

News on the Model Forest Approach



to Sustainable Forest Management

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RMFP Forest Policy Workshop

The *Regional Workshop on Forestry and Related Policies, Legislation and Practices and their Impacts on Sustainable Forest Management, and on the Model Forest Approach* was held in Tacloban, Philippines from 29 July-2 August 2002. It was organised by the RMFP, in collaboration with the DENR, Philippines, and the IMFNS, and attended by 36 representatives from the four RMFP countries, FAO, Forestry Agency of Japan, IMFNS, Samar Island Biodiversity Project (SIBP) and other organisations. A welcoming address was delivered by Mr. Demetrio Ignacio Jr., Undersecretary for Policy and Planning, DENR, Philippines.

The workshop discussed the findings of the recently completed *reviews of forestry and related policies, legislation and practices* in the four RMFP countries, and related experiences elsewhere, lessons learnt, and how model forest level outputs can be effectively used to influence policy makers. It also discussed the findings, conclusions and recommendations of the RMFP terminal evaluation mission carried out in April/May 2002.

Presentations included,

- *The seven 'P's of effective forest policy development*, by Mr. Patrick Durst, FAO Bangkok.
- *Study on supporting forestry policies in Lin'an Model Forest, China*, by Prof. Shen Yueqin, and 6 others. (Presented by Prof. Jiang Chunqian).
- *Review of forestry and related legislation, policies and practices and their impacts on SFM and on the MF Approach in Myanmar*, by Dr. Kyaw Tint, (presented by Prof. Kyaw Htun, Forest Department).
- *Policy review of Philippine MF Project: Case study of Ulot Watershed MF*, by Mr. Roberto Oliva, Consultant.
- *Review of forestry and related legislation, policies and practices and their impacts on SFM and on the MF Approach in Thailand*, by Mr. Thanapol Saranak, RFD.
- *Feedback from field-level activities to policy levels: Lessons from the International Workshop on MFs for Field-Level Application of SFM (Yamanashi Workshop)*, by Ms. Makiko Uemoto, Forestry Agency of Japan.
- *MF outputs and experiences in forestry and related policies: Observations from Canada*, by Mr. Peter Besseau, IMFNS.
- *Linkages between field operations/outputs to policy: Experiences from the*

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4th PSC Meeting and RMFP Workshop

The 4th and final PSC meeting will be held in Tacloban, Philippines on 29 Nov. 2002. The PSC meeting is intended for official RMFP country representatives and collaborating agencies.

This PSC meeting will be preceded by a workshop on "What Next (for the Model Forests)?" from 25-28 Nov. in Ormoc (2-hour drive from Tacloban), Philippines. The workshop will discuss the experiences and lessons learnt in the development of model forests, and the action needed to continue providing support to the model forest initiatives in the four Project countries after the completion of the RMFP in February 2003. It will be organised and co-sponsored by the RMFP, DENR Philippines and IMFNS. Participants from each of the four RMFP countries and resource persons from FAO, Forestry Agency of Japan, IMFNS and other relevant countries or agencies are expected to attend the workshop.

For more information on the workshop, contact the RMFP at the address on the back page of this newsletter.

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QUOTE

"Chance favours the prepared mind"
Louis Pasteur

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Samar Island Biodiversity Project, by Dr. M. Dalmacio and Mr. G. Guillermo, SIBP.

- *A general introduction to sustainable development policies for the bamboo and rattan sectors in China*, by Prof. Zhu Zhaohua, Distinguished Fellow for Life, INBAR.
- *Do forest policies really make a difference to forests and forestry?*, by Dr. Thomas Enters, FAO, Bangkok.

Among the observations made were,

- Forest policies in Asia have been shaped by problems of deforestation, widening gap between timber supply and demand, recognition that forests provide many goods and services, and trend towards devolution and decentralization.
- The policy review in Lin'an was carried out at the micro level, in Myanmar and Thailand at the macro level, and in the Philippines at both levels, and all demonstrated their own advantages. It would be useful to carry out both types of review at periodic intervals.
- The Philippines has experienced unprecedented loss and degradation of its forest resources and the impacts of these actions. It is slowly rehabilitating and putting back the trees in degraded forests.
- The government is reviewing its forestry policies to liberalise the use of forests, has undergone substantial devolution of Government authority, and good governance is now the pillar of the Government system.
- The *Model Forest Approach* (MFA) provides an opportunity to combine these elements and approaches to develop partnerships to involve stakeholders in the sustainable use and management of forest resources; and a challenge for the DENR to change its role from being a policeman to a facilitator.
- Seven 'P's' for effective forest policy development include being *Proactive, Participatory, Political, Practical, Progressive, Professional and Persistent*.
- *Model Forests* can be an effective means of translating national forest programmes into action at the field level.
- Opportunities for SFM in Ulot WMF include: Institutionalization of multi-stakeholder involvement in forest management; involvement of government agencies, particularly local government units (LGUs); the consensus method of decision-making provides a model for enforcement of forestry standards and environmental laws; and creation of MF Core Groups ensures attention to technical and policy assistance.
- Constraints include the need to effectively address the issue of developing sustainable livelihood opportunities, the imminent termination of FAO/Govt. of Japan RMFP and the need to maintain stakeholder interest.
- LGUs and local communities are two of the most important stakeholders in protected area (PA) management, and their active participation and support are crucial to attaining the objective of SFM and sustainable PA management. They should derive direct benefits from their participation. However, some policies are constraining, rather than promoting, their participation.
- Threats to biodiversity conservation include habitat destruction, timber poaching, encroachment, indiscriminate harvesting of NWFPs, hunting and quarrying.

- Experiences in forest policy in Lin'an MF show conflict between forest policies and requirements of SFM. Field-level research undertaken to address this conflict highlighted changes in the socio-economic characteristics of farmers, including a shift toward NWFPs, and attitudinal change in terms of better environmental protection and a more enterprising approach.
- Forest and forest property rights policies must satisfy the needs of forest owners. Problems include uncertainty of ownership of forestland, ill-defined forest property rights boundaries, ineffective measures for the transfer of forestland, and scattered location of farms.
- The policy review group and the Lin'an MF Partnership Group include government and Lin'an Forestry Bureau officials. This has greatly facilitated acceptance of the review results, and the follow-up action taken.
- The bamboo industry is one of China's most important rural industries. In 2001, the total production value of bamboo products was USD 3.5 billion, and export value was USD 650 million. 90% of China's bamboo sector consists of small- to medium-scale rural enterprises established by farmer entrepreneurs, staffed by local farmers, and based



Participants at working group discussion

- on locally-sourced raw materials.
- Since the 1980s, rural areas have practised a *land contract policy*, which provides rights of use and management to rural households for a period of 30 years.
- On Hainan Island, the provincial government established a land contract system with farmers, providing rights to grow rattan in specified areas for 30 years, in return for guaranteeing its protection. The project involved small-scale trials in demonstration villages to test application of the policy, and received the support of the local people.
- In developing bamboo and rattan, the Chinese government has integrated both policy and technical support and made livelihood improvement of farmers, especially the poor, its key objective. The participation of government, enterprise, scientists and farmers will enhance and accelerate development of these sectors.
- The *Myanmar Forest Policy* (1995) is the major policy-related instrument for forest management, and contains six policy imperatives, i.e. protection, sustainability, participation, basic needs, efficiency and public awareness.

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RMFP Terminal Evaluation Mission

A terminal evaluation of the RMFP was carried out from 14 April to 11 May 2002 by a 3-person team comprising Dr. K.C. Lai (representing FAO), Dr. K. Ishida (representing the Government of Japan) and Dr. Jerry Canonizado (representing the Project countries). The report of the mission has been submitted to FAO and forwarded to the donor, with FAO's consolidated comments.

The overall assessment of the RMFP was positive, and the mission concluded, *inter alia*, that,

- a) *The Project was both relevant and timely, and FAO and the donor are to be commended on their vision in identifying and supporting the Project, which addresses an important need in the region.*
- b) *The project design was generally coherent in substance and the overall strategy sound, although the implementation schedule was extremely tight. If resources had permitted, a more appropriate project design would be for a longer project duration, covering both a pilot and a consolidation phase, and incorporating ongoing and mid-term evaluation processes, in order to exploit more fully the piloting of the MF process and approach, which is relatively new to the Project countries.*
- c) *There had been considerable project effort at regional and country MF levels. Despite difficulties with the project design, implementation had progressed well to-date. Creditable outputs were achieved in the relatively short time the project had been in operation, and useful initial outcomes at the MF field level were already apparent.*
- d) *RMFP and the Project countries had built up a very good working relationship with one another, which should form a firm basis for future networking and collaborative activities. Whilst still at a relatively early stage of establishment, there is now an appropriate framework for continued development of the model forests in the four countries.*
- e) *Project results were broadly positive, as evident from: the perceptions and responses of the target beneficiaries.*
- f) *The core attribute of MFs - that of voluntary partnership - is a workable concept. The MF approach appears to be*

a sensible way forward in helping integrate the multi-functional dimensions of natural resource planning and management.

- g) *The MF approach tested in all four Project countries demonstrates that local people, including communities as well as private sector and NGOs, can take collective as well as individual initiative and responsibilities in natural resource management. Given the right economic motivations and clear user rights, forest and forest-edge dwellers could be good custodians of forest resources, hence should be seen not as problems but rather as future solutions to sustainable land and forest resource management in the region. At the same time, the MF approach has shown that organisations with very different development agendas can effectively collaborate towards a win-win situation through the communication process facilitated.*



Evaluation mission visiting Paukkhaung MF

The mission identified gaps and weaknesses in project design and implementation, and made suggestions to enhance the prospects of future sustainability and further development effort. Although it was too early to take full account of RMFP's results and outcomes, which will require further substantiation and corroboration, the mission felt that they "were nevertheless able to identify some initial lessons relevant to project design, implementation approach, and the model forest concept in general, that ought to be given due consideration during the planning and operation of future similar projects".

The mission's main recommendations on future steps and actions were, *inter alia*, that,

- a) *Additional funding and technical resources to support future MF initiatives post-RMFP be sought to permit fine-tuning and deepening of the MF Approach in the Project countries, and possible extension to other countries in the region, and*
- b) *Given the significant contribution already made by the Government of Japan, both financially and in original conception of the present project, the present donor should, in the first instance, be approached to consider future support for this initiative.*



Foreground, from left, Dr. Canonizado, Dr. Lai and Dr. Ishida meeting with Ulot WMF partners.

“Autumn Bamboo Shoot” Cultivation Training

The first training course on “autumn bamboo shoot cultivation techniques” in Lin'an City was conducted by a partner of the Lin'an MF, Gaohong township. During the course, the chairman of LMF Partnership Group, Mr. Wang An'guo, gave a lecture on the problems in the development of the bamboo industry in Gaohong, and how the solution was provided through development of cultivation techniques for autumn bamboo shoots. Over 100 bamboo shoot producing households participated in the training course. The participants received specific answers from Mr. Wang about autumn shoot cultivation techniques.

Forestry technicians had carried out years of study on *Phyllostachys praecox*, the main shoot bamboo in Lin'an, to enable it to produce shoots twice per year, following its natural growth pattern. Now, techniques of autumn bamboo shoot cultivation are available, and good prices help to generate income of at least 15,000 Yuan/ha.

In the past, the farmers only focussed on spring shoot production and neglected autumn shoot production. Some farmers mistakenly believed that the autumn bamboo shoots would reduce the production in the coming year. In fact, autumn bamboo shoot cultivation helps to increase the fertility of the bamboo land, improves bamboo growth, and promotes early shooting in the next year with higher yield. The price of spring shoots is usually low because of high production. But in autumn, the supply of bamboo shoots is much less, resulting in higher prices, thus helping farmers to earn more money.

Gaohong township is an important bamboo shoot producing area of Lin'an. It has 923 ha of bamboo stands, with an annual output of 5,690 tons of bamboo shoots and an output value of about 25 million Yuan. Over 50% of the farmers' income is from bamboo shoot. At present, the serious degradation of bamboo stands, low management intensity and lack of information, are providing the



Mr. Zhou Cheng, FRI, Lin'an (left) and Mr. Wang Anguo, Lin'an Forestry Bureau (middle) giving a demonstration during the training course

bamboo industry with a big challenge. The urgent task of the local government is to help farmers to improve their management intensity in order to broaden income generation.

To achieve this, the government selected 133 ha of low yield bamboo stands as a demonstration site for autumn bamboo shoot production. The autumn bamboo shoot cultivation techniques will be promoted and applied to this area to increase the yield of bamboo stands. It is estimated that the output value of the whole town from autumn shoots should be over 2 million Yuan, that is 150 Yuan per capita of the villagers.

By He Yiling, CAF; Ge Huaping and Jin Haiyan, LFB

During the 1st Changhua (in Lin'an City) Hickory Festival from 28 Sept. to 05 Oct., a hickory (*Carya cathayensis*) workshop was organised by the Lin'an MF Secretariat, attended by over 60 leaders and experts from local governments, forestry bureaus, research institutes, associations and Lin'an MF partners.



Hickory workshop at Changhua Mountain, Lin'an

The Lin'an MF Secretariat also organised a training course on the implications of China's entry into the World Trade Organisation (WTO) for about 60 MF partners on 26 Sept, in Lin'an.

By Ge Huaping, Lin'an MF Secretariat.



Training course on WTO at Lin'an MF

“What Next?” Workshop in Myanmar

A workshop was held at the Mt. Popa Resort in the Dry Zone of Myanmar from 01-02 October 2002 to discuss “What Next?” for the Paukkaung Model Forest and a proposal to establish a model forest in the Dry Zone of Myanmar. The workshop was organised by the Forest Dept. (FD) with the support of the RMFP, and was attended by about 30 participants, mostly from the FD and Dry Zone Greening Dept. (DZGD), but including representatives from the Myanmar Timber Enterprise (MTE) and PKMF Partnership Group (from private sector).

Presentations included *an opening address by the Director General, FD, U Shwe Kyaw; The Model Forest Approach to SFM - Experiences of the RMFP* by Tang Hon Tat, CTA, RMFP; *Experiences of the Myanmar Timber Enterprise (MTE) in the PKMF Project*, by U Khin Zaw, Deputy GM (Planning), MTE; *Review of the PKMF partnership group's activities* by U Min Lwin, sawmill owner and member of PKMF Partnership Group; *PKMF - Lessons learnt*, by Prof. Kyaw Htun, Deputy Director and NPC; *Establishment and implementation of PKMF* by U Htay Aung, Staff Officer, PKM; *Review of possibilities of establishing a model forest in the Dry Zone to demonstrate SFM* by U Win Myint and U Mya Win, Staff Officers, FD; and *PKMF - What Next? and selection of site in Dry Zone for 2nd MF* by Prof. Kyaw Htun.

U Shwe Kyaw, DG FD, said the *MF Approach* is proving to be a useful tool to facilitate the stakeholders to work together, and increase their understanding of sustainable forest management, and of their role in this process. The FD is committed not only to continue supporting the PKMF, but also to establish a second MF in the Dry Zone, which is heavily populated and where the pressure on the forest resources is high.

Mr. Tang, CTA, RMFP, updated the participants on the status of the MF projects in the other three RMFP countries, and at the

regional office. The various speakers reported their experiences (mostly in Myanmar) with the PKMF, which were generally positive. Prof. Kyaw Htun presented a framework for “What Next”, and some suggested activities. He said the representatives from PKMF should discuss this with their other partners and suggest activities for the next three years at PKMF. This will then be discussed at a workshop in PKMF on 18-19 Oct.

Two Working Groups discussed the selection of four potential sites in the Dry Zone and both selected the KyawPadaung site as their first choice. The FD will next prepare a proposal for the establishment of a model forest at KyawPadaung.

*By Tang H.T., RMFP
and Prof. Kyaw Htun, FD Myanmar and NPC.*



2nd row, 1 to r: U Thein Win (DZGD), U Khin Zaw (MTE), Tang H.T. (RMFP), U Shwe Kyaw (FD), U Khin Maung Zaw (FD), Prof. Kyaw Htun (FD)

First Myanma Female Foresters Visit PKMF

Seven of the first (2001) 12 female forestry graduates from the Institute of Forestry (IOF), Myanmar, visited the PKMF from 15-28 June 2002 to study the implementation of the *model forest*



U Win Myint, Staff Officer (centre, white shirt) briefing the visiting foresters

approach (MFA) and observe the various MF and other operational activities. Among the activities visited were tree marking for selection felling; commercial teak plantations; special teak plantations; enrichment planting in degraded forests; establishment of demonstration plots of community forests, kapok and bamboo plantings; and soil erosion control plots.

They met with members of the community forest user group from Letha village, in Kyat Kon Reserve Forest. Some villagers are encroaching onto the R.F to cultivate agricultural crops. A community forest of 50 acres (20 ha) will be established in 2002 for the village.

The visiting foresters said that they had gained useful knowledge and understanding of the issues, problems and opportunities in the management of the natural forests and forest plantations in Bago Yoma (West), and also a good appreciation of the objectives and benefits of the PKMF project.

By Win Myint, Staff Officer, FD, and Prof. Kyaw Htun, NPC.

Traditional and Current Land Use in South Nawin Watershed in PKMF

Introduction

Paukkhaung Model Forest (PKMF) has a unique mosaic of land uses practised by local communities for years. The watersheds of both South Nawin and North Nawin dams fall within PKMF. Therefore, these land use practices are of critical importance. A case study of the traditional and current land use systems was carried out in three selected villages in the South Nawin Watershed, namely Nyaung Win, Gone Min Khone and Taung Le in September 2001.

Traditional land management practices

Land Tenure

Permission to cultivate *cash crops under the taungya* system in forest plantations, and participatory forest management through the community forestry approach are incentives to raise the interest of local populace in the conservation of forest resources. The Community Forestry Instructions, 1995, highlight the issue of land allocation for community forest on a usufruct basis. The use of forest or other Government land can be granted to individual villagers or an organization for establishing firewood plantations. Land outside reserved forests are managed under the Municipal Administrative Law.

Soil Conservation

The Kayin race has been practising shifting cultivation (high-land farming) for years, applying their traditional knowledge of soil conservation. Today, due to population pressure and limited land, shifting cultivation with short fallow periods has become a major cause of forest degradation. Traditionally, it takes 8 to 10 years for a fallow to "mature". In Kaing-Khone (river bank based farming) and paddy field (low-land cultivation) erosion control against water flow is necessary. Making spurs and filling them with earth and stones, called "*toat*" in Myanmar, is a common way to reinforce eroded banks and check rill erosion. The tree component in home-gardens and tree-gardens in the study area performed the functions of soil conservation.

Fertilisers

To supplement soil nutrients, cow dung/manure and humus are thoroughly mixed with soil during ploughing. Limited knowledge of the use of chemical fertilizers and their high prices are major constraints to their wider use. Newly developed paddy fields close to the Bago Yoma mountain range are still fertile and average paddy yield is 2,570 - 3,090 kg/ha without fertilizer application. Annual loss of nutrients from these paddy fields is probably supplemented by minerals leached from nearby forests. Farmers prefer cow dung to chemical fertilizer because it is environmentally friendly and available on a sustainable basis. Typically, the application of cow manure is about 125 kg per 0.4 ha of paddy field.

Crop Patterns

Due to availability of adequate water throughout the year, some double cropping is practised. Crop selection is influenced mainly by market demand, micro climate and soil conditions. Sesame (*Sesamum indicum*) and groundnut are mostly planted as lucrative cooking oil crops. The cultivation season commences

with the rainy season crops followed by winter season crops. Paddy and sesame are mostly cultivated in the rainy season and groundnut in some areas. In the winter season, mung bean and groundnut are mostly cultivated. Cotton is mostly planted in the rainy season mixed with either paddy or sesame, and harvested in the dry season.

Market Status

Two types of marketing are practised in the study area. Under the first, the farmers sell their products at the market and fully benefit from the profits made. But transportation is always a constraint. Under the second, middlemen come to the village to buy the products, and the farmers lose some profits to them. The economically important crops are paddy, sesame, groundnut, cotton, mung bean and pigeon pea. NWFPs, which are socially and economically important at subsistence level, are bamboo, mushroom, honey, medicinal plants, edible fruits and some tubers.

Current land use systems

Shifting Cultivation

Shifting cultivation is the oldest land use practice PKMF. It was originally practised by Kayin, a hill tribe living in the deep forests of Bago Yoma mountain range. Today, landless migrants and low-land people practise shifting cultivation. In PKMF, shifting cultivation is mostly done in unclassified forests since the practice is strictly prohibited in reserved forests. Areas close to reserved forests are characterized by various stages of deforestation due to repeated shifting cultivation.

Kaing-Khone

Kaing-Khone is a river bank-based land use practised mainly by Bamar (major national race in PKMF) people along the river banks. Rivers flood during the rainy season and then subside, depositing new land along the banks, called "*Kaing-Khone*" in Myanmar. The width of *Kaing-Khone* ranges from 10 to 20 metres. *Kaing-Khone* cultivation is different and better than shifting cultivation in many aspects, e.g. proximity to the village, less labor in site clearing, not necessary to move from place to place, natural nutrient replenishment from flooding almost every year, and potential for summer crops.

Paddy Fields

In the watershed area, undulating topography limits the extent of paddy fields. As rice is the staple food, villagers tend to grow paddy wherever possible. Given the limited plains, small patches of paddy fields ranging from less than 0.1 ha to 1.0 ha are scattered in narrow valleys. Paddy growers constitute about 4% and 20% of the total households in Nyaung Win and Gone Min Khone villages respectively. The average size of paddy fields is about 0.5 ha.

Paddy Mono-cropping is practised in the study area. Double cropping or mixed cropping with other crops were not observed. Paddy is grown in the rainy season and harvested in the winter season. Ploughing is the main site preparation carried out at the beginning of the rainy season in May. Planting is either by

direct broadcast sowing or transplanting seedlings from nursery beds.

Homegardens

Homegardens are established in home compounds, and are characterized by fruit trees and vegetables. Flower and ornamental plants are usually grown in front of the house while shade trees are planted around the house. Home-grown vegetables meet the kitchen's needs. A small clump of bamboo at the corner of the homestead becomes useful when the house and farm need repairs. Animals such as pig, goat, chicken and duck are reared primarily for family consumption and the surplus sold to supplement household income. Cows and buffaloes are essential for farming.

Tree-gardens

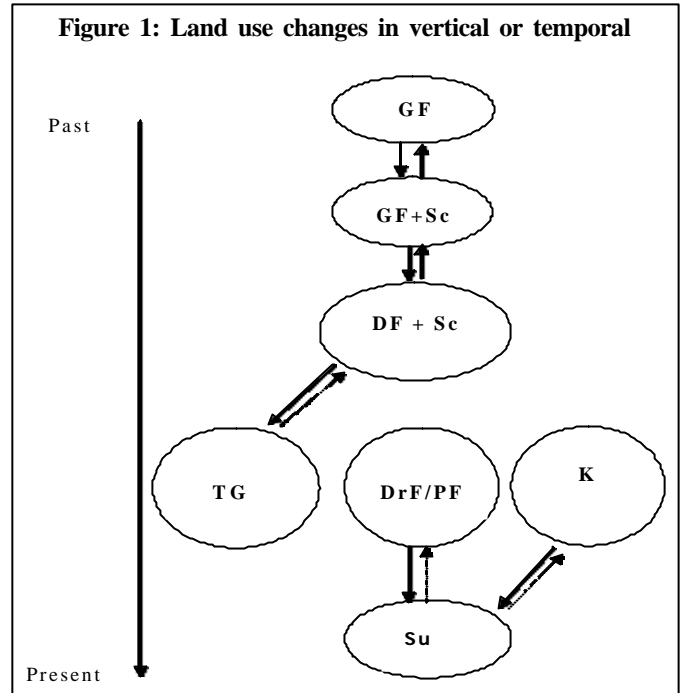
Much land in the vicinity of the villages have been depleted due to repeated shifting cultivation. Such land is usually transformed into a tree-garden with perennial tree crops, e.g. jackfruit, banana, coconut, tamarind, guava, citrus, pineapple and custard apple. A "Thanakha" garden established by a farmer in Gone Min Khone Village is successful and economically promising.

Land use changes

The changes in land use in the study area can be observed from two perspectives: vertical or temporal (Fig. 1), i.e. land use changes on the same land over different periods of time, and horizontal or spatial (Fig. 2), i.e. land use changes on different land over the same period of time.

Land Use Change in Vertical or Temporal Perspective

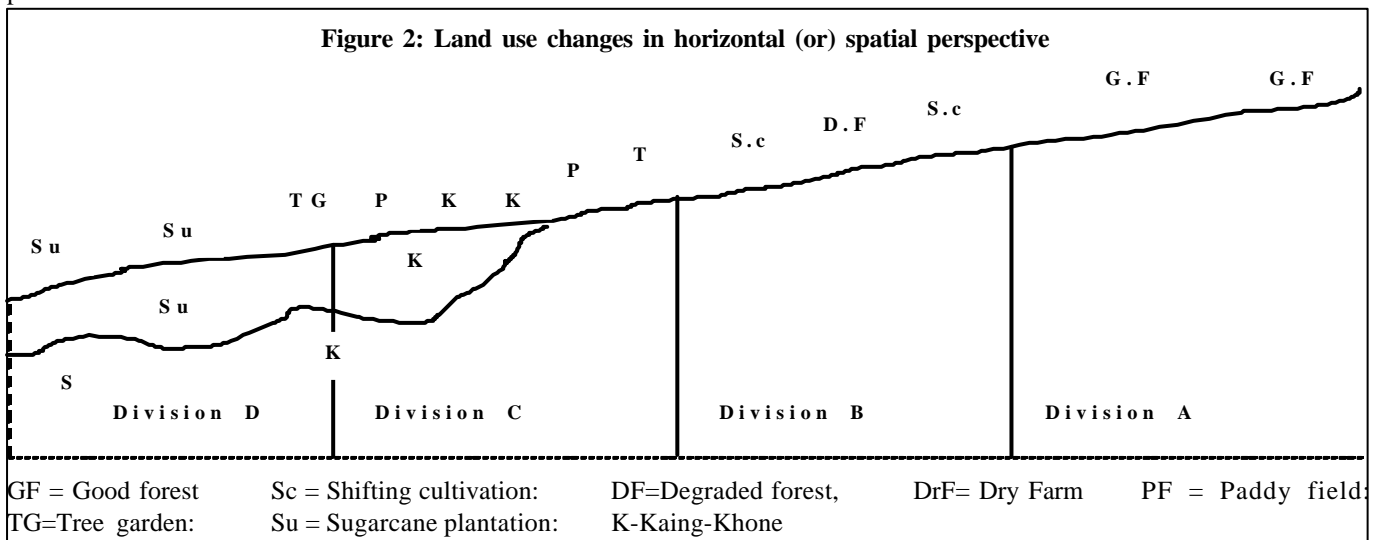
The Bago Yoma was once inaccessible and the least developed, and natural forests were the least affected. Today, transportation and communications have improved and population has increased rapidly. Land once covered with good forests have been transformed into various stages of degradation by widespread shifting cultivation on the slopes, paddy fields in the valleys and *Kaing-Khone* cultivation along river banks. At this stage, the affected forests can be restored through systematic forest management practices. But, cultivation of sugarcane outweighs other crops in terms of profitability and market reliability. Some paddy fields, *Kaing-Khone* and shifting cultivation plots have, therefore, been converted into sugarcane plantations.



Land Use Changes in Horizontal or Spatial Perspective

In Fig. 2, Division A includes forested lands. The elevation is high and vegetation (forest) cover is good, and all the forests are reserved forests. Division B includes unclassified forests open to local people for their livelihood activities. The major cause of land use change is shifting cultivation. Due to increased population and shorter fallow periods, the forests have been degraded. At this stage, land use changes from good forest to degraded forest affected by shifting cultivation. Division C is characterised by lowlands, valleys and river, and resettlement. At this stage, degraded forests are depleted and transformed into paddy fields in valleys, *kain-khones* on river banks and tree crop gardens on marginal land on slopes. In Division D, sugarcane planting has become an economically promising activity, and land use in this division has completely changed from forest into agricultural land with sugarcane.

By Asso. Prof. Kyaw Htun (NPC),
and Win Myint (Staff Officer),
FD, Myanmar



GF = Good forest Sc = Shifting cultivation: DF=Degraded forest, DrF= Dry Farm PF = Paddy field;
TG=Tree garden: Su = Sugarcane plantation: K-Kaing-Khone

Collaborative Management of Forest (Bamboo) Resources in Ngao MF

Extensive and unmanaged forest exploitation generally causes environmental problems, resource depletion and conflicts. In Ngao MF, northern Thailand, over-exploitation of forest resources has resulted in forest degradation, leading to insufficient water supply and forest products to support local livelihoods. These impacts are of great concern among local communities.

Some communities have, therefore, initiated conservation strategies for protecting nearby forests for future supply and environmental protection. In Ban Hua Tung, for example, the village has suffered from water shortage as a result of over-exploitation of forest in the headwaters nearby. In response, the village committee started a forest rehabilitation program in 1998, under which about 1,500 rai (240 ha) of Huai Mae Hin Forest, the headwaters of the two main streams that supply water to the community, Huai Mae Hin and Huai Pong Puea, were set aside as reserved forest, known as 'Huai Mae Hin Forest'. Following establishment of the reserve, community regulations were declared for the management of the area, including a ban on bamboo cutting, which has remained in force until today.

In early 2002, Ngao MF, with support from the RMFP, launched a collaborative management program of wild bamboo to support the village's initiative and encourage development of a sustainable management system. The MF staff facilitated establishment of a formal local organization for the management of the area's resources. Several meetings have been organized in cooperation with the committees of other local organizations, to identify their needs and discuss the roles and responsibilities of the involved parties.



New shoots of *Pai Sang Nuan* in a managed stand



Bamboo stem transportation.
In background, unmanaged stand on left
and managed stand on right

Several follow-up activities have been undertaken with local participation since May 2002 to improve the forest condition and management, including erection of boundary posts and regulation signboards, enrichment planting, improvement cutting, forest patrols, and monitoring plot establishment. Experts also visited and introduced better techniques for resource management. Seedlings of *Pai Tong Sri Prachin* (*Dendrocalamus asper*), a better species for bamboo shoot production, were distributed to local people to plant to offset the ban on shoot collection in the reserve areas.

The establishment of bamboo farms has been promoted to reduce pressure on natural forest and meet the growing demand for bamboo. In addition, guidelines for bamboo planting (*Ngao MF Information Note No. 8 - The Establishment and Maintenance of Bamboo Farm*) and non-waste bamboo utilization (*Ngao MF Information Note No. 9 - Manual for Bamboo Sticks and Charcoal Processing*) were prepared, published and distributed to communities in Ngao MF and the public.

USDA Ft. Service support for extension of programme

The USDA Ft. Service has agreed to provide USD10,000 to strengthen the collaborative management of natural bamboo and extend it to more communities in the Ngao MF. Public awareness and participation is being promoted to improve understanding, and to build true commitment of villagers to SFM. The growth and yield of wild bamboo, as well as the effects of bamboo harvesting on forest conditions, are being investigated. The program will be also extended to several other communities in Ngao MF that have expressed interest to adopt this approach to manage their own nearby forests.

By Phusin Ketanond and Jira Jintanugool, RFD.

Use and Cultivation of Paper Mulberry in Ngao MF

A study to obtain information on the distribution, utilization and cultivation of the paper mulberry (*Broussonetia papyrifera*) tree in Ngao MF was carried out between February and June 2002.

For the paper mulberry distribution study, a random sampling method was used, with 100 groups or samples surveyed at 42 villages in 10 sub-districts. The study found that paper mulberry has a scattered distribution in the Ngao MF. The average of girth at breast height was 19.97 cm, average height was 5.41 m, and average number of stems was 23 per point. The study method and results are described in the report.

The bark of the paper mulberry tree is used for making paper. Based on interviews conducted and observations in the mulberry paper factory, nine (9) steps or procedures are involved in producing paper. These steps are described in the report.

The best method to produce "seedlings" for planting is to use the stolons for propagation. This is described in the report.

As an extension activity to promote people's participation in planting paper mulberry to ensure adequate and sustained supply of raw materials in the future for the paper mulberry factories, the Ngao MF Project produced 5,000 paper mulberry seed-



Paper mulberry seedlings in RFD nursery, Ngao MF.

lings and distributed them free-of-charge to 18 villagers. (should mention if these have been planted, and if not, when they will be planted, and also whether the nursery and planting techniques are described in the report).

By Suraphong Chaweepak, RFD, Ngao MF
(Abstract from Ngao MF Information Paper No. 14 (written in Thai))

Partnership Development in Ngao MF

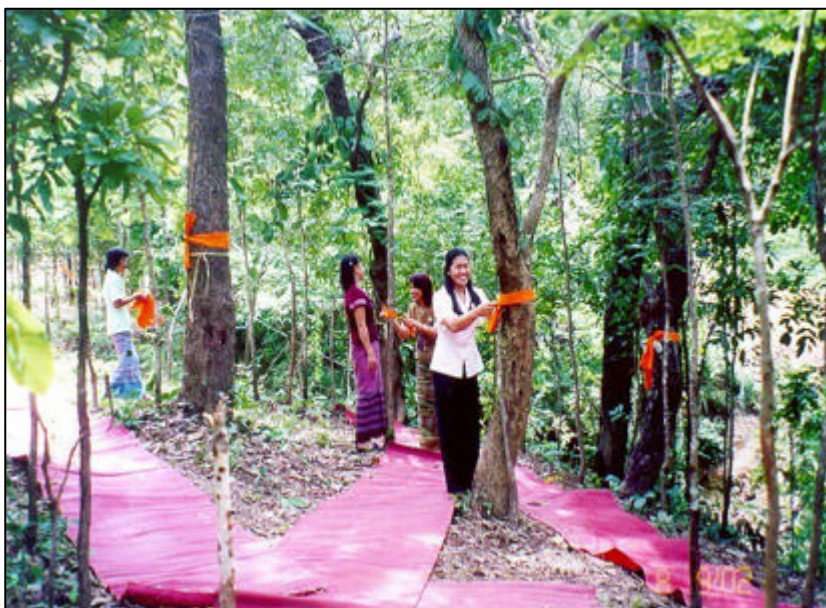
The Interim Ngao MF Committee (NMFC) was established in Nov. 2001. After a number of meetings, the Interim Committee and its partners decided to form a "Ngao Model Forest Association (NMFA)" and a proposal was submitted to register the NMFA on 4th October 2002.

Recent activities of the interim NMFC have included,

- on 23rd July, collaboration with Ngao District and other local agencies to organise the planting of about 8,000 seedlings (mainly of teak (*Tectona grandis*), Khun (*Cassia fistula*) and Tabag (*Lagerstroemia floribunda*)) along approximately 20 km of Highway No.1, which passes through Ngao District. The event was presided over by the Chief, District of Ngao.
- on 9th Aug, collaboration with Pracharard Withaya School and Ngao MF partners, to organise an event called "Sueb Chatar Parmai" (Sustainable Human-Forest Co-existence) to celebrate the Queen's birthday. The focus of this event was for humans to convey their well wishes to, and recognition of, the forest. About 800 trees in the forest near the school were recognized and yellow clothes (old monk's robes) tied around the tree trunks as a mark of high respect. Also, about 100 tree seedlings, recognized as the symbol of different provinces, were planted in the school compound. The MF NPC of Thailand, Mr.Jira

Jintanugool, presided over this event which drew about 600 participants.

By Jira Jintanugool
RFD and MF NPC.



Tying yellow cloth around trees to mark "Sueb Chatar Parmai" in Ngao MF

Ulot Watershed MF Federation Gets New Partners

As a result of the series of information, education and communication campaigns during the third quarter of year 2002, the Ulot Watershed MF focal person received the support of two people's organizations as new partners and members of the Ulot Watershed MF Federation. These are the Mabuhay Multi-purpose Cooperative in Can-avid, Eastern Samar and the Balagon, Multi-purpose Cooperative in Can-avid, Eastern Samar which are located in the lower stream of the watershed.

Two meetings conducted on 03 July, 2002 and 14 August, 2002 in Dolores and Can-avid respectively, were attended by a total of 77 participants. In attendance were Mayor Antonio Rivera of Dolores and Mayor Gel Norman Germino of Can-avid together with their respective Vice-mayors, and some representatives from non-government organizations.

The participants, especially the local government executives, pledged their support to the Ulot Watershed MF Project.

By Leo M. Poculan and Purificacion S. Daloo



Meeting with LGUs and NGOs in Tacloban City

Perimeter Survey Completed in 3 Barangays

A total of 1,344 ha of forest lands located in the Ulot Watershed MF were surveyed and monumented in August and September 2002 with the support of DENR and RMFP. These covered 982 ha in *Barangay* Lokilokon and 362ha in *Barangays* Casandig and Lawaan, all in Paranas, Samar.

The conduct of the perimeter survey is an important requirement in the processing and issuance of the Community Based Forest Management Agreement (CBFMA). This is a 25-year tenurial instrument issued to all qualified people's organizations who are interested to protect and conserve the remaining second growth forest within their forest areas.

The people's organizations that are qualified beneficiaries of the CBFMA are the Lokilokon Development Multipurpose Cooperative in *Barangay* Lokilokon, Paranas, Samar and the Casandig-Cantato Multi-purpose Cooperative in Brgy. Casandig, Paranas,

Samar.

Upon issuance of the CBFMA, the members of the two people's organization will have the right to manage and protect the forest lands that will be assigned to them. They shall also be authorized to utilize all minor forest products within their area upon confirmation of the resource use permit (RUP). These products include rattan, bamboo and other non-timber products.

The CBFM is a people-oriented program of the government wherein qualified people's organizations that are living within or adjacent to forest lands are given the privilege to use the non-timber resources in such areas on a sustainable manner. At the same time the people's organizations are tasked to undertake protection and conservation of the forests while working for their socio-economic development.

By Leo M. Poculan and Purificacion S. Daloo

Ulot MF Plans "What Next?" Activities

A workshop was held on October 14, 2002, in Tacloban City to identify activities for the next three years, i.e. Feb. 2003 to Feb. 2006, to strengthen the MF Project. Participants included some 30 representatives from several People's Organizations (Guibwangan Farmer's Association, Mabuhay Integrated Farmers Association, KAPPAS; Taft People's Economic Council (TPEC, an NGO), SIBP and DENR.

The CTA, RMFP, Mr. Tang H.T. addressed the meeting on the importance of this exercise, that was also being carried out in the other three Project Countries (PCs), and will provide the inputs of the PCs at the 4th RMFP workshop (theme of "What Next?") from 25-28 Nov. 2002 in Tacloban. He said that the terminal evaluation mission of RMFP had found that all RMFP countries had established a reasonable framework for MF development to continue post-RMFP.

Mr. Leo Poculan, Ulot MF Project Manager, presented the main lessons learnt and proposed action plan that had been identified at

a meeting on 09 October of about 35 persons from 5 P.O.'s, 3 LGU's, 1 NGO, SIBP Technical Assistance Team (TAT) and several GOs (Dept. Agriculture, Dept. Agrarian Reform, DENR).

The workshop participants reviewed, revised and elaborated on the action plan. Among additional activities proposed were increase no. of stakeholders that are MF partners, increase no. of barangay members that are members of their POs, strengthening baseline information, watershed characterization survey (in collaboration with SIBP), support for further livelihood alternatives to provide direct benefits to the stakeholders, strengthening community-based forest protection activities, institution building using the CBFM approach, and installation of stream gauging stations. Potential MF partners include DoA, Fiber Development Authority and National Abaca Research Center of the Leyte State University

*By Purificacion S. Daloo
DENR, Region 8, Tacloban City.*

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Table 1. Selected policy-related issues in RMFP countries

No.	Country	Issue	Current situation	Current effects/impacts	Action taken/ to be taken/ needed to be taken to facilitate change	Expected effects/ impacts	Remarks: How can policy makers be most effectively influenced
1	China	Taxation on timber harvesting	Tax too high to attract people to grow trees	No interest in investing in growing trees and intensive plantation management by the private sector	Encourage the development of a new tax system that does not discourage investors	More investment in tree growing and better management of plantations	Sound analysis of current tax system Propose decentralized tax system
2	China	Ecological subsidies (incentives) for forest protection	Compensation fund in place; proposed payments too low; payments are not made.	Difficult for local people to continue with forest protection and do not allow alternative activities that may pollute the environment (waterways)	Implement fund; increase payments according to value of services provided	Upland people receive just payments for providing services for lowlanders Better forest protection	Sound analysis of payment levels; Use of media for providing information about environmental services and the potential benefits of compensatory payments
3	Myanmar	"Adhocism" in land use	Absence of clear cut land use policy and planning	Loss of forest cover Low productivity	Develop a system of balanced and complementary land use policy and plan	PFE becomes more secure	More effective coordination among agencies concerned
4	Myanmar	Community forestry legislation	Under Community Forestry Instructions (1995) FD can approve issuance of land tenure certificates to communities on forest reserve; on non-forest reserve land approval is required by Dept. of General Admn.	Long delays in issuing certificate providing land tenure (30 years) for practising community forestry	Improve collaboration between agencies concerned to facilitate quick issuance of certificates	No effect Faster issuing of certificates fulfilling the demand of communities	Raising awareness of requirements for obtaining certificates amongst local authorities and local communities; More actively involve relevant agencies in the MFP group
5	Thailand	Community Forest Legislation	Community Forest Act discussed for more than 10 years and still pending. Passed by lower house, amended by upper house, returned to lower house for endorsement (for more details see Thai paper)	Lack of legal basis for community forestry, no guidelines for actions to be taken; Negative effects on partnership, general feeling of distrust among the partners of MFP Disenchantment by communities	Articulate the need for Act (compromised and harmonized version) to be passed in the near future to facilitate SFM to lower house, NGOs and general public	No effect Community Forest Act passed providing clear guidelines for involving people in forest management.	Build a consensus within the association first and then -- - Lobby individuals not to further delay the passing of the Bill. - Lobbying by RFD and NGOs.
6	Thailand	Relocation of hill tribes from PAs	Policy enunciated but could be implemented in a few areas, and is now a controversial issue.	Conflicts in resource use rights Over-exploitation	Enunciate policy to develop buffer zones as relocation sites	Reduced conflicts Optimum resource use	- Facilitate consultation/ cooperation with stakeholders
7	Philippines	Restricted utilization rights	MF is under logging moratorium and is soon to be declared a protected area; Hence policy will restrict utilization rights (RA7586)	Poor stakeholders will resort to illegal activities and management will not be sustainable; Reduces options for generating income	Review existing policies and propose more flexibility in interpretation (e.g. allow certain areas as timber production forests); Assess the need for strict protection (i.e. national park status)	No effect More options for developing improved income generating opportunities and sustainable forest management	IEC and petitions and/or resolutions put forward through POs, NGOs and LGUs
8	Philippines	Ineffective enforcement of guidelines for livelihood opportunities	Implementing guidelines in place, but not fully implemented; lack of coordination among agencies concerned.	Conflicts in resource use rights	Improve implementation coordination Policy review to grant appropriate instruments in support of livelihoods.	Reduced conflicts Strengthened livelihood opportunities	IEC by MF PG LGU to develop resolution in support of the said action DENR to process /consider
9	Myanmar Philippines Thailand	Livelihoods strategies of local people living near the forest	Heavy reliance on shifting cultivation and extraction of forest products	Deforestation and forest degradation	Promote alternative income-generating activities and employment; Introduce sustainable farming practices	Reduction in forest dependence and less forest degradation	

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- Lessons learnt from PKMF include the importance of practical demonstrations; challenge of effectively protecting forests; inadequacy of regulatory measures in protecting forests and the MF partnership group does not have capacity to monitor and evaluate impacts on the forests.
- The *Constitution* (1997) of Thailand gives local communities rights in the use and conservation of natural resources. Local authorities have powers and duties in relation to the management, preservation and exploitation of natural resources within their respective localities.
- The 7th NESDP (1992-96) increased the proportion of conservation forests from 15% to 25%.
- To resolve disputes over land use in National Reserved Forests (NRFs), the total area of NRF (46% country area) was classified into three zones – conservation (28%), economic (16%) and agriculture (2%) – in 1992.
- A *Community Forestry Bill* is currently under consideration by the National Assembly.
- Field-level practitioners may have problems influencing policy due to inadequate field-level information; heavy reliance on scientific arguments; and inappropriate persons for the job.
- Constraints to effective feedback to policy include: *entrenched traditions, lack of capacity, structural problems, impatience to get results quickly, vested interest in status quo, and no feedback mechanisms.*
- From IMFNS experience, the most valuable output and experience of MFs has been the direct addressing of the thorniest SFM issues relating to people.
- As a network and individually, the MFs have had numerous successes over a broad range of areas, dealing with SFM. The main success has been in making these advances through locally-based partnerships.
- MF outputs and processes are increasingly being taken advantage of outside of the network and are influencing policy, particularly at the local and provincial levels.

Among the recommendations made were,

- R1 *Every effort be made to incorporate the Model Forest initiative as the field level demonstration component of the respective national forest programmes, forestry masterplans or like programmes.*
- R2 *Based on the work of the Lin'an MF, the other MFs should investigate, analyse and propose policy interventions to improve administration and fiscal instruments for forest management.*
- R3 *Existing policies on forest and protected area management should be rationalised to strengthen the partnerships among key stakeholders and provide greater*

economic and other benefits to local communities.

- R4 *The four MF countries continue to be supported so that micro/macro level forest policy reviews can be carried out to complement their recent policy reviews.*
- R5 *The lessons learned and recommendations from the International Workshop on MFs for Field-Level Application of SFM be studied and applied where appropriate in the continued development of the four RMFP-supported MFs and other new MFs that are developed.*
- R6 *The IMFNS share the experiences, knowledge and documentation on how to influence policy-makers, from their partner MFs, in particular from the Canadian MF Network, with RMFP countries.*
- R7 *The Ulot Watershed MF more actively promote closer involvement and collaboration with SIBP and other agencies in its planning and management.*
- R8 *The successful strategies employed by the Hainan Island rattan and bamboo project to inform, involve and then secure the support of policy management at all levels should be closely studied and, where appropriate, adapted and adopted in RMFP countries, as well as other countries in the region.*
- R9 *All Project countries take concrete steps to develop a "critical mass" of appropriately experienced and trained persons to ensure the continued and proper development of their MFs.*
- R10 *Any post-RMFP regional MF network or initiative should include provision of funding support for MF partnership meetings and development; development of forestry resource management plans at MF and community levels, based on participatory principles; and strategic and systematic identification of forest resource potentials and opportunities.*

Priority actions needed to feedback from field/MF outputs to policy, and how policy can be most effectively influenced.

The participants formed two working groups to discuss some of the key policy issues (particularly in the MFs) affecting SFM and the *MF Approach*, priority action needed to address these issues, and how policy-makers can be most effectively influenced. All four RMFP countries were represented in each working group. The outputs of the two working groups were presented and discussed at a plenary session, and shown in Table 1 (on page 11).

Field visits

On Thursday, 01 August, visits were made to the Marabut Marine Park, Mangrove forest, Philippine Eagle sanctuary, Ulot Watershed MF Information Centre, Barangay San Rafael, and Rattan furniture center.

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