

ASIA-PACIFIC FORESTRY SECTOR OUTLOOK STUDY

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**DECENTRALIZATION AND DEVOLUTION OF FOREST
MANAGEMENT IN ASIA AND THE PACIFIC**

by

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Note to Readers

Questions of whether to decentralize or not or how to go about it are the subject of considerable controversy. Strong views are held by many of those involved in the dialogue. Similarly, the question of whether central forest administrations have failed or have been effective and have contributed in some measure to sustainable management or conservation of forests also generates heated debate.

This paper addresses both topics and, in addition, its author proposes what some may consider drastic changes in policies and structures of government forestry administrations (particularly in Chapters 8 and 9).

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INFORMATION NOTE ON ASIA-PACIFIC FORESTRY SECTOR OUTLOOK STUDY

At its sixteenth session held in Yangon, Myanmar, in January 1996, the Asia-Pacific Forestry Commission, which has membership open to all governments in the Asia-Pacific region, decided to carry out an outlook study for forestry with horizon year 2010. The study is being coordinated by FAO through its regional office in Bangkok and its Headquarters in Rome, but is being implemented in close partnership with governments, many of which have nominated national focal points.

The scope of the study is to look at the main external and sectoral developments in policies, programmes and institutions that will affect the forestry sector and to assess from this the likely direction of its evolution and to present its likely situation in 2010. The study involves assessment of current status but also of trends from the past and the main forces which are shaping those trends and then builds on this to explore future prospects.

Working papers have been contributed or commissioned on a wide range of topics. They fall under the following categories: country profiles, selected in-depth country or sub-regional studies and thematic studies. Working papers are prepared by individual authors or groups of authors on their own professional responsibility; therefore, the opinions expressed in them do not necessarily reflect the views of their employers, the governments of the Asia-Pacific Forestry Commission or of the Food and Agriculture Organization. In preparing the substantive report to be presented at the next session of the Asia-Pacific Forestry Commission early in 1998, material from these working papers will be an important element but will be blended and interpreted alongside a lot of other material.

Working papers are being produced and issued as they arrive. Some effort at uniformity of presentation is being attempted but the contents are only minimally edited for style or clarity. FAO welcomes from readers any information which they feel would be useful to the study on the subject of any of the working papers or on any other subject that has importance for the Asia-Pacific forestry sector. Such material can be mailed to the contacts given below from whom further copies of these working papers, as well as more information on the Asia-Pacific Forestry Sector Study, can be obtained:

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1. INTRODUCTION

Decentralization as a generic concept is considered from time immemorial to the present as a more congenial form of human clustering. This is not only true in societal governance but also in the realm of families. As early as 200 B.C., the Greeks found city states as more democratically manageable and administratively effective. An example in the recent past is the breaking away of the states from the erstwhile USSR. In the realm of families, we are all aware of the gradual movement from the large to nuclear families.

In spite of this natural human tendency to decentralization, society has not been consistently trying to achieve it. Different countries at their different periods of history had sometimes decentralized but after a certain while reversed the process. This happens as decentralization is accompanied by establishment of a state hierarchy in which higher officials gradually usurp the power of the smaller units and thus undo the development.

Leaving aside the dawn of the history of the human civilization when small clustered units were natural, decentralization or its reverse namely centralization has been superimposed from the top and when resisted, it was forced. Or else the people coerced the state to accept decentralization. In other words, decentralization or otherwise has a turbulent history.

Decentralization has often been mixed up, albeit wrongly, with the concept of geographical division. Most people mistakenly consider division of a state into provinces and provinces into districts and so on down the ladder as decentralization because the area under each of the lower divisions is less than that of the next higher. This is one of the reasons why a number of other words have now been coined by specialists to distinguish different facets of decentralization. These include deconcentration, delegation, devolution and privatization (Hye, 1985). In this paper, we will stick to two of these: deconcentration and devolution which we believe can cover what all these words refer to. To avoid unnecessary misunderstandings about the meaning of words, we define deconcentration to include all concepts where the large has been subdivided into small units including the geographical subdivision in its domain without transferring any special authority. The devolution will refer to only cases of deconcentration where some form of authority of the centre has been passed to the decentralized units in the hierarchy. We will continue to use the word decentralization in the generic sense.

It is necessary however to distinguish between administrative and financial devolution. In the former, certain administrative authority is only delegated to the lower echelons while in financial delegation, the authority to earn, collect and spend revenue is also transferred.

One important consideration in a study of decentralization is to be clear about who administers the decentralized units. They may be government officials, both central and provincial. It may also be the legislative arms of the parliament such as the panchayats in India or District Political Authority of Sri Lanka, village leader and party chief together in China or a combination of NGO, elected representatives and government officials as Uphoff (1985) recommends. The other important consideration is how far down the hierarchy of the society is the decentralization carried out. Is it up to the region, district, block, village or hamlet level?

The devolution of authority to the deconcentrated units also have diverse manifestations. The nature and degree of authorization to the smaller units is really the major point of departure from centralization. It may be fiscal by which the deconcentrated unit may be authorized to decide sources of revenue and collect revenue from these sources. Along with it or even without it, the authority may also be given singly or in combination, of developmental planning, implementation, administration and management.

The objectives of decentralization may be many but the more laudable ones are to mobilize local resources, improve implementation, promote participation of the local people and the last but not the least to encourage equity in regard to distribution of wealth. Decentralization however is often introduced by the central government to consolidate its hold in the countryside. The obvious result is that participation is restricted to the people who accept the political philosophy of the centre while others are left out. Equity thus becomes the victim.

In this paper, we will first describe the progress of administrative decentralization over time and then follow it up with a discussion on decentralization in respect of forest management particularly the relevant policies, legal aspects, associated rules and regulations and some recently introduced new initiatives and their implementation. We will then discuss the impact of the policies, legislations and the new initiatives on the people and the forests including the lessons learnt therefrom. We will then construct a scenario in respect of some countries of the Asia Pacific the fate of the forests if the present forest policies in respect of centralization continue. Finally we will propose some changes, the problems, prospects and methods of implementation of these proposed changes.

There are thirty countries included in the Asia- Pacific region. They are diverse in many respects. In size, American Samoa island in the Pacific is 20 sq. km. while India extends over 297 319 and China 932 641 sq.km. As of 1990, the density of population is as low as 1.4 inhabitants per sq. km. in Mongolia and as high as 122 in China, 209 in Philippines, 287 in India, 888 in Bangladesh and 4445 in Singapore. The difference in GNP per capita as an indicator of economic progress is equally striking. The average GNP for the whole region is US\$ 602 per capita, the least in the world sans Africa. But the Continental SE Asia has a GNP of \$1195 while that of Cambodia is 170, Bhutan 190, Bangladesh 210 and India 360. The annual GNP growth is 0% in Cambodia, 3.3% in India and 6.8% in Bhutan (FAO, 1990). Politically also the countries have different structures. Some of them like India are democratic and federal, others such as Indonesia, China are more centralized. Some countries such as Bhutan continue to have monarchy.

Under these differing circumstances, each country certainly has a different past history and would have differing futures of decentralization and devolution. In respect of the forests however there are some common characteristics between countries which allow a form of grouping as indicated below:

- Group 1: Countries with high population and low or dwindling forest cover: e.g. Bangladesh, China, India, Nepal, Pakistan, Sri Lanka
- Group 2: Timber exporting countries with large forests: e.g. Indonesia, Malaysia
- Group 3: Timber exporting countries recently changed to importing countries due to severe forest loss in the recent past: e.g. Philippines, Thailand
- Group 4: Island countries with large forests and traditional pattern of forest ownership e.g. Papua New Guinea, South Pacific Islands

In the paper, we have chosen India from the Group 1 countries, Indonesia from Group 2, Thailand from Group 3 and Papua New Guinea from Group 4 countries for detailed discussion on some topics. We will however consider other countries as well, where necessary, to provide a wider perspective.

2. STATE OF ADMINISTRATIVE DECENTRALIZATION AND DEVOLUTION IN ASIA PACIFIC COUNTRIES

Many of the countries in the region (for example, India, Indonesia, Malaysia) had colonial past and had been subjected to decisions made by a handful of colonial administrators in the centre. For convenience, the colonial administration had carried out deconcentration without or with devolution within very narrow limits. Some countries such as Thailand and Nepal were not under colonial rules but they have histories of centralization not much different from the colonial countries. In the region, however, there are some other countries which had a long history with traditional authority enjoyed by the decentralized units such as Papua New Guinea where 90-97% of the land resources is owned by groups of families although used by individual households (Talbot and Lynch, 1995).

In the post- colonial period, a general feature valid for the countries with centralized administration was to promote decentralization in the 1950s and early 1960s, waning of interest in it in the late 1960s and renewed interest from early 1970 onwards in some of them (Hye, 1985).

Whatever be the degree of interest, deconcentration was the only important element. The other important element of decentralization namely the development of devolution had been very slow and disappointing. On top of it, in most countries, there has been hardly any structural change to the administrative organization so that within a short period the deconcentrated units became more cosmetic than substantial.

2.1 Bangladesh

The story of Bangladesh is a typical one namely one of progress and retraction. When the region became independent from Pakistan in 1947, there were moribund administrative institutions at the union and district levels. In the period 1958-1968, two more echelons namely the thana and divisional levels were introduced. In addition, government service institutions were established in the thana levels. Besides, for the first time a thana council composed of the government officials and the elected people of the unions was formed with some devolution of powers and allotment of funds for development. This institution was suspended after Bangladesh became independent of Pakistan. In 1976, for the first time, decentralization to the village level namely gram sabha and gram sarkar (local government) was brought into being. In 1982, with the change of the government, gram sarkar was abolished and instead upgradation of thana into upazila with some powers was done. This means that the decentralization to the village level was curtailed in favour of a higher level namely sub-district level (upzila). Overall, the upzila did not also function well because of weak financial base, stranglehold by the government officials, unrepresentative character of

the upazila parishad, and the development of a nexus between the traditional elites and the local administration.

2.2 *India*

In India, the real process of decentralization was started with the establishment of Panchayati Raj in the 1950s. Over time the Panchayat became a three tier system, one at the district, the second at the block and the third at the cluster of village level. The members constituting the different levels were elected. While the intention was excellent, the effectiveness of the system broke down substantially because of delay in (some states, discontinuance of) regular elections, entrenchment of vested interests of the elites in the Panchayats, disassociation of panchayats in many development projects, failure to garner resources, bureaucratic resistance and lack of government will (Muttalib, 1985). Only recently, the central government has made it mandatory of the state governments to have elections at regular intervals. In some states such as West Bengal, the Panchayats have started to function well as a decentralized unit in development work. However, they still are dependent mostly on the resource grants from the state or the centre.

2.3 *Nepal*

Nepal introduced partyless Panchayati system in 1959. This consisted of a hierarchy of councils from the village to the central level. This is a return to the traditional system of governance ruled by elites. Popular participation was negligible. In 1982, the government enacted the Decentralization Act, which made the District Panchayat as the focal point of development headed by an elected person (Pradhan, 1985). However, the Act has not made things much different as the government departments continue to act as the major player in most activities.

2.4 *Sri Lanka*

In Sri Lanka, in 1973, the district administration was restructured with a district political authority. The process of devolution was further improved with district ministership in 1977, the use of decentralized budget in 1974 and establishment of the development councils composed of parliament members, locally elected representatives and the local administrators in 1982. However centralism, failure to promote local participation and the politicians' continued attempt to keep the decision making to themselves rather than share with the people have made the attempt to bring about administrative decentralization substantially ineffective (Gunawardena, 1985).

2.5 *Philippines*

Philippines, the decentralized government units below the central government are: barangay, municipality, city, province, and the regional government in the national capital region at

Manila and regional autonomous governments in regions IX (Western Mindanao) and XII (Southern Mindanao) (Guzman and Padilla, 1985).

The criteria used to make these subdivisions is population, average estimated annual income for the last 3 years, land area and approval of the majority of the votes cast in a plebiscite. For example the required population for qualifying are 1,000, 10,000, 100,000, 150,000, and 500,000 respectively for the five decentralized units levels.

The constitution of 1973 gives the powers to the subdivisions to create their own resources and to levy taxes. But in fact, the smallest unit namely the barangays do not have any significant income and are therefore totally dependent on the other units. The other units, although able to impose some taxes to earn revenue, also have to depend on about 60-80% of its total income from the central government.

The participation of the different units in planning, implementation, supervision, and monitoring is variable. The barangays are too small and unviable while the provinces too big for personal attention to individual citizens. The intermediate units between the barangays and the provinces namely the city/municipality are centre dependent but do deliver services to the people within its jurisdiction.

It is not necessary to go on detailing the history of administrative decentralization for each country of the Asia Pacific region to understand the process. But it will be worthwhile to analyze a little on what led to deconcentration. Lutz and Caldecott (1996) believes decentralization as a means of redistribution of property rights and bargaining power of different levels of society by three distinct processes namely the educational or self discovery process, empowerment process and the process of communication and negotiation. In self discovery process, each level of society perceives the oppressive elements of reality which include harmful environmental problems and act against them. In the empowerment process, each level acquires its bargaining power. The communication and negotiation process is self explanatory. While these three processes cover a lot of ground, they fail to explain some common features of decentralization. For example, why in most countries, deconcentration has been aggressively promoted but devolution has been left unattended. Another interesting element is promotion of deconcentration by the centre although there was no bargaining for it (for example that of introduction of panchayati raj in India). Still another element is plethora of bargaining for decentralization only by a handful of people. These demands often political in nature are sought and sometimes acquired for themselves and not for the people. It is also often noticed that decentralization is often a facade to defuse or pre-empt the rising democratic aspirations of the people. It may also be a method to keep a political tab in the far reaches of the country.

We therefore believe that a more realistic way to divide the factors that bring about decentralization are as follows:

1. State coercion: Superimposition by the top Administration/political authority of the society: The administrative/political authority on its own distributes its officials to geographically decentralized units for local supervision and management.
2. Political Democratization: The political authority promotes deconcentration through popular elections at different levels
3. Peoples' power: Wrenching of power by the lower echelons of the society: This amounts to political unrest and eventual devolution to the revolting group.
4. Popular Pressure: Reluctant deconcentration due to popular pressure exerted by environmental lobby, social activists, judicial courts etc.
5. Traditional: Decentralization existed in the past and have continued to exist at present.
6. The above processes may have acted singly or in combination to influence decentralization noticed in different countries.

We will see in the next section different forms of decentralization in forest management and how they relate to the classification made above.

3. HISTORY OF FOREST CONTROL AND FOREST POLICIES

In the case of Forest Management, the history of deconcentration parallels the deconcentration noticed in the case of general administration but with some significant variation. For example, in India, around 1927, the forest management, so long a central matter, was transferred as a part of the revenue department to become a provincial subject. Soon the forest section became independent of the revenue department. The forest organization since then consisted of a Chief Conservator of Forests (CCF) located at the provincial headquarters, his deputies called Conservators of Forests, at regional levels. The next layer of Divisional Forest Officers usually at the district headquarters and his deputies Forest Rangers at the block levels. The set-up is almost similar to the general administration but with some basic differences. The most important variation is that deconcentration in forestry never went down to the village cluster level as it did in general administration and in legislative wings. Sometimes, a forest guard was entrusted with an independent responsibility of a small forest block but the forest guard was simply a watch and ward man and had no proper authority in any other forest duties. The most important variation however was that the forest department had always taken the stand of doing away with the private or communal ownership of land containing the forest in contrast to general administration which has championed the cause of private agriculture. In other words, in spite of an apparent deconcentration, the forest management continued to be a centralized system, which was mainly the result of state coercion. The local revolts were not powerful enough to confront or force a change of the policy of coercion.

The logic presented behind this centralization in forestry have been many. First, it was believed that the forest is a national resource which should therefore be utilized for the nation/state. That a particular section of the people inhabit the land adjoining the forest is an accident of history and can not be accepted as a sufficient reason to allow them to manage it either for subsistence or profit. The analogy presented is that of mining. Coal, gold, petroleum etc. belongs to the state which exploits it, no matter where they are found. Forests can not be an exception. Secondly, forests have effects that transcends the local environs. The local

people will manage a resource keeping in mind its own local interests which may have disastrous effects on the outside areas. For example, the local interests may like to use it for fuelwood production while the particular forest may be a storehouse of biodiversity. Similarly, the people may use a forest area for grazing when it may be required to be protected from all uses being a catchment of a dam reservoir. Thirdly, the colonials and later the national government wanted the forest areas to be a source of revenue. For example, teak was extensively exploited by the British colonial government for ship construction, sal and pine in India for railway sleepers and so on. The revenue earned by the Indonesian government annually is second to the money earned by the country from petroleum, which is the largest money earner. In parts of India, the forest contracts, such as that of biri pata (leaves of *Diospyros melanoxylon*), earns so much revenue that it is often used by the people involved in this business as a leverage for political power. Fourthly, some forests were earmarked by the government or the rulers with the sole purpose of using them for hunting and rest for the royalty and the colonial officials. Fifthly, the control of such large forest areas provided political power to the centre. And last but not the least, the government thought wrongly, an idea still held by many, that the local people are ignorant of forests, their indigenous forest management unsustainable and unscientific. Thus the forest management should continue to pursue a policy of centralization. Only in the recent past, a number of initiatives in several countries have been taken more as an adjunct to the main policy of centralization. These initiatives however are certainly significant departures from centralization worth separate discussion.

3.1 Pre Colonial Times

Before the advent of the colonial powers in different parts of Asia and the Pacific, which happened around the beginning of the 16th century, the forest land was mostly under the use of the local communities. The nature of use to which the forest land was put varied from place to place, depending on the characteristics of the people who inhabited the local areas. Some used it as the hunting and gathering ground for subsistence. The gathering included fruits, vegetables, cereals for food, fibre for clothing, timber, fibre and grasses for homes and materials for daily use and medicine. Some other groups who have already been initiated into agriculture practiced shifting cultivation, which developed different forms in different areas (Banerjee, 1995). But there are some commonalties between them. An individual household chooses a certain area of a forest, cuts it down, burns the wood for the ash to add nutrients to the soil, cultivates the area for a year or two and then moves to another forest leaving the first one to fallow and thus to naturally reforest. The household comes back to the first area after a fallow period for recultivation. The fallow time used to be around 15-20 years, now in places diminished to 3-5 years. Besides the hunting and gathering and shifting cultivation categories, there were two other forms of forest use. In one, the forests were permanently felled for sedentary agriculture. In the other, home gardens were introduced. In home gardens, the original forest vegetation near the home was disturbed and replaced by species of trees more useful to the householders. The garden simulated the forest in having a number of artificially grown canopies of trees, shrubs, herbs and grasses.

Whatever the form of use, the forest area was under the control of one or a group of households, except in the case of hunting and gathering where the entire community was in control of the whole forest. The households did not have the ownership of the land which vested with the community or sometimes in a very vague manner with the sovereign. The

management however rested with the household/s. In other words, the forest administration was deconcentrated to the household or a group of households or to the community level but the authority lay with the community. It has to be kept in mind that this devolution is not an introduced or imposed process but is a step in the naturally developing human society, which we have classified as traditional.

3.2 Colonial Times

Except in a few countries, the equation between households, groups of households and community and the forest land changed dramatically with the advent of the colonial powers and consolidation of their hold on the countries concerned. The change was towards concentration i.e. the ownership was usurped by the colonial powers which took over as the sovereign power.

One of the earliest of such a change happened in Sri Lanka. In 1840, the British Administration promulgated an ordinance called Crown Land (Encroachment) Ordinance by which all forests, wastes, unoccupied and uncultivated lands were vested in the crown. The shifting cultivation land was considered as uncultivated and therefore came under the aegis of the ordinance. In Java of Indonesia, the proprietary rights of land in Java were vested to the sovereign by the British Administrator in 1811. By the Agrarian Act of 1870, the government accepted the local ownership only of continuously cultivated land which by implication excluded all shifting cultivation lands as not owned by the local community and thus subject to acquisition. In India, by the Forest Act of 1878, the British Administration acquired the sovereignty of all wastelands which by definition included forests. This Act also enabled the administration to demarcate reserved and protected forests. In the former, all local rights were abolished while in the latter some existing rights were accepted as a privilege offered by the government to the local people which can be taken away if necessary (Lynch and Talbot, 1995). Similar stories can be told of Nepal, Philippines, Malaysia and other countries.

The net outcome of the changed circumstances during the colonial period was that the forests came under the sovereignty of the state, which means a move towards centralization. The de facto situation was however different. Where the forest produces were immediately useful and valuable such as Teak in India, Burma or Thailand or Pine (for railway sleepers) in Garhwal Himalayas, the arm of the administration reached the forest for exploitation. Where however the forests were distant, needing large investment or the products were not marketable or the area was malarial, (e.g. Nepal terai) the local people, continued to use the forests as they used to do traditionally. For such areas therefore the de facto and the de jure situation were different which created a lot of tension between the people and the sovereign at a later stage of history. The perception of the users were that the forests belonged to them while the government functionaries believed that the forests were allowed to be used by the people either by default or as a gesture of goodwill. As the countryside opened up, as the demand of all types of timber developed in the local and in the international markets, and as the state realized the potential monetary and other values of the forests, stricter rules were enforced by coercion to bring all these forests under the state control.

3.3 Post Colonial time

With the departure of the colonial administration and attainment of independence, the noose of state control around the forests were further tightened and the traditional users were more and more left out. Only around 1970s and thereafter some initiatives in devolution were taken.

3.3.1 India

In 1953, which is a few years after the attainment of independence, the government took over the forests which were earlier with the zaminders. Even as late as 1980, the Conservation Act stipulated that the central permission is required to change the legal status of any forest, which is a concurrent subject. It has been ensured in the Act that even the practice of agro-forestry in a forest area will need central permission or else attract punishment. The moves towards centralization was intended amongst others, to keep deforestation under check, to earn revenue from the forests for using it in the country's developmental work, to conserve certain areas for ecological purposes such as biodiversity and soil and water conservation, to put a break to the fast dwindling animal life and so on. However, the intention was not matched by performance. Whether by design, inefficiency, lack of political will or centralization being a wrong policy, none of the intended objectives was attained in a significant manner. The states had faced obstacles to indiscriminately dereserve forests for ostensible development work, but overall deforestation went on increasing, the animal life dwindled further and the erosion of the forest land accentuated to clog the river valleys with more sediments.

3.3.2 Indonesia

Based on the provisions of the Indonesian Constitution, Basic Forestry Law enacted in 1967 empowered the central government to control all relations between the people and the corporations and the forests over about 143 million ha of Indonesian forests. Article 5 of this Law says, " All forests within the territory of Indonesia, including the natural resources contained therein, are controlled by the state". This includes private forests as well. The Central government used this law to take away gradually the adat (traditional) rights of the local people of the outer islands and to lease the forests for specific periods to the concessionaires for timber harvesting. Much of forest land was declared as terrestrial parks and reserves and permanent protection forest respectively (World Bank, 1993). In 1990, another scheme that impinges on the adat rights was introduced - namely timber plantation rights. By this the private, corporate and other bodies are allowed a tenure of 35 years and the rotation period of the dominant planted species to grow and exploit plantations in forest land (Lynch and Talbott, 1995).

3.3.3 Thailand

Land Code of 1954 has the most important bearing on the question of land ownership and by implication on the process of centralization. Pah sa-nguan or the public forest land had many users or squatters for a long time. The Government by promulgation of 1954 land code provided the option that anyone occupying any forest land as of November 30, 1954 can receive a land using claim certificate provided he can prove his claim within 180 days. Few provincial farmers had been aware of this time stipulation, failed to take advantage of it and thus became encroachers. In 1961, the Thai government decided that 50% of the country

should be forest land and as such started evicting encroachers to reach the target. In 1985, the National Forest policy reduced the target of forest land to 40% to release some land for other purposes but the objective was not realised. In fact, the Forest department undertook a programme of planting up the degraded forest which resulted in more evictions resulting in a political crisis (Lynch and Talbott, 1995). The net result of all this is that the centralization process for forest management continued in Thailand.

3.3.4 Papua New Guinea

In contrast with other countries described above, the forest ownership was nearly completely decentralized. 'Under Melanesian tenure, resources are owned by groups but used by individuals (or more precisely by households)' (Talbott and Lyncy, 1995). The experience of forest management in the island therefor will be an interesting lesson about the effect of decentralization on forests.

4. IMPACT OF FOREST POLICIES, RULES AND REGULATIONS IN DIFFERENT COUNTRIES

Forest policies leading to centralization in different countries of the region had a number of impacts that had cascading effects on the forests of the countries concerned. Some of the impacts such as forest land alienation from the forest users, commercial over-exploitation, over dependency on technocracy and policing, and adverse reaction of forest dependent people have caused and are still causing tremendous forest damages such as reduction of the extent of the forests, the deterioration of their quality and loss of biodiversity.

In contrast, some of the other impacts have played useful roles. These include rise of environmentalists' and green lobbies world over and local revolts. These latter impacts are beneficial as these have forced some governments to take initiatives that may finally reverse the process of damage and bring into focus the need of changes in policy and implementation to bring forth devolution in forest management. The experience of PNG, where forest management was not decentralized had however been different which will be discussed in the section discussing new initiatives.

4.1 Forest Land alienation

One impact of centralization that is proved to be the most destructive of forest is alienation of the people from the forest land. As we have briefly described earlier, most countries of the Asia-Pacific have from the seventeenth century till date have consistently brought the forest land under central control.

Alienation of forest land from the people created a large number of unwholesome situations disastrous to the forest area and its quality. As stated earlier, large areas of the forest land were used by the local people for shifting cultivation with a fallow period of 15-30 years. As more and more land was usurped by the central government, less and less of forest were available for the people for cultivation. In the meantime, some population increase would have taken place so that there would be no chance for the shifting cultivator families to reduce the extent of annual cultivation. The only course open for the people was to gradually reduce the fallow period which affected the forest land quality. A reasonable good land husbandry of shifting cultivation thus became, due to land alienation, centres of erosion and deforestation. Another effect of alienation is the loss of indigenous forestry knowledge. Only recently it has been realized how extensive is this knowledge gathered through thousands of years of empirical evidence by various tribal people. Unfortunately, a lot of this knowledge disappeared for ever along with the disappearance of some of the tribal groups. Yet another problem due directly to the land alienation was not so obvious but nevertheless a major phenomenon, namely the loss of the way of life of a large section of the local and indigenous people. The culture of these people were inexorably linked with the forests. As the forest areas became closed to their use, the tribes were uprooted from their habitual ground. Some of the tribes felt culturally lost and disappeared by waste, some tried to get mixed up with the local rural milieu only to be annihilated by disease and a very large section became marginal farmers some of whom became urban slum dwellers, took to begging and became a permanent liability and a focus of crime in many developing countries. These alienated people will visit the forests again this time either to fight retrieving their rights to forest land or to annihilate it.

4.2 Commercial Over-exploitation of Forests

Study of the forest management policies of some of the Asian Pacific countries make strange reading. That sustainability is one of the basic element of use of any resource was totally lost sight of. The countries concerned reacted to the market demand of timber as if the goods that the forests generate are manufactured and thus can be made available on future as well on will. When the timber prices went up, the governments concerned leased out large areas of forests to the concessionaires for harvesting. For example, by 1991 the number of concessionaires in Indonesia was 580 covering 60 million ha or about 31% of the country's land. In Philippines, it was 4.67 million ha in 1989 (Gasgonia, 1993). The area of broad-leaved forest harvested annually in 1986-90 in the Asia-Pacific forests is 2,314,000 ha compared to 588,000 ha in 1961-65 i.e. about 4 times as much or an annual increase of 15.7% over 25 years. The timber production increased from about 24 million m³ to 76 million m³ (FAO, 1990). In 1982, Malaysia and Indonesia exported more hardwood than all Latin America and African countries combined (Gillis quoted in page 31 by Miller and Tangley, 1991) Although there were agreements with the concessionaires that the latter would undertake tree plantations to make good the failure of the forests to have the required natural

regeneration, the concessionaires hardly ever followed it in practice. The total area reforested in each year in Indonesia 164,000 ha. against the estimated deforestation of 920,000 ha. of forests and woodlands (Miller and Tangle, 1991).

When there were a number of flash floods and damage to property and the data started coming that these are caused by paucity of forest, some governments made knee-jerk response and prohibited all forest fellings or made laws and regulations regulating them. This story is found in India where now all green fellings in the hills have been prohibited. In Thailand, commercial fellings have been stopped after disastrous floods in Southern Thailand in 1988. In Philippines, after a series of floods, programmes supporting community forestry became very popular. But the damage to forests have already been done and it will be a colossal task to retrieve the situation. We can forecast that these knee-jerk measures will find their place in due course in Indonesia and Malaysia as well.

4.3 Over dependence of the Government on technocracy and policing

In addition to the impacts discussed above, another was to spurt the government to take a number of initiatives in forest management. One was to try to increase forest productivity to deal with the increasing local and international demand of timber and the second was to increase the protection force to keep the vandals away from the forests. As annual timber productivity of fast growing plantations is more than that of natural forests, the plantation programme was increased manifold by some countries. FAO estimates annual estimated gross planted area is 2.1 million ha (FAO, 1990) in Asia-Pacific region. It is a great anomaly that enormous investment were done by many of these developing countries to grow new forests when the existing forests were more and more degraded and converted to alternate uses. On top of it, the plantations also were to a great extent vandalised thus making most of the investments largely uneconomic.

The second response namely that of increasing forest police force. It was realized in due course that this measure of continuing to increase the protection force was cost ineffective as the deforestation rate increased rather than go down. The enormity of the cost of the staff was so high that in India, there was little money left in some of the provinces to do any worthwhile forest development work. Not only the cost. The supervision of the staff took a large part of the time of staff from their technical function of forest and plantation management (Palit, 1996). The corruption amongst the staff also increased tremendously due to their mushrooming in number.

4.4 Behaviour of Forest Dependent Population

In spite of the fact that most governments have usurped large sections of the forest areas and put them under its own control, there continues to be a large population who are partially if not fully dependent on the forest resources. The approximate number of forest dependent people in several countries are presented in table 1 below.

Table 1 - Non-Governmental Estimates of Forest-Dependent Populations (Lynch and Talbott, 1995)

Nation	Dependent people (million)	Living on Public Forest (million)
India	275	100
Indonesia	80-95	40-65
Nepal	18	8.5
Philippines	25-30	24
Sri Lanka	2-4	??
Thailand	20-25	14-16

Most of these people living in the forests or dependent on it are extremely poor and live from hand to mouth. Due to the prevailing law of the land, use of the forest as a matter of right is illegal. In some areas, use is allowed as a largesse by the government which can be withdrawn any time the government wants to.

The degree of the dependency is variable. It can be only for fuelwood, fodder, small timber and grazing for own consumption. But additionally, it can be for non-wood forest product for own consumption and sale. Besides, some of the dependent people collect surreptitiously all possible forest products for sale in the local townships for the subsistence of the family. They usually have no other income source.

As the use of forest is illegally made, the users are conscious of their vulnerability to being hauled up any time by the guardians of law. They, therefore, use the forest as a transient resource which should be encashed whenever possible. The users are not concerned about the sustainability of the resource and the income from it as they are aware that the concessionaire if there is one or the government will use the resource or annihilate it as they wish without bothering about the users. The result of this approach to the use of the resource results in its fast deterioration, faster than one would have thought from the total quantity of wood and other products removed from the forest. For example, the users would break the fence of a young plantation and let their cattle in. They will girdle regenerating advance growth of the principal trees to make them dry and then remove it them as dead wood, which is sometimes allowed by the forest authorities. They will lop oak trees to death. They will fell large trees at about breast height thus wasting the best part of the wood as a stump, cut away a small piece of the stem and remove it as quickly as possible leaving the balance of the tree to rot in the forest. They will break forest land to do marginal agriculture to be chased out often, returning as soon as the protection force goes elsewhere. Unlike damages by commercial operations or shifting cultivation, the forests damaged by this form of use goes through stages of degradation to end up in scrub forests and eroding floor.

4.5 Rise of Environmentalists and Social Activists

Another impact of the centralization policies and laws is the appearance of a strong environmental lobby in most countries of the Asia-Pacific region. This is supported by international NGOs and also by the international donors. This lobby is concerned about the loss of habitat, wild animals, and bio-diversity. Their major argument is that the losses are so fast that total disappearance is not far off unless it is pre-empted by segregating sufficient percentage of forest land specifically as biosphere reserves, national parks, sanctuaries etc.

Some countries in Asia Pacific have very impressive achievement in this regard. For example, Indonesia has 19% of its forest land kept aside for terrestrial parks and reserves and 15% as permanent protection forests for watersheds (World bank, 1993). In Asia-Pacific areas, FAO (1993) estimates that about 14% of the total land area has been conserved for forestry and wild life.

The impact of this segregation is viewed in two different ways. One view is that the central authorities have deconcentrated management of some areas by creating local offices in charge of these reserves. The outcome is satisfactory in certain cases. For example, some of the animals such as tigers in India almost on the verge of extinction in 1970s have increased in number. The other view is that more and more such land is taken away from use, less and less of land is available for local use, a condition opposite to decentralization that accentuates forest degradation and deforestation in the long run.

4.6 Local Revolts for forest use rights and annihilation of forests by slow attrition

The subterfuge, resistance or fight by the local people to retrieve their rights on lost land happened in many countries. The resistance or fights are attempts to force the government to yield ground. We will mention a few: Chipko movement of India, the resistance of the Penan people of Borneo and Pariier land dispute case of Indonesia. On the other hand, what we refer as 'subterfuge' is a means adopted by the people to annihilate the forests by slow attrition and finally to encroach it.

In 1970, when an unprecedented flood devastated many areas in the mountainous Chamoli and other districts of Uttar Pradesh of India, the local villagers of Chamoli connected it to the forest cutting by the contractors. The department was allowing the forests to be cut as a part of their forest working plan by selling the trees to the contractors. In 1973 when the contractors came, the village women with the support of a local cooperative group hugged the trees (Chipko means to hug) to deny the contractors to cut the trees on which the contractors had legitimate rights of, having bought them from the forest department. This hugging movement then spread around other villages in the area and then to other parts of India as well (Guha, 1993) The one most important demand was that the contract system be abolished and the forest products be allocated to the local people. Chipko and other such environmental movements have influenced the government in arriving at the policy of stopping cutting of green trees in the hills and to make appropriate changes in forest policy.

The Penans (a Dayak tribe) of the Sarawak (Malaysia), a hunter gatherer people objected to their forests being decimated by the concessionaires. As the government did not respond to their vocal protests, they started cutting trenches across the transport roads thus stopping movement of the trucks of the concessionaires. In 1989, 71 Penan people were arrested because of law breaking. While no relief is in sight, the Penans have continued to fight their cause (Miller and Tanglely, 1991).

Pariieri Land Dispute is another case that may be mentioned in this connection (Rumansara and Rumwaropen, 1993). Pariieri village is located in the island of Biak of Irian jaya of Indonesia. The land in the village, except the agricultural land, belongs communally. The dispute between the provincial forest department (Dinas Kehutanan) and the local community happened in respect of an area of 2,200 ha where agathis trees grow and copal collected from

them for export. The people had an agreement in 1959 with the then Dutch Forest Department that the latter will manage the trees for copal collection on behalf of the community and pay them a specific compensation per tree. The people did not like to have the agreement renewed on termination but wanted the land use revoked to them. The Indonesian government who took over from the Dutch did not agree to. Instead the area was included into a large forest concession and the people were paid a minor compensation for each tree. This resulted in a conflict generating tension between the people and the department. The next conflict flared up when the Dinas Kehutanan decided in 1980 that the area of 2,200 be redeveloped as a part of 13,000 ha of plantations of *Agathis* for industrial use. The people objected to it and appealed to the district administration. Their case was taken up by the local press supported by a local NGO and the Ford Foundation. The proposal was then dropped, two pilot sites for social forestry were selected in the area and the government are encouraging the community to plant trees in the area under social forestry.

The subterfuge of annihilation of forests by the alienated people is recorded in most of the forested regions of the developing countries of the Asia Pacific region. It generally works in two ways. The first way is by occupation of the forest land. The people, alienated from their forest home in the past, usually end up as landless labourers or inefficient marginal farmers in nearby villages. When a forest is selectively cut, roads opened, timber transported and then their establishment removed elsewhere by the concessionaires, the alienated landless and the marginal farmers make a bee line for these areas. They first cut whatever trees are standing and then start their new life by occupying this land usually for cultivation by different methods.

The second way is by chipping the forest away in bits and pieces. What was once the domain of the local people has been usurped by the centre to do timber business with, without bothering about the peoples' needs. The local people in their turn, now remove stealthily their needs of fuelwood, small timber and non-wood forest products as much as they can so long they are not observed or penalised. This form of unplanned removal damages the forest far more than what is actually removed.

5. NEW INITIATIVES, THEIR SUCCESSES AND FAILURES

The adverse impacts of centralization have caused massive and continuing deforestation and its consequences. In the 1981-90 period, FAO has estimated the deforestation rate of 3.9 million ha per annum (FAO 1993). On the other hand, some impacts which we have called beneficial resulted in initiatives congenial to decentralization and local forest conservation. In other words, the centralization policy had in its core not only the hammer for forest destruction but germs for activating demands for the reversal of the policy. The initiatives (a summary of initiatives may be seen in Annex 1) differ from country to country but all are intended to carry out some form of devolution of authorities to the local people.

5.1 New Initiatives in India

The National Forest Policy of 1988 introduced certain changes more oriented towards the local and the indigenous people. The requirement of these people of fuelwood, fodder, non-wood forest products and construction timber was considered as the first charge of the forests. A notification was introduced in June, 1990 by the Government of India providing for

rehabilitation of degraded forests with the participation of the local people in and around the forests (referred to as Joint Forest Management). It has been proposed that specific villages in association with the forest department will manage specific forest blocks. In particular, the protection of the forests would be the responsibility of the people. The tenure for such management is not specified although some of the state government orders which followed the central order fixed it for variable number of years. The ownership of the forest will continue with the government. The village people through a village committee will enjoy the usufruct of the forests and a part of the final product (Annex 2).

By 1992, seventeen states of India have started JFM and by 1992 about 2 million ha of forests are being protected by 20,000 protection committees. In West Bengal state alone, as of 1991, 236,723 ha of forests (55% of the total degraded forests of the region) were being protected by 1726 forest protection committees. The number of families involved in the committees amounted to 178,985 (Roy, 1993).

The effect of the JFM is positive. In majority of places where the JFM has been introduced or it has spontaneously developed, the forests have revived dramatically. For example, in Hunsur, a village in the Western Ghats, had managed a forest in which the number of trees larger than 10 cm in diameter at breast height increased from zero in unprotected plot to 1,477 in protected plots after 14 years of protection (Rabindranath, Gadgil, and Campbell, 1996). Recent satellite imagery survey shows that the total forest in West Bengal have increased, a phenomena recorded first time in Indian forest history.

However, although the potential of JFM is high, in the overall Indian forestry situation, the impact is small. Only 2% of the forests of India have been covered by JFM so far. Only degraded forests are being offered for joint forest management. Leaving out the closed and high forests from the JFM operation is counterproductive as the degraded forests of to-day are the closed forests of yesteryear. And the fate of the present day closed forests will be the same over time unless the people are involved in their management.

Another failure of JFM is that some of the Forest Protection Committees are in paper only. The people have not participated in either planning or in management.

An important obstruction to the full development of JFM is that the people have involved in protection but have not been given enough authority to deal with management. Due to lack of clarity regarding tenure, the committees are often apprehensive of their future status (Annex 2).

Another initiative taken recently in Indian forests particularly in conservation forests is Eco-development. Eco-development is somewhat akin to JFM (i.e. a devolutionary step), the difference being that the benefits provided to the people come from financing economic development of their village and not from the cutting of the forests which are fully protected from any use. The impact of this paradigm has not been evaluated so far but our analysis is that eco-development can not substitute the benefits that the people traditionally obtain from the conservation forest. The people can be weaned away from the forest only when the economic development reaches a sufficiently high level which the financial assistance in the villages through eco-development will never be able to achieve.

5.2 *New Initiatives in Indonesia*

The initiatives that promoted devolution are few and their scope limited to certain areas only (Annex 1). An important one however is that the government has recognized the local rights on rattan (cane) exploitation. Another is that the central government encourages informal agreement between the concessionaires and the local adat right holders whereby the former grants certain facilities to the locals for using the forest products. Few such agreements made have been followed more in their breaches. In Java, Perhutani (State Forest Corporation) which manages 2 million ha of forests, has launched from 1986, thirteen social forestry projects with support from Ford Foundation. The local people are allowed, as in the taungya system, to cultivate between planted forest seedlings. They have to however move away when the trees grow its canopy and cast shade. The experiment has had disappointing results so far. In the outer islands, a few pilot projects under the aegis of the Director General of Forest Utilization have shown the capacity of the local people to undertake forest protection work and to isolate the area from outside encroachment (Wangsadidjaja, 1993). In 1993, the government has agreed that the people can harvest trees in concession area if the concessionaires and the government permit them. But no such authorization has been granted by 1995. Forest Land use by adat (customary) right holders has also been permitted with consensus (called TGHK). In a series of studies done on the subject in Kalimantan and Jaya (ibid), TGHK has been found to result in problems between individual claims, land problems when roads are constructed, scale of compensation for the crops standing on the area where road is being constructed, and also between local people, neighbouring communities and concessionaire. There is a strong NGO lobby in Indonesia trying to influence the government to allow more legal rights to the communities and to legislate in its favour. The response so far is extremely limited.

5.3 *New Initiatives in Philippines*

Of the group three countries, the Philippines has the best record of policy changes in favour of the people particularly the upland dwellers. A government order in 1989 has specifically promoted the facility of upland dwellers to acquire legal rights of using forest products within the areas of their traditional domain (Fox, 1993). Even otherwise, the Philippine government has sponsored several community forestry programmes. These include: The integrated social forestry programme (ISFP) (World Bank, 1989); the National Forestry programme (NFP) and subsequent amendment of the programme Forest Lease Management programme (FLMP); Ancestral Land Delineation Task Force (TF-AD). With some variations these programmes are all aimed at providing incentives to the communities living in the public forest land and the upland communities to acquire legal rights to the forest land and its products (Annex 1). An in-depth look however makes it clear that extensive areas are prohibited from the programmes. In addition, in some programmes, only the denuded areas with less than 10% stocking are allowed to be transferred. Besides these two problems, the people have to cross many of the bureaucratic hurdles before they can establish their legal rights. On top of it, there are many Forest department (DENR) officials who are not convinced of the usefulness of the programme.

5.4 *New Initiatives In Thailand*

In 1975, the Thai Cabinet approved granting amnesty to the residents of the public forests so that they in their turn improve the degraded forests. The villagers were assisted with forest village development (FVP) funds as well. Another similar programme called Sit Thi Thamkin (Right to Harvest:STK) was introduced in 1979. The difference of this programme with the earlier one was that no funds for village development was made available (Chamruspanth, 1993). As of 1990, under FVP, 119 villages covering 55,344 ha have been involved. The STK programme of 1979 has benefited 709,395 families on 1.15 million ha of land (Attanotoh, 1993).

5.5 *New Initiatives in Papua New Guinea*

The PNG have enacted a Forest Act in 1992. The Act repeals the Private Dealings Act which provided for the concessionaires to have direct dealings with the local headman. (Lynch and Talbott, 1995). The Private Dealings Act was so permissive that the local headman could do away with any discussion with and consent from the co-owners of the resource. The 1992 Act recognizes the customary rights of all the owners of the forest resources. So, the Act is an immense improvement of the situation prevailing before the Act. But the customary owners are allowed to have an agreement with the PNG Forest Authority only, for tree cutting or removal. This means that the Act recognizes the rights in one hand and removes the option of using the rights by another. This is tantamount to usurpation of rights of the customary owners of the resources by the government. The second problem is that in spite of a ban on the export of logs, the export continues. Further, the private owners, to improve their financial position have in the past sold their timber rights which resulted in denudation of these forests by the buyers. Complete freedom of the owners of the right holder of the resources has got thus big pitfalls as well.

In 1989, an independent commission of enquiry into the forest problems found lax law enforcement, widespread corruption, weak political will and other failures as the major problems. The Forest Act has been one of the responses of the report but that alone can not eliminate the problems emphasized in the report. The corruption is accentuated because of the ignorance of many owners of their rights to resources.

6. LESSONS LEARNED

There is hardly any doubt that the present centralised forest management and implementation systems adopted by the foresters have not been able to sustain the forests. This is manifest in the ongoing deforestation of 3.9 million ha per year in 1981-90 period (FAO, 1993). The failure is corroborated by Duncan Poore's revealing report that hardly a few percent of the rain forests of the world have been scientifically managed (Poore, 1989). Burgess (1989) reports the lack of seriousness in silvicultural work in most of the SE Asian rain forests. The implementation systems of forest cutting namely appointment of concessionaires as in SE Asian countries or use of parastatals such as Forest Corporations as in India have not been able to stop the deterioration of the forest environs, overcutting, encroachment, or corruption.

The new initiatives that have been taken by different governments have also not been very successful in stopping the ongoing deforestation. However, it is only now been increasingly realized that wherever management has been even partially decentralized to the level of the users, in effect not in rhetoric, the forests have showed definite signs of improvement. And yet, why is it that decentralization is not been taken up as an established paradigm to follow and even it is accepted, why is it done so slowly and reluctantly?

The reasons can be grouped under two categories. First are those which can be referred to as national in character and thus revolve round macro level issues. The others are those relating to issues noticed at the village levels, what can be referred to as micro level issues.

The macro level issues comprise the observed deficiencies in political will, policies and legislation, tenure, technology, offered organizational structure and bureaucratic apathy including the latter's counterfight to decentralization. The micro level issues include power usurpation by local elites, lack of incentives to users, failure to wean people away from forest dependency and lack of local participation.

6.1 *Macro level Issues*

6.1.1. Lack of Political Will

Lack of political will can be best explained from the case of land reform in almost all the countries of the Asia- Pacific region. Most of the countries (India, Philippines etc.) swear by land reform. Legislation have been enacted in India, restricting holding of private area to a maximum with the intention of distribution of the surplus to the poor and the landless. And as of to-day, 40 years after the legislation has been passed, the reform has not been completed. In forestry, the government of India policy was to increase the percentage of forest to a minimum of 33% of the total land area. Yet, in the name of development, about 4 million ha of forests have been cut down to accommodate dams, roads, townships, refugee rehabilitation during 1956 to 1980. The government of Philippines has made tiers and tiers of decentralized units but no financial powers have been devolved on these tiers. Most of the financial resources have to come from the central government which means that the deconcentrated units are totally dependent on the largess offered by the centre. Investigations sponsored by the government have revealed that the concessionaire system of forest cutting is not conducive to good forest maintenance, but it continues uninterrupted in Indonesia. In Indonesia, the government has issued orders for the concessionaires to assist the neighbouring communities to develop economically. It is true that some of the concessionaires have helped in an unplanned manner with some philanthropic measures and not as a part of a legal requirement. But the government has not made any serious attempt to ensure them.

6.1.2 Lack of clear policies and legislation about devolution in forestry

Except in Nepal, none of the countries in the region have a clearly enunciated national policy or legislation in respect of decentralization of forest management to the local level. It is true that JFM in India has made very significant progress in a number of states of India. The local people, where they have formed groups to protect and manage the forests have been given

rights of the non-timber forest products as also a part of the final product. But this arrangement is based on an administrative order which may be easily contested in the court. The policy statements made on this behalf is vague and will not stand any scrutiny. The most important requirement namely an enabling enactment has not been as yet made.

6.1.3 Lack of clear tenure statements

In almost every country except in the Pacific island states, there is a lot of confusion about the customary rights of the people and that of the state on the forest land. For example, in Indonesia, the basic Agrarian Law of 1960 recognizes customary law as the basis of national land law, but at the same time basic Forestry law of 1967 have been invoked to disenfranchise the local people of their rights. This has been done for commercial timber operations or conservation (Lynch and Talbott, 1995). In India, the customary rights of the people for various forest products is being abolished as and when any national park, sanctuary, biosphere reserve or national heritage parks are established. Even in PNG, the recent law establishes that the owners can dispose of their products only through the parastatals. In Nepal, the tenure is clear but there is a provision that the tenure can be revoked if the people do not follow the guidelines. The decentralization of forest management has been revoked or drastically modified twice in the last 50 years and even now the villagers in Nepal during field interviews express apprehension that the present rules are also not going to stay permanently.

6.1.4 Lack of Technology

The technology adopted in the decentralization initiatives follow the pattern suitable for timber management. No matter what the needs of the people are, the final product of the forest management aims at generating timber/pole to supply urban and industrial needs. Generally speaking the local people require sustained supply of fuelwood, poles for construction, some small timber for plough pieces, grazing ground, tree to lop for fodder, and various types of non-timber forest products including herbal medicines.

If the forest is the first charge of the local needs as the India's recent policy states, why then there is no change in technology? If the governments believe in new initiatives, how is it that there are no large scale experiments for forest management to generate local needs. Why for example, there is hardly any work on shrubs and bushes that are most used by the people to cook their food (Banerjee, 1989).

6.1.5 Lack of Institutional Restructuring

The name of Forest Department is synonymous with forest policing. The continuing name 'Forest guard', a level in the forest organisation hierarchy, bears testimony to the statement. This policing behaviour is a legacy of the colonial period and has since been perpetuated in the post colonial era. Where some measures leading to decentralization and devolution have been introduced, the forest department structure and its activities have not been concomitantly altered. Decentralization with devolution have not been accepted as a new paradigm but as one of the many projects that the department takes on. It is mistakenly assumed that training

of the staff without any change of the main structural edifice of the department is sufficient to deal with decentralized participatory forest activities.

6.1.6 Bureaucratic Apathy

As stated earlier, the policy supported by legislation in favour of devolution of authority to the users of forests in Nepal is very clear. The pace of transfer of forests to the users is however very slow. Similarly, in Thailand, only 119 villages have received the benefits of the forest village programme. The reasons for this lack of zeal is not far to seek. The first is the apprehension of the foresters that they will lose the proprietary powers over the forests so long held by them. And second that some have little faith that the people will really conserve rather than destroy the forest. After all a myth about the poor local people being responsible for deforestation has been created over time.

It does not mean that there are no bureaucrats who are not pressing for devolution of authority to the local people. The JFM concept and its implementation, that has now made such an important mark in India, was initiated by a government official (Satishchandra and Poffenberger, 1989). Today in India, there are hundreds of bureaucrats who are firm believers of the concept. Similarly, there are many in Nepal, China, Thailand and Philippines and also other countries of Asia- Pacific. But this group is small compared with the vast majority that are apathetic some of whom also play an obstructive role.

6.2 *Micro level Issues*

6.2.1 Usurpation by local elites and power brokers

In places where the decentralization and devolution at least in terms of policy and enactments have been successfully carried out, there has been a common problem of local elites and power brokers usurping the powers and the benefits that should have been equitably distributed. This is also true of the traditional group structures. This usurpation is really a miniature version of the state or the national assemblies which are democratically ruled in name but lorded over by corrupt politicians or army personnel. Although the democracy has degenerated substantially in many countries, the system as we understand it namely free election of legislators to represent the people who have voted them to power, can perhaps be improved, particularly because democracy has checks and balances and has high visibility. This system of management by a democratically elected committee however is not replicable in decentralized units, if the decentralization is reduced to the village or users level. These units are inhabited by poor, marginal or landless people who occupy the lowest rung of the society and have been exploited for ages. Unless supported by outsiders and a sound system ensuring equity is established, they fall a victim to the more prosperous, educated and vocal section of the group. The nature of committee management therefore has to be altered.

6.2.2 Failure of weaning the people away from forest dependency

As discussed earlier, an alternative paradigm is being introduced in the recent past for the conservation forests. This is referred to as eco-development. This aims at reducing or eliminating the forest dependency of the people living inside or in the periphery of the conservation forests by promoting economic development of their village. The assumption is that when these people have an alternative source of income, they will not use the forests. The idea is flawed for a number of reasons. The first is that the number of forest dependent people is enormous. An estimate of people dependent directly on forests is about 420 million in India, Indonesia, Nepal, Philippines, Sri Lanka and Thailand alone (Table 1). Economic development of such an enormous number is beyond the scope of forestry projects. The second is that in these projects, the amount being invested per village is paltry and can just touch the fringe of the poverty of these people and they at best will accept this development as an additionality to their income, not as an alternative to their forest dependency. Eco-development therefore, cannot be a substitute for transfer of rights to forest management.

6.2.3 Lack of incentives for Users

More often than not, the decentralization and devolution in forestry as has been introduced in the new initiative programmes, is not accompanied by satisfactory incentives to the users on whom the authority is supposed to be vested. The central authorities expect more services from the people than what it is prepared to pay for. The people are expected to protect the forest with immediate effect but they will have to wait for 5 years before they are entitled to collect any forest timber as per the JFM agreements in West Bengal, a pioneer in JFM. The forests that are allowed to be used by the people are the most degraded ones while the ownership and management of productive forests continue to remain with the state, as in Nepal terai and Indian states. This means that the earning that the users are entitled to will be little, while the government will not part with a share of the fat revenue that the government earns from the adjoining valuable forests. Better incentives are imperative to promote participation of the people in the management.

6.2.4 Neglect of Indigenous technology and local needs

The local people use the forests to satisfy their family needs of the forest products. These include fuelwood, small timber, constructional timber, herbal medicine, food, fibre, and cattle feed including grazing. Besides, they use the forest land for shifting cultivation to grow subsistence food. And when there is demand in the forest vicinity for these products, they also collect for local sale. The Forest Department on the other hand had been and still is focused on production of the demands of the urban and industrial sector. In a few countries (Thailand), in Java of Indonesia, attempts are being made to introduce taungya system (a type of agroforestry and a distant variation of shifting cultivation) but the more common endeavour is to convert the shifting cultivators to sedentary farmers. The technology adopted by the forest authorities for the decentralized forests is therefore very different to what is customarily practiced by the indigenous people. This is not conducive to get the participation of the local people in the management of the decentralized forest units.

6.2.5 Lack of Local participation

The sustainability of decentralized forest units with devolution of authority is dependent on the participation of the users in planning, execution, supervision and monitoring. In spite of the rhetoric, in fact the participation has been very small. In India under JFM, except for the participation of the people in forest protection, hardly any input by them in planning (microplanning), execution and supervision is sought after or accepted. The forestry officials generally are reluctant to accept the advice of others, especially of the uneducated local people, on forestry management and its problems.

7. FOREST SCENARIO IN 2010 IF THE PRESENT FOREST MANAGEMENT SITUATION REMAINS UNCHANGED

Based on the lessons learnt, it is now possible to propose changes required in different elements of forestry to bring about devolution up to the village level and get them implemented. A computer model developed by the Oxford Forest Institute forecast that the Asia Pacific countries that now supply more than 80% of all tropical hardwood exports will supply just 10% a decade from now (Miller and Tangley 1991). The situation thus is desperate. Before we propose the required changes, we like to construct a few more of glimpses of the likely state of forests in 2010 in some of the countries of the region if the present state of affairs in forest management are continued. The glimpses will reinforce the need of urgency of changes.

7.1 India in 2010 without substantial policy changes

We believe that the scenario of forestry in India under the present method of management including promotion of JFM will be dismal. We are arriving at this conclusion based on the ongoing process of deforestation. The forests at the present time are composed of three categories in density terms. The first category is the closed forests which now occupy only about 50% of the total forests. The second category is the degraded forests which are the outcome of mismanagement of the closed forests. A large part of this degradation is caused by the local people whose rights on forest products have been withdrawn over time. The third category is the blanks in the forest area which is the final product of mismanagement of degraded forest.

In the event that the present centralized management methods continue, this deterioration of closed forest to degraded and later to blanks will continue unabated. In the next thirteen years reaching to 2010, India will have in its hand more blanks, more degraded forests, and less of closed forests.

One can argue against the above analysis by stating two counterpoints. The first counterpoint is that Indian forest departments have afforested on an average 0.4 million ha per year in the 80s and have since increased it. The second counterpoint is that the private farmers continue to plant a large number of trees annually in the farm land. The present figures are not known but it is not less than an additional half a million ha per year.

The argument against the first counterpoint is that the government plantations are monospecific and are not substitutes of the natural forest lost annually. And these plantations are subjected to destruction just as the closed and degraded forests are. So the net forest area

added therefore is much less than what is planted. The farm trees, also monospecific, however have much higher survival.

Taking the above two situations namely one of destruction and the other of accretion, we tend to picture the situation in 2010 compared to present, as one of India turning into a sparsely wooded country with more of farm trees but much less of natural forests. The increase of farm trees will not however match the loss of natural forests. Supposing a lapsed time film is made from today to 2010, the viewer will see the picture of Indian tropical and subtropical multitiered forests moving away from the forest zones losing many trees on the way to a monospecific (Eucalyptus, Acacia, Dalbergia etc.) one tiered wooded country around the village farms and in the village fringes. Small patches of closed forests will continue to exist, possibly in better condition than now. These are the few well protected national parks that are frequented by tourists and treated as prestigious units by the forest department. Some degraded forest areas will improve to look like multitiered natural forests. These are some of the JFM degraded forests of 1997. The sites of the most of the closed forests of 1997 will be however degraded forest with little of second and shrub canopy and of large blanks undergoing further depredation and soil erosion. This change in forest distribution and forest quality will bring on its wake further flood damages, landslides in the mountains, filling up of dam reservoirs, shortage of timber for local needs and industries. Enormous gaps between supply and demand of Industrial and local woods will emerge and import of wood for industry will increase.

The forest department will be further de-concentrated and strengthened in numbers. At the moment there are about 120,000 forest department staff (Palit, 1996) which will further increase. There will be more specialised posts, more specialists, more data about various aspects but little used and improved research but on esoteric subjects that may not have sufficient relevance to the main problems namely dwindling natural forests.

The pace of planting will increase but will not be able to reduce the gap between deforestation and afforestation. Plantation technology will improve particularly in seed and seedling quality but vandalism and theft will not allow improvement of plantation yield.

The employment in forestry will increase because of increased pace of afforestation but the total production of timber and other products will have a downward trend. The price of timber will therefore continue to increase, as at present, at a rate faster than the inflation rate of the country.

Concern for forests will increase and the lobby of the environmentalists and social activists will be stronger. There will be more legislators than now talking about green subjects but still not be strong enough to make any breakthrough. Forest tourism will increase at a rapid pace and the young generation will be more nature conscious.

7.2 *Indonesia in 2010 without substantial policy changes*

The forests in Indonesia are getting degraded because of the number of problems the most important of which is management and cutting through concessionaires and centralized management and monitoring. The concessionaires are responsible for illegal overcutting, damage to trees not due for fellings by wrong felling methods, compaction of soil using heavy

machineries thus disturbing natural forest regeneration and soil erosion due to construction of temporary roads. The other major problem is that the poor people from the neighbouring areas, townships and other islands often encroach upon these harvested forest areas, resort to cutting of the residual trees, and start practising shifting or marginal cultivation. The transfer of population from Java to outer islands to reduce the pressure on Java and to improve the economic situation of the transferred people based on the resources of the islands is not only not a solution of population management but also a sure method of further destruction to forest. Transfer of population has not succeeded in Nepal where it was done to more people from the mountains to the Terai, in Amazon where the people of the North-east Brazil to the Amazon basin was tried. In fact the transfer process unleashes uncontrolled migration to the new place, a situation now found in Java of Indonesia. It is true that the government and the World Bank which were supporting the project have both stopped providing any further incentive to the people for migration, but the conditions for damage to forests has been created and it is now difficult to undo it.

If the present systems of centralised forest management, Indonesian forests by 2010, like the present Thailand and Philippines, will be substantially deforested and degraded. The present deforestation in Indonesia is estimated at 1.212 million per. a rate of about 1% of the forest area of the country. With growth of population, the rate will further increase.

Indonesian government has classified 143.5 million hectares of its forests into four types namely protection, nature conservation, conversion and production forests (Wansadidjaja, 1993). The latter is about 64.9 million hectares, best part of which are allocated for production by concessionaires. A substantial part of the deforestation comes from these areas which means that the pace of deforestation in the production forests is more than 1% rate and will be accentuated. Another substantial damage is likely in the outer Islands which have taken the maximum load of transmigration of about 1.5 million between 1979 to 1986 alone (Miller and Tangle, 1991). This number is besides the larger numbers who have migrated on their own initiative when the support for migration was cut back.

The total staff that oversees the 143.5 million hectares of its forest is 50,000 (Fox, 1993) and it is likely that more staff will be placed over time to introduce stricter regulations on the concessionaire operation. It is also possible that the forest organisation will be deconcentrated as far as practical. However, as much as it can be strengthened or deconcentrated, the possibility of the staff looking after thousands of square kilometres of forest with its borders under pressure for encroachment, shifting cultivated areas with low fallow cycle by swidden cultivators and marginal farmers consisting of 30 to 40 million people and forest damages in thousands of hectares of concessions areas by contractors after quick profit, is an impossible task to fulfil. Thus, the likelihood of any reduction in rate of deforestation and improvement of forest quality is minimal by the present method of control and management. It is unfortunately similar to a situation where a few policemen are trying to stop a large number of enemies trying to wreck the peace and stability.

Still further attempt to control by centralization is noticed in the government's role in the protection and nature conservation area. These two categories together make about 49.1 million hectare, about 33% of the total forest area. The reservation of the areas to such a large extent is indeed a very impressive decision but what it gains in fact is questionable. Many of these areas are inhabited by the indigenous and other people who have no legal rights on these areas and have thus no stake in their preservation. One can surmise how they will

treat the forests when the forest department has little scope and capability of vigilance over most of these areas.

7.3 Thailand in 2010 without substantial policy changes

Thailand has been the most rapid deforestation in the last 40 years. Its forests in 1961 occupied about 27 million hectares and by 1989 has come down to 14.3 million which is only about 28% of the country. The National Forest Policy wants the forests to be about 40% of the land area of the country. The actions taken by the country so far to remove further threat to the forests include cancellation of the contracts with the concessionaires, stoppage of green felling in the forests, some decentralization to involve the villagers in developing and protecting forests and active endeavour to enact a Community Forestry Act.

Stoppage of felling, do most often, just the opposite of what is intended. It is impossible to strictly enforce stoppage of felling. The demand of wood can not suddenly disappear and thus the price of timber shoots up in a market of low supply which act as an incentive for illegal trade. It is now understood that stoppage of felling has increased illegal cutting of timber in Burma border region and the produce is being smuggled into Thailand. In due course it will be impossible to assign smuggled timbers to Thai or Burmese forests. No matter where it is cut, the forest of Asia-Pacific will suffer. The other measures including some decentralization are recent and the results will have to wait. But an assessment of some of the new initiatives in respect of decentralization has found the results disappointing so far, which has been described earlier. The draft Community Forestry Act envisages involvement of the people in the degraded forests lying close to the villages and is not a call for devolution in respect of all the forests. Under the circumstances, we believe that the forests in Thailand will continue to deforest, although its rate may decrease to a certain extent.

8. CHANGES PROPOSED, METHODS OF IMPLEMENTATION, PROBLEMS AND PROSPECTS

In the context of what we have described above, we conclude that no half way or incremental measures can eliminate the problems that the past mistakes have led to. There is no avoiding the fact that all forests have to be returned to the people who should be given the authority to manage it. And this complete devolution has to be to the people who are the users, who inhabit in or near the forests it, and who have a stake in its survival for their own survival, This is a drastic change which we will refer to as 'Forest Reform' hereafter.

8.1 Proposals¹

8.1.1. Development of Political Will

¹ See also Annex 3 for specific proposals for a few countries.

The first and most important change required to bring about forestry reform is to develop appropriate political will of the government. This does not happen overnight. Seldom it is self propelled. If it was otherwise, the desperate forestry situation and the lessons learnt from the experimentations carried out in the last thirty years or so in Asia and the Pacific would have moved the forest politics towards significant devolution of forest management authority to the users by now.

Fortunately, the political environment in respect of forest conservation has improved in the recent years. This has been brought about a number of factors. These include presentation of periodic data by the FAO about the pace of deforestation in different countries (FAO, 1993), surge in activities of the international organisations to respond positively to global deforestation (Kenton and Miller, 1991) such as the Man and Biosphere programme of 1972, the World heritage Convention of 1972, the Tropical Forest Action plan of 1985, establishment of International Timber Trading Organisation in 1983, Biodiversity Conservation Strategy programme since 1989, the Global Biodiversity Convention of 1984 and the latest Rio Conference of 1993 and its subsequent support activities. The other suitable factors are the press and the journalists drawing attention to the problem of increasing tropical deforestation, the eruption in the number of international and local green NGOs and social activists, and local forest users' demand for more say in management of natural resources. Apart from some publications (and the last factor), others have not indicated what needs doing first. Participation of people and devolution of authority to the local people always find a place in the recommendations but as one of the many and thus lose its overriding importance.

Much more pressure than what is exerted at present is required to be built in the above processes by different organizations to change the political will of the concerned governments to bring about forestry reform to decentralize in favour of local people. As of to day, unlike that on Amazon forests, Costa Rica or Ivory Coast examples (Caufield, 1986), there are few circulars, papers or books providing sufficient scientific information about the contribution of peoples' participation in conservation of Asia Pacific forests. Most that we have to-day are anecdotal although there are now enough of collected data to be presented. The FAO, UNEP or UNESCO should take this publication project immediately and get it circulated urgently for the different political people to take note of it. This publication, to be followed up by periodic report, will play the role of promotion of devolution like the FAO's data has played in the recent past on drawing attention to intensity of deforestation.

Presentation of data alone however will not be sufficient to bring about the change. The political will has to be altered politically. The global conventions and conference have to first place the subject of forest reform as the top of the agenda and then to try to ensure its adoption by the countries attending the convention. This is a difficult task but at present sufficient emphasis to and prioritization for reform has not been made. We believe an Asia Pacific convention for forest reform in favour of peoples' participation is an urgent need.

Adoption of a few resolutions in the convention alone also is insufficient. Ensuring its implementation will mean continuous prodding and pushing through political means, economic incentives and technical support as is done for other global issues such as global warming, atomic energy pollution etc.

Although all the countries in Asia Pacific countries need to be attended to the proposal suggested above, the countries which have large forests and are still continuing to manage centrally should get more attention. These are the group 2 countries as per our classification.

8.1.2 Change in policy and legislative rules and regulations

Adoption of the political will should be followed with changes in the forest policy, legislation of required acts and framing of rules thereunder. There is a contrary opinion that enactment is not necessary but an understanding has to be reached with the people about their rights. We think that this may be done to get a kick start but eventually an enactment will be necessary. This is so as the peoples rights have been too often removed without their consent and approval.

Forest Policy should clearly state, no matter what the category of forests, that the first charge of forest is the satisfaction of the subsistence of the local users and the excess only available for national needs. The forests that should be so designated would include the production and conservation forests as well. The usual argument that these categories should be excluded misses the point that without people supporting production and conservation objectives, the forests are eliminated in due course. Protection by forest guards, police and the army are cost ineffective and fail in the endeavour.

The forest enactment would have to specify the tenure of the people on the forest land and its products with the only caveat that the land will not be converted to any use that does not consider forestry as its major element. The tenure may be for complete change of ownership to the people or for usufructship for a period renewable at regular intervals. The law should also provide penalty for unlawful activities. The 'people' should be defined as the community comprised of all the households inhabiting in one village or hamlet as the case may be, situated in the forest or in its fringe. Each village will have a specified forest area linked to it for their exclusive management/ownership rights as the decision may be.

The rules under the enactment should, among others, include a cut-off date when the transfer of tenure to the people in the whole country would be completed. This is important as otherwise it may take ages as it is happening in Nepal. Besides, the rules should envisage preparation of a plan (called microplan in India, management in other countries) to manage the forests in a sustainable manner. The rules should clearly mention the benefits, rights and responsibilities of the managing group., which should be incorporated in the management plan. The villagers' managing group has to be small in size, not more than about fifty households in order that the equity in the group can be easily established. In case a village has more than fifty households, the households should be further grouped so that each group remains within the specified number and have a forest of their own. Olson (1971) argues quite convincingly that even if the interest of different numbers is the same, large groups do not function for the common good. Hence, establishment of small groups is an important element and must find a mention in the rules. Even the small groups if they so desire, would have the right to engage as long term landholders groups of families or individual households amongst them for managing parts of their forest resources. In China, some villages follow this procedure referred to as 'responsibility system' for management of collective forests with good results. The concept of individuals managing forests is untested in most parts of Asia but individual families, even as owners of forests, have managed forests for a long time in

Germany. (Klose, 1985), in Swiss Alps and in other countries of Europe without any forest deterioration. Gender problem and problem of poor households particularly of the landless, marginal farmers and indigenous people should be paid special attention in the rules so that their participation is not in any way neglected. The official personnel such as the foresters should not be a part of the group. In the beginning of the whole process, they may be authorised to oversee the operation from outside with an advisory and monitoring role.

8.1.3 Structural Change of the Forest Department

With the progressive transfer of the forest to the local people, the function of the forest department would have to change substantially. This would require structural change of the department. The main function will comprise technical extension, training of the forest management groups in forest management skills, assistance in preparation of forest management plans, forest research, disseminating market information and monitoring of contractual agreement if any between the government and the local people about forest management. It will also arrange investment for agroforestry in blanks and in farm forestry. On the other hand, it would be divested totally of protection functions excepting for some forests left out from the ambit of community forestry such as protection forests.

The new structure of the department to cater to the demands of the functions enumerated above would be two tiered, the upper tier consisting of a number of specialists and the lower tier of many small units, the number of the latter depending on the number of village management groups. The connection between the two tiers will be non-hierarchical, the upper tier responsible in respect of transfer of research findings, market information, providing resource persons for training and problems arising from contracts. The smaller units will be more or less independent and will be responsible for all other functions of the department.

8.2 Problems of the Proposed Paradigm

The paradigm suggested above have some genuine problems and objections to face. One problem often cited by the protagonists arises from a misunderstanding. Management of the commons has been described as tragic and there are examples all over Europe and Asia supporting this theory. It is for all to see that the reserved forests managed by the government (say, in India), have fared much better than what was not reserved, i.e., those left as village forests without being allocated to any specific community. There is a common apprehension among bureaucrats and technicians of forestry that devolution of forest management, as is proposed now will return tragedy of the commons a second time and will lead to forest annihilation faster than at present.

In fact, the present proposal is exactly opposite to what is described as common property in literature. Our proposal is to delimit the forest area for a limited number of families to look after it. It means “communalisation” of a property, excluding all others from its use. It is a form of privatisation, the only difference being that instead of the property being owned by an individual, the property is to be owned/used by a private group. In content, it is in no way, different from a private company with many share holders. In form however, it is more democratic as we are proposing that the group stays away from the concept of the small managing board or the managing director, as is the practice in a company. In our proposal, all

the share holders, i.e., all the house holds will be members of the managing committee and will be active participants to its decision.

The second is an apprehension that with rising population, which is a reality in many Asian countries, the forests allocated to a village, will eventually be too small to cope up with its subsistence demand. This may be true of some of the countries which have already destroyed much of the forest such as Sri Lanka and Pakistan. It may also be true for even the countries with much forests which are often much uniformly distributed. For example, Indonesia has sufficient forest area but Java island suffers from its shortage. So is the Indo-Gangetic alluvial areas of India. The only answer to this problem is that the government and the people will have to find alternative sources of energy and economic dependence over time. For example, in Nepal, in some parts of the border regions with India, the forests have receded miles away from the villages. The villagers have now transferred their dependence for energy on the agricultural residues and the farm trees. Transfer of responsibility to people for forest management does not, in any way, worsen the problem.

Another tremendous problem is the possibility of migration of people to villages as soon as the concept of allocation of forest areas to village house holds is accepted. There will be claimants and counter claimants to the property, some coming from the indigenous people as part of their ancient domains (e.g., Thailand and Philippine), and others from the old and recent migrants.

One basic mistake being done with the new devolution initiatives is the emphasis being placed on investigating into the rights of the local and indigenous people to provide them with the rights of forest management. This approach, supposed to be moral, appears to right a wrong that has been done over a few centuries. This approach has resulted in bureaucratic tangles, claims and counter-claims and has reduced the pace of transfer to a trickle. The authorities have not accepted the fact that devolution of authority to local inhabitants (whether they had or had not the rights of traditional "adapt"), is an alternative and only possible paradigm which ensures forest protection and its sustainable management. What is required is to take the decision of devolution, follow it up with linking certain area with the village people living near it and come to an agreement about their role and the role of the government in its management. While this looks like a tall order, it, in fact, is not. The local inhabitants are its users and its claimants as well. And they are the best custodians of forestry. It is quite possible that in some cases there will be disputes which have to be resolved between the claimants with government playing a mediating role. Such conflicts have arisen in a large way between the Amerindians, the rubber tappers and other forest dwellers in Brazil. They have now formed a coalition of 'peoples of the forest' to fight together in many issues (Miller and Tangle, 1991). The counter claimants have become one. Similar solutions will appear for the Asia Pacific countries. There will be however more conflicts between the concessionaires and the private, or the community right holders. In such cases, the government has to go by the decision about devolution of authority, namely favour the local people.

Another problem that the authorities will have, is in respect of the existing concessions. This is important now in Indonesia, Malaysia, Papua New Guinea etc. Attempts to modify the procedure with concessionaires providing economic benefits to the villagers or as Repetto (quoted by Kenton and Miller, 1991) suggests of increasing the lease period so that the concessionaires have a stake in the forest development, will not work. The problem is not only the concessionaires doing the damage. The more important issue is keeping away the people

who normally should be the decision takers in respect of these forests and be its beneficiaries. The whole concession system has to be dismantled in a sufficiently rapid pace as is being done in Thailand and Philippines and replaced with devolution of forest management to the local people.

Revenue from the forest is the second largest source of earning of the Indonesian Government. The forest revenue is equally important in many other countries of the Asia Pacific. Between 1979 and 1982, the government of Indonesia earned \$ 1.6 billion from its timber cutting concessions (Miller and Tangle, 1991) best part of which went to the foreign companies. Withdrawal of the concession would obviously place the country in a serious monetary problem. But in the long run, the country would not only recoup which it will lose in the short run but will enhance its income from the forests. The communities which will eventually become the forest owners/managers will be required to pay taxes on the income that they will make from the forest management. The forest will be sustained and hence the income will be perpetual. The biggest gain will be the improved indirect benefits that the forest provide such as less flood, erosion etc. as also the direct economic benefits through other forms of forest revenue such as eco-tourism.

One challenge that the government will face is the difficulty inherent in total restructuring of the forest department. The forest department has to transform its activities from resources managerial function to technical extension functions, more akin to the agriculture department. Although it will take a few years before the complete change over takes place, this complete transformation has to be carried out. The time required by the existing structure is to train the communities in their new responsibilities.

Further to this need of change of the structure is an undiscussed apprehension amongst the foresters that they will not only lose their power but also lose their occupation. Need of relinquishing power is the biggest psychological and material hurdle for most of the foresters to accept the new paradigm of community take-over. This is where the general administration has to take the lead to realise the government decision. It can not be left to the forest department to change. In respect of technical staff requirement, the number of foresters is expected to increase except that their role, if employed by the government, will be advisory. Other foresters will be employed by the communities to manage their forests technically. In America, the Amerindians engage highly qualified foresters to advise them on their forest management. In Switzerland, the cantons engage foresters to advise the private farmers about their forest planning and management. There is no reason why it will not be repeated in Asia Pacific.

Transfer of forests to the local people may bring another apparent problem to the fore. The village managing group being small and the forest at their disposal being little, the entire silvicultural and harvesting operation will change dramatically. The groups will also have less fund to invest, even if credit is arranged by the Bankers. As a result, at least at the beginning, there will be a sharp drop in production, reintroduction of old harvesting technology including manual operation, animal transportation and so on. This ideas may look regressive but there is no other way of reducing the damage that the present mechanisation had brought to the forest floor and the residual forests. But over time, the production will increase as the groups gain experience and the technology turn appropriate to the task.

In the realm of social aspects, there are a number of problems that will need special attention. It is a well known fact that the traditional structures even among the indigenous people have not performed morally and democratically to its former standard. In Papua New Guinea, as discussed earlier, some of the leaders have sold away, for their own benefits, the forest rights of the households without consulting them. There are also instances in Arunachal Pradesh of India where the village leaders have agreed, against pitiful compensation, to allow unscrupulous plains people and mill owners to harvest forest in their name. The new legislative structures at the village levels, that many countries have evolved, are also not functioning well, except in bits and pieces. Transfer of forests with devolution of authority to these organisations will attract misuse of power. It is essential that the transfer is made to a totally new structure. The question that may be logically asked is why should the new structure be more effective than its predecessors.

The new structure will be different from the others in a few characteristics discussed earlier but needs reiteration. These characteristics will help secure members' participation and save the organisation from being usurped by a few as has happened in the existing ones. First, it will be a small body not more than fifty households composed of all the households of the village or a part of the village. The 'smallness' will allow all members to know each other well and to express his/her views. Women and the poor will particularly be encouraged to talk. The government officials including forest officials will not be members of this body. A social activist or an NGO in the committee at this stage will however, be included to act as a catalyst. Second, the committee will not have an elected or selected managing group. Rather, all the members will comprise the management committee. This will obviate the present problem of only the rich and the vocal members of the village getting a foothold in the managing committees. The fallout of this form of structure is that the decisions will be participatory and the process transparent. Third, all decisions will have to pass through this committee before being operational. The social activists will help the committee to make their own rules for protecting the forests and undertaking the routine work. The forest management will be however, carried out as per management plan to be prepared in consultation with technical foresters.

8.3 *Implementation of the Proposals*

The implementation of 'Forest Reform' is a large task which can not be handled by the forest department alone for a number of reasons. The department is engaged in multifarious activities and can not provide the required attention that the one time high pressure reform task needs. Further, the forest department staff, as discussed earlier, has reasons to be somewhat reluctant to accelerate the process. In addition, the department is not equipped with the specialised knowledge that the reform will require.

A separate agency has to be created temporarily to handle the task. The agency should be constituted of officials of the national/provincial survey and mapping department, forest department, land reforms department and social workers preferably from NGO community. The head of the this department should be a suitably authorised administrator. The mandate of the agency will be to complete the task of transferring the forest to the local people as provided in the law within a target date. The target date will naturally vary from country to country depending on the present state of decentralization. For example, Indonesia and Malaysia will take much more time than say India and Nepal which have already some part of

it on the rail. It has to be realised by the country that the agency will be substantially a big one to handle the task.

The task of the agency will be to complete the following main works:

- a) To publicise nationally, regionally and locally, the decision taken for 'Forest Reform', and to explain the system and the caveats by local meetings in villages.
- b) To separate the forests into two major categories at the first level of classification, namely community forests and protection forests. The protection forests will only be those which are to be left undisturbed and unmanaged at present because these have no infrastructure and also are not degenerating under the present usage. These may include such forests which few people use and if used for shifting cultivation, has acceptable fallow periods. Substantial areas of Pacific Island forests will come under this category. The agency will then separate the community forests into two categories, the production community and the conservation community forests. This operation of categorisation will not be difficult as in most of the countries, these divisions have already been made. The conservation community forests will include what is presently segregated, as biosphere reserves, national parks, sanctuaries etc.
- c) The major activity in respect of production community forests will be to link specific villages with blocks of forests they are presently using. This linking process, at this time, will not be subject to mapping and preparation of management plans. The demarcation between forest blocks will be done by geographical features and approximate sketching of these features in the presence and with the help of village people who have common boundaries of their forest blocks. These approximation may later create a few conflicts but seldom as much as foresters apprehend or some social scientists emphasise in treatises in conflict resolution. There will be problems between old traditional users, new and local migrants. The social activist in the agency will have to take the leading role in their resolution.

In the case of conservation community forests, individual units of conservation (for example, a biosphere reserve or a sanctuary) has to be linked with all the villages that are contiguous to it and who have a stake in the reserve. In other words, the reserve unit will be linked to a group of villagers rather than one village as in the case of production community forests.

- d) Concomitant with the demarcation and forest- village linking, teams of planners will spread out to support the villages to form committees, to assist them make their own rules and regulations, to train the members of the village in basics of forest protection and management, and to assist the committees in preparing the management plan. The planners will include the forestry officials, accounts people and social activists. The planning will see to it that the plan is so made that the forest production, be it of timber or of nontimber forest products, can be sustained over time, that it allows the subsistence support of the village as its first goal followed by marketing for economic gain as the second goal. Indigenous technology should be encouraged to be adopted in the plans. If the forest is such that it can not be planned as a separate economic unit, the social workers can advise the members to make a unified plan with the contiguous units. This is being done in the Hubei province of China for their community conservation areas. The members can do the plan implementation on their own or engage contractors to carry it out. Where they feel necessary and can afford it, they can engage foresters to do the monitoring for them.

In the case of conservation units, the planners have to provide examples of how the villagers can benefit economically and from subsistence point of view by maintaining the objectives of the forest unit. There are now many examples in the world where this is being done successfully. One example is the Annapurna National Reserve of Nepal. The other is that of Korup National Park of Cameroon of Africa (Kenton and Tanglely, 1991). In any case, it is a great challenge to innovation that the foresters have to face and come up with a solution to influence the village committee members to adopt.

- e) Once the above tasks are completed, the agency can be disbanded and the foresters can take over the technical back up of the committees. The mapping of different units may now be undertaken and completed over a period. The foresters will also undertake research on topics specially those that are required by the committees to increase their economic gains sustainably. We believe that the topics will be much spread out than now and will include a lot of non-timber forest products.

8.4 Prospects

We can not say that the prospect of acceptance of our proposal of forest reform by decentralization to the village level by the countries is excellent, but we also believe that if all the outside and inside forces of goodwill make a concerted move, adoption is within the realm of possibility. The international agencies with their financial incentives and scientific and technical support, the rising voices for conservation by the social activists and ecologists, the spreading demand by the indigenous and local people for establishment of their rights to be saved from ecological disaster and above all the recognition by the administrators and foresters that something needs be done urgently against deforestation make it a suitable time to go for a drastic reform. No further tinkering with the problem will suffice.

9. CONCLUSION

There is no other way to conserve and sustain all categories of forests of the Asia Pacific region than to carry out complete devolution to the village/users level which we refer in this paper as 'Forest Reform'. The objective of the reform is not moral namely to right a wrong that the government of all countries have done in the past to the traditional users by centralising forest authority. On the contrary, the reform is to establish a new paradigm based on the premises that the forest benefits should rightfully go to the people who live in the forest vicinity now, whether they are traditional users, old or new migrants. This change over will need political will, policy change, legislation and sincere implementation. Given the earnestness, the international organisation, the local activists, and the government can, by acting in unison, bring about the Reform.

This process of devolution has to be done by linking villages to specific forest blocks which the villagers use for the sustenance and oftentimes are dependent for economic living. Thus, the present day large forest blocks will be divided up into small sections each being managed by a village committee composed of all the families in the village. Where necessary, the villagers would be advised to make unified plan for economic and ecological sustainability. The change to such a scenario will have to be done by a temporarily erected new agency for forest reform, comprising of survey department, land reforms department, forest department, administrative department and social activists. The role of the forest department in the future will be to provide the support to prepare management plans, to demarcate the forest of different village units and to provide technical and extension assistance. The time period for the reform will vary from country to country but should have a cut-off date.

The immediate effect of such a change will be a drop in production, less revenue for the government, decentralised non mechanised operation, and other such manifestations. These will be temporary as the villagers will learn to appropriately utilise the services of the technical forests, genuine contractors and proper book keeping. The permanent change will be that the forest will now be properly supervised by a host of people who will have a stake in the forests, corruption by outsiders will be resisted, more local employment generated and better equity will prevail upon the villagers. The government will also regain its revenue loss by imposing taxes on the village which will now operate the forest for economic gain.

In order to kick-start the whole process of forest reform, a forest reform convention sponsored by FAO and other donors involving all the Asia Pacific countries is a pre-requisite. It is also imperative that to support the convention theme, the FAO, UNDP and others together bring out a publication recording authentic (and not anecdotal) data about the superiority of the peoples' forest management over the so called scientific forest management and to clarify the positive role that devolution can play in forestry.

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ANNEX 1 - COMMUNITY BASED FOREST MANAGEMENT POLICIES IN THREE COUNTRIES OF ASIA PACIFIC REGION (FOX,1993)

Country	Product Rights	Responsibilities	Participants	Restrictions	Tenure rights
<u>Indonesia</u> Java	Agroforestry products intercropped with timber species (no right to timber)	Follow FD directions; repay loans; guard and protect forests; meet timber seedling survival standards	Community members with emphasis on landless	Illegal felling; fires; encroachment	No ownership; contracts renewed every 2 years through length of timber rotation
Outer islands	Rights to exploit and benefit from forests as long as these activities do not infringe on basic forest law	Not specified	Not specified	Not specified	Adat (customary) rights are recognized except when land is deemed necessary for FD purposes
<u>Philippines</u> Integrated Social Forestry	Exclusive use rights	Responsible land stewardship	Landless occupant who lived on the land before January 1982	Not specified	25 years renewable
Community Forestry Stewardship Agreement	Sharing of income from sale of timber, NTFP	Responsible land stewardship; from a legal nonprofit organization	Upland dwellers	Not specified	25 years renewable
Ancestral domain	Not specified	Responsible land stewardship; form a legal nonprofit organization	Approved indigenous groups	Not specified	Not specified
<u>Thailand</u> Forest village programme	2.8 ha of agricultural land; 0.8 ha for home lots	Responsible land stewardship	Thai citizens; landless or small landholders	Can not transfer rights except by inheritance; can not cut or use forest trees; no grazing	Not specified
Stewardship Certificate programme	2.8 ha of agricultural land	Responsible land stewardship	Thai citizens; landless or small holding; forest occupancy before January 1982	Can not transfer right except by inheritance, can not cut or use forest trees; no grazing	25 years contract

FD: Forest Department, NTFP: Non-timber Forest Produce

ANNEX 2: COMMUNITY BASED FOREST MANAGEMENT POLICIES IN INDIA (POFFENBERGER AND SINGH,1996)

	Product Rights	Responsibilities	Participants	Restrictions	Tenure Rights
National	Community should share in usufruct grasses, fuelwood, timber (25%)	No grazing; no agriculture; promote stall feeding,	exclusively to village community; no individual agreements		No ownership or rights
Rajasthan	All NTFP (except bamboo), 60% of net timber to be reinvested		Registered society; revenue village based	Control grazing, illegal felling, fires, encroachment	Not specified; maximum of 50 ha per group
Orissa	Subsistence timber/fuel free- not for sale		FPC-panchayat based; 8 + member of village panchayat	Same as above + distribution to villages	Not specified
Gujarat	All NTFP; 25% of GFD timber and 80% of timber from other sources	Regenerate and develop degraded forest land; no agriculture or grazing	Village communities, panchayat, society or informal groups; all families		No lease or ownership rights; joint management agreement
West Bengal	25% of timber net after minimum 5 year protection; all NTFP	Protect forests against fires, encroachment, cutting	Community-based FPC under panchayat broad based land management committee		10-year rotation with possible extension
Haryana	25% of net timber; first priority to HRMS vested after 3 years; all NTFP except fodder and fibre lease	Protect, manage, plan development and accounts, form rules and regulations	Registered society revenue village or community with revenue village area if other villages agree; all households male and female heads		Not specified except 1-year lease on fibre and fodder bamboo area; HRMS first choice
Bihar	Dry leaves, branches, and grasses for free subsistence; not for sale	Establish rules for forest protection and enforcement; help organize forest labour; meet regularly distribute produce	village development committee; all members of 1 or more villages with tribal representation		2 years, then new committee is formed

NTFP: Non-timber forest product; GFD: Government forest department; HRMS:Haryana resource management societies; FPC: Forest protection committee.

ANNEX 3 - PROPOSALS FOR SPECIFIC ACTIONS IN SOME COUNTRIES

India

1. Provide legal basis of the administrative orders by different states to promote Joint Forest Management.
2. Amend government orders on JFM to provide for:
 - a) Transfer all forests for joint management and not degraded forests only as at present.
 - b) Gradually transfer the entire forest management activity to the Forest Protection committees (FPC) i.e. eliminate the concept of Joint Management to management by the local people alone. The role of the Forest Department will be that of an extension agency. This would mean that the representative of the forest department will no more be the convenor of the committee meetings.
 - c) Provide tenure rights to the committee for at least 25 years. Presently except for a few states (West Bengal 10 years), all states have specified very short periods or kept the period unspecified. Further it should be clearly mentioned that the agreement is renewable.
3. Eliminate the practice of a separate executive committee of the forest protection committee ie. discontinue two tier system in the participatory groups in favour of only one namely the protection committee. All the households in the village should be members of the Forest Protection committee and all members should be encouraged to participate in discussion and decision making processes. Each family should be asked to have one man and one woman from each family to be member of the committee (as in Haryana state now) to take care of gender discrimination. In order that the group does not become unwieldy, the groups should be small (not more than 50 households).
4. Till the entire forest management is transferred as proposed in (2b) above, timber revenue shared with the forest protection committees should be calculated on the gross revenue basis and not on the net revenue (gross minus the expenses for harvesting and supervision by the government parastatal which turned out to be 55% of the gross revenue in some cases) as done in West Bengal. Further, the benefits should be reasonable to attract the participants. In other words, the incentive structure should be improved. For example, in areas where the gross income is little as in arid areas or in mountains, the percentage promised to the participants should be appropriately increased. On the other hand, the gross income of the productive forests being high, a smaller percentage of the gross revenue may be negotiated with the community.
5. Forest Department should be reformed and its activity limited to publicity, extension and monitoring, providing assistance, evaluation and research.

Nepal

The Nepal Forest Bill is vary progressive in which the users (i) will be given the legal sanction of the forests to be managed by them, (ii) 100% of the benefits will accrue to the users (iii) one third of the members of the users committee will comprise of women members and other such provisions. Yet the handing over process is very slow which needs to be expedited by some measures. The causes leading to the slowness is bureaucratic reluctance, transfer only of degraded fragile forests to the exclusion of productive high forests and hence the lack of zeal amongst the users to take over, highly bureaucratic procedures and too many advisers including the international ones interfering with contradictory advices.

The following changes are proposed to improve the system as also expedite the process of transfer.

1. All forests irrespective of its standing value should be transferred. This would mean that the terai high forests should also be included for user forestry.
2. Financial incentives should be given to the foresters to carry out the transfer process.
3. Reduce the bureaucratic processes of transfer.
4. Restructure the FD so that they become simply extension agency as envisaged in the Nepal forestry Master Plan.

Bangladesh, Sri Lanka

Although basically these two countries have, to a varying degree, accepted the concept of decentralisation and devolution of forestry management, no significant legislative or administrative steps have been taken. In order to facilitate the process, these countries should legislate for decentralization and devolution before further steps are taken. We suggest that a high level ministry supported group of technical and administrative personnel should visit India, Nepal and China to study the users group forestry management of Nepal, JFM of India and Reformation Forestry of China, Vietnam etc. and decide which system can be suitably modified to form their National Forestry Management System.

Indonesia, Malaysia

We propose that the countries concerned make the following changes:

1. Take a decision at the highest government level that peoples' management is the best possible known paradigm for forest sustenance.
2. Dismantle the concessionaire system of harvesting and management within a cut off date.
3. Carry out all the steps mentioned in the proposal section in the main paper. This includes enactment of legislation to provide the legal backing to the decision. The two most

important issues that should be given importance in the rules to be made under the legislation would be that (i) contiguity to the forest and use level should be the criteria for transfer of management and not the claim of actual or hypothetical rights and (ii) that equity amongst the members of the local group to manage the forest is established so that at the local level the more powerful do not undo the decentralization, a common problem discussed in the paper.

Philippines

The changes proposed are listed below:

1. Amalgamate the programmes of decentralization and reduce the bureaucratic levels and procedures to facilitate the expeditious progress of the programme discussed under the new initiatives in section.
2. Enact a legislation (one is being drafted now in Thailand) and rules thereunder providing a legal basis to community forestry not only for the degraded areas but the productive forests as well.
3. Further reduce the concessionaire agreements through negotiation or by legal measures within a cut off date.
4. Follow the steps mentioned of our decentralization proposal.
5. Restructure the DENR so that it has more bias towards implementing the community forestry. Involve the NGOs

Papua New Guinea

We propose the following changes:

1. The provision in the Forestry Act, 1992 of only using the customary rights need to be amended to provide for the right holders to operate directly with other agencies and not only through the parastatals. What will however be required is some form of arrangement by which the rightholder and the buyer will be bound by some rules of sustainable management.
2. A programme of information management and delivery should be carried out. This proposal is somewhat akin to the Autonomous Natural Resource Options Network that has been suggested in a recent meeting (in Manila) composed of biologists, planners and others. This would make the landowners aware of different forest management options and their impact on the environment. This system should also include delivery of the rights, privilege and responsibilities of the land holders in respect of the forest resources owned by them.

List of Working Papers already released

APFSOS/WP/01	Regional Study - The South Pacific
APFSOS/WP/02	Pacific Rim Demand and Supply Situation, Trends and Prospects: Implications for Forest Products Trade in the Asia-Pacific Region
APFSOS/WP/03	The Implications of the GATT Uruguay Round and other Trade Arrangements for the Asia-Pacific Forest Products Trade
APFSOS/WP/04	Status, Trends and Future Scenarios for Forest Conservation including Protected Areas in the Asia-Pacific Region
APFSOS/WP/05	In-Depth Country Study - New Zealand
APFSOS/WP/06	In-Depth Country Study - Republic of Korea
APFSOS/WP/07	Country Report - Malaysia
APFSOS/WP/08	Country Report - Union of Myanmar
APFSOS/WP/09	Challenges and Opportunities: Policy options for the forestry sector in the Asia-Pacific Region
APFSOS/WP/10	Sources of Non-wood Fibre for Paper, Board and Panels Production: Status, Trends and Prospects for India
APFSOS/WP/11	Country Report - Pakistan
APFSOS/WP/12	Trends and Outlook for Forest Products Consumption, Production and Trade in the Asia-Pacific Region
APFSOS/WP/13	Country Report - Australia
APFSOS/WP/14	Country Report - China
APFSOS/WP/15	Country Report - Japan: Basic Plan on Forest Resources and Long-Term Perspective on Demand and Supply of Important Forestry Products
APFSOS/WP/16	Country Report - Sri Lanka
APFSOS/WP/17	Forest Resources and Roundwood Supply in the Asia Pacific Countries: Situation and Outlook to Year 2010
APFSOS/WP/18	Country Report - Cambodia
APFSOS/WP/19	Wood Materials from Non-Forest Areas
APFSOS/WP/20	Forest Industry Structure and the Evolution of Trade Flows in the Asia-Pacific Region - Scenarios to 2010
APFSOS/WP/21	Decentralization and Devolution of Forest Management in Asia and the Pacific