The Contract Reforestation Program: Policy Issues and Constraints

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The Department of Environment and Natural Resources (DENR) reported a reversal of the growing trend of deforestation in the country in 1990. This came during the second year of the Contract Reforestation Program of DENR. This article discusses several policy constraints that impede the sustainability and effective implementation of this program, as follows: (1) lack of tenure rights in reforested lands; (2) lack of food security components in reforestation projects; (3) lack of community participation in reforestation planning; (4) intrusion of patronage criteria in the selection of contractors; and (5) weak administrative capacity of the forest bureaucracy. It thus recommends that: (1) tenure rights be guaranteed for the local people in state-sponsored reforestation projects; (2) livelihood activities and food security provisions be made integral components of reforestation plans; (3) local communities be organized for forest management; (4) access to forest rehabilitation and management rights be democratized and devolved to upland communities; and (5) forest bureaucracy be strengthened as a regulatory and developmental agency.

Introduction

The extent of forest degradation in the Philippines has reached alarming proportions. During the second quarter of 1993, Environment and Natural Resources (DENR) Secretary Angel Alacala admitted that the Philippines has the unsavory distinction of having the least forest cover in Southeast Asia (Philippine Star 1993). A mere 20 percent of the country's land area is still forested. Of the 6 million hectares of land that are still planted to trees, only 800,000 hectares are classified as virgin forest. Moreover, only 4 out of the 15 administrative regions in the Philippines continue to have old growth forests in significant hectarage. This includes the Cagayan Valley, Southern Luzon, Northern Mindanao and Southern Mindanao.

In 1934, around 57 percent of the total land area of the Philippines or 17 million hectares was still covered by forests. However, relentless deforestation for decades has greatly diminished the forest reserves in the country. The average annual deforestation rate reached a high of 284,000 hectares in 1975 during the height of the logging boom. This tapered down to 122,000 hectares

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in 1985. In 1990, the deforestation rate went down to 88,000 hectares in part due to the state's decision to decrease the number of commercial forest concessions in reaction to the tremendous depletion of timber resources (DENR 1991).

The rapid pace of forest loss in the archipelago has been attributed to a number of causal factors which include uncontrolled logging, forest land conversion for plantation and mining activities, swidden agriculture, fuelwood gathering and upland migration. It can be argued, however, that these factors were shaped by political and institutional arrangements. Any serious assessment of the politico-institutional context of Philippine deforestation requires an inquiry into the role of the state in upland management.

Historically, the state has assumed ownership and control over the uplands by virtue of its authority under the regalian doctrine to provide access and use of forest areas. Nevertheless, the state had in the past exercised limited regulatory and fiscal functions in forest management, preferring instead to grant vast forest concessions, through the Timber License Agreement (TLA) system, to private timber companies which engaged in direct extractive and management activities. The TLA system, however, failed to promote sustainable logging and instead degenerated into a patrimonial mechanism where forest concessions were awarded to timber enterprises not on the basis of the environmental soundness of proposed forest management programs but on the strength of partisan linkages.

Compared to the preference given to large timber enterprises in forest resource extraction and management, the state's historical aversion against acknowledging the legitimacy of community claims to upland tenure and use rights has been a major institutional constraint in the search for equity and sustainability in forest management. The inability of the state to institute reform measures in property regimes, not only in the upland but in the lowland areas as well, has contributed immensely to the rising trend in the upland migration and the increasing engagement of forest dwellers in unsustainable shifting agriculture. Clearly, the analysis of politico-institutional conditions expressed in state policies, practices, and orientations regarding upland management are essential towards the formulation of strategic policy recommendations aimed at reversing the vicious cycle of forest degradation in the Philippines. In the face of renewed state efforts to rehabilitate the denuded upland areas, it would be important to acquire a broad understanding of the policy constraints emerging in the transitional process from deforestation to reforestation in the Philippines, specifically by evaluating the policy contraints in the implementation of the Contract Reforestation Program (CRP). The CRP, which became a banner program of DENR when it was launched in 1988, was intended to lead the way towards ecological recovery in Philippine forest zones through the initiation of a massive reforestation drive.

Reforestation and Ecological Recovery

From being a major log exporter in the world from the 1950s to the early 1980s, the Philippines has become a net importer of wood in the 1990s. The country has to import 800,000 cubic meters of wood from the Malaysian island of Sarawak alone to meet the domestic timber demand of 3 million cubic meters in 1992 (Business World 1993). While deforestation has exacted irretrievable losses on future income opportunities from the forestry sector, it should nevertheless be emphasized that the value of the forests go beyond their instrumental capacity to provide raw materials for wood-based industries. Standing forests are valuable in themselves for the natural ecological functions they perform. They create soil, moderate climate, control floods and store water against drought especially in a tropical country like the Philippines, which perennially experiences strong typhoons from June to November and extremely dry weather from December to May. Forest trees serve as protective umbrellas against the erosive impact of rainfall. The sturdy roots hold the soil on slopes and prevent siltation in rivers and coastlines. Forests likewise provide sanctuary to biologically diverse species (Meadows, Meadows, and Randers 1992: 63). In recent years, ecological disasters attributed to deforestation like the forest fires in Mindanao and the floods in Negros Oriental, Samar and Leyte have caused tremendous damage to lives and properties. Forest loss in watershed areas have also been blamed for the shortened lifespan of hydroelectric dams in Mindanao, thereby contributing to the energy shortfalls in the country.

Reforestation, in this context, is aimed at restoring the climatic and environmental functions of forests, as well as relieving pressures on primary and secondary forests for timber production purposes, through the deliberate establishment of tree plantations in denuded upland zones. A simple distinction is often made between afforestation and reforestation, such that the former usually applies to land that has lacked forest vegetation for decades or centuries while the latter refers to the immediate restoration of forest cover (Mather 1993: 2). In many countries, tree plantation projects have been undertaken in lieu of natural regeneration forestry. The main advantage cited for the growing reliance on tree plantations is that while natural forests take decades to regenerate, trees in artificial forest plantations reach harvestable size in a much shorter span of time.

There are two types of tree plantations that are at present cultivated in tropical countries. The first one is the tropical hardwood plantation. Tropical hardwoods such as triplovhoton, terminalia, okoume, maesopsis and teak are grown in plantations in countries like Myanmar, India, and Indonesia. However, such plantations are undertaken on a limited scale because of their relatively long payback period. The second type of tree plantation called the industrial tree plantation is more widely applied in tropical countries like the

Philippines. In this type of plantation, fast-growing species like pine, eucalyptus, gmelina, falcatta and mangium which mature in 5 to 15 years are cultivated (Ledec 1985: 199).

History of Philippine Reforestation

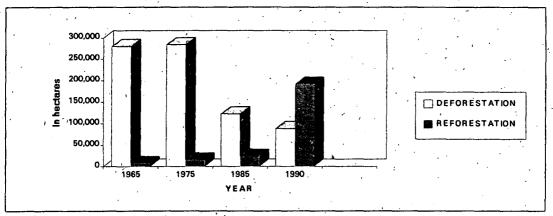
The first reforestation projects in the Philippines were undertaken as early as 1916 under the auspices of the American colonial bureaucracy. From 1916 to 1987, the Bureau of Forest Development (BFD) implemented 184 reforestation projects with a total area of 1 million hectares. The BFD, however, was way off its target when it actually planted trees in just 272,000 hectares. Moreover, the Philippine-German Forest Resources Project sampled half of these government reforestation areas in 1988 and estimated that only 70,000 hectares actually had trees standing in them (Korten 1992).

The dismal record of Philippine reforestation can be further gleaned from forestry data which shows that from 1965 up to the late 1980s, deforestation rates had constantly outstripped reforestation rates by comparatively huge margins. While the annual deforestation rate climbed up to 280,000 hectares in 1965 and 284,000 hectares in 1975, the reforestation rates were only 7,396 hectares and 15,280 hectares, respectively, for the same period. Even up to 1985, the reforestation rate was registered at only 24,231 compared to a rate of forest loss of 122,000 hectares. Indeed, the state was relatively unsuccessful in directing forest utilization activities toward sustainable levels while, at the same time, failing to replace the lost forests through massive reforestation efforts. It was only in 1990, with the full-blown implementation of the Contract Reforestation Program, that the reforestation rate surpassed the deforestation rate (see Figure 1).

In the past, reforestation was the exclusive domain of the state. Nevertheless, from 1965 to 1975, the total area reforested annually never went beyond 20,000 hectares. The poor performance of government-managed reforestation projects had been attributed to inadequate funding, technical inefficiencies, and corruption (Hyman 1983: 518). The state, on the other hand, while awarding numerous logging permits covering vast forest lands from the late 1960s to the early 1970s, failed to mobilize the timber companies for reforestation activities. It was only in 1976 that timber concessionaires began to participate in the reforestation process of the country. A year earlier, Presidential Decree No. 705 (Forestry Reform Code), which belatedly recognized the need to reforest "inadequately-stocked forest lands within forest concessions," was passed by the Marcos regime (P.D. 705, Section 3). This was the first attempt by the state to place the responsibility to reforest on timber companies.

In 1979, with Presidential Decree No. 1159, logging firms were further required to reforest their concession areas with the same species harvested, replacing each cut or damaged tree with tree seedlings. This reforestation measure, however, suffered from weak implementation (Hyman 1983: 517). In 1981, the state issued

Figure 1
Deforestation and Reforestation Rates
1965-1990



Source: Data are from the DENR Planning and Policy Office and the Forest Management Bureau

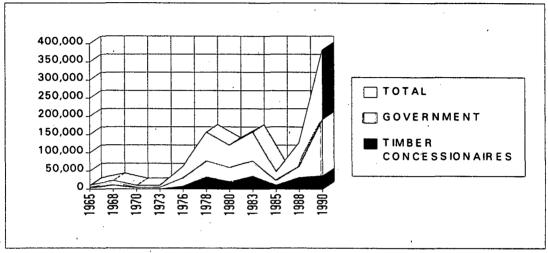
a policy mandating timber companies to undertake forest restoration efforts in their respective forest sites within six months as a condition for retaining their logging licenses. Within six months, the concessionaires had to either apply for an industrial tree plantation lease or furnish a seven-year plan for reforestation. Nonetheless, after the six-month period, only one-third of the timber companies applied for tree plantation leases (Porter and Ganapin 1988: 27).

As shown in Figure 2, the contribution of timber concessionaires to the total reforestation effort since 1976 has not increased remarkably over time despite the consistently high annual allowable cut (AAC) announced by the government through the years. Under the TLA system, timber concessionaires were issued logging permits given certain conditions which include the obligation to reforest a certain percentage of their forest site. Definitely, weak state enforcement of reforestation requirements have resulted in the dismal rate of reforestation in the concession area. The TLA holders were neither sufficiently taxed nor regulated to conform to sustainable logging practices.

Contract Reforestation Program

In 1988, the National Forestation Program (NFP) was approved. The program aims to establish artificial forests covering 1.4 million hectares by the

Figure 2
Area Reforested by Government and Timber Concessionaires
1965-1990

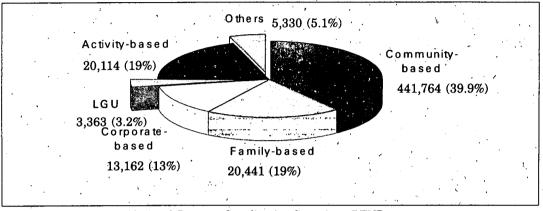


Source: Data are from the Forest Management Bureau

year 2000, or an average of 100,000 hectares per year. The ambitious program is being funded by the Asian, Development Bank (ADB) under its forestry sector loan program in the amount of \$120 million, with counterpart financing of another \$120 million provided by the Overseas Economic Cooperation Fund (OECF) of Japan (Tolentino 1992). A major component of the NFP is the Contract Reforestation Program (CRP) where private corporations, local government units (LGUs), non-government organization (NGOs), local communities and families are encouraged to enter into contracts with the Department of Environment and Natural Resources (DENR) to undertake reforestation activities. The areas that are available for contract reforestation are denuded forest lands, underdeveloped portions of reforestation projects not covered by DENR development plans, and areas within TLA sites with poor reforestation performance. Usually, three-year agreements are signed by which corporate, local government, community, and family contractors are paid to engage in seedling production, site preparation, plantation establishment and maintenance/protection. Estimated at P20,000 (\$740) per hectare, reforestation contracts are to be performance-based, which means that a contractor will receive full payment after three years based on an 80 percent survival rate for the trees (Korten 1992: 9).

From 1988 to 1991, a total of 21,279 reforestation contracts were awarded. DENR's records show that the majority of contracts signed by the agency were

Figure 3 Contract Reforestation Program Area Contracted, By Type Contractor 1988-1992 (Values in hectares)



Source: Planning Report, National Program Coordinating Committee, DENR

with family contractors (16,730), followed by communities (3,969), LGUs (474) and corporate entities (106). In terms of the total area contracted for reforestation purposes, community-based contractors were given the biggest share with 41,763 hectares or 39.9 percent of the total, followed by family-based-contractors, corporate-based contractors and LGU contractors (see Figure 3). The NFP Steering Committee claims that as of 1992, a total of 197,856 hectares have been reforested under the CRP (Tolentino 1992).

The Contract Reforestation Program, while laudable in recognizing the participation of new agents like LGUs, NGOs and local communities in forest rehabilitation, nevertheless faces a number of policy constraints. The constraints include the following: (1) lack of tenure rights in reforested lands; (2) lack of food security components in reforestation projects; (3) lack of community participation in reforestation planning; (4) intrusion of patronage criteria in the selection of contractors; and (5) weak administrative capacity of the forest bureaucracy.

Tenure Rights

Under the Contract Reforestation Program, contracts are issued for a period of three years. In this case, the lack of guaranteed tenure rights in reforested lands beyond the three-year period serves as a disincentive to family and community contractors in undertaking long-term forest protection measures in the reforestation sites. It is not surprising that during the hot dry months,

poorly maintained tree plantations with thick cogon grasses become prone to forest fires. With the absence of tenure security in the reforested lands, family and community contractors normally lose their interest and commitment to protect the forest plantations upon the expiration of the reforestation contracts.

Several tenure instruments already exist that would allow the sustainable management of the uplands by local peoples, either as individual families or as organized communities. In the past, forest occupants had been labeled as squatters regardless of their length of occupancy and branded as kaingineros or "slash-and-burn" cultivators regardless of their farming practices (Lynch and Talbott 1988: 682-683). In 1992, the Integrated Social Forestry Program (ISFP) was launched through Letter of Instruction No. 1260. For the first time, the stewardship right of upland farmers to forest areas was recognized. Through the ISFP, families can avail themselves of 25-year Certificates for Stewardship Contracts (CSCs) which allow them the right to engage in agro-forestry activities in forest lands covering an area of three to five hectares. Such contracts are renewable for another 25 years. Under this scheme, 20 percent of the forest site is to be planted forest or fruit trees while 80 percent can be devoted to livestock raising and cash crop production purposes.

In 1989, the Community Forestry Program (CFP) was inaugurated. Under this program, organized communities can secure 25-year Community Forest Management Agreements (CFMAs) for the right to engage in livelihood and upland rehabilitation activities in residual forest lands covering an area of 500-1,000 hectares. This tenure instrument provides forest product utilization privileges to upland communities under sustainable yield levels. On the other hand, the Forest Land Management Agreement (FLMA) became the legal instrument granting communities and families the long-term right to manage reforested lands. FLMAs have a duration of 25 years and renewable for an additional 25 years. Under the FLMA, upland people are given the right to interplant cash crops, fruit trees, and other agricultural or minor forest products between the existing trees. They are likewise given the opportunity to harvest, process, and sell the products grown on the land covered by the FLMA. Financial assistance that are granted by the government to FLMA holders shall be reimbursed through the proceeds of sales of (a) timber sold as poles, sawlogs, veneer logs or pulpwood logs; and (b) rattan, bamboo and other non-timber forest products, provided that the combined area planted to these products cover 50 percent or more of the total FLMA area (DENR 1993).

As a remedial measure, provision for the awarding of tenure instruments like FLMAs, CFMAs and CSCs should already be incorporated in reforestation plans even before reforestation projects are undertaken. For its part, the DENR has seen the need to integrate several tenure instruments into one in order to simplify the process of awarding tenure rights to upland people (Tolentino 1992: 5).

Food Security

Another constraint to sustainable reforestation has been the lack of livelihood components in a number of reforestation projects, which leads to the unsustainable practice of local people clearing the reforested areas to plant food crops. Similar to the actions of local villagers in Thailand who resorted to the cutting and burning of eucalyptus tree plantations, the rash of forest fires which hit government reforestation projects in the southern Philippines in early 1992 was theorized to be an expression of the poor rural folk's exercise of the so-called "weapons of the weak" in defending their food security. Indeed, food insecurity is not a strong ally of environmental protection.

The integration of livelihood components and an agro-forestry techniques plan would augment the income and satisfy the food security requirements of upland dwellers without sacrificing forest protection goals. For instance, intercropping through the cultivation of food crops like camote, bananas, cassava, peanuts and kadios could coincide with the planting of perennial tree species. Moreover, a certain portion of the forest site could be devoted to livestock production, as well as the cultivation and utilization of non-timber products such as bamboo, rattan, anahaw, pandan, medicinal plants, fruits, gums and resins, species and horticultural crops.

The provision of livelihood opportunities as an integral component of forest development strategy is necessitated by the immense pressure on the forest zones occasioned by the intensified growth in lowland to upland migration, particularly with the eruption of the debt crisis in the 1980s. It is generally understood that the low absorptive capacity of the manufacturing sector in the Philippines has pushed people to overexploit fragile natural resources.³ While migration flows in the 1970s were heavily concentrated in urban areas like Manila, the economic contraction resulting from the debt crunch and the economic stabilization program created so much unemployment that migration flows toward open access upland and coastal destinations grew tremendously in the 1980s. For instance, net upland migration increased to 14.5 percent of the total upland population over the period 1980-1985 (Cruz and Repetto 1992: 48).

Community Participation

The minimal participation of local communities in the planning and management of reforestation projects has been identified as a major constraint in the pursuit of sustainable reforestation. The lack of community participation in reforestation site identification and planning often leads to a situation where local people are recruited in reforestation projects to become hired laborers rather than as forest managers.

In 1991, the Upland NGO Assistance Committee (UNAC) surveyed 24 reforestation projects in 5 regions of the country. The UNAC study noted severe shortcomings in the application of participatory mechanisms in the sample population. It was found that the involvement of the local populace from the reforested areas either as contractors or as participants in the preparation of development plans, selection of species, and seedling production was quite limited. Furthermore, contractors made no effort to develop people's organizations within the local community. Hence, the planning and maintenance of the trees became dependent on short-term financial remunerative incentives, which the study argued was a poor substitute for people's involvement in all aspects of forest management (Upland NGO Assistance Committee 1992: 39).

In her study of four NGO contractors in two Philippine provinces, Baldwin emphasized the differences between locally based and non-locally based contractors specifically in terms of their approach to forest land utilization and community participation. For instance, non-locally based contractors developed plans to establish large tree plantations encompassing the entire contract area without taking into account current land use by the local people. On the other hand, locally-based contractors tended to reforest their area by establishing several small community forests. With respect to the issue of community organizing, locally based NGOs initiated the setting up of local development organizations even before the forging of reforestation contracts, while non-locally based contractors failed to organize the local communities for management responsibilities. The reasons cited by the non-local contractors for their inability to organize the local people included the lack of DENR funding, insufficient time. and absence of incentives from the DENR. Indeed, the non-locally based NGOs were heavily dependent on DENR funding to pay the hired labor force which maintained the tree plantations. Not surprisingly, non-local contractors lost a high percentage of newly-planted trees due to intentional burning and uprooting of seedlings caused by frequent delays in the disbursement of DENR funds allotted for contract reforestation. Locally-based NGOs, however, were able to maintain newly planted forests using volunteers who continued to work on the reforestation projects even without wages (Baldwin 1993: 23-28).

Sustainable reforestation, indeed, necessitates the devolution of administrative authority and responsibility to local communities. Aside from the institution of greater local involvement in environmental governance, the application of local participatory and empowerment principles requires taking into account the framework of demands generated by the local people themselves (Redclift 1992: 257). In this regard, the search for sustainable environmental governance cannot be isolated from socio-political constraints and opportunities which can either empower or disempower people in their efforts to take control of their own lives and environment.

Patronage Factor

Political patronage considerations have been observed as a major barrier to the attainment of equity in the bidding process and in the awarding of reforestation contracts. Reminiscent of the past practice of logging licenses being issued to politically well-connected groups, influence-peddling has likewise been observed in transactions governing the state's exercise of its prerogative to select the contractors in its reforestation program. In a Philippine province, for instance, the patronage factor was quite visible when the Provincial Environment and Natural Resources Officer (PENRO) granted reforestation contracts to all the municipalities in that province (Jalova 1993). In other cases, entrepreneurial or "fly-by-night" NGOs created by local politicians corner reforestation contracts despite their utter lack of technical and administrative competence in forest management.

It is interesting to note that with the passage of the Local Government Code in 1991, environmental protection functions have been devolved to LGUs. Under guidelines issued by the DENR, LGUs are now given the power to participate in the establishment of new reforestation projects, except those areas located in protected areas and critical watersheds which remain under state supervision (DENR 1992). Furthermore, under the Local Government Code, NGOs are provided the right to be represented in local development councils of municipal and provincial governments, especially in environment and natural resource committees which the LGUs have the option of setting in place. With the power given to LGUs and the opportunities provided to NGOs in the area of environmental governance, it becomes a fair question to ask whether LGUs have the commitment to ecological concerns or whether NGOs have the technical competence to pursue sound reforestation management.

Given the devolution of environmental management authority to LGUs, the formulation of strategic perspectives aimed at broadening the sphere of local community access to natural resources, like the forest, requires an assessment of how to democratize and "ecologize" the composition of provincial and municipal officials across the archipelago. For example, it has been observed that the lack of political will and knowledge of the salient provisions of the Local Government Code has prevented the establishment of natural resources and environmental committees in many towns and provinces (Magno 1993: 18). Clearly, high environmental stakes are involved in local electoral outcomes in the contemporary period.

Weak Forest Bureaucracy

The state's assertion of its sovereign right to exercise its authority over the national and natural domain derives from its claim to have the best technical capacities for assessing, enunciating, and satisfying the nation's material and

psychological needs (Camilleri and Falk 1992: 181). Nevertheless, in the area of managing the forests which fall under the public domain, many states have found themselves unable to defend the rights which they have asserted. The forest zones in tropical countries, like the Philippines, are too vast and most national forest bureaucracies are underfunded and understaffed amidst strong encroachment pressures (Miller, Reid, and Barber 1991: 90). The DENR, hounded by budgetary constraints, can only maintain a forest ranger force of 3,800 to guard the dwindling forest cover of 6 million hectares (Gonzaga 1994).

It is within the context of state weakness in implementing proclaimed forest protection goals that the recent shift of the DENR from purely regulatory towards developmental functions can be better appreciated. Nonetheless, even as the DENR has decided to subcontract reforestation projects to smaller organizational agents, strength and efficiency are still required of the forest bureaucracy in presiding over the selection process for reforestation contractors as well as in the disbursement of development funds. The UNAC study, for example, criticized the bureaucratic processes within the DENR. In the study, the UNAC took exception to the DENR's inability to establish a systematic procedure for recruiting reforestation contractors. It was asserted that political influence played a major role in the recruitment of contractors. Reforestation contracts were awarded through negotiation, invitation and upon the recommendation of DENR officials. On the other hand, the development and financial plans prepared by DENR personnel for community and family contractors were too technical to be understood by the contractors. Ironically, the study concluded that the DENR itself lacked the personnel required to administer the reforestation projects, provide technical assistance to the contractors, and supervise the implementation of scheduled activities (Upland NGO Assistance Committee 1992: 70).

Conclusion

Having cited the major policy constraints to reforestation in the Philippines, it is important at this point to identify the requirements for the sustainable governance of reforestation projects. Firstly, tenure rights should be guaranteed for the participants, preferably local people, in state-sponsored reforestation projects. By making the provision of security of tenure to upland communities a priority concern of the reforestation program, local people can become more effective agents of forest protection and regeneration. Secondly, livelihood activities and food security provisions should be made integral components of reforestation plans. The incorporation, for instance, of agro-forestry techniques into forest rehabilitation plans will serve to balance the requirements of human subsistence and forest protection. Thirdly, local communities should be immediately organized for forest management functions. In this case, upland dwellers should be integrated at the earliest stage of the planning process especially in terms of the identification of

reforestation sites and the delineation of management responsibilities. The clear demarcation of their role and contribution to forest governance will prevent the situation where local people end up simply as hired laborers in forest restoration activities. Fourthly, access to forest rehabilitation and management rights should be democratized and devolved to upland communities. This will prevent the reforestation program from being overwhelmed by patronage-oriented forces. Lastly, the forest bureaucracy should be strengthened as a regulatory and developmental agency, and made more independent of vested political stakeholders in the interest of being transformed into an effective co-manager of forest resources.

Notes

¹The annual allowable cut (AAC) is the volume of materials, whether of wood or other wood products, that is authorized to be harvested yearly from forest areas.

²For an account of the Thai experience, see Larry Lohmann, "Peasants, Plantations and Pulp: The Politics of Eucalyptus in Thailand," *Bulletin of Concerned Asian Scholars*, vol. 23, no. 4 (1991): 3-17.

³Of the 12.6 million workers added to the labor force during the period 1970-1989, only 992,000 found jobs in the manufacturing sector. See Paul Krugman, James Alm, Susan Collins and Eli Remolona, Transforming the Philippine Economy (Manila: NEDA and UNDP, 1992), p. 19.

'The Upland NGO Assistance Committee (UNAC) was founded as a partnership of institutions providing assistance to NGOs and people's organizations involved in agroforestry, land tenure and marketing in the uplands. Its member-institutions are the Kalahan Educational Foundation, Philippine Business for Social Progress, Philippine Partnership for the Development of Human Resources in Rural Areas, Philippine Uplands Resource Center, Structural Alternative Legal Assistance for the Grassroots and U.P. Los Baños.

⁶For a discussion of the role of partisan political considerations in determining access to TLA rights, see Marites Danguilan Vitug, *Power from the Forest: The Politics of Logging* (Philippine Center for Investigative Journalism, 1993).

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