

philippine studies

Ateneo de Manila University · Loyola Heights, Quezon City · 1108 Philippines

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Philippine Studies vol. 31, no. 4 (1983) 409–429

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Fri June 27 13:30:20 2008

The Task Ahead: Developing the Uplands Through Social Forestry

FILOMENO V. AGUILAR, JR.

THE UPLANDS: A NEW FOCUS FOR DEVELOPMENT

In the attempt to overcome underdevelopment, much attention has been focused on the problems of the exploding urban centers of Third World countries like the Philippines. Subsequently, the stress was shifted to rural development, with emphasis on the improvement of agricultural technology and infrastructure, and the establishment of a limited degree of social transformation through tenurial reform. With each spatial focus is a social category that, in a phrase that embodies the technocratic "top-down" worldview, becomes labelled as a "target group."¹ Thus for some time now the urban poor and small farmers have been the "target groups" of many agencies. Recently, landless rural workers have been identified as yet another object of development. It is interesting to note that at any point in time the emphasis coincides with the realization of the particular group's material deprivation. Usually, it is also correlated with notions of social injustice that the group has suffered, and thus the group becomes the focus of government concern in so far as it is deemed susceptible to political agitation.² On the whole, these groups have been limited to the lowlands.

1. Colin Leys comments on the World Bank's use of "target group" as a concept "far removed from any conception of change in which the activities and the consciousness of 'the poor' themselves are really expected to play a leading part." See his "The Politics of Redistribution with Growth: the 'Target Group' Approach," *Institute of Development Studies Bulletin* 7, No. 2 (2975): 5.

2. Rocamora and Panganiban argue that counter-insurgency is an important, albeit implicit, goal in government rural development programs. The same can be said about measures to ameliorate poverty in the inner city, a place many thought was a fertile breeding ground for dissidents. J. Eliseo Rocamora and Corazon Panganiban, *Rural Development Strategies: The Philippine Case* (Quezon City: Institute of Philippine Culture, 1975), p. 125.

The start of the 1980s saw the emergence of a new area of concern: the Philippine uplands. Constituting about 60 percent of the country's total land area, the uplands have been legally defined as those areas with slopes of at least 18 percent.³ With or without forest cover, they are classified as forest lands and are under the jurisdiction of the Bureau of Forest Development (BFD).

THE ENVIRONMENTAL CONCERN

The most obvious impetus for upland development is environmental. Alarm has been expressed over the widescale denudation of large tracts of what was only a few years ago forested lands. This has been confirmed by satellite pictures which revealed that in 1976 only 9 million or 30 percent of the country's total land area contained densely stocked forests, whereas the desirable cover is 46 percent. To reach this target 6 million hectares must be reforested. However, at current reforestation efforts some 4.7 million hectares will still be denuded or inadequately stocked by the year 2000.⁴

Even now the deterioration of the protective cover in the highlands has caused droughts, flashfloods, soil erosion, and the siltation of rivers, reservoirs, irrigation canals and agricultural fields, leaving in their wake tremendous economic losses. In addition, the supply-and-demand balance for local timber products is expected to break down by the end of this century. A simulation model of the Philippines' dipterocarp forests has projected that by 1993 all primary growth forests would have been sawn off, and the remaining secondary growth forests would not be adequate to meet even the country's domestic timber needs.⁵ Thus, at the current rate of forest extraction the economic dislocation that the country will experience in the future could be highly crippling.

3. The 18 percent slope criterion for upland/forest areas is contained in Presidential Decree No. 705. Because of this decree, many areas suitable for agriculture such as the rice terraces, are now considered part of the forest domain and are therefore not alienable and disposable. Foresters and policy-makers are hard-put in explaining the choice for this gradient.

4. Population, Resources, Environment and the Philippine Future (PREPF) *A Final Report*, Vol. 1 (September 1977), p. 49.

5. *Ibid.*, p. 373.

THE CULPABILITY OF UPLANDERS

What has brought the country to this critical state? In trying to determine responsibility for the shrinking forest, it has been commonplace to single out forest occupants as the major culprits. Numbering an estimated 4 to 6 million,⁶ these uplanders generally practice swidden cultivation, an agricultural system requiring the cutting, drying and burning of forest vegetation. Because of this practice, *kaingineros* allegedly destroy several thousands of hectares of forest land every year, with estimates ranging from 53,000⁷ to 80,000⁸ to 100,000.⁹ These are all rough estimates and have never been substantiated by any empirical study.¹⁰ Nonetheless, the view persists and dominates the thinking of foresters and laymen alike. There are a number of reasons why this is so.

The most pervasive yet subtle cause for the view that holds uplanders culpable is the ethnocentric bias that westernized lowlanders hold against swiddening, a form of agriculture which colonial thinking has pictured as primitive and destructive. This is complemented by the widespread notion that uplanders are backward, illiterate and uncivilized, not having the scientific know-how for the optimum utilization and efficient conservation of forest resources. Second, the view is a manifestation of a class bias against the upland peasantry whose claim to the land is not given due recognition by the state apparatus. This is reflected in policy documents which require large amounts of capital as a requisite for legalized access to upland resources. In this regard, Makil illustrates the preferential treatment given to large-scale commercial

6. This estimate was lifted from the Bureau of Forest Development (BFD) Upland Development Program brochure.

7. C.B. Serna, "Kaingins: Facts, Figures and Why," *Reforestation Monthly* 11 (1972): 3-5, as cited in Geoffrey A.J. Scott, "The Evolution of the Socioeconomic Approach to Forest Occupancy (Kaingin) Management in the Philippines," *Philippine Geographical Journal* 23, no. 2 (1979): 59.

8. Filiberto S. Pollisco, "Reforestation and Silvicultural Techniques for the Regeneration of Philippine Forests," paper read at the Brazil Conference on Tropical Moist Forests, September-October 1975. *Canopy* 1, No. 6 (1975): 1, 6-7.

9. National Task Force, Population Center Foundation (PCF), "Kaingineros: The Boat People of Philippine Forestry. Population/Environment Planning for Communities Practicing Shifting Cultivation: The Philippine Component, Phase I," 1980.

10. The BFD's data show that of the 24,605 hectares subjected to forest destruction in 1981, only 23.7 percent (or 5,826 hectares) was destroyed by "kaingin," 50.7 percent by forest fires, 24.8 percent by logging and 0.8 percent by pests and diseases. See *Philippine Forestry Statistics* (Quezon City: BFD, Ministry of Natural Resources, 1981), p. 52.

forest users, while poor forest dwellers are accorded only trifling concessions even in the latest pieces of legislation.¹¹ Third, the country's strategy of dependent capitalist development, which is anchored on the exportation of primary commodities, invariably provides favorable terms to extractive industries. The upland peasant is then perceived as a nuisance and a competitor for upland space and resources. As a result, when the effects of denudation began to be felt, the highland populations bore the brunt of the blame.

The popular notion may not be altogether wrong. Upland residents do cause forest fires and other environmental damage, but the real extent and the circumstances that abet such behavior are little understood. For instance, much has been said about uplanders utilizing logged-over areas left by concessionaires; however, little mention has been made of companies displacing forest occupants, and forcing them to go deeper into the mountains, as in the case of the Tiruray.¹² Moreover, there has been a tendency, evident even in policy documents, to treat upland cultivators as a homogenous lot, thus failing to differentiate tribal and long-time migrant communities that have developed environmentally sound practices from those communities, composed of relatively recent migrants from the lowlands, that are still in the process of adaptation to upland conditions. The labelling mechanism puts them all under the one category: destructive.

A NEW TREND IN FORESTRY

It therefore appears unusual, with the flurry of reforestation projects now underway, that upland peasants should be enticed by the bureaucracy to revegetate the highlands. As of December 1981, there were 252 socially-oriented forestry projects throughout the country, covering 491,598 hectares or about 3 percent of the total forest zone. About 6 percent of these projects are pri-

11. Perla Q. Makil, with Ruby E. Reyes and Fadzilah M. Cooke, *Toward a Social-Forestry Oriented Policy: The Philippine Experience* (Quezon City: Institute of Philippine Culture, 1982).

12. See Stuart Schlegel, *Tiruray Subsistence: From Shifting Cultivation to Plow Agriculture* (Quezon City: Ateneo de Manila University Press, 1979), pp. 112-20. This is part of the "disequilibrating factors" referred to later in the article.

vately-run, while the majority (88.5 percent) are government-sponsored. For most of these projects, the involvement of uplanders is a distinctive project component, at least as conceptualized, if not actually practiced.¹³

This turn of events can be attributed to a number of factors. Firstly, some policy-makers have come to the realization that punitive measures, such as incarceration of kaingineros, do not work. This has led to the granting of an amnesty which allows uplanders to stay on if they had been forest zone dwellers as of 19 May 1975, recently extended to 31 December 1981. Their agricultural activities, however, would have to be "managed" by the government.¹⁴ Moreover, forest "squatting" has been diagnosed as part of a bigger problem, that is, the lack of employment opportunities and the maldistribution and shortage of productive land in the lowlands have combined to push landless Filipinos to migrate to the uplands. The recognition of the broader social context has led some administrators to adopt a more tolerant posture toward upland residents.

For the sake of expediency, the upland population has begun to be perceived as a source of cheap manpower. If uplanders could be transformed from "agents of forest destruction to partners in forest development and conservation," which one government program declares to be its objective, their sizeable number would not only speed up the rehabilitation of forest lands but could also, in the longer term, generate substantial savings in labor costs, especially once the strategy of mobilizing forest occupants has been mastered. It could also serve as a labor pool which, being already sited in the inaccessible highlands, has the time and dedication not only to plant but also to ensure the survival of young trees and propagate the suited species. These advantages cannot be obtained from payroll workers, and so the free labor of upland peasants could be

13. Filomeno V. Aguilar, Jr., "Blueprints and Realities: The Experience of Upland Development Projects," paper read at the Conference of Upland Development: Policies and Issues, sponsored by the Center for Policy and Development Studies, University of the Philippines at Los Baños, 22-25 August 1983.

14. Penalties for kaingin-making have become even more severe lately: they include fines eight times the regular forest charges; two to four years imprisonment for the first offense, four years for the second, and eight years for the third; and ejection plus the cost of restoration. See Makil, *Toward a Social-Forestry Oriented Policy*, pp. 51-52. Thus the positive attitude toward uplanders that has recently emerged has not yet found its way into current legislation nor gained widespread acceptance.

the most cost-effective approach to reforestation.¹⁵

A third factor that has softened the approach to upland residents is the concern that this "marginal" population has enjoyed very little of the benefits that come with economic growth. Their material condition is believed to fall below the national poverty threshold, and the ameliorating services of government often fail to reach the hinterlands where they live. Thus forestry projects if restructured in a way that will meet the basic needs of forest occupants could conceivably be an antipoverty measure and a vehicle for rural development.

A fourth factor for the growing concern for people in the uplands is the fact that the highland terrains have come to assume the central stage in the anti-government offensives of opposition groups. Naturally the establishment is anxious to react not only by using military might but by improving the structure of opportunities available to the upland peasantry, although it still has to take an unequivocal stance regarding the latter.¹⁶

Finally, there is the belated recognition that forest dwellers are not the ecological vandals that they have always been thought to be. On the contrary, many of them are seen as environmentally astute, with a lifestyle that is a creative adaptation to highland conditions. Indeed, many studies have documented the indigenous technologies, evolved particularly by the so-called cultural minorities, which prove that the agricultural practices of integral swiddeners are compatible with the upland ecosystem. Fire control measures, soil conservation and revitalization techniques, and the tendency to adopt polycultural production systems are indeed widespread. In this regard, the classic work of Conklin on the Hanunoo Mangyans is often cited.¹⁷

15. It is quite difficult to say to what extent this view could lead to another form of exploitation. Makil notes, for instance, that while the burden of watershed rehabilitation falls on the barrio residents, the intended beneficiaries are actually forest-based industries. (*Toward a Social-Forestry Oriented Policy*, p. 30). However, it is also possible to design projects so that uplanders would control the produce from the land, and thus become the primary beneficiaries.

16. Any individual of whatever political persuasion should note that the "upland problem" goes beyond the conflict between capitalistic enterprises and peasant communities. It also includes decisions on the mass disposition of state-controlled resources and on technological intervention, among others.

17. Harold C. Conklin, *Hanunoo Agriculture: A Report of an Integrated System of Shifting Agriculture in the Philippines*, Forest Development Paper No. 12 (Rome: Food and Agricultural Organization, 1957).

On the other hand, it is slowly being accepted by the forestry profession that over-cutting by concessionaires is a far more serious problem, arising from (1) the over-estimation of forest growth yield by as much as 50 percent in certain cases; (2) the technical deficiency in the allowable cut formula; and (3) the deliberate over-cutting by franchise holders.¹⁸

These then are the justifications for what has come to be known as "social forestry": the awareness that punitive actions are ineffective; that migration to the uplands is merely a symptom of a more complex problem, and that the practices of the upland peasantry may not necessarily be detrimental to the environment. The upland peasantry could well be a source of cheap labor for reforestation; moreover they constitute a poverty group which until now has not been a recipient of development projects, and if continually ignored could become prone to political activation. These concerns in varying degrees have shaped the concept of social forestry which is now being institutionalized as a government program, although many foresters and administrators still do not share the perspectives behind it.

FEATURES OF SOCIAL FORESTRY

This new trend in forestry is distinguished from the orthodox school in that, while the latter gives primacy to the trees that make a forest, the former posits that people are an integral part of the upland ecosystem. Forest dwellers are assumed to have a symbiotic relationship with the other elements of the environment, and hence are to be the prime actors in upland resource management. Likewise, while the orthodox school is commercially extractive in orientation, the new forestry puts emphasis on socialized access to natural resources for subsistence needs.

There is an added dimension to social forestry. It has come at a time when the pure logic of economic growth is increasingly being challenged by its own inadequacy to reduce poverty in less materially advanced countries and by questions about the substance of

18. A.V. Revilla, Jr., "Forest Management Problems, Issues and Strategies in the Philippines," paper read at the National Resources Management Center, monthly forum on natural resources, Asian Institute of Tourism, 1978, cited in PCF, "Kaingineros: The Boat People of Philippine Forestry," p. 56.

development itself. A more socially-oriented perspective is gaining acceptance, and one of its hallmarks is people's participation. People are no longer to be merely the objects of development, the planned-for masses, but they are to be the subjects as well. They are to share in decision-making, project implementation and evaluation, and in the equitable distribution of benefits derivable from projects and from development in general. This process requires both administrative flexibility and commitment on the part of the government, and the people's empowerment and accountability. This democratization of the planning process ought to characterize social forestry as well.

Consequently, the new forestry is not confined to increasing productivity in the uplands, along with better conservation, for otherwise it would be nothing more than a modified trickle-down strategy. Rather, social forestry seeks to develop participatory approaches to upland development. This is to be achieved by mobilizing forest occupants through community organizations which the uplanders would themselves set up and manage. To be tangible structures of participation, these forestry associations should not be dominated by local elites and public officials. Rather, they must develop widespread grassroots capacities for self-reliance, the articulation of interests, and the policing of their own ranks. They are not to be established simply to facilitate the tasks of field extension workers, or worse, simply as a matter of compliance.

Being people-focused, social forestry therefore has three basic propositions: (1) the socioeconomic development of the upland peasantry is essential; (2) their needs are to be met through participatory community organizations, and (3) the whole process should generate community-based strategies for the management and protection of forest resources. The new thrust rests on the premise that the upland peasantry has legitimate access to natural resources and that they have an important role to play in the upland ecosystem. In advancing social equity and improving the living condition of the upland population, it is the expectation that eventually the traditional forester's concern for sustained productivity and ecological stability will be satisfied. The impact on the environment is henceforth viewed as a positive external force which in turn will contribute to the further advancement of upland communities, as principal beneficiaries, and of lowland

society as a whole. As an approach to upland development, social forestry is inherently a *partnership* between upland residents and foresters taken as equals, between those who dwell amidst the forests and those who profess forestry as their science.

PROBLEMS OF APPLICATION

This change in orientation provides some reason for optimism. At the forefront of social forestry conceptualization and project formulation is the BFD, backed by an interdisciplinary working group composed of administrators, foresters, lawyers, and social scientists. Although dialogue between essentially conflicting interest groups is not always smooth, the fusing of various disciplines, sentiments and institutions will hopefully crystallize a holistic approach to the "upland problem." However, before taking too sanguine a look at this new trend, it must be realized that the implementors face a gargantuan task. Because forest dwellers have been subjected to economic and cultural pressures from the lowlands, their strategic role in maintaining the environment has been distorted. Consequently, social forestry will have to contend with the disequilibrating stresses on upland existence.¹⁹

THE DISEQUILIBRATING FORCES

Land insecurity. In the uplands, no issue can be more sensitive and strategic than land access and security. The lives of the upland peasantry are intimately intertwined with their basic means of production, land. Their subsistence is dependent upon the land on which they can grow rootcrops to meet their staple food needs, and cash crops which become the basis for commodity interchange with the lowlands. Communal pastures and communal forests are also important aspects of land access, especially among tribal communities that raise livestock for ceremonial and commercial purposes and whose water sources are dependent on a thriving but protected forest cover.

19. This is not to say that in the absence of these "disequilibrating forces" there would be complete social harmony, for indeed conflict is an integral aspect of societal living. The "equilibrium" that these forces jeopardize refers only to ecological relationships.

Consequently, loss of control of the land creates severe cultural and economic disruptions. In many areas, they either retreat deeper into the interior or they are forced to incorporate themselves into lowland society as tenants or even as rural proletarians – which happened among the Tirurays. The response of more adamant uplanders could also take the form of retaliatory burnings and indiscriminate use of resources to express their resentment and powerlessness against entities that threaten to uproot them from their land. Incendiary activity as protest action has been documented among the Tinggians of Abra, while the Ikalahans of Nueva Vizcaya and Pangasinan have chopped down young trees for firewood and allowed fire to escape from their swidden fields in exasperation over constant harassment for being “squatters” on their ancestral land.²⁰ These, however, are simply reactions to real threats of displacement; in normal circumstances, these integral swiddeners would have been strict guardians of their ecology.

Threats to land security originates mainly from the lowlands, specifically from (1) lowland migrants and speculators, (2) concessionaires and property developers, and (3) government projects and personnel. The 220 hectare Paitan reservation in Mindoro is a glaring example of the lowland push caused by migrants. Proclaimed in 1935 as a Mangyan reservation, the area is now dominated by lowland settlers who occupy about 86 percent of the site. This lowland push appears to be a widespread phenomenon, particularly as the class of landless rural workers, many of whom continue to look for land on which to anchor their lives, has been increasing in recent decades.²¹

What is more, in the Paitan case, titles to land were issued in favor of the lowland migrants, and the Mangyans who did not

20. References to the Ikalahans, Tinggians and Buhinons in this paper were culled from the case studies which the BFD commissioned the Institute of Philippine Culture to undertake. See Filomeno V. Aguilar, Jr. *Social Forestry for Upland Development: Lessons from Four Case Studies*. (Quezon City: Institute of Philippine Culture, Ateneo de Manila University, 1982).

21. The argument concerning the growing landlessness was developed in my article, “The Agrarian Proletariat in the Rice-Growing Areas of the Philippines,” *Philippine Studies* 31 (1983): 338-66. See also the interesting work of Antonio J. Ledesma, *Landless Workers and Rice Farmers: Peasant Subclasses Under Agrarian Reform in Two Philippine Villages* (Los Baños: International Rice Research Institute, 1982).

want to surrender their land rights were forced to do so through coercion and intimidation.²² In addition,

The government agencies responsible in releasing reservation lands to lowlanders claim *oversight and inadvertence* but there is a prevailing suspicion of a *deliberate attempt to maneuver legal tools* in connivance with local government constituents and some influential people.²³

While high-ranking public officials have the mechanisms for adroitly manipulating legal procedures, ordinary government workers are no exception. Armed with the interpretation of the law that all uplanders are squatters, these personnel find the occasion to extort bribes under threat of prosecuting the upland peasant for swiddening. Moreover, Lopez-Gonzaga mentions the case of

The first CNI representative to the Mangyans (a Kalinga man and thus a member of a cultural community himself) [who] did not only swindle hundreds of Mangyans of their small earnings but likewise illegally had reservation land surveyed and sold to lowlanders.²⁴

In contrast to these somewhat "quiet" forms of displacement and threats to land access are the much publicized cases of logging and mining concessionaires and of government projects. The Kalinga response to the government's Chico Dam project is well-known.²⁵ Similarly, the interest of the Cellophil Resources Corporation in the supple Benguet pine, available in the Abra highlands, for the production of unbleached kraft paper, exemplifies the displacement threat from concession holders, and the grave social conflict and environmental damage that proceed from intense insecurity over land.²⁶ However, there are many other cases that go with little public knowledge. For instance, several well-placed state officials turned property-developers, attempted to convert a plateau in the Ikalahan reserve into a resort city. However, with

22. Development Academy of the Philippines (DAP), *Mindoro Cultural Communities Project*, n.d.

23. *Ibid.*, p. 137. Underscoring in original.

24. Violeta B. Lopez-Gonzaga, *The Mangyans of Mindoro: An Ethnohistory* (Quezon City: University of the Philippines Press, 1976), p. 120.

25. See, for example, Gabriel Y. Itchon, "The Case for the Multi-Purpose Chico 4 Projects," *Aghamtao* 2 (December 1979): 27-36, and Joanna Cariño, Jessica Cariño and Geoffrey Nettleton, "The Chico River Basin Development Project: A Situation Report," *Ibid.*, 37-103.

26. See Richard Dorral, "The Tinggians of Abra and Cellophil: A Situation Report," *Aghamtao* 2 (December 1979): 116-54. This is not to discount the influence of opposition groups such as the New People's Army.

the help of a crusading lawyer, the 198 hectares that had been registered as private property were reverted to the affected families, but only after about four years of court battle. These are but a sampling of innumerable cases of land insecurity stemming from large-scale business enterprises and capital-intensive projects, which usually are undertaken with the support of the state and its bureaucratic apparatus.²⁷

On the other hand, there are also internal sources of land insecurity. Since upland communities are far from homogeneous, the more educated, wealthy and powerful residents can attempt to deprive others of land. To cite one example, in the 1950s about fifty Ikalahan cattle owners petitioned for the release of about eighty hectares of communal pastureland. However, a Bontoc influential, who was married to an Ikalahan, applied for a private lease over the same area. Though he possessed the greater number of cows, the other cattle owners objected through their barrio captain. In the end, neither application was approved. The magnitude of internal trends in land displacement is something which requires further documentation. Nevertheless, it can be argued that while the pressure comes from all sides, both internal and external, the latter sources of land insecurity have generally proved to be more overwhelming and more drastic.

On the whole, land insecurity does not augur well for participatory upland resource management. In some areas, it has led to the dramatic depletion of the forest cover and the abandonment of conservationist practices. In most places, it has discouraged the planting of perennial crops. Thus, land insecurity acts as a disincentive for uplanders, whether on their own or through projects, to participate in forest preservation and reforestation. Moreover, the insecure hold on the land has created credibility problems for the government, with most of its projects and personnel now suspect in the apprehensive minds of forest dwellers.

Land squeeze. The stream of lowland migrants and the natural rate of increase in the upland population (probably due to both higher birth rates and lower death rates) have combined to upset

27. An impending case of displacement involves the Remontados of Tanay, Rizal. In April 1984 about 1,100 Remontado-Dumagat families are to be relocated away from their ancestral homes to give way to the Kaliwa-Kanan Dam Project. Ironically it was declared a settlement site in 1956; see Sol Juvida, "Remontados," *Tempo*, 21 October 1982, p. 4.

the man-land ratio in many areas. This is exacerbated by other competing claims on the land, such as plantation agriculture,²⁸ mining and timber concessions, and government projects. In 1981, the BFD reports that the total area of classified and unclassified forest lands is 16,672,370 hectares. Of these, 46.4 percent is covered by timber licenses,²⁹ 3.2 percent by pasture leases and permits, and 3.6 percent is occupied by people.³⁰ Thus, there is clear monopolization of the best lands by the concession-holding class, while many upland peasants are relegated to sub-marginal areas.

Since swidden cultivation is most suitable in places where sufficient space is available for field rotation and long fallow periods,³¹ the land squeeze has resulted in the disturbance of the ecological balance to the point where abandoned swidden patches have to be recultivated even before full revegetation has taken place. For instance, in the Lake Buhi watershed, farmers from two study sites are practising a total swidden cycle of only 4.4 years on the average. This intensive utilization of the land does not allow the restoration of soil fertility, as is evident in the very low yields in the area. As a consequence, about 28 percent of these farmers have given up swiddening altogether, but the majority have clung to the practice just so they can provide for their barest minimum needs.

However, in some areas where the man-land balance has been extremely jeopardized, upland residents have, on their own initiative, moved out and transferred to frontier regions where the population density is more favorable – thus the phenomenon of migration from the Cordilleras to Mindanao. In other areas where people have not moved from the land, there has been less reliance on shifting cultivation and a marked tendency to intensify animal

28. For instance, Timoteo Oracion mentioned that the Magahats of Southern Negros have less and less land to cultivate due to the growth of sugar plantations. See his "The Magahats of Southern and Northern Negros Island, Philippines: Problems and Prospects," *Philippine Quarterly of Culture and Society* 2 (1974): 38-46.

29. Even with the recent presidential directive to cancel eleven timber license agreements, there are still over 5 million hectares where logging is allowed, which represents 32.5 percent of the total forest zone. See Willie Ng, "All Logging Halted Except in 9 Areas: FM Issues Order To Save RP Forests," *Bulletin Today*, 12 August 1983, p. 1.

30. BFD, *Philippine Forestry Statistics*, pp. 7, 49, 60, 75.

31. See Karl J. Pelzer, *Pioneer Settlement in the Asiatic Tropics: Studies in Land Utilization and Agricultural Colonization in Southeastern Asia* (New York: American Geographical Society, 1945), and Clifford Geertz, *Agricultural Involvement: The Process of Ecological Change in Indonesia* (Berkeley, University of California Press, 1963). Geertz states that the ideal population density is about fifty persons per square kilometer (*ibid.*, p. 27).

husbandry and handicraft production, and to rely on the sale of their labor power. Peralta mentions this coping mechanism among the Iwak of southern Cordillera.³² While these adaptive capacities exist, the competing land use in some areas has reached the point where the practice of swidden cultivation has been detrimental and the invasion of *imperata cylindrica* (cogon grass) has been massive. Population density aggravated by competing land claims are therefore crucial variables impinging upon the rational use of forest resources.

Poverty and low levels of living. Among upland peasants, the basic food items have traditionally been grown and consumed by the household, mostly without passing through a system of market exchange and valuation. However, a growing proportion of subsistence needs has to be acquired now from the lowlands, and these include items such as rice, salt, dried fish, medicine, kerosene, swiddening tools, iron pots, and clothing. Thus cash has become an important aspect of the household and village economy. Consequently, while it is difficult to ascertain the value of subsistence production, the level of cash income is a significant indicator of the standard of living.

In this regard, there are wide income differentials between upland communities. It would be a mistake to think of the uplands as faced with the same degree of material deprivation everywhere, for indeed some upland areas are poorer than others. For instance, the median income in two study sites in Buhi amounted to only ₱639.50 in 1981; on the other hand, the Ikalahans had a median income of ₱3,056.50 for the same year. In this particular case, the "cultural minority" group had a better standard of living than the Buhi lowland settlers. Even within each of these upland communities, however, pronounced income disparities also exist. The Gini coefficient of inequality in the Ikalahan sample was 0.40 while in the Buhi sample it was 0.63.

Notwithstanding these variations and despite the absence of a poverty line for the uplands, it can be argued that upland peasants subsist on very low real incomes. Moreover, 75 to 82 percent of Ikalahans and Buhinons perceive their total household income to have stagnated or even deteriorated during the last five years.

32. Jesus T. Peralta, "Contemporary Incipient and Swidden Cultivation in the Philippines," in *Senri Ethnological Studies No. 9*, ed. S. Koyama and D.H. Thomas (Osaka: National Museum of Ethnology, 1981).

There is also the widespread perception that their level of living is inferior to that enjoyed by people in the lowlands. Another study showed that upland households had a mean income in 1975 of ₱2,088.60 which was lower than all the mean incomes of households operating in other agricultural zones (i.e., irrigated rice, rain-fed rice, rolling sugar, and fishing) in the Western Visayas.³³

Consequently, many upland dwellers do live in extreme poverty. And where daily subsistence is a constant struggle, there is little incentive for planting perennial crops. The survival needs of uplanders dictate that preferences be given to annual crops which yield tangible and relatively immediate cash returns. Moreover, the need to generate cash makes upland production highly susceptible to market conditions. The financial status of upland peasants, then, affects their ability and willingness to participate in reforestation activities.

Market conditions. Because of the need to generate cash, peasants in the uplands have responded by gearing part of their agricultural production to the market. The specific form of production, however, is determined by actual market conditions, particularly by the commodities in demand. Thus, where there is great demand for, say, ginger, more swiddens will have to be cut from densely-stocked areas since this crop thrives best on virgin land. Lopez-Gonzaga demonstrates how market demand influences land use and upland technology: because of the saleability of corn, the Buhid Mangyans have shifted to corn production, employing carabaos for ploughing and other land preparation tasks.³⁴ Thus, lowland influences transmitted through compelling market forces have led to the erosive practice of hillside farming.

Further, a frequent element of upland markets is that they are stimulated by travelling middlemen who provide capital in some cases, and the more important linkages with buyers from other economic sectors and regions. However, precisely because these middlemen provide strategic information, they also dominate the

33. H.A. Luning, "A Micro Profile of Rural Employment and Income," Working Paper No. 5, NEDA/PCARR/SEARCA/UPLB study on the process of regional planning in the Western Visayas, November, 1976, cited in Gelia T. Castillo, *Beyond Manila: Philippine Rural Problems in Perspective* (Ottawa: International Development Research Centre, 1979), p. 325.

34. Violeta B. Lopez-Gonzaga, "Peasants in the Hills: A Study of the Dynamics of Social Change Among the Buhid Swidden Cultivators in the Philippines" (Ph.D. thesis, University of Toronto, 1981).

market, controlling the price levels and appropriating the bulk of the profit for themselves. The upland peasants, as a consequence, are not fully compensated for their labor in primary production. Forced to accept the monopsonistic character of the market, the upland peasants generate more cash by cultivating as much land as is available, subject however to the labor supply of the household production unit. Lopez-Gonzaga once again illustrates how one lowland entrepreneur stimulated corn production among the Buhids, but in the process was able to build a warehouse where he stocked corn bought during harvest time at low prices, but passed on to a brewery company in Manila at higher margins when the supply in the "free" market had diminished.

On the other hand, lowland goods sold in the upland market are priced dearly.³⁵ But because these are basic consumption items unavailable in the uplands, households have little alternative but to purchase them at the inflated price. Since peasant output fetches depressed prices while lowland consumer goods are sold only at padded prices, the barter terms of trade therefore are decidedly against the upland peasantry. As a result, the movement of cash is a net outflow from the upland village economy. In Lopez-Gonzaga for instance, the total cash paid by Buhid households to resident Bisayan entrepreneurs amounted to ₱13,330, but the cash earned by these households by selling agricultural products to the same lowlanders reached only ₱1,720, during one month in 1979.³⁶ Evidently, the mechanisms of the market siphons capital away from the uplands and perpetuates the peasantry's low levels of living. To a significant degree, then, the market shapes the overall pattern of resource utilization in upland communities.

ELEMENTS OF A BROAD STRATEGY FOR THE UPLANDS

How then should social forestry be implemented? A detailed formulation of strategy is not intended here; rather, a list of different areas of concern, arising from the social analysis of the pre-

35. The physical inaccessibility of most upland communities and the inadequate infrastructural facilities contribute to the difficulties of obtaining essential consumer items from the lowlands. Because of the hard trek to the uplands, middlemen charge exorbitant prices.

36. Lopez-Gonzaga, "Peasants in the Hills," p. 248.

vious section, will be discussed, with the expectation that this will help in setting the direction for strategies to be adopted in specific localities. Broadly, the strategy consists of, in currently fashionable language, a participatory and basic needs approach.

Strengthening of the peasant economy. Any strategy for change in the uplands must ensure that the peasantry's basic needs are met; otherwise, their immersion in poverty will seriously hamper efforts at local resource management. In essence, a basic needs approach seeks to strengthen the peasantry's petty commodity mode of production by ensuring subsistence through agro-forestry and by developing alternative sources of income, such as livestock and handicraft production. Thus it involves the twin strategy of intensifying and diversifying the peasant economy. Clearly this should promote not only non-cash incomes, but cash revenues as well, since many of their essential needs are now met through the market. The strengthening of the peasant economy therefore calls for raising agricultural productivity in the uplands and the generation of more self-employment opportunities. This also demands that technical and financial resources be readily accessible to the upland peasant and the organization to which he belongs.

Land security. An important and indispensable need of the upland peasantry is a secure hold on the land, which is foundational to the peasant economy. The form this will take, however, is unsettled. The establishment of reservations is one way, but it has had a deplorable record of failure, as the earlier analysis suggests. Another alternative is to grant private titles or ancestral land patents. Lynch has emphatically argued that tribal communities,

indeed most long-term occupants of "public" land, have constitutionally protected rights to possession, occupation, and ownership of their ancestral land. Application for recognition of title to these lands by qualified occupants is a "mere formality."³⁷

In the absence of an official response, it is not certain whether this interpretation is shared by the government. A test case is probably

37. Owen J. Lynch, "Tribal Land Law: A Mechanism for Upland Participatory Development," paper read at the Participatory Approaches to Upland Development Seminar, Integrated Research Center, De La Salle University, Manila, 16 March 1981, p. 2. See also his "Native Title, Private Right and Tribal Land Law, An Introductory Survey," *Philippine Law Journal* 57 (1982): 268-306.

needed. However, others who share the sentiments of Lynch are at the same time beset by the nagging question of land use. The fear is that a private title would serve as a license to do with the property as the owner wishes, even if it endangers the bio-physical environment. Still others fear that, in the face of machinations by lowlanders, obtaining a title could be a roundabout way of losing one's land.³⁸

Stewardship contracts and communal forest leases are other alternatives.³⁹ These, however, are not easily acceptable to uplanders who in general aspire for private titles to their land. Moreover, even with an explicit clause on the proper care of the land, there is no guarantee that detrimental practices will not be adopted. Further, if Lynch's interpretation of the law is to be pursued, stewardship contracts and lease agreements would then be contraventions or evasions of the law, or at best faint applications of what the law stipulates.

This paper can do no more than argue that the government must clarify its stand vis-a-vis native titles. Much of the apprehension on land use originates from a basically negative view of the upland peasantry, which the earlier discussion attempted to show, is an uninformed position. Secondly, because not all upland communities are tribal, the government must be open to granting different forms of land security. Lastly, all these crystallize the great urgency to promote and encourage substantive participation so that upland dwellers are encouraged to manage their local resources and themselves police the implementation of environmentally sound practices. In the end, land security and the concrete form or forms it will take within the confines of what the State can allow, must be developed with the people.

Land redistribution. As seen in the previous section's discussion, the land squeeze is in large measure due to the inequitable distri-

38. As to the first apprehension, even without a private title, other ways of disposing of upland areas (e.g. concession leases) have not prevented the wanton destruction of the forest zone. As to the other apprehension, this is quite patronizing and underestimates what the participatory approach could accomplish. I owe these points to Perla Q. Makil.

39. Twenty-five year communal forest leases have recently been awarded to the Ikalahans and to a Mangyan community in Occidental Mindoro. In return for the secure access to the land, the communities in the lease area are required to conserve and manage local natural resources. The Ikalahan and Mangyan leases are the only cases so far, and the granting of each lease entailed a complex and lengthy bargaining process with the government.

bution of land in the uplands. Thus to improve the man-land ratio and to ensure stable access to the means of production, land as a strategic resource must be reallocated to forest occupants. In the first place, there are procedural requirements which disallow the granting of concessions where peasant land rights subsist (e.g., Forestry Administrative Order No. 11 of 1970), but these are usually not followed. A retroactive and belated implementation of the law requires the revocation of licenses, leases and permits which were awarded without regard to the longstanding occupants of the area. Secondly, the future awarding of concessions should be strictly limited to unoccupied areas. In areas with forest occupants but where natural resources abound and their extraction is important, upland peasants could be organized for collective ownership of the enterprise (and given financial and technical support by the government), or they could enter into some form of partnership with entities having the necessary expertise. Lastly, in areas where tenancy relations have emerged, they would have to be "abolished" so that the benefit from the land will accrue to the direct cultivator. There is need therefore for extending the land reform concept to the uplands.

Market protection. In order to augment the upland peasantry's real cash income and redress the terms of trade which are at present heavily in favor of the lowlands, the market for agricultural commodities must be adequately protected. This can be accomplished by directly linking the upland producer to the lowland consumer, thereby eliminating the middlemen who appropriate the profits. Moreover, direct linkage with, especially large-scale commercial, buyers will create opportunities for raising the price levels at which upland peasants sell. On the other hand, community-based initiatives for the provision of essential consumer items from the lowlands will further help in improving the upland-lowland commercial exchange.

Improvements in trade will have far-ranging implications. With assured markets and increased incomes, peasant households can increase production and eventually accumulate more capital to meet not only subsistence but production needs as well. This will strengthen their purchasing power and will make improved technological packages more affordable. Further, if surplus production comes from non-swiddening activities, this will also relax the intensive utilization of ecologically endangered areas.

Community organization. Much of what has been said cannot be attained by adopting a "top-down" strategy. Not even advocacy in some elite quarters will suffice. The upland peasants themselves must be mobilized through community organizations that have the capacity to articulate the people's interests and that will enable them to demand the fulfillment of their social and economic rights. Moreover, these organizations, if properly developed, can be relied upon to work out mechanisms for the allocation, control and management of local resources. This is all the more important since there is wide variability in upland conditions, and thus each organization will be able to direct the specific line of development in its given area.

Restructuring of the bureaucracy. An important ingredient in espousing change in the uplands is a government administrative system restructured to be more responsive to the needs of upland peasants. This involves a fundamental change in the value orientation of public officials, given that government-elite biases continue to be a major stumbling block in effecting peaceful reforms. It also entails deepening the conviction at all levels of the bureaucracy that social forestry should be more than just rhetoric, or what is even worse, just another prestige program. Political will is a necessary condition, which, if present, will facilitate the more pragmatic concerns of making standard procedures adaptable to field conditions, such as in fund releases and in a more socially-conscious evaluation system for forestry personnel.

These suggested schemes, however, cannot be pursued independently of each other. To effect real social change, each element of the broad strategy must be undertaken in conjunction with the others. This integration is imperative not only because each scheme complements and facilitates the attainment of other goals (e.g., marketing linkages can strengthen the peasant economy), but more so because of the interrelated nature of the problems themselves, that is, the technical, legal and socioeconomic are all intertwined. Thus, for instance, to try to solve the technical alone (which has been the usual emphasis until lately), ultimately proves ineffective and futile. On the other hand, emphasis only on the socioeconomic would miss the other factors that significantly impinge upon it. Indeed, there can be no facile solutions to the "upland problem."

THE UPLAND-LOWLAND DICHOTOMY

The analysis of, and the suggested solution to, what has been referred to for convenience as "the upland problem" indicate that to limit the problem to a certain geographical area, highland regions in this case, is theoretically and empirically inaccurate. Although it makes the analysis somewhat manageable, and granted that the physical attributes are distinct in each ecological zone, it must nonetheless be pointed out that "the upland problem" extends beyond the uplands. This is illustrated by previous references to, among others, the upward migration due to the maldistribution of land in the lowlands, the low labor absorptive capacity of the industrial sector, the depressed cash incomes due to the trading practices of lowland entrepreneurs, and infrastructural projects constructed in the uplands but meant to benefit the lowlands. On the other hand, "the upland problem" has serious ramifications for the lowlands, such as the siltation of irrigation systems, crop losses and the depletion of timber supply. Therefore, an uncritical use of the term "upland development" might conjure an image of two distinct, unrelated worlds – the uplands and the lowlands – each to be developed separately. It might also create the impression that the locus of solutions to the uplands is completely outside the lowlands. On the contrary, the uplands and the lowlands have a shared social structure and physical environment. Consequently, "the upland problem" is in fact a problem facing the whole nation, and therefore it concerns us all.