there are three non-legally binding instruments such as, "Principles on Forests", " Proposals of the IPF" and "Proposals of the IFF."

Some countries have expressed concern about duplication between existing

instruments and a new Convention on Forests, and also point out the need to implement existing instruments effectively before establishing new ones.

On the other hand, it could be said that there are too many instruments to achieve SFM, and inconsistencies between the existing instruments have been noted. For example, the possibility exists of a conflict emerging between the CBD and the Kyoto Protocol due to differences in their respective purposes. Plantations are important for both these instruments as well as for SFM. However, the CBD aims to conserve biological diversity whereas the Kyoto Protocol values increased carbon sinks. If plantations are expanded in order to increase sinks, problems will arise from the perspective of conserving biological diversity. Since contradictions may become obstacles when plantations are being established, for example, some countries feel that new international instruments, including legally binding ones, are necessary.

In order to analyze relationships among the international treaties related to forest management, the basic principles of international law should be recognized. An important principle is *lex posterior derogat pripori*, which states that if a country ratifies many international treaties, and there are contradictions between previous treaties and newer ones, the newer ones are effective in that country, with some exceptions. Another principle is *lex specialis derogat lege generali*, which states that if a country ratifies many international treaties and there are contradictions between general international treaties and specific ones, the specific laws are effective in that country, with some exceptions. According to these principles, existing international treaties do not provide a sufficient reason to reject the establishment of new laws, even if the issue is covered by existing laws.

2) Principles in the each existing international treaty related to forest conservation

It is not clear what obligations would be required in a "Convention on Forests." However, there are several important principles included in the existing treaties. These principles can be said to be legal principles on forest conservation which can be included in a "Convention on Forests." The principles can be extracted from six international treaties: CITES, WHC, the Ramsar Convention, ITTA, CBD, and CCD. The "Kyoto Protocol" can affect forestry policy, but it is not yet certain what action will be required with respect to "carbon sinks." Therefore, the "Kyoto Protocol" cannot indicate the principles for forest conservation at the present time.

The principles can be also found out in "Soft Law" instruments related to forest conservation. According to experiences with environmental international law, several principles are defined in non-legally binding instruments at first, and these principles are included in legal instruments. Hence, non-legally binding instruments should be analyzed in order to clarify the principles on forest conservation. Regarding forest conservation, there are three important "Soft Law" instruments such as, the "Principles on Forests", " Proposals for Actions of the IPF" and "Proposals for Actions of the IFF." In particular, the "Proposals for Actions of the IPF" includes important

principles. In addition, resolutions or decisions of conferences play an important role in the implementation in some treaties. In particular, the parties to the Ramsar Convention adopted an important resolution on "wise use guidelines."

The results are shown in Box.3. These principles can be divided into three parts. The first part shows general principles of forest conservation. These principles can be applied not only to forest issue but also to other issues. Therefore, they can be said to be common principles of international environmental law. Due to the nature of these principles, the principles do not describe concrete measures for sustainable forest management. Rather, they describe just concepts of international environmental laws. The second part shows concrete measures for forest conservation at the international and national level. These principles indicate concrete and necessary measures in order to achieve sustainable forest management. The other words, these principles show the obligations required of governments.

There is difference in the nature of obligations required by each treaty. The CITES and the WHC, which were adopted earlier than other international treaties, limited their objectives to controlling the trade of endangered species and protecting valuable eco-systems. On the other hand, the international treaties that were adopted after the Rio Summit deal with more comprehensive issues than the earlier two treaties. The earlier two treaties tended to regulate some activities related to forest management. The later two treaties set up policy processes to deal with problems related to forest conservation by entire societies.

Box.3.Principles included in existing international treaties on forest conservation

General Principles	• Common concerns of humanity • Rights of future generations • Sovereign rights over natural resources under jurisdiction • Precautionary • Prevention • Principles of sustainablity • International cooperation • Principles on subsidiarity • Common but differenciated responsibilities
Principle on International level	• Information exchange • Consultation
Principles on National level	• Consideration of environmental impact (Monitoring EIA) within jurisdiction on decisionmaking process open to foreign people • Legislation (New legislation, revision of existing laws) • Institutional arrangement among concerned ministries and authorities (Establishing strategy, policy/ Nomination of focal point) • Regulation of land use in order to avoid negative impact on eco-system （Protected Area/Zoning/Permission for certain activities • Regulation of international trade on goods or wildlife relevant to forests in order to avoid negative impact to eco-system (Permission for the export/import only of goods or wildlife which are produced by processes managed under principles of sustainable

According to these principles, government should regulate land use depending on the character of the eco-system, and create comprehensive policies, taking into consideration the social, cultural and economic aspects of forests. In order to ensure appropriate decisions, information relevant to forest management is necessary. Hence, inventory, monitoring, research and access to information are required. Needless to say, EIA is required in the decision-making process. In addition, cooperation from all stakeholders for forest conservation is indispensable for the success of forest management. Hence, coordination among ministries regarding forest conservation is required, and public participation is also required. Moreover, for all stakeholders, capacity building is necessary for the management of forests in a sustainable manner. This will allow all stakeholders to equitably share the fruits of forest management.

3). Measures for public participation in international treaties

One of the principles mentioned in Figure 1 is participation by stakeholders. The necessity of ensuring participation by legal and administrative measures has been recognized by international society. In Agenda21, the Rio Declaration and other international instruments, public participation is required, to ensure the efficiency of systems of environmental protection. Needless to say, public participation should be respected in order to protect basic human rights. With respect to international treaties related to forest conservation, the participation of local people is emphasized. It has affected many countries' forestry policies and policies of international organization, as mentioned in the introduction.

The second element is the level of participation. There are several areas where local people should be allowed to participate in the process of forest management. Local people should have access to information, participate in decision-making, involvement in implementation and access to means of redress. In Europe, regional treaties were adopted, in order to support participation by ensuring these elements. Also, with respect to allowing locals to participate in decision-making, it is recognized that environmental impact assessment systems can play important roles in ensuring

participation in international treaties.

Other elements to be addressed are the accountability of local and indigenous communities, demarcation of rights and responsibilities of local and indigenous communities and people, costs and benefits of public participation, and stable funding for public participation.

4). Character of measures to deal with issues of nature conservation

The principles described in Figure 1 all have a common character. These principles would be same under a "Convention on Forests." Almost all existing instruments require contracting parties to take account of environmental values in their decision-making policies, and implementation and evaluation processes. In order to achieve this, the instruments disseminate measures on environmental values, and the selection of which measures are appropriate for each country depends on each contracting party.

Ecosystems are too diverse to stipulate universal measures for their conservation. Thus, these instruments cannot set out mandatory measures. Beside, such diversity causes difficulty in developing objective indicators in order to evaluate whether situations are managed in a sustainable manner or not, at the present time. In other words, even if there are problems with forests, it is difficult to decide whether or not they cause irreversible negative impacts to the ecosystem.

Therefore, these instruments simply require that contracting parties should take measures to avoid irreversible negative impacts on the environment in advance, according to each party's circumstances. The decision of appropriate measures depends on each party's thoughts, and evaluation of these measures by third parties is quite difficult. However, there are many problems and criticisms of governments policies related to the implementation of these treaties. This is one reason why the effectiveness of these international treaties is questioned.

5). Necessity of compliance of existing international instruments

As mentioned above, it is difficult to objectively decide whether forest management is sustainable or not. This leads to passive behavior by contracting parties to achieve objectives of these treaties. Therefore, it is necessary to create measures to enhance compliance with international treaties on forest conservation. There are several measures on ensuring compliance of the treaties (see Box 4: Measures for compliance). These measures are necessary for ensuring implementation of the principles. Referring to the character of the principles, three measures are emphasized, particularly in the context of realizing sustainable forest management.

The first measure is "Giving benefits," in particular through financial mechanisms. Almost all developing countries need financial support to fulfill the obligations required by international treaties.

This is same with all environmental issues. The second measure is

"Coordination." In order to deal with the diversity of ecosystems and cultural, social and economic condition, flexibility is required.

Moreover, coordination among international treaties is important, in order to avoid conflict and duplication of investment of financial and human resources. Finally, administrative measures are important, for the same reason as the importance of "Coordination." Appropriate guidelines to implement the obligations required by international treaties are necessary to deal with the diversity of natural, cultural, social and economic conditions. Hence, it will be crucial to develop guidelines for sustainable forest management accordance with the experiences of each region and country. In developing the guidelines, experiences from each country can provide informative suggestions. In particular, judgements by national courts on the enforcement of international treaties related to forest conservation can clarify ways of applying these treaties. Therefore, conflict resolution mechanisms at the national level can play important roles in developing the guidelines.

Recommendations- Recommendations for Sustainable Forest Management from the viewpoint of legal analysis

From analysis of existing legal systems related to forest management at the national and international level, some obstacles to implementing the necessary legal systems are identified. In order to overcome these obstacles, several recommendations are made:

Box4: Measures for ensuring compliance

Public awareness:
Effective implementation can be ensured by cooperation between all stakeholders. Public awareness can be a strong motivation for cooperation between stakeholders.

Administrative measures:
Administrative measures give detailed and desirable procedures of the obligations or interpretations of articles, in order to support smooth implementation. For example, the guidelines for implementation of a treaty can provide concrete procedures to ease implementation at the national level.

Coordination:
Coordination requires measures for ensuring the flexibility of treaties, to deal with the various conditions and situations of contracting parties. This measure includes coordinating relevant treaties in order to avoid duplication and conflict. For example, the United Nations Framework Convention on Climate Change and CBD stipulate adopting protocols in order to deal with changes in scientific knowledge and to supplement the general obligations of these conventions. The CCD has an article requiring contracting parties to adopt regional action programs for the purpose of dealing with the varied conditions of contracting parties. These measures ensure flexibility in overcoming problems. The CBD and the Ramsar Convention exchange MOU, in order to coordinate the two conventions.

Monitoring and inspection:
These measures means that implementation is monitored or inspected by other parties or persons nominated by treaties. Reporting from contracting parties on the status of implementation can be included in this category.

Giving of benefits:
This measure involves the establishment of a system to support implementation by contracting parties by providing financial and technical support. Some treaties establish funds to support developing countries. Almost all treaties require developed countries to support developing countries.

(1). Enhancing compliance with existing treaties

There are many existing international legal instruments related to forest conservation, yet there is still not a consensus for establishing a new international convention on forest conservation. Therefore, it is necessary to consider measures on forest conservation at the international level, while referring to three points:

It is important to enhance compliance mechanisms for existing instruments.

Coordination among these instruments, and dispute settlement, will be important for existing compliance mechanisms.

When developing new compliance mechanisms, it is important to keep in mind the differences in the characteristics of instruments that exist for nature conservation compared with instruments concerned with other issues.

(2). Ensuring local people's participation

Pubic participation is indispensable for the sustainable use and management of natural resources. It is clear that it has become one of the legal principles in some international instruments, but the specific contents of the principle depend on the characteristics of the natural resources in question. Research has revealed several important principles of public participation, as follows:

The participation of local people and indigenous people should be respected and ensured. Forest management systems should adopt the “Subsidiary Principle,” a general principle of governance that means making and implementing decisions at the lowest effective level of government or organization. Not only central governments, but also international treaties and organizations should support local people and indigenous people's participation. The former should act in a subsidiary role, and as a safety net,

when local and indigenous people cannot solve problems by themselves.

Based on learned experience, several actions are necessary to ensuring local people's participation:

Ensure their economic benefit.

The right to consult with the Concession Company by providing advice from experts should be secured by law.

Disclosure of information relevant to forest conservation and management systems in order to create public awareness among local people.

Support of the local government by the central government, in order to ensure local and indigenous people's participation.

Coordination and cooperation among these organizations.

Capacity building is indispensable for realizing sustainable forest management.

Awareness of local people and government officials of the necessity of realizing sustainable forest management is important

Ensure access to remedies when the rights of local people are violated.

(3). Necessity of dispute settlement mechanisms

Concerning dispute settlement, the following components should be considered in designing mechanisms for solving conflicts over forest management:

The rights of local and traditional communities and people, including tenure over forest land, and the rights of access, ownership, control and harvesting, shall be recognized, guaranteed and stipulated clearly enough to be invoked in court or at a public forum, when problems based on these rights come into question.

Local communities and people shall be included in the decisionmaking process for regulations, legally binding normative instruments, as well as forestry plans, projects and policies. The procedure shall include reasonable time frames for the different phases, allow sufficient time for informing the public, and provide for early participation.

Access to information by local people shall be guaranteed, especially at the early stage. If her or his request has been ignored or inadequately answered, the person shall have access to a review procedure.

Once a conflict occurs, the settlement process shall be established upon the request of a concerned party. The process shall be transparent.

In the settlement mechanism, three components shall be included: First, an objection mechanism, allowing the public to respond or object to the government; second, a reliable, independent dispute settlement mechanism or ombudsman; and third, the option to chose or agree with conducting the settlement through a legal forum or out of court.

Most of these elements have been mentioned and discussed widely at international forums. Although the importance of these elements has been recognized at the national or sub-regional levels, few concrete measures have been taken to realize these concepts.

3.Conclusions

3.1. Conclusions

Measures for Sustainable Forest Management and Effective Participation of Local People

As mentioned in the previous parts, there are many findings and recommendations. Sustainable forest management is a common goal of international society for ensuring a sustainable society. However, the current situation of forest management is far from sustainable forest management due to a number of obstacles. One of the major obstacles is a gap between the legal and administrative systems related to forest management and the actual situation of forest and land use. In order to fill the gap, appropriate legal and administrative mechanisms adapted to the actual situation of forest and land use is necessary.

The actual patterns of forest and land use differ from place by place because of

the diversity of ecosystems, and the different cultural, social and economic situation in each area. Hence, such appropriate legal and administrative systems require flexibility and a decentralized approach. In addition, the systems also require participation by local people, in order to adapt existing laws and systems to the actual local situations of forest and land use, and to ensure the effectiveness of the system.

The following parts show the necessary legal, administrative and other measures for sustainable forest management, based on the factors set out above.

Forest Laws and Plans: Laws related to the forest should be harmonized and coordinated to attain the sustainable use and management of forest, and plans or programs for the improved implementation of such laws should be developed and carried out. The following measures are necessary:

(1). Where appropriate, new laws on sustainable forest management should be enacted, or existing laws should be amended. (WHC Article 5, Ramsar Convention Wise Use Guidelines, PM Recommendation Indonesia 1-4, The Philippine 1-1, Laos 1-2,ST Recommendation (3)1))

Laws of different sectors related to sustainable forest management should be harmonized, and an integrated approach should be taken. (ST Recommendation(4)1), LA Recommendation (3)2))

Management or a control of forests or lands should be based on their current use. Where appropriate, traditional forest management systems and tenure rights should be authorized by law. (CBD 8(j), PM Recommendation Indonesia 2-1, ST recommendation (4)2) LA Recommendation (3)1))

Protected areas should be established and managed under a law. (ST Recommendation (3)8),(4)4))

(2). Forest plans should be developed in order to effectively implement laws related to sustainable forest management. (CBD Article 6, Ramsar Convention Article 3(1), WHC Article 5a, CCD Article 4(2)c, PM Recommendation Indonesia 1-1, The Philippine 1-3, Laos 1-1, Vietnam 1-1)

1) Effective coordination among ministries and authorities relevant to sustainable forest management should be encouraged and promoted. (ST Recommendation(4)(1), LA Recommendation (2)3)e))
   a) An inter-ministerial forum for the sustainable forest management should be established within the central government. (ST Recommendation(4)1), LA Recommendation (2)3)e)
   b) Such coordination mechanisms should also be introduced between the national government and the local governments, and the activities of the local governments should be supported by the central government. (ST Recommendation(4)5),LA Recommendation (2)3)d)
2) A national minimum of sustainable forest management, what is called “a green safety net” should be developed. (CBD Article 6, Ramsar Convention Article 3(1), WHC Article 5a, CCD Article 4(2)c, PM Recommendation Indonesia 1-1, The Philippine

1-3, Laos 1-1, Vietnam 1-1)

3) The Criteria & Indicators for sustainable forest management should be developed.(PM Recommendation Vietnam 3-2).
4) The criteria for demarcation of forestlands should be clarified and published. (PM Recommendation Indonesia 1-3, Laos 1-3, 1-4, 1-5, 1-6, 3-1, Vietnam 1-3)
5) Forestland zoning should be, where appropriate, based on the current situation of land use and social/economic situation of the forestland. (PM Recommendation Indonesia 1-3, 2-1, Laos 1-3, 1-4, 1-5, 1-6, 3-1, Vietnam 1-3, ST Recommendation (4)4))
6) A traditional forest management system and land use by local people and their traditional right should be ensured as much as possible. (ST Recommendation (1)2),)
7) The forest plan should be implemented in a flexible way.
   a) A step by step approach should be adopted when a new plan is introduced. (PM recommendation Laos 1-7)
   b) A forest plan should be reviewed periodically. (ST Recommendation (3)1))
8) Sufficient financial basis and human resources for the forest plan should be prepared and provided. (WHC Article 5, PM Recommendation the Philippine 1-2, Vietnam 3-5)

3). Neighboring countries should be consulted in advance of forest related activities for concerted management of boundary forests. A bilateral or sub-regional agreement on sustainable forest management should be developed. (Ramsar Convention Article 5, WHC Article 5 (3), CBD Article 3, 14(C), (d) ST Recommendation (3)9))

Supporting Measures: Laws and plans related to the forest management cannot be implemented effectively without relevant supporting measures for promotion of public awareness, improvement of prior assessment procedures, dissemination of information and so on. The necessary measures are as follows:

(1). Educational programs should be organized in order to promote public awareness of the necessity and importance of forest management. (LA Recommendation (2) 3) g)

(2). In order to avoid negative environmental impacts caused by plans and activities related to forest management, including international aid, plans and projects of governments and projects of private companies, Environmental Impact Assessment (EIA) should be carried out. Also, a monitoring system for forest management should be created by international organizations, governments and NGOs. (ST Recommendation (1)3),4)(5)2),)

1) In the EIA and monitoring procedures, cultural and social aspects should be assessed and monitored. (ST Recommendation (1)3)
2) Activities related to forest management should be assessed and monitored in the long-term perspective. (ST Recommendation(5)8))
3) The participation of all stakeholders should be ensured in the process of EIA and the monitoring system.(ST Recommendation (1)3))

(3). In order to ensure the meaningful participation of people, basic information should be widely disseminated. (ST Recommendation (5)4))

1) The information related to forest management should be disseminated. In addition, the right of access to information should be assured by law. (ST Recommendation (3)2), LA Recommendation (2) 3)c))
2) Information related to forest management, including "Good Practice" and "Bad Experience", should be exchanged among all stakeholders in order to share useful experiences of success and failures of forest management.(ST Recommendation(5)5))

(4). Trade in forest products should be controlled under the principle of forest sustainability and mitigation of the degradation of natural forests. The three principles 'reuse, reduce and recycle' should be the base for promoting the sustainable export and production of agriculture and forestry. (TT Recommendation, ST Recommendation (2)1))

1) Methods of evaluating the value of forests should be developed by way of constructing "forest accounts." (TT Recommendation, ST Recommendation (1)1))
2) A certification system to support sustainable forest management should be established in order to ensure reliability. The legal and administrative system to monitor the certification system and punish forgery should be developed.(TT Recommendation, ST Recommendation (2)2))
   a) Compatible evaluating criteria and indicators among certifying institutions should be developed. (TT Recommendation)
   b) National criteria and indicators for the forest certification should be developed.(TT Recommendation)
   c) An Asian Forest Certification Institute should be established with an initiative by local people and NGOs, in order to adapt to the current situation of the Asia-Pacific region. (TT Recommendation)

Participation of Local People: For the effective implementation of laws and plans, the active, free and meaningful participation of local people is indispensable.

(1). The participation of local people in processes of sustainable forest management should be assured by law. (CBD Article 8(j), CCD Article 5d,Article 10f, Ramsar Convention Wise Use Guidelines, WHC Guidelines, PM Recommendation Indonesia 1-2, 1-4, 1-8, The Philippines 1-6, Laos 2-1, CCD Article 10 (2)f, PM Recommendation Indonesia 1-4, ST Recommendation (3)2))

(2). Appropriate administrative measures should be taken by the governments in order to ensure the effective participation of local people in the decisionmaking process, in management processes of protected areas, in the planning and implementation processes of international aid programs, and in the grant process for forest concession. (WHC

Guidelines, ST Recommendation (5)2), (3)3),(4)2), PM Recommendation Indonesia 1-2, PM Recommendation Indonesia 1-7, Lao 3-5LA Recommendation (3) 2))

1) Administrative programs related to the participation of local people should be developed, coordinated and revised periodically.(PM Recommendation Indonesia 1-5)
2) Establishment and implementation of the legal and administrative system on ensuring the participation of local people in the forest management in developing countries should be supported. (ST Recommendation (5)1),3),4)))
3) The participation of local people should be secured by the national law, and the national government should direct, instruct and encourage local governments to take every necessary measure. Necessary supporting measures, including financial, technical and human resources assistance, should be taken by the national government. (PM Recommendation Indonesia 1-6,ST Recommendation(3)5))
4) Opportunities for expressing views should be given to local people in a process of the forest planing. Then their views should be highly taken account of in the plan. (PM Recommendation Indonesia 1-2)
5) A system for providing sufficient advice from experts should be established. In addition, a financial supporting measure for the payment of the administrative cost of that system should be made available to local people. (LA Recommendation (2)3)b), (3) 2),)

(3). Training programs should be organized in order to enhance implementation of the legal and administrative system on forest management. (CCD Article 19, LA Recommendation (2)3)f), PM Recommendation Laos 3-2, Vietnam 1-4, 3-3 , ST Recommendation (3)4)

1) Training programs for government officers, members of NGOs, journalists and local people should be organized. (PM Recommendation, the Philippines 1-4, Vietnam 1-4,3-3,ST Recommendation (5)6))
2) Recognition of the value of forests and the necessity of participation of local people should be included in the training programs. (PM Recommendation, the Philippines 1-4, ST Recommendation (3)4))

(4). The benefits to local people should be ensured. (CBD Article 8 (j), PM Recommendation Indonesia 1-8, LA Recommendation (2) 3)a))

1) Collective forest management by local people should be encouraged and supported. (CBD Article 10 (c), (d), PM Recommendation Indonesia 3-2, Laos 2-2,)
   a) Collective forest management should be authorized by the law. Village communities, cooperatives and forest user groups may be authorized as the management body. (PM Recommendation the Philippines 2-2, ST Recommendation (3)3))
   b) Collective forest management by local people should be given priority over the large-scale forest management by corporations in the process of granting a forest permission by the relevant government. (PM Recommendation Indonesia

3-1, The Philippines 2-6, Vietnam 2-1)

c) Where appropriate, the collective forest management bodies should be authorized by the relevant government to carry out necessary regulations. The collective management body should also be provided for technical support. (PM Recommendation Indonesia 2-2, Vietnam 2-2, Laos 2-3)

d) Ministries and authorities related to the collective forest management should coordinate among them in developing the forest plans. Not only within national government but also within and among local governments and between national government and local government, coordination measures should be taken. (ST Recommendation(3)8)

2) Support for individual-based forest management

a) A right to benefit, a right of management and a property right of local people over the forest who participate in reforestation and afforestation activities should be assured by the law. (PM Recommendation Indonesia 4-1,4-5,4-6, The Philippines 3-1,ST Recommendation (3)3))

b) A plan for supporting the tree plantation and for distribution of benefit should be established. (PM Recommendation Indonesia 4-4, Laos 3-3, 3-4 ,)

(4). Dispute settlement system including an informal mechanism should be established or modified in order to secure the rights of local people. (PM Recommendation Indonesia 1-9)

1) The reliable and independent informal dispute settlement mechanism or the ombudsman system should be established. (LA Recommendation (2)3)h, (3) 4), (3) 5))

2) The procedures for objection or appeal should be established in order to ensure the public to raise an objection to the government decision. Information related to the objection procedures should be widely disseminated.(LA Recommendation (2)3)h, (3) 4), (3) 5))

3) An option to chose/agree with a dispute settlement mechanism, through legal forum or out of the court, should be ensured. Recourse to the traditional conflict resolution mechanism should be considered in deciding which mechanism should be appropriate for the resolution. (LA Recommendation (2)3)h, (3) 4), (3) 5))

4) In order to promote the use of such mechanisms, information related to such mechanisms should be sent to all stakeholders. In addition, necessary advice from experts and, as appropriate, financial assistance should be provided for them.(LA Recommendation (3) 3))

Specific Issues: Some specific causes of the forest degradation in the Asia-Pacific region are identified and they need specific counter measures. The necessary measures are as follows;

(1). Eradication and Prevention of Illegal Logging. (ST Recommendation (3)6))

1) The law on the prevention of illegal logging should be enacted or amended. In

addition, a plan should be developed in order to enforce the law effectively. The plan may include the following measures;(ST Recommendation (3)6))

a) An inspection system to forestry factories including a surprise inspection should be developed and carried out in order to ensure that the factories do not use timbers derived from illegal logging. (ST Recommendation (4)5))

b) Import of timber derived from illegal logging should not be accepted by importing countries. (ST Recommendation (2)3))

2) A network or a mechanism on monitoring the timber flow, involving NGOs and local people, should be established in order to grasp the situation of illegal logging. (ST Recommendation (2)3), PM Recommendation Indonesia 4-3))

3) Training program for government officials, members of NGOs and local people should be organized in order to enhance the capacity of relevant persons. (ST Recommendation (2)3))

(2). Control of Forest Fires

1) When necessary, a law for prohibition of activities that cause a forest fire should be enacted or amended. At least, a plan controlling such activities should be developed and implemented by the government. (ST Recommendation(4)6)))

2) In order to ensure the effectiveness of laws or plans for the forest fire control, appropriate technology and sufficient equipment should be provided to governmental local branches or local governments that implement the law or plan at the field site. (ST Recommendation (4)7), 9))

3) An alternative technique to the forestland clearance by fire should be provided to local people. ((4)9))

4) Assistance for activities or projects related to the fire control should be given high priority in international aid program and in the national or local budgets. (ST Recommendation (4)8), (5)7))

(3). Improvement of the Forest Concession; (regulation of concession)

1) Information related to the examination and decision on the forest concession should be disseminated. (ST Recommendation (4)3))

2) Participation of local people in the process of examination and decision on the grant of concession should be ensured. (ST Recommendation(4)3), 4))

3) Areas of cultural, social and ecological significance should be excluded from the forest concession. (ST Recommendation (4)4))

3.2 Next Steps of the IGES Forest Conservation Strategy

In the first phase, the IGES Forest Conservation Project aimed to identify principles or elements of sustainable forest management based on experiences in the Asia-Pacific region. This accounted for an important portion of the strategy for forest conservation. The research was carried out in the framework of four interrelated sub-

themes: 1) sub-theme on structural analysis of forest destruction (ST sub-theme) in order to provide basic information to other sub-themes, 2) sub-theme on participatory forest management policy (PM sub-theme) in order to make recommendations covering local and national level, 3) sub-theme on timber trade policy (TT sub-theme) in order to make recommendations covering national and international level, and 4) sub-theme on legal/administrative measures for forest conservation (LA sub-theme) to elaborate principles/elements for sustainable forest management as a final outcome of the project. Target countries were Indonesia, Thailand, the Philippines, Laos, Vietnam, China, and Russia.

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

The project has successfully constructed valuable network with researchers, NGOs, local people, and government officials in the Asia-Pacific region. These inter-personal relations with project members might be utilized and evolved into inter-organizational relations with IGES in the second phase.

As a logical consequence of the fact that the major outcomes of the project are principles or elements of sustainable forest management, the main target groups in the first phase were the government authorities. Even though we invited government officials to a series of regional workshops held in Jakarta and Vientiane 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 policy in each country.

A goal of the IGES FCP is to develop strategy for desirable forest conservation and sustainable forest management. Although many approaches should be taken into consideration to achieve the goal, for the second phase the project will focus on objectives based on the outreach of first phase activities, which were partly referred to above. The project will develop local guidelines (IGES local guidelines) and national guidelines (IGES national guidelines) for meaningful participation in forest management at the local and national level. It is expected that the local guidelines will be utilized at a local level. They will make up an important part of national guidelines together with other field projects concerned, and will be presented at international conferences. The

project called the attempts "local approach" where a viewpoint shifts from local level to national and international level.

In addition to these objectives, the project will to develop recommendations (IGES policy recommendations) to ensure the effective application of international treaties on local participation in forest management at national level for participation in forest management. This activity is called "international approach" where the viewpoint shifts from international level, to national and local levels.

IGES FCP project expects that two approaches, such as local approach and international approach, will be intersected, blended, and synthesized at national level discussion, especially in the process to elaborate the IGES national guidelines.

Appendix 1

IGES Forest Conservation Project
Outline of the Second Phase Program

By
Makoto Inoue

OBJECTIVES

1. To develop "IGES local guidelines" for participation in forest management
2. To develop "IGES policy recommendations" to ensure effective application of international treaties on local participation.
3. To develop "IGES national guidelines."

TARGET COUNTRIES

1. Indonesia: transition to decentralization
2. Lao P.D.R.: transition to market economy
3. Russia: dynamic reformation, boreal forest

TARGET GROUPS

1. Main target groups:
   - Local communities
   - Local and national policy makers
2. Supporting target groups:
   - NGOs, universities, companies
   - International organizations

EXPECTED POLICY IMPACT

1. **Influence at local level**
   - Direct application of IGES local guidelines
   - Local activities supported by international society
     ← Presentation of ILG at international conference
2. **Influence at national level**
   - Application of IGES national guidelines for the stage of policy enforcement
   - Application of IGES policy recommendations in the process of policy reformation

SPECIFIC OBJECTIVES

1. **Local Approach:**

- To describe existing local forest management (LFM)
- To analyze the merits and demerits of the existing LFM
- To analyze the interests and behavior of various actors (stakeholders)

- To analyze policy making processes at local level
- To analyze the obstacles for promotion of LFM
- To analyze the need for new approaches in forest management
- To identify the necessity for external support for LFM
- To develop the IGES local guidelines to improve the LFM as well as recommendations for national and international support for LFM
- To develop the IGES national guidelines in cooperation with international approaches

** (anthropology, sociology, political science, etc.)*

2. International Approach:

- To analyze legal and non-legal measures for local participation in existing international treaties
- To analyze national forest regimes and administration from international perspectives
- To analyze obstacles for better implementation of forest regime at national and local levels
- To analyze policy making processes at the national level
- To analyze the measures to ensure sustainability in forest management, including forest certification systems
- To develop the IGES policy recommendations
- To develop the IGES national guidelines in cooperation with local approaches

** (legal, economic, and political aspects)*

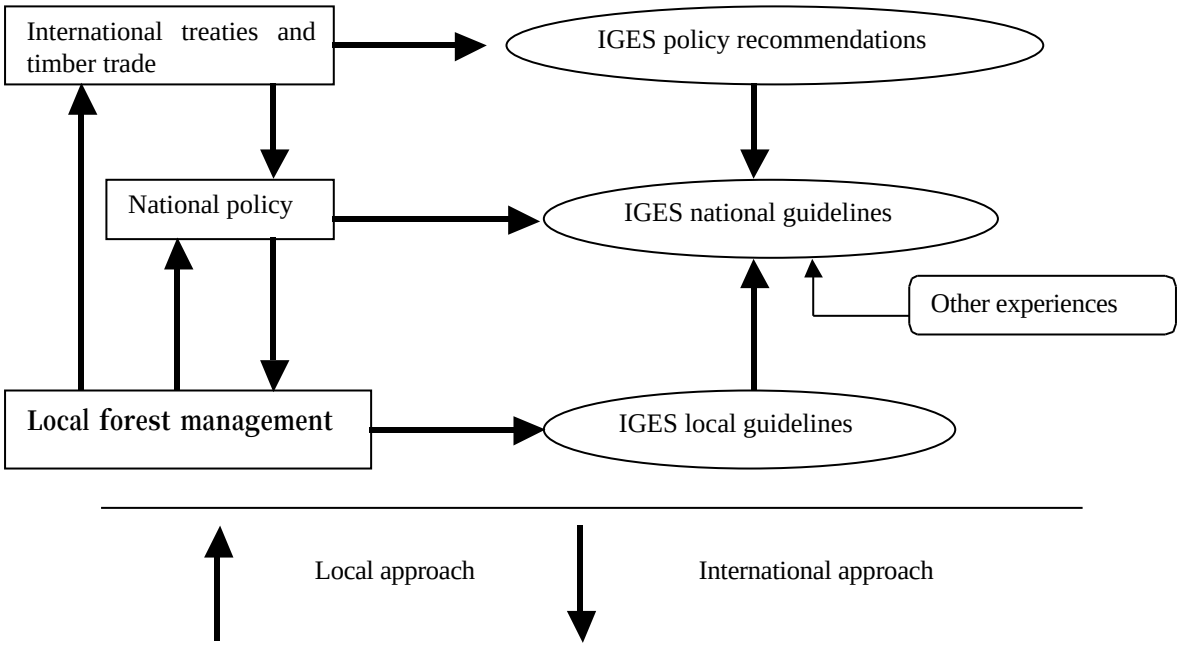


Figure 1: The two approaches and their integration

Program of IGES the Fourth International Workshop on Forest Conservation Strategies in the Asia-Pacific

17 January (Wed.) Morning: Closed Session
Chair: Martinus NANANG

Discussion on the results of the first phase research results with IGES FC project's research collaborators and invitees from foreign countries and Japan.

9:00- 9:30: Presentation on the first-phase research results (1998-2000) by IGES Forest Conservation Project (FC) - (Prof. Hiroji ISOZAKI/ Project Leader, IGES)
9:30-12:00: Discussion on the first-phase research results of the IGES FC

17 January (Wed.) Afternoon: Open Seminar
Chair: Prof. Shin NAGATA

"Toward Sustainable Forest Management in Asian Countries"
Involving participants from organizations, NGOs and institutes related to forest conservation in Japan, discussions on the results of the first phase will be held. Based on the discussions, panel discussions on the necessary measures toward sustainable forest management at a local level in Asian countries will be held.

13:30-14:00 Presentation on the first-phase research results (1998-2000) by IGES Forest Conservation Project (Prof. Hiroji ISOZAKI/ Project Leader, IGES)
14:00-14:15 Comment by Dr. Ma Hwan Ok (Project Manager Forest Industry, International Tropical Timber Organization)
14:15-14:30 Comment by Drs. G. Simon DEVUNG (UNMUL Co-Manager, Center for Social Forestry (CSF)/ Indonesia) on the IGES FC first-phase research results
14:30-14:45 Comment by Mr. Xeme SAMOUNTRY (Director, Department of Forestry/ Lao P.D.R.) on the IGES FC first-phase research results
14:45-15:00 An outline of the second phase activities (2001-2003) by IGES Forest Conservation Project (Prof. Makoto INOUE/ Sub-Project Leader, IGES)
15:00-15:30 Coffee Break

15:30-17:30 Panel Discussion
Chair: Prof. Akio Morishima
Panelists: Mr. Mafa CHIPETA (CIFOR), Dr. Tachrir FATHONI (Forestry Attache of the Indonesian Embassy in Japan), Mr. Yoshiaki Kano (JICA), Dr. Efransjah (Projects Manager of the Division of Reforestation and Forest Management of ITTO) and Mr. Martinus NANANG (IGES))

Experience in Promoting Participatory Forest Management

- 5 (min) /Opening Remarks – Prof. Akio MORISHIMA, IGES President
- 50(min) /10(min) ~5 (panelists) Presentation from panelist of ITTO, CIFOR, JICA, Indonesia, and IGES. Each presentation informed experiences or activities related to community forestry in each organizations and country.
- 30(min) /Discussion among panelists
- 30(min) /Open for Floor
- 5 (min) /Closing Remark – Prof. Akio MORISHIMA

18:00-20:00 Reception