5 Private Sector Participation on Public Forestlands: Challenges and Policy Issues

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Introduction

The private–public partnership initiative in sustainable forest management (SFM) and private sector participation (PSP) in plantation establishment on public forestlands have increased markedly over the past few years. Public forest agencies in many developing countries are contemplating handing over greater responsibility to private entities. These countries are increasingly adopting market-based instruments (MBIs) to encourage private sector participation in SFM. In parallel, forestry authorities are being restructured to reflect the changing roles of the private sector (Lendell-Mills and Ford, 1999). Three discernible trends in this regard are:

- increased PSP in ownership/lease of forestland;
- adoption of MBIs to promote PSP (tax incentives, security of forestland tenure, forest certification and global transfers for forest conservation); and
- moves to restructure forestry authorities.

This chapter has been divided into sections: the first provides the theoretical framework for PSP in public forestlands, the second examines a list of constraints to mainstreaming PSP, and the third provides options to promote PSP in plantations on public forestlands with particular reference to India. The final section discusses the new policy orientation and policy research that must be undertaken to move the concept forward.

Theoretical Frameworks for Private Sector Participation (PSP) in Public Forestlands

Incompatibility of production objectives

Plantation forestry is an economic/agricultural activity like other forms of agriculture, e.g. wheat or maize cultivation. The only real difference is the time frame of production and the recreational opportunities that this activity presents. Virtually all the benefits from plantation forestry flow through the market, so the public sector forest agencies may not have any particular incentive or gain any advantage from engaging in this form of forestry activity. Furthermore, public forestry agencies, with their elaborate bureaucratic structures, multiple layers of accountability and complex cross-checks, are institutionally incompatible with the demands of commercial production in a competitive, fast-growing economy. The public agencies' main functions in forestry are to manage indigenous forests, to offer services to communities, and to provide policy and regulation guidelines. It is not their job to provide raw materials to business entities. Thus mixing market and non-market products in its mandated

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functions creates incompatible objectives for a public sector agency (Binkley, 1999). It is therefore argued that plantation forestry activities should be the responsibility of the private sector. It would, therefore, be logical for the forestry agencies to spin-off functions and assets to the private sector, through leasing or selling lands that are particularly suitable for industrial plantations. This rationale is particularly valid for those countries where the public forestry agencies own all the forestlands and there is no scope for leasing or buying forestlands in the market place.

Pros and cons of public–private partnership in the management of public forests

The key challenge in the natural forest management of the future is to produce industrial timber at an acceptable cost. This should be accomplished while promoting a range of goods, services, experiences and values that contribute to community well-being, economic opportunities, social and personal satisfaction, spiritual and cultural fulfilment, as well as recreational enjoyment, from the same area. Furthermore, in the future, forest management will be enhanced by policies that encourage public and private investment in long-term sustainable forest management. The management of natural high forests on public lands in the future will respond more to the demands for non-market goods, and industrial timber production from these forests will decline. These outcomes may be due to the difficulty that a public sector agency faces in appropriately balancing all possible outputs against an economic yardstick, restrictions on commercial timber harvesting in public forests due to the adoption of forest certification as a criterion for good forest management, and the relative importance of a range of non-market goods in the production mix.

This will act to reduce the revenue being earned from the timber harvest. Thus public forestry agencies will be unable to attract more funds through the budgetary process, since the budget is generally proportional to revenue-earning capacity. This implies that the resources available for forest management will decline just at the time when management problems become more complex. Those interested in the non-timber aspects of forestry do not lobby for increased budgets for integrated forest management (Binkley, 1999: 6).

The establishment of industrial plantations on public forestlands with private sector participation becomes more relevant in this context. The private sector will have more resources and the wherewithal to undertake industrial plantation on an intensive scale. Technology-based industrial plantation will provide higher productions per unit area and thus greater areas of natural forests will be available for non-timber production and other environmental facilities. Limited public resources can be effectively deployed for meeting the social, cultural, spiritual and recreational needs of society, for which the public agencies are ideally suited. Outright sale or leasing of forestlands to the private sector becomes pertinent as these lands can then be intensively managed for plantation. This is particularly relevant for India where private market for forestland is non-existent and the land tenure system does not encourage the private sector to take up extensive forest plantations.

Involving the private sector in plantation establishment on public forestlands has become more important because of some newly emerging areas where public forest agencies can only have a regulatory role. One example is the area of carbon sequestration. Even while detailed negotiations on carbon trading proceed on post-Kyoto arrangements for tradable carbon rights,[2] it is clear that third-party countries such as India may be admissible as beneficiaries and participants in carbon trading. The flexibility and non-bureaucratic nature of the proposed tradable pollution rights is what gives them potential importance as a major investment source by the private sector in future forestry development.[3]

Current status of private sector participation in public forestlands

Private sector participation (PSP) in the forestry sector has increased markedly over the past ten years (Lendell-Mills and Ford, 1999). Governments are adopting market-based instruments to encourage the private sector to act sustainably. In parallel, forestry authorities are being restructured to reflect the changing roles of the public sector. A detailed worldwide study across countries has revealed the following trends in PSP in the forestry

sector: (i) increased PSP in forest ownership; (ii) the adoption of MBIs to encourage sustainable forest management (SFM), including financial and material incentives, conditions attached to forest concessions, trade liberalization, promotion of markets for non-timber benefits, forest certification and global transfers for forest conservation; and (iii) a move to restructure forestry authorities in order to increase their exposure to market forces through contracting out, corporatization and privatization.[4]

A review reveals that many countries have implemented or are implementing reforms and incentives to increase PSP in the forestry sector. All of these countries have introduced at least one MBI, and almost 70% of the countries have restructured their forestry authorities. While the private sector is getting involved in forest ownership, utilization and management, increased PSP is most noticeable in forest management. Of the MBI's investigated, financial incentives (e.g. subsidies, compensation payments, cheap loans, and/or tax exemptions) have been most widely implemented over recent decades, followed by the promotion of the market for non-timber benefits (Jaakko Pöyry, Finland, 1999, personal communication).

The underlying arguments for the introduction of incentives are: that the forest resources have been historically exploited; dwindling forest resources near consumption areas have resulted in higher transport costs of raw materials; sustainable sources of raw material are necessary in order to satisfy increasing demands for wood products; reliable sources of wood will expand the industry's domestic and international markets and countries would benefit from this trade; the plantation industry is labour intensive and would generate employment both through backward and forward linkages; and the private sector has adequate financial resources and the wherewithal to establish plantations on forestlands under their control.

The most common types of incentives offered to private investors are direct subsidies, tax deductions, subsidized loans, and secure tenure of public forestland through innovative tenurial instruments.

Direct subsidies have been used successfully in Chile,[5] Uruguay,[5] New Zealand,[6] Indonesia[7] and Portugal.[8] Tax deductions have been provided in Chile, Brazil, Uruguay, Argentina, Australia, Portugal and South Africa. In Brazil, income deductions were used essentially as a form of subsidy whereby the investor could allocate a proportion of their tax liability to plantation establishment.[9] In addition, income tax deduction is also available in Australia allowing a 100% deduction of costs incurred against taxable income that year.

Security of land tenure has been used in conjunction with subsidized loans and direct subsidy for promoting plantations on cut-over forestlands in the Philippines and Indonesia. These examples best illustrate how the government can provide the correct policy environment and incentive to attract the private corporate sector as well as the community in order to stimulate forest plantation establishment on degraded forestlands as well as implementing the management of residual production forests in lieu of timber licensing agreements. The means used are: allocation of state forestlands to the private sector under renewable long-term lease arrangements, initially 25 years and thereafter for another 25 years;[10] providing a financing facility consisting of equity participation and non-interest or concessional interest-bearing loans; establishing a special reforestation fund in the commercial banking sector to provide loans at reduced interest rates to private investors engaged in establishing forest plantations and repairing environmental damage; and the allocation of residual production forests through Community Forest Management Agreements (CFMA).[11]

Fiscal mechanism of resource transfer for environmental rehabilitation and resource regeneration – Malaysian case study

The Government of Malaysia (1984) used financial incentives to promote industrial plantation objectives in the constituent states. The project design was to meet two simultaneous objectives: (i) to rapidly cover the degraded forestlands with fast-growing, high-yielding, general utility timber species to stop further encroachment and discourage their use; and (ii) to help reduce the pressure on natural forests and thus prolong their sustainable use. The project had another feature, which was an interest-free loan by the federal government to the states to build up the renewable asset. The Malaysian Government approached the Asian Development Bank and received a

blended finance of $25 million. There was also a second loan and the country has now established about 88,000 ha of industrial plantation of *Acacia*, *Gmelina* and *Paraserianthes* (Ganguli, 1995: 156).

Constraints in Promoting Private Sector Participation (PSP)

There are a large number of impediments to promoting PSP on public forestlands. These include: inadequacy of policies, diverse interests of stakeholders, trade and marketing constraints, lack of private entrepreneurial initiative, and lack of initiative among bureaucrats in charge of the forest agencies.

Inadequacy of policies

There is a broad category of policy failures or inadequate policies, which have resulted in a slowing down of PSP. Among these are: absence of a clear statement on the role of the private sector in plantation establishment and management on public forestlands; failure to introduce appropriate incentives for promoting PSP; and reluctance of the concerned agencies to involve the private sector in industrial plantations on public forestlands. The Indian Forest Policy states:

> As far as possible a forest-based industry should raise the raw material needed for meeting its own requirements preferably by establishing partnership arrangements with individuals and farmers.

The Government has thus absolved its responsibility in the production of industrial timber, leaving it to the private sector. It owns 69 million ha of forestlands and is unable to raise plantations on degraded forests because of lack of investment funds. The other impediments are: the absence of tenurial rights on the public forestlands, thus limiting the prospects of private sector participation; legal restrictions on buying forestland for the purposes of industrial plantations in the market place; a lack of institutional support where privatization has been set as a goal but agencies have not been willing to implement the policy goal; and the fact that public–private partnership on forestlands is politically unpopular.

Stakeholders' resistance

There are multiple stakeholders in forestry. This has stemmed from increased global environmental awareness and, perhaps more importantly, international publicity for controversial natural-resource issues. The private sector, particularly the corporate sector, is seen by a group of stakeholders as destroyers of forest resources. These stakeholders firmly believe that the corporate sector in the pursuit of profit will not be able to take the long-term view which forest rehabilitation requires. Further involvement of the public agencies in all spheres of forestry activities in some countries is supported by these stakeholders on the grounds that the requisite expertise in the private sector is not available. These stakeholders also resist reforms to promote PSP, as they fear that the powerful corporate sector may establish an unholy alliance with politicians and bureaucrats and the welfare aspect of the people's movement in forestry will be derailed.

Market and trade constraints

The reluctance of the private sector to get involved in plantation forestry establishment and management has been due to market and trade uncertainties. Forestry is a long-term venture and there are two associated market risks. These are the fluctuating prices of forest products and the risks associated with changing costs of production. Even though these are not unique to the forestry sector, they are seen as constraints by the private sector. They therefore look for incentives other than security of land tenure to encourage them to participate in long-term plantation ventures and to take care of the associated market risks. The trade policies that are targeted at raising domestic timber processing levels also act as constraints to good forest husbandry practices and often act as constraints to the promotion of PSP in plantation forestry.

Lack of entrepreneurial initiative

The lack of private sector entrepreneurial initiative has been considered as a constraint to

promoting PSP in plantation forestry, particularly in India. The importance of a sustained supply of raw materials for national-level use in defence, communications and industry has been underscored in the Forest Policy. However the post-independence rapid development process has led to the setting up of a number of paper, plywood and other wood-based industries in all regions, leading to a sharp increase in demand for timber and pulp wood. This was initially met from commercial harvests from forests under the control of the public forest agencies. The idea of attracting industries in the constituent states led to the allocation of raw material to industries at concessional prices for long periods without applying any economic yardstick. This led to some complacency on the part of the industry, both in terms of not investing in raw material development and in continuously using the leverage to obtain raw materials at less than market prices. This has also resulted in a lack of entrepreneurial initiative, as the administered pricing of produce from public forests removed the incentive for the industry to grow its own raw material. Some of the industry owners who have pioneered the business in India appear to welcome globalization and believe that captive plantations are necessary in order to have the level playing field necessary to achieve cost competitiveness.

Lack of information and understanding among bureaucrats

A lack of understanding of the rationale of PSP contributes to public agency resistance to reform. Even in India, where the industries are willing to invest in technology-based plantations and have provided this assurance to the government, the signals are conflicting. There is no forum in India where global issues concerning forestry and issues on privatization and other emerging areas of importance to forestry development are discussed. Thus decision makers are not able to reach a considered view on enabling the conditions and environment for convergence on a national position on these issues *vis-à-vis* international positions.

Options to Promote Private Sector Participation in Plantation on Public Forestlands with Particular Reference to India

Views on the issue

There are two opposing views on the role of the private sector in plantation establishment on public forestlands in India. For those who support it, their argument is based on the rationale that the resources required for large-scale, technology-based, high-yielding plantations on degraded public forestlands are considerable and may not be easily available in the public budget. Promoting PSP in some partnership arrangement may result in accelerated rehabilitation of these degraded lands. The investment of private capital in industrial plantations is also cost-effective, as more public resources could then be diverted for better protection and conservation of natural forests.

Those who oppose it argue that the private sector in India, particularly in the wood-based industries, has traditionally been an exploiter of forests and therefore cannot be trusted in their new role as the developer of forest resources. Leasing or outright sale of degraded forestlands, according to them, may result in the diversion of forestlands for other uses. Furthermore, they argue that public forestlands should, as far as possible, be managed for the promotion of biodiversity and meeting the community's needs and should not be used for industrial plantations. Land for such plantations should be procured from government non-forestlands and private lands in the market place.

The contribution of natural forests to commercial timber production will continue to decline and technology-based plantation will be the main source for meeting industry's requirements for timber. Should large areas of degraded forestlands which are currently producing very little continue to remain under the management of the public agencies, particularly since they do not have enough resources to invest to make these lands productive? Would it not be better for these agencies to divest this resource as a non-performing asset in the market place, as is being done in respect of the Public Sector Units (PSUs)? The proponents of PSP argue that that such a policy option will also

open new opportunities for investment in forestry plantations, as well as in carbon trading in the international market, given that forestlands are available to the private sector at reasonable prices in the market place or in some sort of long-term tenurial arrangement.

Option 1: Divesting degraded forestlands in the market place

Option 1 examines the possibility of divesting in the market place about 5 million ha of degraded forestlands (at 0.25 million ha year^{-1}) which can be converted to technology-based, high-yielding plantations. This option will bring in an additional investment of US$130 million per annum (for the next 20 years) by the private corporate sector. This may, at the end of the period, yield enough industrial timber to meet the demands of the timber-based industries on a sustainable basis. Furthermore, it may enable the private sector to earn an income through carbon trading while at the same time providing an annual rural employment of 220 million days. The outright sale of these 5 million ha of lands after proper valuation may provide a total quantum of resources ranging from US$1–2 billion to the Government. Funds received from this sale could be redeployed in a trust fund to support non-timber and other aspects of development on the remaining forests (e.g. non-timber forest production) that provide substantial public values. This option to generate funds for the forestry sector may be a good option, as more funds can then be injected into the sector through the trust fund mechanism (Binkley, 1999).

Option 2: Joint sector plantation companies with private corporate sector

This option is proposed as the second-best solution in view of the political difficulties that may constrain selling off forestland in the market place and the difficulty in dedicating the sale proceeds specifically to the forestry sector due to the budgetary process. This option considers the establishment of a tripartite venture with state forest corporations (SFDCs), the private corporate sector and the local communities. The SFDCs may provide equity in terms of forestlands which will be valued, the private sector will bring in technology, financial resources and management expertise, and the communities may provide indigenous know-how as well as other inputs, as required. The choice of species and sharing of products, especially the wood, may be regulated through a management plan acceptable to the three stakeholders, along with a memorandum of understanding (MOU) for the sharing of produce.

New Policy Orientation and Policy Research

New policy orientation

In order to promote PSP in public forestlands, several new policy initiatives are necessary. Among these are adequate and appropriate incentives, innovative tenurial reforms, and favourable trade policies, redefining the role of the public forest agencies, and mainstreaming of information. The appropriate incentive framework to promote private sector participation will depend upon specific country conditions and commitment. However there are some common theme incentives, such as tax deductions, subsidized credit and other market-based instruments, which have proved successful in promoting PSP in many countries and can be pursued further.

The policy option of tenurial reforms in the context of countries where the government controls the forestlands is of primary importance. In this respect, several policy options are available, namely: outright sale/disinvestment of public forestland; leasing of forestland on renewable basis; and a tripartite venture with the public agencies, private sector and the local community. In order to dispose of or sell off public forestland, an appropriate valuation of the land will be a prerequisite. If outright sale of public forestland is politically unacceptable, a long-term renewable leasing arrangement, as has been carried out in the Philippines, may be a second-best solution. The alternative of a tripartite public–private–community venture may also be a good option. This will enable the public agencies to keep the land as equity, with the private sector providing the financial resources and the technical know-how and the community providing the protection and labour within the framework of some cost-sharing arrangements.

The trade policy, which concentrates on increasing the productivity of domestic industry, is very important and in this regard any policy that promotes self-sufficiency in raw material production is important. If the production functions of the forests are going to be privatized through policy changes and tenurial reforms, then the role of the public sector agencies has to be redefined so that they undertake to preserve the management of natural forests, parks and protected areas, and to promote forestry as an alternative land-use. It is also necessary for the public sector agencies to modify the present unclear institutional arrangements in order to improve their efficiency and to enhance PSP. Domestic pressure from cause-oriented pressure groups who oppose PSP should be resisted by information dissemination. The institutional culture should be modified to integrate broader reforms in the forestry sector along with the other sectors of the economy. The institution should also align itself with the directional shifts being adopted by the global community.

Policy research

Forest policy-related research could play a crucial role in promoting PSP. The challenge is to make it demand-driven and an interactive process involving the private sector. Due to it attracting less economic interest than, for example, agricultural research, financial investment in forest policy-related research has traditionally been low, resulting in an inadequate infrastructure and facilities, a smaller number of research personnel and a low level of skill. Research capacities (infrastructure and human capital) need to be improved, while the planning and coordination of research and development activities and the cooperation of people and institutions need to be strengthened. In this regard changes are required in the planning and management of forestry policy-related research with a view to involving users of research in identifying problems and opportunities and to provide the appropriate field orientation. A list of worthwhile policy-based research may include the following: identification, listing and analysis of a set of conditions that will promote PSP in plantation development on public forestlands; an inquiry into the nature and need for specific incentives that may encourage PSP in plantation as well as carbon sequestration on public forestland; analysis of costs and benefits of various land tenure options – open-market sale, long-term leasing, joint sector ventures for involving PSP on public forestlands; analysis and synthesis of conditions for promoting PSP on public forestlands; analysis of benefits and costs of alternative models of private–public–community partnership and criteria for selection of the private sector for participation in public forestlands.

Building partnership initiatives and cooperation with global and regional initiatives

The complementarity and close relationship of the private corporate sector and the public agencies in forest resource management in the pursuit of achieving environmentally sustainable development have resulted in many international and regional initiatives in support of PSP. Special attention needs to be given to building partnerships with the new funding organizations such as the Sylvan Fund and the Geneva-based World Business Council for Sustainable Development, a body of 150 corporate groups who have decided to promote international transfers aimed at PSP and SFM and to follow the sustainable development path as their corporate goal.

Forestry in the developing countries, particularly in India, is heading towards a new process change. Foresters will find it difficult to function in the new environment if they follow the traditional forest management practices, which espouse multiple-use forestry but basically focus on timber management. Social pressures are pushing foresters of the developing countries to take a wider landscape or ecosystem approach to management. Thus, forestry in these countries, particularly India, is at the crossroads where the consequences of the choices made will have a great bearing on the way that forests will be managed in the future.

Endnotes

[1] Formerly Senior Forestry Specialist, Asian Development Bank, Manila, The Philippines.

[2] The planned negotiations in The Hague in 2000 did not result in an agreement on this.

[3] There are a few examples of forestry-sector carbon-offset projects under implementation or being developed in the Asia–Pacific region including a reduced impact logging project in Indonesia and Malaysia, and a proposal for a plantation offset project in Fiji, Solomon Islands and Papua New Guinea. The Forest Rehabilitation Project in Sabah is being implemented by the Sabah Foundation and the Dutch Electricity Generating Board and since 1992 has established 3000 ha of forest plantations.

[4] Country-level information is provided in the IIED publication *Privatising Sustainable Forestry: A Global Review of Trends and Challenges* by Natasha Landell-Mills and Jason Ford (1999). This publication provides consolidated information on the variety of forest management activities being handed over to the private sector in line with mainstreaming the private sector in sustainable forest management.

[5] Chile, through Decree Law 701 enacted in 1974, provided a 75% subsidy for plantation establishment costs of acceptable forest species based on a standard cost calculated annually by the National Forestry Corporation. The owner retains the ownership of the land – mostly eroded and sand-dune areas. In 1996, DL 701 was extended by another 15 years. In Uruguay, to boost afforestation, Forestry Law NO.15.939 has established a system of subsidy (50% of the national average cost of planting, determined by the government).

[6] A Forest Encouragement Grant Scheme introduced in 1970 which enabled recovery of 50% of cost per ha, as a subsidy subject to a maximum of NZ$ 593 ha^{-1}, which was later modified to cover all costs with no maximum to stimulate plantation establishment on degraded lands. A major change in ownership structure occurred due to the sale of government forests between 1990 and 1996.

[7] Government subsidies are used to establish plantations on Hutan Tanaman Industry (HTI) land.

[8] Private landowners enter into a joint venture with the state, in which the landowner provides the land and 10% of plantation costs and the state provides 90% of the plantation costs but also receives 40% of the future revenues.

[9] The government objective was to encourage investors to directly provide funds to establish large plantation estates rather than collecting taxes and reallocating them as subsidies.

[10] The instrument is called the Industrial Forest Management Agreement (IFMA). Under IFMA some of the larger and contiguous areas of degraded forestlands with residual growth under government control have been made available to the private corporate sector for development into industrial forest plantations. The objective is to involve the private corporate entities in order to pay for the development of its own resources to be used in industry and at the same time fulfilling the government's obligation to rehabilitate the degraded forests.

[11] CFMA is a renewable 25-year lease agreement for forest management and utilization granted to local communities, which enables the community to manage and harvest existing forest resources according to a mutually agreed plan.

References

Binkley, C.S. (1999) *Forestry in the Next Millennium: Challenges and Opportunities for USDA Forest Service*. Discussion Paper 99–15, Resources For the Future, Washington, DC.

Ganguli, B.N. (1995) *Breakthroughs in Forestry Development – Experience of the Asian Development Bank*. Asian Development Bank, Manila, 269 pp.

Lendell-Mills, N. and Ford, J. (1999) *Privatising Sustainable Forestry, a Global Review of Trends and Challenges*. International Institute of Environment and Development, London.