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FORESTRY FOR DEVELOPMENT: SOME LESSONS FROM ASIA

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SUMMARY

In the past decade, forestry has emerged from its long history of separateness in human affairs to enter the mainstream of national and rural development. Nations are investing increasingly in their forest resources as means to advance economic welfare, social equity and political resilience. The organization of forestry has changed dramatically to satisfy the demands of its new mission. Forestry-for-development has already yielded impressive results. Wood balances are beginning to display positive trends in many countries that had been facing dire scarcity. Such advances may have been at the expense of other objectives, however. They reflect the rapid "agrification" and industrialization of forestry rather than the slowing destruction of the natural forest and its environmental services. Developmental forestry has yet to deal effectively with the human poverty that drives forest destruction; it has not begun to fulfil its promise as a means to enhance rural equity and wellbeing. This paper examines the experience of the past decade in Asia in order to identify why forestry is not yet an effective means for rural development and how its effectiveness could be increased.

INTRODUCTION

National development strategies in Asia have focused primarily upon industrialization and upon improvements in rural production that generate the investible surplus and social stability that industrialization requires. In this strategy context, the contributions of forests to development depended historically upon their destruction. Forests were cut for cash to invest in other activities or were cleared for the expansion of agriculture and settlement. Only in the small enclaves of high-value export plantations, of teak for example, were the productive capacities of forests themselves treated as appropriate targets for investment. Forests were beyond the normal scope of development theory and strategy.

Changes in this pattern are relatively recent. They have arisen primarily from the increasing economic scarcity of forest products and cultivable land, the rising human and environmental costs of forest destruction, and the growing political need to reduce the insecurity of land-dependent populations. These conditions are increasing the seriousness with which investment in forestry is treated as a source of economic growth and social stability. Investment in forestry has, over a short
period of time, become a significant aspect of national and rural development strategy throughout Asia. This has changed rather profoundly what forestry is and how it is done.

Until recently, forest products have either been exported as raw materials or consumed in subsistence uses. The management of forests was entirely a governmental function. That function could be characterized in the two roles of the forester: as revenue officer and as policeman. The forester recorded and sold commercial timber. He prevented subsistence uses and forest clearance. These roles were custodial rather than managerial in nature. The forester represented the sovereign claim to resources and territory. Although management plans could be carefully drawn, these were essentially schedules for extraction and administrative statements of territorial claim. They were not plans for investment.

This mode of forest administration then came under two kinds of pressure that gradually eroded its underlying rationale. First, it could not control forest boundaries and uses against the incursions of a growing rural population. Two stereotypic situations prevailed. Mass movements of the land hungry overcame any governmental resistance to forest conversion. Indigenous villagers, who saw the forest as theirs, continued to operate within their own management plans; although the government or village management regime might have sustained the forest, the simultaneous assertion of both tended to destroy it. The forests of Asia were disappearing at an extraordinary rate. Second, the custodial mode of forest administration worked against national urges for industrialization. It was not prepared to develop the processing and marketing capacities that would change a nation from a supplier of raw materials to a seller of finished goods at home as well as abroad. Although it may have been designed to maintain the health and territory of the forest, it served to enhance the economic and social wellbeing of industrial nations. These two pressures—for forest conversion and for forest industrialization—clashed with one another in a way with which the prevailing forestry administration could not cope.

The responses to these pressures have been profound and fast. Governments first split industrial forestry corporations from the parent custodial organizations in order to develop processing and marketing capacities and the secure forest base to support them. They subsequently spun off social forestry organizations from the parent, to work with villages to establish and manage productive forests on lands that were already degraded or were likely to become so in the absence of a clear village interest. The development of industrial and social forestry organizations created channels for public investment that had not previously existed.

Industrial and social forestry organizations have been expanding rapidly, relative to the parent agencies, and are developing their separate
systems of educational, scientific and political support to serve their particular requirements. Perhaps more significantly, and generally without governmental intent, they have been increasing opportunities for spontaneous private forestry investment, which is a new phenomenon in Asia. Control of forestry and forest policy, once the monopoly of the custodial agencies, has moved to the broader arenas of government and outward to the public at large. Forestry is no longer the possession of professionals; it is a politically hot topic that has penetrated the national debates of development strategy from which it had previously been insulated.

The first section of this paper presents the conceptual foundations of forestry-for-development strategy in Asia. The second section provides one interpretation of current evidence about actual responses to the strategy. The third section examines some lessons about forestry and rural development that the Asian experience appears to provide. The final section discusses some general implications of the experience.

CONCEPT AND STRATEGY

Forestry for National Development

The creation and diversification of pathways for forestry investment integrated forestry in national development strategy for the first time. The conceptual basis derived from prevailing development theory: forest industrialization would increase the employment and income obtainable from forest resources, and would pull marginal agricultural populations toward non-agricultural jobs. This would relieve socially and environmentally destabilizing pressures in rural areas, increase the investible surplus that rural production could generate, and enhance the welfare of rural people. Social forestry would increase the productivity and income derivable from the vast areas of formerly forested and now agriculturally marginal lands. It would thereby mobilize a wasting resource that could serve national interests by enhancing rural production and wellbeing. The two pincers of industrial and social forestry investment would together increase the stream of income, stability and investment from limited natural resources.

Forestry for Rural Development

The rationale for forestry-for-rural development has taken a more novel form and responds to compelling realities throughout Asia. Despite the pressures of population, most of Asia's land is uncultivated and outside private ownership; much is agriculturally marginal and prone to
degradation. The large rural populations who depend upon the land for their livelihoods are universally among the most impoverished and most vulnerable segments of their societies. They comprise at least 250 million people in South and Southeast Asia alone. They rarely possess legal rights to the natural resources upon which they depend. They rarely have political, or even legitimized, claim to the normal protections and services of their national governments. Indeed, their use of “public” forest land commonly draws them into strife with governments that assert but cannot enforce their territorial jurisdictions or serve the needs of their residents. In this state of ambivalence and insecurity, forest resources typically have been exploited in ways that provide only a marginal livelihood for subsistence users and unsustainable income for commercial users. Both groups often degrade forest stocks and land at the expense of national interests in maintaining a productive resource base.

Responses to this condition have been based upon five premises.
1. Securing the rights of forest users, and developing the effective scope of government, increase the readiness of both to invest in improved resource management.
2. Management technologies that reflect the interests of both the forest users and the government are more productive and sustainable than those that one or the other party would apply.
3. The benefits of increased productivity and reduced conflict justify the local and national commitments that more productive and stable forest management regimes require.
4. The accommodation between local and national interests, and the mutual investment that it permits, increase the power of both to govern conditions that affect their wellbeing.
5. These advances will catalyze broader processes of development in the economic and political status of rural populations.

These common premises can be summarized in one strategy assumption: more secure and productive rural rights to forest resources will increase rural income, rural power, and the contributions of rural activity to national wellbeing. To put this in terms of general development theory, the distribution of resource benefits determines the productivity of the resource.

Within this broad concept, four specific objectives characterize forestry-for-rural-development activities:
1. Strengthen the rights of rural people in the land upon which they depend.
2. Improve governmental capacities to work with rural groups in the management of such land.
3. Develop the technologies and modes of organization that increase the productivity of and economic returns from cultivated and uncultivated land resources.
4. Develop policies that support the adoption of these technologies and modes of organization.
In pursuing these objectives, social forestry organizations throughout Asia have made major advances in approach to local systems of land management and to policies and institutions that these systems require. These advances include: a variety of modes of collaboration between government agencies and village communities for forest, range and watershed management; the development of education systems to prepare foresters to focus upon groups of people rather than upon trees; and the systematic search for production technologies, commonly lumped together as "agroforestry," that are suitable for agriculturally marginal land.

These advances have strengthened national capacities to use forestry as a means to develop rural areas, to ameliorate the poverty of forest-dependent populations, and to reverse environmental and resource declines that erode national prospects. In application, however, they have had unanticipated consequences that seem to have buried these intentions.

DEVELOPMENTS

The consequences of forestry investment are apparent throughout Asia. Investment has greatly expanded productive land use opportunities through the development of markets, nursery systems, direct subsidies, public information and technical assistance, but the opportunities have not been used as and where anticipated. For good or ill, depending upon one's view, the consequences depart from expectations. New forests are arising in farm fields, particularly near cities; the agriculturally marginal lands remain as degraded as before; and the hinterland forests continue to retreat.

The "agrification" of forestry is occurring rapidly and everywhere. Farmers are planting trees instead of or together with food crops. In some areas of India, vast agricultural landscapes have been transformed from fields of crops to plantations of trees in less than ten years. The national gap between forest harvest and growth is declining in a number of countries. Even in Nepal, the rate of increase in forest cover exceeds the rate of decline; at current rates, the absolute gains and losses would equal each other within ten years.

Such increases, however, reflect a shift of forestry to the cultivable fields rather than to the marginal lands for which they were intended. They have provoked heated political debate about the relative importance of wood relative to food crop production on agricultural lands and about the pricing policies that governments have used to keep food prices low as a stimulus for industrial development. Groups that once promoted social forestry as a means to halt forest degradation are now fighting it as a threat to productive agriculture. Forestry has become a symbol for debate of much deeper political issues regarding the distribution of resources and
power and the nature of governmental response to them.

The conversion of agricultural land to forestry production is occurring most rapidly around cities, where emerging industrial markets for wood are located. Rising wood prices, related to the growth of processing capacity, and the development of market institutions outward from the city, are fueling forest expansion. This process is also driven by the urban wage attractions to farmers and their new capacity to earn income from land in the less-intensive and more remunerative forestry crops. It is driven further by urban middle-class investment in land, which undemanding forest crops have made easier and more attractive.

Although social forestry has helped create the opportunities for agricultural and “exurban” forestry, it has had little impact upon its intended target: the populations that depend upon degraded “public” lands. Social forestry organizations have turned rather quickly from the common property problem toward support for farm forestry and the development of government-run plantations of locally useful crops. The marginal-land populations are not better off or more stable than before.

Hinterland forests continue to succumb to the pressures for land. Contrary to theory, the increased production of wood has not relieved the pressures for more agricultural land. The growth of productive investment in forestry has been partly at the expense of protective investment in the security of existing forests. With populations growing at high rates, the conversion of land from agriculture to forestry may be exacerbating these pressures.

To sum up this composite picture, forestry-related investment, income and employment are rising rapidly throughout Asia. The growth of wood is increasing dramatically, wood balances are more favourable than could ever have been expected in such a short period of time, but the growth of wood is occurring primarily in settled areas, and particularly near urban markets, rather than in the hinterland. The hinterland forests, the base of the custodial forest departments, continue to decline. The environmental consequences of the decline, once a central motive for investment in social forestry, remain unabated. Environmentalism has now become more absorbed with the loss of agricultural land to forestry. Forestry investment created new opportunities that have been seized by those who were prepared to take them. The wood economy has been strengthened in unanticipated ways, but rural poverty and forest degradation have yet to respond.

SOCIAL FORESTRY AND RURAL DEVELOPMENT

While investment in forestry has proven to be economically advantageous for nations, and is certainly transforming their landscapes and wood balances, it is not yet contributing significantly to the welfare of the rural
poor and to the quality of the resources upon which they depend. The reasons may lie in the difference between what social forestry can do to promote rural development and what rural development actually requires. Rural development requires much more than a capacity for specialized interventions. As an approach to rural development, social forestry is stumbling along a well-trodden path of illusions about how rural development occurs and what one specialized programme can contribute to it. These illusions deserve discussion because they can all be overcome.

Single Solutions

Those involved in a rural development programme typically overestimate the impact it can have on rural conditions. The illusion helps to maintain organizational autonomy and morale, but it usually doesn’t benefit rural people. Rural development, or the self-sustaining growth of rural opportunity, arises when some threshold of diverse and complementary conditions is passed. No one or two changes do the job. Rather, a configuration of diversified supports reaches some critical mass that then sustains continuing change. Specific interventions do not achieve this critical mass unless they provide the threshold piece of the configuration. A social forestry programme cannot stimulate rural development and relieve rural poverty and powerlessness on its own unless it targets those special conditions in which it is the threshold piece. Otherwise, its impact requires greater coordination with other rural development activities.

Coordination can occur through strategic mixes of activity rather than through overt organizational effort. The “magnet and the fence” principle offers one guide. By increasing the income obtainable in agriculture, improved water supply and/or better crop production techniques can reduce human pressures on a social forestry plantation. This reduces the investment that must be made in protecting the plantation or it increases the likelihood that the plantation will be sustained. As a thriving plantation is more beneficial than one that is moribund, it will produce a greater surplus for possible investment in agriculture or some other advantageous activity, thereby creating an opportunity for further expansion of social forestry. The strategic combination of complementary activities has a larger effect than the sum of its parts. Furthermore, the diversification of opportunity and the cycle of gain it engenders tend to increase the relative power of the village involved to control its own circumstances. Although rural empowerment is one objective of social forestry, social forestry cannot accomplish the objective on its own.
Physical Production

Most rural development strategies, including social forestry, focus upon increasing rural production, but production strategies have paradoxical consequences: the more successful they are, the less their products are worth. Agriculture offers innumerable examples of how increased production can impoverish rural people. Although initial adopters of new technologies enjoy a bubble of surplus, the bubble disperses as the extent of adoption grows. Producers’ long-term benefits depend upon their capacities to control supply, not just increase it, and to diversify the markets for their outputs. Their gains induce local development only to the extent that these can be invested locally.

In these terms, social forestry might be more effective for rural development if it focused on the structure of markets for its products as well as on the management of land. As deforestation has a depressing “open frontier” effect on wood and forage prices, reducing incentives for rural production of forest-derived goods, it is conceivable that greater public investment in the protection of custodial forests would do more to advance social forestry and rural wellbeing than similar investment in social forestry directly. Rural people as a whole might benefit more from tighter, as opposed to weaker, government controls of forest supplies, if such controls could be designed to support village and farm forest production policies rather than to protect territorial and environmental interests.

Social forestry strategies, if directed toward production alone, will not benefit the majority of rural people, who will ultimately be paid no more than their costs. These strategies are likely to be more effective if they also attend to market structure and diversification and to policies affecting the flow of materials from public forests.

“Paper Rights”

Rural development strategies are commonly couched in terms of “rights to the people.” Social forestry has this quality: it is intended to promote rural development by increasing the rights of people in the land they use. But rights are only as strong as their enforcement, and they are only as valuable as the benefits to which they secure claim. A strong but unenforcible paper right is not a right in fact. A weak but valuable right can have greater benefit in developmental or distributional terms than a strong right that is worthless.

The enforcibility of a right depends upon the diversity and legitimacy of potential sanctions against its abuse. On issues of land, capacities for such sanctions exist only in local units of governance. Thus far, however, most social forestry organizations have preferred to maintain their autonomy rather than to work through local governments
that have the capacity to enforce land rights. The argument for autonomy is sound: it prevents the diffusion of purpose and the muddiness that seems characteristic of local governments throughout the world. Nevertheless, the “rights” part of social forestry strategy will continue to be meaningless until such concessions are ready to be made.

The value of rights depends upon the capacity to gain favourable market control. Only national governments can achieve this capacity. Social forestry organizations have not yet addressed this issue for two apparent reasons. First, they have a dominating micro- rather than macro-view of their problem. Second, they perceive themselves in budgetary competition with their parent custodial forestry agencies that could help to satisfy the need for greater market control. They are likely to respond to both issues as the growing political debate of forest policy increases the pressures upon them to do so.

Bilateral Cooperation

Rural development strategies must address the complementary needs for (a) specialized services, which depend upon relatively centralized critical masses of resources; (b) general local capacities to choose, coordinate and protect or enforce desired combinations of activity in a territorial unit; and (c) capacities to mediate the relationship between specialized central agencies and general local units of government. Strategies that exclude one or another of these basic elements will not stand on their own.

Social forestry organizations have sought direct relationships with villages and farmers. The bilateral nature and asymmetric power of the specialized relationship between a technical government agency and a village render the relationship, and the rights and flows it creates, inherently unstable. A government agency and a village lack equivalent ability to impose costs on the other if it fails to comply with their agreement. Thus, local resource rights are at the agency’s discretion and are subject to possible shifts in its policies and personnel. Villagers who have entered agreements with social forestry agencies have had no way to hold the agencies accountable when, as it typical, they didn’t deliver their share. Third-party mediation mechanisms are essential to the stability and productivity of the relationship and to the credibility of social forestry programmes.

Sub-national levels of general governance and court systems are potential third parties for social forestry. They have the capacity to establish rules that both villages and national agencies will accept, to equalize the power relationship between agency and village, and to enforce their judgements in various ways. For obvious reasons, social forestry organizations have avoided giving attention to the need for a third party although it is essential to their long-term political stability and effectiveness.
TOWARD DEVELOPMENTAL FORESTRY

Forestry's entry into the mainstream of development strategy in Asia is a recent phenomenon. It has had an extraordinary impact in the past ten years—on nations and on the forestry profession—but it still has a long way to go. In particular, it has not yet touched the hard-core poverty of its initial targets, the vast populations that depend for life on degrading lands that were once forested. It has not done so for two reasons. First, social forestry organizations have backed too quickly away from the complexity of the problem, retiring to the calmer waters of farm forestry and government plantations. Second, although directed toward rural development, they have yet to internalize key concepts of rural development or to fit into a framework that can satisfy this difficult goal. These two sources of ineffectiveness are obviously related. Forestry has plunged quickly into the cold river of social reality; its long history of technical lifeline provides insistent temptation to retreat to the shore. However, the tremendous progress that forestry organizations have made in Asia over the past decade offers every reason to expect that they will continue to build the new crafts and connections to help the millions in dire straits who determine the fate of the forest. The current issues will be resolved in due course.

Résumé
Longtemps isolée des affaires de l'homme, la sylviculture est entrée, au cours de la dernière décennie, dans le courant du développement national et rural. De plus en plus, les nations investissent de l'argent dans leurs ressources forestières, qu'ils considèrent comme un moyen de favoriser le bien-être économique, l'équité sociale et le ressort politique. L'organisation de la sylviculture a changé de façon dramatique afin de satisfaire aux besoins de sa nouvelle mission. La sylviculture-pour-développement a déjà donné des résultats impressionnants. Les bilans de bois commencent à afficher des tendances positives dans maints pays qui avaient été menacés par une disette aiguë. Cependant, de tels avances ont peut-être faits au détriment d'autres objectifs. Ils témoignent de "l'agrification" et de l'industrialisation rapides de la sylviculture plus que d'un ralentissement de la destruction de la forêt naturelle et de ses services écologiques. La sylviculture de développement n'est toujours pas venue à bout de la misère humaine qui est la mueur de la destruction des forêts; elle n'a pas encore commencé à réaliser ses possibilités en tant que moyen d'accroître l'équité et le bien-être ruraux. Cet article étudie l'expérience de la dernière décennie en Asie afin d'établir pourquoi la sylviculture n'est pas encore un outil efficace dans le développement rural et comment l'on pourrait augmenter son efficacité.