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Private sector forestry: a review of instruments for ensuring sustainability

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Executive Summary

Private Sector Forestry: a review of instruments for ensuring sustainability

Society requires a large number of goods and services from forests. The private sector is an increasingly dominant player in the production of wood; and the market is the main way in which wood products are distributed. Yet, for the other forest goods and services such as non-timber products, biodiversity, and carbon storage, markets are often not effective. Worse, government and policy failures mean that the private sector's wood production activities often degrade the production base for these non-wood benefits.

The private sector offers many potential advantages in wood production: production efficiency due to exposure to competition; technological development and transfer; and the ability to undertake long-term investments. What are the chances of these benefits being turned to the production of forest goods and services other than merely large quantities of fibre? What regulatory and market instruments would create the right climate for a wholesale move away from companies stripping away forests' assets, and towards a longer-term investment in sustainable forest management for multiple benefits?

At present, there are few routine systems for assessing forest companies and their use or abuse of forest assets. Whilst acknowledging this lack of information, this paper reviews the behaviour of large companies. Such companies are involved in both deforestation and afforestation. The paper suggests that governmental/policy failures lie behind much of the poor practice – stock market and product market failures merely reflect these.

There are many examples of companies improving their environmental practice. While this is largely due to companies achieving cost-savings in environmentally-sensitive practices, it is also partly due to stakeholder pressure and discriminating purchasing policies, where products from well-managed forests are sought by buyers. The recent swing in many countries towards market solutions, as opposed to regulation, may thus have had some environmental benefits. However, both market failures and policy failures remain very pronounced with respect to social issues – local people's rights are insecure or ineffective, especially in relation to those claimed by large companies, and systems for participation are weak. Pressures to improve the private sector's social performance have not proven very effective.

In general, both market and policy failures are such that the private sector will infrequently improve its forest management spontaneously. A mix of regulations and incentives will be needed to ensure that the full range of social and environmental benefits is produced at the same time as fibre. Property rights for various forest goods and services need to be more secure, externalities need to be internalised in companies' decision-making on forests, competition increased, and uncertainties reduced.

How can this be done? This paper reviews varied experiences of privatisation processes, and recent lessons of regulatory and market instruments that affect the private sector from both supply-side and demand-side angles. It is clear that a much more subtle palette of solutions is required – rarely are extremes of

universal privatisation or nationalisation effective. Many new market instruments are particularly promising.

Five key issues are singled out as significant in defining instruments that result in sustainable private sector forestry:

1 The *nature of the forest good or service* in question – whether it is a public or private good (or something in between) can be assessed by its excludability (the ability of an individual to deny its use to another) and its subtractibility (the amount that its consumption subtracts from its repeated consumption).

2 The *maturity of forestry institutions*, which entails the quality of information flows, communications between stakeholders, degree of decentralisation, and administrative capacity of state institutions. Some instruments just will not work without sophisticated institutional capabilities.

3 The level of *participation of other stakeholders* in the decisions on private sector roles and associated instruments. Greater participation appears to be justified. Putting companies together with the parties that will be affected by their operations can help to generate innovative solutions. These solutions include markets for non-wood benefits, markets for damage abatement/compensation, differentiated rights provisions, and partnership arrangements.

4 The *motivations, organisation and dynamics* of private sector enterprises. These will differ according to whether the enterprise is the *owner* of the forest resource, or the *manager* of forest operations. It is more effective to examine motivations and dynamics in terms of business responses to policies, forest endowments, and market situations, rather than to assume a "conspiracy theory". Industry associations will be increasingly significant in improving private sector performance – especially if they adopt independent verification.

5 The *costs of any instrument* – which should not exceed the benefits obtained. This will always be a difficult calculation as the costs and benefits of non-wood benefits are not always well-enumerated or widely agreed.

The failure of otherwise promising instruments may be explained by the lack of one or more of the above. This paper provides a brief overview of the main issues in improving the sustainability of private sector forest management, and reflects a range of opinions on these issues. It finishes by summarising a three-year IIED programme, just started, which will explore and promote the most effective instruments for sustainable private sector forestry.

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1. Introduction

1.1 Scarcities of forest goods and services

Society as a whole now seeks an enormous range of goods and services from forests (Table 1). This range is far greater than the market can currently deal with.

Greater or lesser value is placed on specific goods and services, by different actors, at different levels from the household to the international community. Some needs may be direct and urgent e.g. for rural people's livelihoods. Others may be more indirect e.g. ensured water supplies for agricultural development.

Stakeholders have different access to the means for expressing their specific needs. Many have access to the market, which can be a relatively efficient means of producing and distributing some goods and services e.g. timber and recreation. For other goods and services, such as biodiversity, there are often neither efficient markets nor other effective mechanisms for ensuring their needs are fully met.

In recent years, various forest goods and services have become increasingly scarce in many regions. A number of supply-side strategies have evolved for dealing with these scarcities:

- developing a *permanent forest estate* (through protection and afforestation);
- obtaining forest goods and services from *non-forest land* (such as farm trees);
- *regulation of forestry management practices* to increase/improve non-wood outputs and protect the residual stand;
- *technological innovation* to increase the efficiency of fibre use, e.g. "engineered" wood panels such as OSB and MDF;
- *importing* forest goods and services; and
- producing *substitutes* for forest goods and services (such as non-wood fibres, concrete, metal and plastics).

Such strategies have evolved in part through government planning, but also largely through the spontaneous action of stakeholders – often spurred on by market pressures.

The private sector has become an increasingly dominant actor in all of these strategies, notably for producing wood fibre. It is driving the expansion of the forest products industry into new regions, aided by technological developments which allow the use of a greater range of species and sizes in wood products. Policies have come to reflect both the importance of fibre and the perceived significance of the private sector in producing it.

In contrast, policy and civil society movements are now also making non-timber forest products, biodiversity conservation and cultural benefits a priority. This is clear from (inter)governmental policy initiatives and from civil society campaigns. The private sector is less routinely involved in producing these goods and services – to the contrary, its production of wood has often reduced other stakeholder's abilities to produce and/or consume these non-fibre benefits. Policy processes have begun to recognize the private sector as a key stakeholder, but have yet to create the right signals to encourage the private sector to provide a broader range of goods and services.

Table 1: Current beneficiaries of goods and services from the forests

Goods and services from forest	*Local benefits*	*National benefits*	*Global benefits*
1. Wood products	X		
2. Non-wood products	X		
3. Maintenance of hydrological cycle	X	X	X
4. Soil and water quality conservation	X	X	
5. Wind and noise control	X		
6. Landscape amenity	X	X	X
7. Recreation and tourism	X	X	
8. Cultural and religious services	X	X	X
9. Microclimate regulation	X		
10. Climate moderation		X	X
11. Maintenance of biological diversity	X	X	X
12. Scientific research and education	X	X	X

Based on: Segura, O. et al. 1996.

1.2 Sustainable forest management (SFM)

At the forest level, the ways in which supplies of the various forest goods and services can be integrated, and the security of such supplies maintained over time, has come to be called 'sustainable forest management' (SFM). In recent years, there has been a spate of initiatives to define, or to prescribe, SFM.

The earliest, unilateral initiatives to define SFM e.g. by industry associations, or by environmental NGOs alone, became mistrusted by other stakeholders. Hence the current interest in defining SFM through multistakeholder processes. These processes attempt to forge patterns of forest management to meet the multiple needs of different actors (not only those which can be expressed in the market place), and to redress the inequalities between those who bear the costs of forest exploitation, and those who reap the benefits. These range from the global/intergovernmental (notably the UN Forest Principles and ITTO Criteria), to the regional (e.g. the Helsinki Criteria for Europe and the Tarapoto Agreement for the Amazon) and national (e.g. the UK's Sustainable Forestry initiative and national standards), to those defined by civil society groups (e.g. the Forest Stewardship Council's Principles and Criteria of forest stewardship).

Such initiatives have come about in response to escalating clashes of interest and opinion about how best to overcome the increasing scarcities of particular forest benefits. The various stakeholders involved have, of course, had their own agendas, overt or otherwise. For example, governments have wished to protect their sovereignty over forests from possible supranational control. Public interest groups have tried to elevate concerns for biodiversity. And many corporations have tried to protect their markets and their access to land and raw materials, and to avoid increased costs.

IIED (1996) analysed 17 initiatives to define SFM and found they all had the following in common:

- sustaining yields of all forest goods and services;

- conserving biodiversity; and
- ensuring positive social and economic impacts on different groups.

All these initiatives acknowledge that the basic principles of SFM need to be interpreted locally. Forest ecosystems, and the human systems with which they interact, are neither identical nor predictable in their responses to different uses or management interventions. Hence most initiatives stress the need for local interpretation (by more than one stakeholder), and for careful experimentation, monitoring and adaptation dependent upon the impacts achieved, whilst employing precautionary principles that acknowledge the many uncertainties involved. There is usually an acknowledgment that management of the forest for specific goods and services will affect the availability of other goods and services; but not always a recognition that in many cases we do not know the optimum production mix. This mix will be a moving target, defined not only by changing preferences of the various groups, but by new technology.

The practical application of SFM will, therefore, require openness to non-market demands, and mechanisms to integrate them with commercial forest uses. It will demand improved knowledge of local ecosystem responses. It will also entail greater attention to the traditional knowledge that has evolved through observation of forest ecosystems over many years. It will certainly not be about universal solutions on clear-cut size, chemical applications, etc.

1.3 The aim of this paper – scoping private sector roles in SFM

This paper aims to begin to address the questions:

- How can the private sector continue to manage forests to produce wood and other market good, whilst improving its delivery of non-market goods and services?
- And in what ways can the private sector be encouraged to do the above – through the market, or through other mechanisms and instruments put in place by government and civil society?

The paper reviews these questions, offering a preliminary overview of private sector performance and tactics, a review of the various mechanisms and instruments, and suggesting promising avenues for research and action that will, in future, ensure that the private sector continues to deliver more than mere fibre, and does so on the basis of greater sensitivity to other stakeholders, and a broader knowledge base, as well as commercial interests.

IIED's approach in this paper builds on its observations, made over 25 years, that progress in the private sector is achieved by leaders *either* becoming aware of some of the business/environment win-win possibilities that lead to spontaneous improvements, *or* being pushed by other actors – as long as the other actors can fashion the right carrots and sticks to cajole the mainstream private sector towards best practice. Research should therefore focus on the root causes which constrain more widespread adoption of best practice. This paper is just a beginning in this respect.

The paper is the first product of a three-year IIED research programme, *Instruments for Sustainable Private Sector Forestry*. This will involve collaborative research with six developing countries, with other research bodies, and with selected companies. The Programme is introduced at the end of this paper (Box 8).

What the IPF, WCFSD, and EC say about private sector forestry

The Intergovernmental Panel on Forests (IPF) calls for action to enhance private sector investment including: voluntary codes of conduct especially on management practices, technology transfer, education and investment; reinvestment of private sector revenue back into SFM; improving the policy/regulatory climate in developing countries to attract private sector investment and community enterprises in SFM and forest protection; and loan and investment guarantees from developed countries for the activities of their national private companies in developing countries.

The World Commission on Forests and Sustainable Development (WCFSD) emphasises a two-pronged approach – both working with the leaders of the private sector to examine constraints to best practice; and working with governmental and civil society actors to improve the incentives and controls they can use for controlling the private sector. WCFSD calls for a special focus on timber pricing, concession allocation, finding the right role for certification, and penalizing "cut-and-get-out" companies operating in such countries as Papua New Guinea (PNG), Siberia and the Guyanas (its global *ForestWatch* proposal is the first step here). It is also calling for policy research from IIED and others.

Article 4 of the European Commission's (EC) Protocol 10 on *"Sustainable management of forest resources"* of the Fourth Lomé Convention highlights the need to ensure that trade and revenue generation from tropical forests is achieved through sustainable forest management, rather than by forest asset-stripping. It focuses attention on the need to define and develop certification as a particular instrument for achieving this. Article 3 calls for improved research and capacity-building in support of this.

2 Private sector involvement in forestry

2.1 Characterising the private sector

What is the 'private sector'? We must acknowledge that there is a broad spectrum of private sector actors. All of them may be distinguished from government and civil society in their imperative to make a *private profit*, where capital resources and other property are owned by individuals in isolation, jointly or in association. This is in contrast to government economic activity (public enterprise) or to individual/community livelihood activities which aim at subsistence.

A particular private sector actor might be characterised by reference to a number of dimensions, for example:

a *Size of operations*

b *Longevity*

c *Degree of vertical integration*

d *Degree of horizontal integration*

e *Form of ownership (source of capital and debt)*

f *Numbers of countries in which the company operates*

g *Scope of action (multiple or single products/sectors)*

h *Motivations other than profit*

i *Attitude toward risk.*

Each of these dimensions may or may not be significant in influencing a company's impact on forests and forest stakeholders. There will be other factors, too, which future research should determine. The point here is that there are multiple dimensions to the term 'private sector'.

2.2 The extent of private sector involvement in forestry: why large corporations are significant

As there are very different types of private sector enterprise described by the above dimensions, it is difficult to generalise about the role of the private sector in forests. In this paper, we concentrate on larger forestry corporations. This is because of the relative significance today of large (often foreign-owned) forest corporations in forest ownership/management, forest product yields, investment, influences on policy and markets, technological development, and impacts on environments and societies.

A current phenomenon is the globalisation of SE Asian companies (Table 2). This is taking place in response to huge demand growth for forest products in SE Asia. In fact, this is the region with fastest demand growth – and it is one where demands for wood are not accompanied by demands for better social and environmental performance (unlike in Western Europe). Furthermore, SE Asian companies are meeting this demand by working in countries with few effective social and environmental controls.

Table 2: Reasons for globalisation amongst SE Asian forestry companies

Reason	*Result*
Log export bans and processing incentives in Malaysia/Indonesia.	Companies requiring logs or material for expanding processing industries must look to other countries.
More effective law enforcement/ tax regimes in Malaysia/Indonesia.	Weak enforcement/tax regimes elsewhere. Fines, revoking of concessions, and scrutiny of accounts more common in Malaysia and Indonesia Companies approach foreign governments.
Need to gain equity.	Securing more concessions to improve credit ratings.
Fear of losing market share.	Attempts to supply home industry with lower-priced logs from abroad.
International trade accords.	Developing countries promoting free trade provide incentives to foreign investors – reducing the net real investment.
Availability of under-priced wood; and low labour costs outside SE Asia.	Strong incentive to globalise operations.

Source: Sizer and Rice, 1995

This does not mean, however, that other private sector actors are not significant. Indeed, in many countries, such as the USA, Finland, Sweden, and some Pacific island states, the private forest smallholder is highly significant. In others, small private sector logging companies and individual chainsawyers may be dominant, as in Guyana. Non-forestry companies can also play a significant role in forests: corporations involved in agriculture, civil engineering, mining and oil, impact on the forest. (Oil companies, in particular, are becoming aware of their potentially adverse impacts on forests and some have undertaken great efforts to minimise and mitigate such impacts).

None the less, we focus on the larger private sector actors in the forestry sector, and specifically national or multi-national forest corporations, for the following reasons: i) the *concentration of market power* in large firms; ii) their *comparative advantage* in access to credit, in technological innovation, in developing commercial plantations, and in cost of production; and iii) because of the scope of *mergers and buyouts*.

Market Power

The largest companies produce an increasing proportion of the world's traded wood. The ten largest forestry companies produce 38 per cent of the global yearly turnover of all forest products (The Economist 1996). The International Paper Company alone has annual sales of $20 billion, exceeding the GDP of 75 countries (Carrere and Lohmann 1996).

Within a given country, a few forestry companies may be predominant in land ownership, and in influence on policy and practice. In Chile, for example, ten years of government subsidies resulted in "just three Chilean corporations [holding] 70 per cent of the planting grants, plantation areas and timber exports" (CODEFF 1991, cited in Sargent and Bass 1992).

The level of profits and export earnings, of contributions to government tax revenue, of land-holdings, and of employment, tend to mean that large companies play a dominant role in the setting of policies and decisions affecting forests. In today's climate of increasing scarcity of many forest benefits, such dominance is being questioned where corporations appear reluctant to produce more than fibre on the lands under their control (see 4.2).

The worst conflicts concerning forests today tend to involve large companies and (often indigenous) peoples' groups e.g. in Canada, Sarawak, Papua New Guinea (PNG) and Brazil. Sometimes, this may be because they are prominent 'targets', rather than because they are the worst offenders – although numerous accusations of very poor practice are made against large companies (e.g. EIA 1996). In many cases, the statutory role of governments in resolving conflicts has not been exercised, perhaps due to excessive private sector influence on the government (see 4.2).

Comparative Advantage

The larger companies tend to be the lowest-cost producers. They have greater resources, technology and skills. The influence of these producers creates a price ceiling which others have to match if they are to retain a market share. This can be a disincentive for other producers to improve their forestry practices, if they lack the technology and resources to both improve forestry and compete in cost terms.

In the last remaining large areas of natural forest e.g. Russia, Canada, the Congo Basin, the Amazon and the Guyanas, it is only really the private sector which has access to adequate capital to create the infrastructure required to open up these areas to logging or forest management. Many observers are worried about the impacts of such investment on the areas of old-growth forest. Indeed, few of the planned investments by such companies appear to be accompanied by adequate controls on the part of (weak, cash-starved) governments (WRI 1997). However, eventually these large areas will not be as commercially attractive as plantations, due to their increasing economic inaccessibility.

Large companies are best-placed to use the market to their advantage. That is, they can create or modify demands through the power of advertising and competition. Sometimes, this appears to be helping forests. Many forestry companies are creating alliances with large retailers, such as the WWF-organised timber buyers in western Europe, which promote certified timber to the public. At other times, it appears to generate demand for 'wasteful consumption' of forest products, which can take off where large companies deliver forest products at very low prices, but do not include the social and environmental externalities in their pricing.

The trend in many countries is towards more private ownership, or at least private management of state lands. Much of the privately-held land is under the control of large corporations. Counsell (1997) estimates that forty corporations control over 115 million ha of the world's forests, through ownership and leases/licences; and that most of the 5.9 million ha of tropical forest, which were logged annually during the late 1980s, were harvested by the private sector.

Corporations have been the main actors investing in commercial plantations, especially in the subtropics. These plantations will become increasingly significant for traded wood volumes, with global demand for industrial wood expected to grow by nearly 20 per cent in the next fifteen years (IIED 1996). Large companies particularly favour plantations – or highly intensively-

managed forests with plantation-like characteristics – as they present practical, logistical and tenure advantages. They are low-cost, low-risk, high-yield and with a uniform and predictable product, which can be used for a wide range of finished goods thanks to recent technological developments (Sargent and Bass 1992).

Most of the highest-yielding forests in the world today are owned by corporations, which have access to the genetic resources, technology and other inputs needed to achieve such yields. However, it is notable that most of these are intensively-managed forests and plantations which are devoted almost entirely to single/few species for wood, and no other outputs have as high a priority as wood in management objectives.

Many of the larger companies have acted quickly in the last few years to improve their environmental performance (see 4.3), partly due to pressure from environmentally-aware consumers and NGOs, but also in response to the growing raft of environmental legislation. Furthermore, companies have realised that they can reduce costs further by developing and employing technologies, such as low-impact logging, integrated pest management, and nutrient monitoring, that protect the resource base and require fewer external inputs (with their attendant environmental impacts).

There are diseconomies of scale, however. Large companies are vulnerable to changes in demand in certain sectors. For example, the European forest industry is highly susceptible to down-turns in the construction industry; and the global pulp industry suffers boom-bust cycles resulting in part from the huge size of every new pulp mill, which substantially increases the quantities of pulp available when it comes on stream, with consequent price reductions.

Mergers and Buyouts

Mergers and buy-outs are continuing, and are international in scope. For example, International Paper of the US has bought control of Carter Holt Harvey, New Zealand's biggest timber producer. Both International Paper and New Zealand's Fletcher Challenge have established operations in Asia and Latin America, as have Smurfit of Ireland. Enso-Gutzeit from Finland has teamed up with two Indonesian companies to invest $100 million in new plantations in Borneo. And South African companies are investing in South America, where costs are lower. With "southern" forestry companies getting bigger, this has forced mergers within European companies, largely driven by economies of scale: two Finnish companies merged in 1996 to become Europe's largest forestry firm, UPM-Kymmene. Similar mergers have been taking place within the USA – firms active in the north-west are now buying companies in the south, where there are accessible forests and fewer environmental pressures.

The potential gains of such mergers include lower costs, increased possibilities for research and development, and technological transfer. Mergers certainly help companies to control prices and wages, concentrate production in large 'efficient' mills, and minimise risk. They also become more difficult to contest by local groups who may be seeking a veto on forestry operations (The Economist 1996). Moreover, Korten (1996) contends that buyers of companies also seek to cut back any environmental and social provisions that there might have been in the companies taken over, although he does not give good evidence for the forest sector. Buy-outs may be increasing the pressure to high-grade (if not to asset-strip) forests, in order to service debts. Le Masters *et al.* 1995 (cited in Counsell 1997) believe that "corporate take-overs and leveraged buy-outs of the 1980s are still causing negative repercussions on private forest lands [in the USA]").

3 Private sector roles in the context of market and government failure

Which aspects of SFM are suitable for private sector management? Which –due to market failure or other reasons – should be the responsibility of government or communities? And where are partnership approaches desirable? In this section, we outline some of the theory.

3.1 Potential benefits and problems of private sector involvement in forestry

The private sector could represent one of the major agents for change towards sustainable development. It provides employment. It creates much of the wealth in the world. It is a principal developer of new technology. It has major influences on the quality of the environment, through its use of raw materials and the impacts of production processes. All of these roles can be positive or negative. What matters is how the private sector behaves. The potential benefits and problems associated with involvement of large companies in forestry are listed in Box 1. They must be better understood in order that the relative roles of government, the private sector and other elements of civil society can be negotiated. We explore this in more detail in Chapter 4.

Whether the potential benefits outweigh the possible problems will depend very much on the level of institutional development of a particular country, and the mechanisms and instruments available to forest authorities to act as "carrots and sticks" for the private sector.

Box 1: Potential benefits and problems of involvement of large companies in forestry

Possible benefits of private sector involvement in forestry, and the characteristics which contribute to them, include:

A. A potential ability to undertake long-term investments
Because of:
- Close and effective control of assets;
- Financial size, resilience and access to capital;
- Ability to use tax and financial incentives and subsidies for forestry; and
- Adequate resources to take on the tasks of afforestation and improving forest management.

B. A potential ability to improve the efficiency of production
Because of:
- Management know-how;
- Exposure to competition;
- Access to markets and market information;
- Relatively attractive employment because of training, staff remuneration, and advancement potential;
- Opportunity to complement investments in other sectors, such as agriculture, forest product industries, recreation, and mining;
- Access to technology and research capability; and
- Experience with Quality/Environmental Management Systems approaches.

C. A potential ability to organise and self-police codes of practice.

Possible problems of private sector involvement in forestry include:

A Neglect of external benefits of forest maintenance, because of:
- strong commercial motivation to reduce costs, which may be inconsistent with the increased complexity of SFM; and
- a lack of direct commercial motivation to consider other forest benefits such as soil and water quality, wildlife, NTFPs, recreation, and biodiversity.

B Regressive transfer of benefits:
- from Southern to Northern investors;
- from forest-dependent peoples to (urban) elites; and
- from future generations to current investors (due to the irreversibility of some forest modifications).

C Marginalisation of local populations, by:
- reduction of local land use options;
- violation of local intellectual property rights; and
- substitution of local workers by expatriate staff.

D Volatility of capital flows in commodity markets, linked to:
- volatility of commodity prices; and
- international competition for investment flows.

E Disproportionate political influence of private sector, resulting in:
- rent-seeking; [1]
- reduction in local control; and
- inequitable policies.

F Short time horizon of many potential investors due to insecure political environment, resulting in:
- a focus on asset stripping rather than investment in SFM;
- lack of long term commitment to local communities; and
- failure to develop non-traditional forest products.

3.2 Market failure, government failure, and privatisation

3.2.1 Stakeholder roles

As a means of investigating the role of the private sector in relation to the public sector, it is useful to distinguish between: i) the *ownership* and *control* over forest resources; ii) *forest management* and *logging*; and iii) the *provision* and *production* of forest management services. The legal owner of a resource may or may not exercise effective control over the resource. And a forest manager may or may not be the logger. Finally, the provider of forest services may or may not deliberately produce those services.

Whereas *ownership* or propriety refers to the exclusive right to possess and use a resource as well as the right to deny others use (Rangan 1997), the *control* of the resource refers to the power to regulate activities and access. Today, we often find that a national government is the legal owner of forest resources that it has neither the will nor the capacity to control properly (Richards 1997). The absence of effective national control over national forest land in many developing countries may allow for common property management institutions to be developed by local inhabitants, or alternatively open access to the

[1] Rent-seeking refers to efforts, such as lobbying and bribery, to gain access to economic activities that produce windfall profits, such as a logging concession, or to influence government regulation of these activities

resource can lead to poor resource management. Conversely, in some developed countries, government controls on forestry effectively undermine (and can devalue) private ownership of forest land. This may result in an effective legal appropriation of the rights to use that land, which may or may not be recognised or compensated. There is much concern about this in parts of the USA.

Whereas *logging* refers to felling and extracting trees, *forest management* refers to the comprehensive stewardship of forest resources before and after logging operations, with a view to optimising the flows of goods and services over time from a forest. Forests can be managed for the simple purpose of earning profits from logging, or they can be managed to produce a range of goods and services, some for profit and some for the public benefit. Both logging and forest management can be contractual arrangements with forest owners. A logging company which has a lease or concession to land that is greater than one harvest rotation will usually have an incentive to manage the forest resource – if the growth rates, harvest costs and produce prices are attractive. But in cases of short-term logging concessions, either another institution must accept the responsibility for longer-term management concerns, or there must be a means for the company to sell its licence when the concession expires – to act as an incentive to add value to the forest over the short time span.

The *provision of forest management services* is the set of decisions and actions which makes the services available and provides the necessary resources for their production[2]. These services include:

- forest fire prevention and control;
- research, development, and extension services;
- road and facilities construction; and
- control of resource extraction.

The provision of these services is a subset of the responsibilities of a forest manager (who need not necessarily be the forest owner). The *production* of forest management services is the act of executing investments and generating services. Production of infrastructure entails both construction and maintenance. Often national forest departments have accepted the responsibility of both provision and production of services. Thus forest managers maintain road construction units, researchers, forest rangers, and tourism operators in their employ. But it is possible for public forest managers to provide for a service and arrange for private sector contractors to produce the service. This "contracting out" has been an imperative of many public sector reform programmes.

3.2.2 Public and private goods – excludability and subtractibility

A principal reason why forest resources have been owned and controlled by national and state governments has been the perception that many forest goods and services would not be properly produced and allocated under a system of private ownership and market exchanges. Indeed forests produce:

- goods that are *well suited* for market allocation and private consumption, such as lumber;
- services that *cannot* be rationed by a market system, such as watershed protection; and

[2] Much of the material for this discussion comes from World Bank, 1993

- services that *may or may not* be considered public goods, such as forest recreation, biodiversity and carbon storage.

These characteristics should be explored in order to provide insights on effective management strategy. Two key concepts are very useful in distinguishing between goods that are best suited for market allocation and goods which, due to market failure, are often considered to be public goods.

a *Excludability* refers to the ability of an individual to deny the use of the good or service to another individual.

b *Subtractibility* refers to the amount that the consumption of a good or service subtracts from its repeated consumption.

Most consumer goods, like timber, can only be consumed once. Since it is easy to exclude other individuals from using consumer goods, these goods are best allocated by the market. Other benefits, like micro-climate moderation, can often be repeatedly consumed without subtracting from repeated consumption. If an individual consumer does not subtract from the continued consumption of a good or service, then the price system is not an appropriate rationing system. And if consumers cannot be excluded from consumption they may not feel obliged to contribute towards the provision of the service. In short, if goods and services are characterised by *low excludability and low subtractibility*, such as watershed protection, then the good is commonly referred to as a *public good*. Since there is little incentive for an individual to invest in the provision of such goods, they will be under-provided – or not provided – unless a government or an association accepts the responsibility for the provision for the public's benefit.

Market failure occurs when the external impacts of producing a good or service are not accounted for in the producer's decision-making. For instance, a forest plantation owner may schedule harvesting activities so as to maximize the revenues from timber, but ignore the plantation's important watershed protection and wildlife habitat services. Similarly, an individual plantation owner might invest in forest fire protection to reduce damage to his/her own land, but not be concerned with the more general benefits and mutual security from fire prevention.

Another market imperfection that may justify government intervention is when the provision of certain goods and services requires large fixed-cost investments with insignificant marginal costs of production. Services such as logging access roads and water provision are characterized by bulky fixed-cost investments and low costs for additional units of consumption. If a private company were to invest in an access road it could charge heavy tolls to users, and receive windfall monopoly profits.

Table 3 lists different forest goods and services as well as forest service activities. As suggested, different forest goods and services can be best described as private goods and others as public goods. However, most of these goods and services fall somewhat in between. Whereas logging is highly excludable because of the extraction requirements, fuelwood extraction, NTFP collection, and hunting are excludable in large forest areas only with large enforcement costs. Similarly, some services, such as forest-based recreation, are not directly subtractable, but they are subject to congestion effects.

Table 3 illustrates that there is not often an obvious and clear-cut case for private or public control of specific goods and services. Whether goods can be considered public or private will depend greatly on the level of institutional development in a country and may change over time. This problem is exacerbated by market and governmental failures.

Table 3: Public good characteristics of forest goods, services, and activities

Forest Goods, Services, and Activities	Excludability	Subtractibility	Externalities and Comments
Timber	High	High	Private Good
Forest Management Services:			
Road Construction	High	Medium	Soil Erosion
Fire Protection	Low	Medium	Positive Externalities
Research and Extension	Low	Medium	High Fixed Costs
Marketing Services	High	Medium	
Non-Timber Goods/Services:			
Hunting	Medium	Medium	Congestion Effects
Hiking	Medium	Low	
Camping	Medium	Medium	
Grazing	Medium	High	
Fuelwood Collection	Medium	High	
NTFP Collection	Medium	High	
Amenity Uses	Low	Medium	Congestion Effects
Carbon Sequestration	Low	Low	Public Good
Watershed Protection	Low	Low	Public Good
Biodiversity Conservation	Low	Low	Public Good
Micro-climate Moderation	Low	Low	Public Good

3.2.3 Towards decentralisation and market incentives

In the 1970s, there was a proliferation of national and state control over forests in many countries, largely in response to:

- the perception that those whose needs were not well-supplied by markets could have their needs met by state provision and production of services;
- a (post-colonial) bias toward large governments and central government control; and
- political ideologies favouring public ownership and control of productive resources.

In the forest sector, this led to widespread government failure in:

- overextended forest departments without the resources and expertise to efficiently manage national forest land;
- rapid deforestation either as a result of government policy or as a result of poor control of forest land;
- public subsidies of logging operations;
- low levels of forest rent capture from concessions/leases of public forest land, often due to corruption, resulting in the transfer of public assets to a favoured few; and
- the absence of initiative and investment in sustainable forest management[3].

[3] The effective implementation of government policies to promote logging and deforestation, for reasons of economic development, resettlement, or employment generation cannot be considered government failure, but the inefficient implementation of these policies may often be attributed to government failure.

Although many government forest departments accepted new mandates of multi-use forest management, in practice they continued to focus on logging operations. This is often because they are obliged to earn revenue, and institutions have not evolved to help them do so in any other way.

In the 1980s and 1990s, after long experiences of inefficient government management, poor delivery of services, increasing public sector debt, corruption and rent seeking, and the dominance of central governments which were not accountable to the citizenry, the prevailing politics made an about-turn in favour of privatisation and deregulation. In this climate, market failure has tended to be dismissed as less serious than government or other institutional failure.

Given the concern about government failure, a new paradigm promoting the benefits of *decentralised management, market incentives, and private sector expertise* has been advanced. This new paradigm has coincided with:

- the transition of centrally planned economies in Eastern Europe and Central Asia to market-based economies;
- an increase in democratic rule, notably in Latin America;
- increased globalisation of the world's economy, with trade and capital liberalisation and currency reform; and
- a series of structural adjustment programmes promoted by international lending institutions, which lead many national governments to reduce public sector expenditures and price distortions.

As a result of this trend: i) forest resource ownership has been transferred to private individuals and corporations; ii) the management of state-owned forest resources has been transferred to the private sector; and iii) the production of forest services has been increasingly contracted out to non-governmental bodies. All of these transfers and activities can be considered to be forms of *privatisation*.

Very broadly speaking, government failures tend to create insecurity of supplies of wood; and market/private sector failures tend to create insecurity of supplies of biodiversity and watershed stabilisation and other non-timber forest benefits. And those goods and services which neither government nor the private sector seem well-placed to supply (grazing, fuelwood, NTFPs, as noted in Table 3) may require strengthening of community stewardship rights and institutions, or partnerships with the private sector and/or government.

Hence, for example, Panayotou (1993) asserts that no sectors, in developing or developed countries, face as many market imperfections as they do in the natural resources sectors. But this justifies neither a reduction in the role of the market nor a wholesale return to government forest management/ownership. Mitigation of market failures, through securing property rights, internalising externalities, increasing competition, and reducing uncertainty would render unnecessary the more 'cumbersome and inefficient' government resource management institutions. But the costs of government intervention must not exceed the benefits obtained – a difficult calculation and a complex political issue when the benefits in question are not always well-established. Establishing them is initially often a matter for stakeholder debate, rather than technocratic decision.

These basic observations would suggest the need for a much more subtle and focused set of mechanisms and instruments rather than a blunt swing towards or away from privatisation (although note that there is almost no nationalization going on at present). The real priority, therefore, should be to reform the State's role, and not merely cut it back ruthlessly.

In spite of a move towards decentralisation and market incentives, and a recognition of the importance of SFM, policies and instruments on forestry and forest products trade have not kept pace.

There is a growing literature that documents how traditional forest policies have led to the mismanagement or inefficient use of forest resources. A widespread concern relates to *forest concession* policies and fees on public lands, and how they are determined. For many years and in many countries, timber resources on public lands have been made available to the private sector at administratively determined prices, which are generally set far below market value (Gillis 1992; Grut *et al.* 1991; Vincent 1990).

Low concession fees can have several negative consequences. Firstly, they result in a direct loss to the state (as land owner), which receives a relatively small share of the total revenue from timber extraction. This in turn implies that less money will be available for public forest management activities, including enforcement of forestry regulations. Secondly, low prices for timber undermine the economic incentive for private firms to extract and use wood efficiently. This in turn can lead to relatively high rates of waste and damage to the residual stand. Finally, low concession fees stimulate private demand for timber concessions, due to the relatively high profits available. This leads to wasteful rent-seeking activities by firms, as well as opening the door to corruption.

A similar argument is often advanced with respect to *timber trade policies*, in particular the widespread use of export quotas, bans and taxes by developing countries to favour exports of processed wood products (Barbier *et al.* 1994). While such policies do appear to have stimulated investment and employment in wood processing industries in exporting countries, this has been achieved at high economic and environmental cost. In the first place, there are the conventional arguments about (the lack of) efficiency and the comparative advantage of developing countries in wood processing. More recently, it has also been argued that restrictions on the export of unprocessed logs or lesser-processed wood products will reduce the domestic prices of these products relative to a free-trade situation. This, again, will undermine incentives for the efficient use of timber resources. Moreover, if log exports are subject to a quota system, there may be problems of rent-seeking and corruption, as noted above.

Hence it is argued that higher concession fees and free export of wood products will lead to greater efficiency of timber harvesting and processing, increased public revenue for forest management activities, and reduced rent-seeking and opportunities for corruption. More innovative approaches to instruments for sustainable private sector forestry are reviewed in Chapter 5.

4 How the private sector is performing in the forest

4.1 Is the private sector undertaking SFM spontaneously and on its own?

This question is key, because the answer will help us to determine what kind of policy environment supports such spontaneous activity towards SFM – or alternatively what instruments are needed to encourage SFM, if it would otherwise not take place.

The simple answer is that spontaneous improvements have not been frequent, due to the varied market, institutional and policy failures noted in Chapter 3.

This brief paper cannot provide a full review of private sector performance. This is mainly because there are not yet the routine, rigorous and transparent systems required to generate and maintain publicly-available records of such performance. While certification programmes and environmental audits do offer such analyses on a per-company basis, these approaches have been applied to few companies and moreover the results are – for the most part – confidential. Reports from companies or trade associations tend to focus exclusively on positive achievements, while those of NGOs generally reflect a campaigning style which points principally to bad practice rather than to good performance.

Books such as *Bad Harvest* by WWF (Dudley *et al.* 1995), *Pulping the South* (Carrere and Lohmann 1996) and *Corporate Power, Corruption and the Destruction of the World's Forests* (EIA 1996) allege many cases of bad private sector practice (covering social as well as environmental factors). They illustrate the impact of different government and other institutional failures that are made manifest *through* the actions of the private sector. Some specific cases will be referred to later.

In this section, we highlight some aspects of two key areas of performance:

- social impacts connected to fibre production, and the production of non-fibre forest goods and services of high social value; and
- environmental impacts related to fibre production.

4.1.1 Social performance

Some companies maintain "social" programmes, which include the provision of social infrastructure such as schools and clinics, and "outgrower" schemes which involve surrounding communities in the production of fibre on non-company land. Sixty per cent of leading companies, who responded to IIED's survey of forestry companies producing wood pulp, source some of their produce from outgrowers, or are otherwise involved in extension of tree-growing packages to farmers (IIED 1996).

Yet, in general, IIED (1996) has noted that the social performance of most major forestry companies is weak, even for those companies which are otherwise leading in environmental aspects. There are sometimes problems for local people in terms of their *access to land and forest products*; numerous cases have been cited in e.g. Indonesia, Finland (Sami peoples) and Brazil. As a result of the huge demand for land by big companies, *land prices* have risen sharply e.g. instances in Chile and New Zealand which can destabilise local

agricultural businesses. *Employment*, which may rise initially for e.g. the tasks of afforestation, soon drops to much below that for agriculture e.g. Chile, Spain. And the *social infrastructure provided* often does not match with communities' priority needs, and/or are a response to government requirements only.

Reasons for poor social performance include the following:

- Multiple rights, claims, and aspirations for land held by different groups, especially by poorer groups with little access to legal means, are often overlooked. Yet these rights may be highly significant, especially for grazing, firewood, and NTFP collection. Such oversight is usually the result of government failure to affirm and defend existing uses of forest land by communities. The tenure and other legal ambiguities associated with these layers of rights and claims may be exacerbated when a company attempts to arrange a lease of large areas.
- With increasing centralization of forestry corporations, and their incorporation into much larger business concerns, there can be a huge rift between corporate policy-making and local conditions and needs. Delinking the corporation from local circumstances and institutions can reduce or undermine the contribution of large corporations to local sustainable development.
- Both in legal tenure terms, and in the business philosophy of many corporations, forests tend to be treated as 'frontiers' and used for extractive purposes in order to develop enterprise elsewhere. Hence there is often little concern for the long-term sustainability of forest-dependent communities, resulting in 'boom-bust' scenarios and considerable social disruption.
- There is a lack of adequate government incentives to encourage the private sector to engage in consultation, participation and partnership arrangements. Furthermore, local groups rarely have a legal veto over forestry operations, due largely to weak property rights. And there is a lack of both precedent and methodologies for consultation and participation. This is worsened in some cases by employing the notion of "stakeholders" as equitable bargaining partners, which obscures real power imbalances.

Nonetheless, pressures are developing for improving social performance. Firstly, market pressure is significant: the market for products from sustainably managed forests (where social aspects have been considered somewhat secondary to environmental factors); and fair trade markets (where social considerations are paramount). The pressure is now on for some forestry operations operating in environmentally-discriminating markets, i.e. those going for certification, to add good social credentials. However, the pressures are too recent to have had much impact as yet. Systems of social audit for forestry operations are only just being developed. Fair trade is emerging quite rapidly, initially in cash crops such as cocoa and coffee, and then in clothing and sportswear goods, and can be expected to have an impact on forestry (IIED 1997).

Secondly, there is growing public intolerance of irresponsible corporate behaviour in many countries – as was made clear in the 1996/7 regional hearings of the World Commission on Forests and Sustainable Development (WCFSD 1997).

4.1.2 Environmental performance

In the absence of stakeholder pressure, effective (inter)governmental control, and strong local property rights, in the 1990s we have witnessed some of the worst cases of asset-stripping of natural forests, with associated losses of environmental benefits. Dudley *et al.* (1995) assert that private sector logging operations are the prime cause of *natural forest loss* in Kalimantan, Central African Republic, Congo Republic (Zaire), parts of the Amazon, the Pacific North West of North America, and northern Siberia.

IIED (1996) conducted a survey of 73 countries to ascertain the types of forest from which the private sector is obtaining fibre for pulp and paper making. 17 per cent of global wood pulp supplies were from *natural forests* of primary-type characteristics: 15 per cent from boreal forests (principally Canada and Russia/Siberia), with one per cent from each of the temperate and tropical rainforest (principally Indonesia) zones. This suggests that the paper industry is relatively more significant for boreal deforestation than for tropical deforestation; while the solid wood industry may be more responsible for natural forest degradation in the tropics. This may simply reflect the different raw material requirements. The IIED survey, however, also revealed an increasing proportion of wood pulp being obtained from plantations (29 per cent) and from regenerating, intensively-managed forests (37 per cent).

Focusing on the intensively-managed forests and plantations, IIED surveyed 18 of the largest pulp producers in the world – together responsible for nearly 4 million ha. This revealed that these companies were practising a generally high standard of environmental management and performance (see Box 2) in intensively-managed forests and plantations. Some of the improved management techniques – such as ecological landscape planning as practised by some Swedish companies – have been developed by corporations, rather than by government or other actors. The net effect amongst these private sector leaders is:

> a reduction of exploitative logging and forest management based on high levels of external inputs within rigid, simple structures. We find an increase in information-intensive management, based on increasingly complex, adaptive systems with more diverse objectives than in the past (IIED 1996).

Many of the companies surveyed cited Environmental Management Systems (EMSs) and corporate codes of practice as being particularly helpful in making the transition to more sustainable practices.

Most companies have received complaints from NGOs and local groups about their environmental or social performance. However, the majority of corporations, including the 'leaders', are *not* subjecting themselves to independent environmental and social audits and making the results publicly available. Therefore we cannot be sure as to the credibility of their claims. It may be that some claims reflect recent intentions more than any proven results. A number of critics note that the industry has often rationalised its activities in such a way as to conclude that it has made deliberate efforts for societal reasons, whereas the fundamental reason was less altruistic. For example, Dudley *et al.* (1995) comment on ecological landscape planning – where many parts of the forest are set aside ostensibly for biodiversity – noting that the unharvested areas are those parts which it is uneconomic to manage for timber anyway. (To the extent that this is true, the resulting 'protected' habitat may be quite unrepresentative of local forest habitats.)

Box 2: Improved corporate practice in plantations and intensively-managed forests

IIED surveyed a sample of 18 of the larger producers connected to the pulp and paper industry. Together, these controlled 4 million ha of plantations/intensive forests, in all continents.

Use of the land immediately prior to company operations:

- Less than 1% was old-growth forest,
- 33% was farmland/secondary forest,
- 66% was grassland or 'degraded' farmland, and
- 2-27% of the area controlled by each company was currently under indigenous forest.

Company environmental practices:

- most corporations used reduced-impact machines,
- most of those using clonal material had strict clonal replacement strategies,
- most used few and/or "safe" chemicals,
- 90% employed soil conservation measures,
- 70% designed-in wildlife corridors to link the natural forest patches,
- 70% monitor the spread of exotic species,
- 25% produce NTFPs on a commercial basis,
- 25% use only 1 tree species, and 40% only 2 species, and
- only 10% monitor soil and water quality.

Source: IIED 1996

4.1.3 Stakeholder pressures are important for improving private sector practice

Private sector firms may be induced to make environmental and social improvements by the need to:

a Increase *efficiency* and cut costs, for example by reducing quantities of chemical inputs;

b Reduce *environmental risks* to profitability for example by avoiding excessive dependence on single clones;

c Reduce *social risk* to profitability from threats of disruption to production and trade by workers, local communities, and pressure groups;

d Secure *access to markets* demanding sustainably-produced wood; and

e Meet governmental and intergovernmental *regulations*, and thereby obtain/maintain access to land and resources.

There are, therefore, some areas where the private sector can be expected to make spontaneous contributions to SFM. The policy environment should support the extension of information on these possibilities to other corporations, in order that the private sector as a whole, and not just the leaders, are encouraged to meet best practice.

Overall, however, it seems that pressure from outside – from consumers, other market players, activists, and regulators – is needed to make corporations improve their performance. Social and environmental externalities are often ignored unless a corporation is forced to monitor and attend to them. Once the corporate sector takes action, however, it can be quite creative in designing and implementing innovative solutions, *provided* it is accorded flexibility in how it meets societal objectives.

How much pressure is felt by an individual enterprise depends upon four main factors (Upton and Bass 1995):

- the types of product – paper tends to be particularly visible as a symbol of 'wasteful' consumption;
- the source of wood – natural forests are prone to excite complaint, especially anywhere perceived to be 'old-growth';
- company size, financial significance, and relative visibility; and
- location of head office and operations and the presence of concerned groups in these locations.

4.2 The policy, market and institutional environments: their interaction with the private sector

The publications noted above (Carrere and Lohmann 1996; Dudley *et al.* 1996 and EIA 1996) imply that the corporation *per se* is the cause of the problem. One might ask if this is akin to blaming small farmers for deforestation (as opposed to land tenure, agricultural and pricing policies), or to blaming population growth for resource depletion (as opposed to resource pricing policy, consumption patterns and inequalities)?

To some extent, blaming corporations may be equally simplistic. However, the difference is that small farmers have *not* had singular influence on policies and markets, but – in the case of the largest corporations – the private sector has often shaped policies and markets, by working – overtly or covertly – with state authorities.

Three issues are worthy of attention concerning private sector involvement in its operating environment:

- corruption and rent-seeking;
- subsidisation; and
- tactics used by the private sector in dealing with other stakeholders, including involvement in national and international policy processes.

These are dealt with briefly, in turn.

4.2.1 Corrupt practices in the forestry sector

WCFSD (1997), using material developed by EIA and WRI, list a range of "corrupt" practices. These are bound up with governmental and other institutional failures. They include:

Illegal logging

- logging species prohibited by national and international law;
- logging in protected areas, or buying logs obtained from protected areas;
- logging outside concession boundaries;
- logging in prohibited areas within the concession, such as steep slopes or streamsides;
- removing under-sized and over-sized trees;
- extracting more timber than has been authorised;
- logging without authorization; and
- obtaining concessions illegally.

Timber smuggling

- export and import of species banned under CITES and national law; and
- contravening national bans on imports and exports.

Under-grading, -measuring or -valuing of timber and mis-classification of species

- declaring lower value for timber extracted from concessions in order to reduce royalty duty and payments.

Corrupt accounting to reduce tax liabilities

- declaring internal transfer prices and sales below market prices to reduce declared product prices and profits, and hence tax obligations;
- declaring purchases at above market prices to reduce declared profits and hence tax obligations; and
- manipulating debt cash flows to transfer cash to offshore and affiliate organisations.

Bribing, excessive lobbying, and threatening government officials

- inducing officials not to report offences;
- encouraging officials to produce and falsify reports; and
- awarding bribes to officials for awarding concessions.

Dudley *et al.* (1995) list countries where there have been significant losses of forest revenue through illegal logging. These include: Kenya, Zaire, Thailand, the Philippines, Cambodia, Laos, Vietnam, Indonesia, Brazil, Bolivia, Ecuador, and the Russian Federation. Timber smuggling has become prevalent in SE Asia, especially in Cambodia and Burma, and in other countries subject to security problems. Timber is smuggled from Afghanistan to Pakistan. The Barnett inquiry in papua New Guinea (PNG) concluded that undergrading and undervaluing timber was normal practice during the late 1980s for just about all foreign corporations operating in the country. Some SE Asian companies operating in PNG and other parts of the world continue to use improper accounting to reduce tax liabilities. Bribery and rent seeking is an endemic problem in many developing countries as well as in formally centrally-planned countries. It is clearly not due to the private sector alone; governmental reform is needed to reduce its prevalence. For example, Malaysia has taken steps to recapture revenues lost through transfer pricing; in 1995, twenty companies were assessed for back taxes, with one owing up to $40 million (Grieg-Gran *et al.* 1997).

4.2.2 The climate of subsidy for commercial forestry

Price (in Harris 1996) offers *reasons why the private sector might invest in plantations:*

- government subsidy makes it attractive;
- forestry offers capital growth as well as income;
- control of marginal supplies can enhance the profit of wood-using industries (especially to large businesses requiring consistent supplies); and
- forest ownership also has intrinsic i.e. non-commercial value (especially to small private owners).

He suggests that, for the UK, subsidy is very significant. This is often also the case elsewhere.

What is less clear, however, is the extent to which these subsidies really do enhance – or undermine – the non-timber benefits of forests and how they have been calculated.

Fiscal incentives – including subsidies for plantation establishment, tax exemptions, and grants – have been especially important to companies involved in developing the comparative advantage for plantations in sub-tropical countries – notably Argentina (from 1974), Brazil (1966-87), Chile (from 1960), Paraguay (1980-4) and Uruguay (1960-78). In Indonesia, where 70 per cent of the land is under the control of the forest authority, huge areas have been made available at rates as low as $0.30 per ha per year for plantations. In both Indonesia and Thailand, reforestation funds, intended to ensure renewal of natural forest cover after logging, have been diverted to plantation companies. Such effective subsidies are not restricted to developing countries. The Alberta government provided C$70 million worth of infrastructure to attract a Japanese company to invest in a pulp mill within a forest, and a similar amount plus a $275 million income debenture and $79 million annual timber subsidy to a Japanese-controlled mill (Carrere and Lohmann 1996).

In practice, much large-scale commercial forestry entails *either* companies exploiting under-priced existing forest resources (stumpage prices in some countries such as Guyana are only a few percent of world market prices), *or* involves afforestation supported by government incentives "apparently not directed by conventional investment criteria" (Price in Harris 1996)

Investment criteria would often rule out commercial plantation forestry in temperate regions because of slow growth rates, high discount rates, low value, high transport costs, and the impossibility of selling the annual increment until merchantable size is reached. A Great Britain Forestry Commission study, for example, showed that only one per cent of proposed future planting was expected to exceed a five per cent return. For tropical plantations, the very high cost of capital, high infrastructure costs, and high social and political risks, often also outweigh the higher growth rates. Price suggests that governments may be encouraging forestry investment for other reasons – notably ensuring strategic supplies of wood (in cases of war, etc.), and for maintaining non-market benefits such as watershed protection. The result is that governments worldwide have enticed the private sector to invest in forestry with massive effective subsidies.

However, an increasing proportion of plantation subsidies is often now going to smaller (mostly farm-based) private sector groups e.g, in Argentina, Chile, Australia, South Africa and, to a lesser extent, New Zealand (Southern Hemisphere Forest Industry Journal, 1997)

4.3 Tactics used by corporations in responding to stakeholder pressures

We should begin this section by repeating our assertion in 4.2 that the policy, market and institutional environments (although undeniably influenced by the private sector) will in large part determine private sector tactics. Whilst there is little research in this complex area, there is a small body of work which describes private sector tactics (although often without evidence and sometimes with very strong doses of innuendo). Some of the tactics of the private sector have been noted by IIED (1996), Sargent and Bass (1992), Counsell (1997) and Dudley *et al.* (1995). These mostly concern relations between the private sector and other actors:

a *Exploiting a policy, regulation and enforcement 'vacuum'* - conducting operations in the absence of effective authority which, *de facto* or otherwise, will then go on to define the government policy. This 'wild west' approach is still being attempted by (SE Asian) corporations in Surinam, Guyana, and Central Africa.

b *Finding and exploiting loopholes in policies and regulations* e.g. the planing of one edge of rough-sawn lumber to get around a prohibition of exports of non-processed wood from the Philippines; and treating (low) fines and reforestation bonds as a routine cost of forest operations, with no intention to meet the requirements of legislation or to reforest (as in Indonesia).

c *Forming private sector forestry alliances to lobby national policy-makers* e.g. the American Forest Resource Alliance was set up "in 1989 in response to mounting pressures to reserve public lands from timber production", and had "five programme areas to foster a favourable business environment for forestry firms - litigation, legislative affairs, communications, technical support and coalition and grass-roots lobbying". US forest products companies have been in dialogue on legislation concerning ozone-depleting chemicals, reform of clean air and water acts, endangered species legislation, labour laws, and taxation treatment of timber – the principal federal instruments affecting forestry (Counsell 1997).

d *Getting involved in international policy processes*. This has greatly increased in recent years, as global forest issues (biodiversity, carbon storage, etc.) have come to be widely acknowledged as important, and some stakeholders have been attempting to bring intractable national or local issues to the attention of global bodies for solution. For example, the private sector has had strong influences on:

- the development of the Forest Stewardship Council (FSC) and (especially) the ISO protocols for forest certification (Counsell 1996);
- EC ecolabelling, through corporate boycotts of applications for the EC standards for tissue paper – followed by strong lobbying for lower standards for fine paper (Counsell 1997);
- ITTO's decision-making processes (Lee *et al.* 1997);
- negotiations against listing of Brazilian mahogany under CITES Appendix II, through the influence of UK and US timber trade bodies (Counsell 1997);
- the Intergovernmental Panel on Forests (through an informal WBCSD/ICC session on private sector forestry, and through leading companies and associations using the sessions to lobby individual parties); and
- the World Commission on Forests and Sustainable Development (which has been perhaps the first significant non-industry forest initiative to examine the potential positive and negative roles of the private sector).

e *Forming coalitions with interests outside the forestry sector.* Counsell (1997) sets out a number of examples, including: the US wood industry working in the early years of the century with anti-drug interests in beating off the hemp paper-manufacturing interests; the American Forest Resource Alliance working with railroad, trucking and home-building associations; and the forest industry in PNG being instrumental in forming landowners associations.

f *Building and exploiting high-level patron-client relations.* Dauvergne (1995) points out that systems of authority operate more often through informal channels than through the overt formal mechanisms, especially in SE Asia where such relations are central to the politics of poor forest management.

g *Party political funding.* Counsell (1997) provides evidence that in 1990 in the USA, there were 40 registered forest products Political Action Committees to channel funds for encouraging sympathetic responses from legislators – and over the preceding seven years, 73 per cent of all contributions went to the Republican Party, which has historically been more sympathetic to business than to environmental interests.

h *Using influential consulting companies to bring together key actors to pursue the corporation's interests,* and to provide a legitimacy to decisions and investments that are sometimes less than optimal for forests and people. Colchester and Lohmann (1993) and Carrere and Lohmann (1996) point often to one of Finland's largest forestry consulting companies as being the catalyst for bringing together influential donors, investors, (Scandinavian) equipment manufacturers, forestry firms and developing country leaders – and thereby "supervising forest plunder" and acting as a "pulp mill lubricant".

i *Staff exchanges* between the private sector, the public sector and other bodies have also built networks that can later be exploited. Counsell (1997) cites this as significant in the development of forest policies for British Columbia.

j *Funding research and technical bodies,* and possibly monopolising their work. Counsell (1997) cites Indorayon in Sumatra, where NGOs have no independent means to monitor its impacts, as local universities and laboratories are funded by the company.

Carrere and Lohmann (1996) discuss the above factors and suggest that there are many more. In discussing the specific case of the pulp and paper industry, they contend that private sector forestry has been able to expand through a process of "collusion" between influential institutions. This strategy is necessary because: "today's immense mills cannot generate profits without a large-scale re-engineering of their physical and social surroundings, [and therefore] the pulp and paper industry relies heavily nearly everywhere on political campaigns to capture handouts from the state and public" (Carrere and Lohmann 1996). They suggest that the process involves "deals" between influential corporate heads and government officials, legitimized by consultants and international development assistance calling for large-scale paper production as the only efficient and environmentally-sound way forward, and funded by the global and national public purse. The key mechanisms are globalisation and subsidisation.

They contend that globalisation and subsidisation "advance hand in hand; none can succeed without the other". Both Carrere and Lohmann (1996) and IIED (1996) acknowledge that there are *many* alternatives to large-scale forestry available – small-scale production, outgrowers, local marketing, small mills, use of non-wood fibre – that can support a sustainable pulp and paper industry. The former authors are more polemical, however, on why such alternatives do not take off: "they are not particularly friendly to the institutional cultures involved [and therefore] have been neglected". In offering solutions to the problem, the authors call for nothing less than "popular movements" to challenge the "excessive power of the institutions" which have fueled the growth of commercial plantations. They suggest that attempts to

generate policy recommendations (on how to improve private sector forestry) will not lead anywhere, because the state, international and private institutions that are assumed to act on them are not in a position to do so, or do not wish to do so. In other words, they imply that institutional failure is practically complete and corruption endemic.

An alternative way of looking at this situation is that the smaller-scale alternatives to large-scale forestry are less prevalent because they are less efficient, currently more environmentally-damaging per unit of output, and hence more costly and uncompetitive (IIED, 1996). If they might have e.g. social value by virtue of (inefficient) high employment rates, then public support could be warranted. But the absence of such public support can only partly be said to be due to corporations themselves.

The most concrete thing that one can infer is that authors such as Carrere and Lohmann (1996) find modern-day business structures and tactics to be inimicable to sustainable development (indeed, they only cite negative ones). These tactics often amount to the exclusion of other stakeholders from involvement in forest management, or the creation of divisions between such stakeholders. Carrere and Lohmann's descriptions of these tactics include:

i Waging "economic or cultural war" on pockets of resisters until they give up a struggle, *example noted: a MNC attempting to establish plantations in Thailand;*

ii "Buying off" potential sceptics or resisters with money, land, goods, jobs or status, *example noted: a large company in Alberta;*

iii Attempting to "demonstrate to opponents how their concerns can be met within the industrial system" instead of by opposing it, *example noted: contract farming and outgrowers in Thailand;*

iv Helping to see to it that resisters are "crushed by force", usually by the authorities rather than directly by the companies, *example noted: pulp operations on Indonesia's outer islands;*

v Acquiescing to certain demands, especially where this is not difficult to do and provides the corporation with 'green' kudos, *example noted: corporations using more recycled material in paper production;*

vi Moving out of an area where local resistance is considered intractable, especially if there are other compelling reasons to invest in a new area, and the ability to do so through a company's international status, *example noted: Japanese paper companies getting out of North America, where the environmental pressure is high, and looking at SE Asia and Siberia;*

vii Hiring public relations firms and employing advertising to generate an acceptable image, as well as to publicize commitment or progress. *NB. The average of 18 large companies surveyed by IIED spends $500,000 per year on public relations (IIED 1996);*

viii 'Coopting' environmental and research groups, creating nominally 'independent' NGOs and other forms of "engineering consent" – including countering the information put out by environmental groups; and

ix Using language not intelligible to local communities, or relevant to their arguments. No examples are given by Carrere and Lohmann, but some of the supposed language is cited. The contention is that corporations confine language to words associated with global or national values rather than local values, and thereby gain the sympathy of governments and NGOs concerned with these non-local matters.

Reading through the 'tactics' listed a-j and i to ix in above, it is all too easy to infer that there is a great conspiracy on the part of business. It may be more useful, however, to present the *rationale behind business behaviour* – in other words, there are rational business responses to policy, market or institutional situations. Such responses may, in fact, lead to positive policy changes (such as where corporations are intent upon influencing the policy environment to obtain longer-term tenure of forest resources). Other rational responses may result in the corporation wishing to free itself from the restrictions imposed by regulations concerning forest use, and obligations to other stakeholders. Some of these will have negative social or environmental impacts, intended or otherwise, depending on the solution. Further research on corporate responses to different policy, market and institutional situations is needed, to help to set up a framework for understanding how the private sector views and uses forests better, and for suggesting improvements. There are no universal laws. For example, Asian companies may respond differently to British ones due to cultural reasons, family ownership and other factors.

A preliminary categorisation of business responses might be:

Forming relationships

- finding and maintaining suppliers and customers;
- creating allies;
- compensating business partners for services rendered;
- excluding, pacifying or compensating opponents/competitors;
- seeking good publicity and avoiding bad publicity; and
- creating a stable business environment.

Managing risk and increasing control

- reducing risk: commercial/financial/business cycles, environmental, social, political;
- increasing control and/or simplifying operations; and
- developing, acquiring, monopolising new technology.

Creating and maintaining markets

- developing, promoting and protecting "unique selling points" (USP);
- influencing public understanding;
- influencing demand for products;
- diversifying and keeping options open; and
- increasing the trade base and removing barriers to trade.

Cutting costs and increasing values

- increasing efficiency and reducing costs;
- securing land, capital, labour, information, and other resources; and
- maximising return on equity and/or share prices.

4.4 Tactics used by NGOs and grassroots organizations in dealing with corporations

We should not assume that the use of the tactics mentioned above will result in omnipotent corporations against which other groups are powerless. Carrere

and Lohmann (1996) correctly caution against doing this, and cite a number of examples of grassroots movements "fighting back" effectively.

We can note a number of tactics:

- media lobbying;
- forming international alliances with other groups and NGOs;
- lobbying politicians and government officials;
- direct (and often illegal) action against forest clearance, afforestation, and logging, including seizing company equipment and assets and destroying plants;
- disobeying company rules against traditional land uses;
- picketing forest company's and other business's offices; and
- legal action.

As we have said in 4.1.3, this pressure has been acknowledged by many companies as critical in causing them to change practices.

4.5 The case for multistakeholder processes to improve the environment for private sector SFM

From the arguments presented in this chapter, we may conclude that the private sector is unlikely to pursue SFM in the absence of a policy, market, or institutional environment which encourages them to do so. Grieg-Gran *et al.* (1997) note that a convergence of good financial performance and SFM will not emerge spontaneously in the near future. But it can be expected when or if:

- SFM does not represent a significant increase in cost over conventional forestry; or
- consumers are willing to pay a premium for wood from sustainably managed forests; or
- there are aspects of SFM which will bring other financial benefits such as reduced liability or improved labour relations; and
- mechanisms are put in place to internalise environmental and social benefits.

The WCFSD's hearings usefully included private sector representation. They suggest that the private sector perceives several constraints to improving its performance. These relate to market, institutional, and policy failure and include:

- inability to obtain financial compensation for providing non-market environmental and social benefits;
- relatively high costs of introducing environmentally and socially preferred practices;
- difficulties of dealing with weak government institutions; and
- pervasive policy failures and unstable policy environments (WCFSD 1997).

Both better organisation of industry, and external incentives and controls, may be needed. There are some observers, sympathetic to industry, who note that forestry companies depend too much on short-term tactics, and have very weak long-term strategies – especially of cooperation amongst themselves and with

other stakeholders. Whilst this also tends to be the nature of many industries in other sectors, there is nonetheless a marked mismatch between the short-term tactics of those corporations which are seeking lowest-cost wood and the long-term demands of civil society for other forest benefits.

Those who wish to improve private sector performance must therefore involve other forest stakeholders and government decision-makers in order to implement policies and instruments that provide incentives for improved private sector strategies and present barriers to the negative tactics noted in 4.3. Working with the private sector alone may be effective for encouraging certain leading firms, but not for the majority of corporations.

Institutions external to the private sector will need to be stronger, in order to counteract excessive private sector influences on institutions and markets, and to help other stakeholders work better with the private sector.

As with policy improvements for forestry generally, the institution of these prerequisites should be based on discussions that are not confined to government and the private sector alone (WCFSD, 1997). They should involve multistakeholder processes, which are nevertheless able to give weight to certain stakeholders according to their:

- dependence on forests for their livelihoods or welfare;
- proximity to forests;
- cultural links to forests; and
- command of technology and scientific knowledge of forests.

What precedent is there for this happening? Which mechanisms or instruments might best improve the policy, market or institutional environment, so that the private sector has the right incentives to practice SFM?

5 Mechanisms and instruments for encouraging private sector SFM

We have noted (3.2.3) that both extremes of nationalisation and unfettered free markets are both unlikely to produce the range of forest goods and services that are needed by society. Today, a finely-tuned set of instruments is needed to encourage the private sector to produce environmental and social benefits – or at least not to harm the possibilities for other stakeholders to do so. In this section, we review recent experience of mechanisms and instruments aimed at the private sector, with an emphasis on more recent, innovative approaches. Two caveats are in order, however.

Firstly, it is tempting to establish *causal links* between specific instruments and observed private sector tactics and resulting performance. But at this stage, all we can do is suggest certain *correlations*. This is partly because many instruments are new and unproven, partly because there is a lack of information, and also because of the difficulties of separating effects. Secondly, we are not suggesting that apparently successful instruments should be universally applied. They must, obviously, suit local conditions; most especially, they need to suit institutional capabilities – some instruments are usable only when information, skills and resources are adequate.

5.1 Privatisation processes

Decentralisation and, more specifically, privatisation are pushed by governments and international agencies, ostensibly for dealing with inefficiencies and with the need (voluntarily or enforced) to down-size cash-strapped state bodies and to rid them of commercial objectives, obligations and risks.

The trend of decentralisation incorporates three dimensions (Banuri 1996):

- *deconcentration* of administrative powers, i.e. spreading government authority closer to 'grass roots';
- *devolution* of political powers i.e. sharing decision-making with other (more local) groups; and
- *delegation* of market powers.

In turn, delegation can be subdivided into a spectrum of approaches (Ferguson 1996):

- from exposing *state-owned* forestry bodies to commercial pressures; to
- *corporatising* government forestry bodies, e.g. parastatals, which are freer than government bodies to act in the ways they deem suitable; to
- completely privatising the operations by transferring them, through competitive bidding or other mechanisms, to the private sector.

For the purposes of this review, Box 3 lists transfers that are potentially considered to be privatisation. Each of the transfers listed can be between national governments and private individuals or firms, between national governments and parastatal corporations, or between parastatal corporations and private entities. Whereas direct transfers of resources from the public to the private sector are considered to be classic cases of privatisation, indirect transfers through parastatals, public holding companies, and semi-autonomous institutions can also be considered to be forms of privatisation.

Box 3: Activities potentially considered to be *privatisation*

1. Transfer of forest land ownership
2. Transfer of management of forest land
3. Transfer of consumptive use rights (timber, fuelwood, NTFPs, water, wildlife)
4. Transfer of non-consumptive use rights (recreation, photography, water)
5. Out-sourcing of rangering and fire protection services
6. Out-sourcing of forest roads and infrastructure
7. Out-sourcing of replanting and treatment services
8. Out-sourcing of research and extension services
9. Out-sourcing of production of recreation facilities
10. Out-sourcing of management of recreation facilities
11. Out-sourcing of exporting and marketing services
12. Reduced power of government exporting and marketing services
13. Transfer of ownership of processing plants
14. Transfer of management of processing plants
15. Recognition and enforcement of rights previously ignored e.g. NTFP extraction by communities.

We concentrate on the transfer of ownership and management of forest resources, and the transfer of the provision and production of forest services that significantly affect forest management. Such transfers are commonly made to large corporations. The transfer of marketing and processing facilities may also affect incentives structures sufficiently to alter forest management decisions.

Whereas the transfer of control and management are the most significant changes in terms of economic, environmental, and social impacts, the transfer of ownership also has ramifications in terms of legal regimes and the security and permanence of management. Of particular interest are cases where a nation maintains propriety of forest resources in order to protect its public good characteristics, such as watershed protection, while transferring the management of consumptive use of forest resources to the private sector.

Box 4: Preliminary definition *of privatisation in the forest sector*

Privatisation is the transfer of the ownership and/or management of forest resources, and/or the transfer of the provision and production of forest services, from the public sector to private entities, either directly or through parastatal institutions.

Two contrasting examples are given of privatisation processes in forestry. They cover Great Britain, where the state tends to run commercial plantations and relies on incentives to encourage the private sector to manage natural forests for non-timber benefits (Box 5) and New Zealand, where the state runs the biodiversity reserves and allows a fairly *laissez-faire* approach to private plantations (Box 6). For a brief literature review of these and other country examples, see OFI/IIED (1997).

Privatisation is the prevailing paradigm in economies in transition. In many cases in central and eastern Europe, privatisation programmes are virtually complete. Ownership changes in the Baltic states have coincided with more than a seven-fold increase in timber volumes harvested between 1993 and 1994. In Latvia, for example, it is planned to return at least half the forest area to previous owners or their families. In the Czech Republic, there are more than 144,000 new private forest owners, with a small average area of 2 ha. In Romania, 400,000 ha of former state forests are being handed to a million peasant families (Dudley *et al.* 1995). The new owners tend to be families (often cash-poor) rather than large corporations, and increased cutting is currently for domestic use rather than export. Nevertheless, there is increasing corporate interest in these forests – particularly by Scandinavian companies in the Baltic. Many Baltic forests are coming under pressure to be managed to the same high standards as are forests in Scandinavia, particularly where many Scandinavian forestry companies have now decided to be certified but are also buying wood from the Baltic. Although some of this foreign influence may prove good for the forests, the collapse of many forest and export authorities in the former Soviet bloc has led many to worry about possible predatory interests of certain foreign companies, especially in the large natural forests of Siberia.

In countries with immature social safety nets, the employment and price effects of privatisation can be damaging and therefore mitigation needs to be part of the privatisation process (Mabey 1996). Alavalapati *et al.* (1997) showed negative impacts for British Columbia, although this was confined mainly to middle-income groups.

The challenge to policy-makers is to improve forest management by incorporating private sector incentives while reducing the risks of single-purpose management, uninternalised externalities, and the marginalisation of local peoples. In order to meet this challenge, policy-makers can improve public sector management of forests by incorporating private sector incentives (e.g. corporatisation) in government operations, and/or they can promote improved private sector management through regulation or incentives.

Forest land may be classified into its suitability for management by different groups, according to externalities. Forest lands with insignificant externalities can be allocated to the private sector. Those with local externalities, such as small watersheds, may be most appropriately communal property, provided there are community rules for such, or private property subject to local regulation e.g. zoning. Forest land with regional or national externalities, such as large watersheds or areas of nationally-important biodiversity, may be best maintained in state ownership – but regulations or incentives could be used to obtain public benefits from private owners, as we explore later. Lands with multiple claims on them, for varied goods and services, might be made the subject of various forms of partnership, with overlapping property rights. The most persistently difficult issue to resolve is forest land with global or international externalities. Supra-national control of forests has been almost universally rejected. There are conventions e.g. on biodiversity and climate change which deal with these externalities, but they are not yet connected to effective international payment/compensation protocols which would encourage the land owners (whether public or private) to maintain the global benefit in question. (Section 5.11 examines the emerging market for carbon storage/sequestration.)

One obvious mechanism that may meet this challenge is partial privatisation. Property rights can be defined so as to allow for private exploitation of specified goods and services, and protection of other forest services for the public good. Independently defined and overlapping *property rights or user permits* can be

Box 5: Forest privatisation in Great Britain

Privatisation in Great Britain has resulted in the unusual situation where many commercial assets (associated with conifer plantations) are in state hands, and many of the non-market values (associated with broadleaved natural woodlands) are in private hands. This has aroused controversy.

Ten per cent of the government's forest land has been sold since 1981. This was motivated by the public sector cost-saving imperatives of the Thatcher government, and by the politically-motivated generation of opportunities for the private sector. The holdings that were sold were mainly the small, less commercially-valuable, broadleaved assets – precisely those which are valued most for non-timber benefits. Incentive payments to private sector forestry operations are considered particularly necessary because Britain has over 90 per cent of its semi-natural or broadleaved woodlands (the type that produce most of the non-market benefits) in private ownership. Such woodlands are slow-growing, and are difficult to operate on a commercial basis for timber production alone. These incentive payments – recently re-designed to stress the non-market benefits – are increasing in volume and complexity, and are becoming difficult to secure and administer. For some forests, intended mainly for recreation and landscape near conurbations ("Community Forests"), the total sum of government payments available is over £7,500 per ha.

Some consequent actions by the private sector have been controversial. Even though the government's own plantations clearly demonstrate that production can be integrated with recreation, there was a significant loss of recreational access on newly-purchased, ex-state land. Private investors felled trees within only a few years of purchase. Despite the high incentives, there was a low uptake of grants by the private sector. Some observers believe that the incentives required to encourage the private sector to produce the recreation and landscape benefits of so-called "Community Forestry" will become so high that they would be politically unacceptable.

This has led to complaints that the government has lost control of the future management of the non-market benefits of locally-important woodlands, while retaining (unneccesarily) the most commercially-viable forests, principally in large tracts in Scotland. Consequently, Pryor (see Harris 1996) proposes the transfer of up to half the government's commercially-viable plantations, whilst safeguarding public access and environmental services – probably through a form of conditional lease.

The 1993/4 Government Forestry Review considered more radical options for privatisation of forest including:

- wholesale trade sales of whole forests or regions by tender or negotiation;
- government forest enterprise incorporation or stock market flotation; and
- accelerated piecemeal disposals.

However, these have not been explored further – the notion being that state forests are not yet ready for wholesale privatisation "at this stage in their development". Instead, a government Forest Enterprise was launched in 1996 to manage the most commercially attractive parcels. The net effect of all the flux in the Forestry Commission and amongst private industry is a sense of uncertainty about the future, which is making investment difficult; everyone is putting off making decisions, expecting the goalposts to keep changing.

Source: Pryor in Harris (1996)

Box 6: Forest privatisation in New Zealand

There is general agreement amongst New Zealand's stakeholders that the government did the right thing in instituting a privatisation process, to concentrate ownership of natural forests within government, and to reduce pressure on these biodiversity-rich forests by privatising plantations. As a result there is now a clear zonation – of 5 million ha of publicly-owned natural forest reserves and more than 1.3 million ha of privately-owned plantations. Such zonation may be more feasible in sparsely-settled, well-forested countries such as New Zealand; multiple use/rights approaches will more frequently be needed in other countries.

In 1985, 550,000 ha (approximately half of the planted forests) was owned by the New Zealand (NZ) government and managed by the NZ Forest Service. In that year, however, the Forest Service was disestablished and its plantations transferred to the state-owned NZ Forestry Corporation in an attempt to create a more commercial environment and so to improve management efficiency. This parastatal was considered to be an interim step in the privatisation process. In 1987 the NZ government announced a sale of some assets, including these plantations, to reduce national debt. Most of the state plantation asset was sold to two NZ forestry companies – which together controlled 41 per cent of productive forest by 1987. In 1996, much of the remaining 190,000 ha of plantations were sold to a NZ/Chinese consortium for NZ$ 2. billion. There are few restrictions on harvesting.

The sale has helped to achieve the government's aim of clearing its debt and has largely removed the state from the commercial forestry sector. A remaining problem is the Maori claim to several forest areas. This is unresolved, even though some attempts were made to address the land tenure problems prior to the sale of the plantation resource. Some observers suggest that the sale was politically – and not economically – driven, with the short-term objective of debt repayment driving the process. It remains to be seen if the process will result in a more efficient forestry sector. The still-unresolved Maori land claims may now be even more difficult to deal with, as the government no longer has direct control of the plantation land, which is under lease to private companies. There is also some unease that 25 per cent of NZ's plantation resource is owned by a single company, and that it has been easy for foreign companies to control both land and mills – some companies are branches of overseas consortia and not NZ-owned.

Source: OFI/IIED 1997

granted for: i) the exploitation of timber, minerals, water, wildlife, fuelwood, and NTFPs; ii) livestock grazing; iii) hiking, camping, fishing, hunting, and cycling; and iv) alternative land uses, i.e. development rights. These property rights and user permits may be freely traded in order to ensure that these rights are dedicated to the most efficient users. Specific protection for public goods e.g. biodiversity, can be written into the property rights.

Systems of well-defined use rights and permits can allow for individual and private initiative, while maintaining public sovereignty over the resource. They can also allow for simultaneous exploitation of different forest goods and services by different individuals. Thus the public can maintain a legal power to protect public goods while allowing for private exploitation. And, by granting predefined property rights, the government can facilitate the regulatory process[4]. Thus, watershed protection can be ensured by defining logging rights to exclude sensitive areas. Public access to recreation or amenity sites can be ensured by maintaining these as public property.

[4] For example, in the United States, the regulation of private property has been interpreted to be the *taking* of a property right, which in some circumstances requires competition.

A system of property rights does have the potential to present numerous conflicts, which calls for a system for resolution. Resolving conflicts between rights-holders, users, and the public can be a potentially difficult and expensive process[5]. Expenses can increase when conflict resolution requires litigation in specialized courts with specialist lawyers.

One mechanism that may be complementary to overlapping property rights is to grant specific management contracts or long-term concessions (see 5.2). Logging concessions can be granted for long periods of time, greater than one harvesting rotation, which may give the concessionaire the incentive to accept management responsibility, but which maintains public ownership of the property. Or management contracts can be granted to private firms for multipurpose forest management. The contractors can accept the responsibility for maintaining public good benefits of forests whilst undertaking revenue-generating activities such as logging, recreation, and NTFP harvesting. They may be allowed to subcontract some activities to e.g. local groups or to do this through partnerships.

A World Bank research report on privatisation has identified three types of contractual arrangements designed to provide private sector incentives while maintaining public ownership (World Bank 1995). These are:

- *performance contracts*, designed to provide public sector managers with private sector incentives;
- *management contracts*, which define the relationship between private sector management and governments; and
- *regulatory contracts*, which define the relationship between a government and a regulated monopoly[6].

The World Bank study concluded that performance contracts had "little positive impact" on total factor productivity[7]. However management contracts were found to improve performance, especially in those sectors where technology is not changing rapidly, such as agriculture. The experience of the sample analysed suggests that management contracts work best where: i) the contract is competitively bid; ii) the contractor has the financial incentive and the autonomy to implement improvements; and iii) both parties face risk. Further exploration of this is required for forestry contexts.

5.2 Concession allocation, pricing and enforcement instruments

In developing countries, most natural forest falls under state jurisdiction, although there are key exceptions such as many Pacific islands. State forest utilisation is conducted through concessions, allocated to private companies for the right to harvest within a defined area and period. A concession is a specific type of management contract, where the concessionaire is granted access to exploit certain financial opportunities and is usually expected to make the necessary capital investments, such as machinery and logging roads. Concession conditions are generally defined to ensure sustained yield, but may also include certain management and protection rights and obligations. When logging concessions are for short periods, the concessionaire has little incentive

[5] For instance, efforts to resolve conflicts between loggers and preservationists in the northwestern United States included Presidential intervention.
[6] This may be less applicable to forest management than the other two.
[7] The authors are careful to warn that the sample of performance contracts analysed was small and not random.

to manage the forest sustainably unless there is a mechanism for selling the licence at the end of the concession. When logging concessions extend beyond a single harvesting rotation, the concessionaire may have a greater incentive to manage sustainably – if growth rates are good and extraction costs lower than expected prices. Even so, since the period of a harvesting rotation is often longer than the expected duration of a political regime, long-term concessions can be risky.

Today, concessions are frequently allocated by direct negotiations between government forest authorities (or sometimes as in e.g. Pakistan, their political masters) and concessionaires, and licenses are given for the nominal fees on the statute books. Negotiations are often covert, and the results of the concession approach are consequently disappointing in terms of public benefits. The inadequate revenue generation for governments, and the frequently high environmental and social costs, have prompted a number of improvements for better controlling the private sector (Speechly in Harris 1996). These improvements include:

- increasing forest royalty fees;
- use of competitive allocation mechanisms, notably auction;
- creating nationally-owned corporations to manage forest areas; and
- awarding concessions to communities who live in the area.

Royalty fees which reflect the economic value of the resource encourage efficient harvesting practices and the reduction of waste; hence should be based on standing volume and stumpage value appraisal rather than volume extracted, as they encourage the user to internalise the full value of the resource. They raise government revenue, but they also need to be accompanied by incentives to maintain long-term productivity, or the concessionaire may treat the forest like a non-renewable resource. In "forest mining operations", extraction levels of profitable species are maximised while harvesting costs are minimised and post-harvest obligations are ignored. This could be avoided with effective government monitoring, protection, and management. However, timber royalties tend at present not to be ploughed back into government monitoring and management.

Competitive bidding has been heavily promoted in the last decade, but it is rarely practised. Covert relations between government bodies and certain private sector groups can maintain the *status quo* of underpriced forest resources with little transparency. Yet, where countries have moved to more open processes, with full information and several qualified participants (pre-requisites for successful auctioning) benefits have increased. Cameroon has been receiving between three and ten times the revenue per hectare since 1995, when auctions began (WCFSD 1997). A variation of concession auctions is competitive bidding for an annual rental of the forest, which has been proposed for privatisation of some state forests in West Africa, and bidding for a performance bond attached to forest rental (see below).

Nationally-owned corporations, in theory, can take a longer-term view than privately-owned corporations, which are obliged to make short-term profits. Many developing countries have tried to manage forests through nationally-owned corporations, but this has rarely provided economic efficiency or the desired environmental and social benefits. Many such countries are attempting to return to privatised operations.

Awarding concessions to local communities is an approach which attempts to employ traditional resource management rules and skills, and to ensure the production of multiple benefits, under the assumption that communities tend to

want many goods and services. In addition, some such concessions are meant to redress past imbalances between corporations and disenfranchised local people. Where community organisations and skills are good, and can keep up with modern marketing demands, the approach has been successful. But, otherwise, local elites, often in collusion with larger private sector or government bodies, have coopted the process. Furthermore, there is no intrinsic reason why community priorities may coincide with all societal demands on forests e.g. for biodiversity.

Speechly (in Harris 1996) draws attention to an alternative to the current concession system, which may overcome the inherent problems of short-term exploitation. This is private ownership, or long-term private rental, of forest land with government zoning controls to ensure the production of environmental and social services. This has been attempted on a pilot scale in the Philippines (Box 7).

Box 7: Philippines Industrial Forest Management Agreement

The notion of the Philippines Industrial Forest Management Agreement was to lease forest land to forest managers, not merely to loggers, with no time limit and with minimal royalties. Management plans based on zones for biodiversity set-aside, community benefits, watershed protection, etc, would be approved by government prior to allocation. The lessee's commitment to the zoning and other conditions would be backed by a returnable performance bond deposited with the government – the amount of the performance bond being determined by competitive bidding open to competent organisations wishing to harvest the timber. The amount of the bid would therefore reflect expected future harvest values to the bidder, as well as his expected maintenance and protection costs under the zoning guidelines specified in the agreement. Pre-qualification to bid would be based on a track record of good management. Good management could be rewarded by the return of the bond with interest. The lessee could sell his rights at any time, which – with good management, stock and infrastructure improvements – can appreciate in value. In the case of violation of the zoned management plan, the lessee would forfeit at least part of the bond to the government.

The full potential of this approach has yet to be realised in the Philippines. The constitution limits land rental to 50 years (the cutting cycle is generally 50 years). There was a paucity of information on the quality of each forest area prior to bidding. The government raised royalties by 2500%. And there is not yet the possibility of returning royalties to government zoning, monitoring, and audit of IFMA performance.

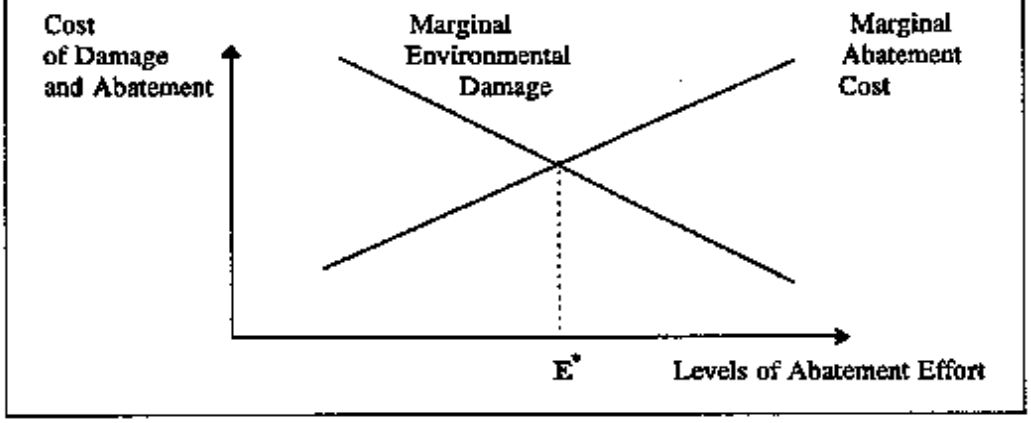
Source: Speechly (in Harris 1996).

A number of other ideas have been put forward to extend the concession approach to the other goods and services that are now in strong demand: concessions for carbon storage (5.11), for ecotourism, and for bioprospecting (Aylward *et al*, 1996; Barbier and Aylward forthcoming). The advantage of these approaches is potentially that the concession holder can realise the value of non-timber resources as cash flow, assuming that buyers can be found.

5.3 Forest management regulations

Given the many positive and negative externalities of forest exploitation, governments have abundant reasons to ensure the proper regulation of private forest management. Regulatory instruments can: i) reduce sedimentation and erosion; ii) preserve critical fish and wildlife habitat; iii) protect river and stream integrity; and iv) maintain amenity uses, while allowing for profitable logging and recreation uses.

Figure 1: Efficient levels of damage abatement



Regulation entails: i) analysis and consultation on the issues; ii) rule-making; iii) monitoring and enforcement; and iv) imposing required sanctions. The information and effort required for efficient regulation can be burdensome for many governments, and each of these stages can be facilitated by the cooperation of the regulated parties. Private sector managers may choose to cooperate with regulators in order to avoid sanctions, or they can challenge regulators by withholding information and fighting enforcement. Regulatory contracts are designed to reduce any incentives that firms may have to withhold information from regulators.

There is currently a spate of governmental codes of forest management and harvesting practice. These include FAO guidelines, and management guidelines developed by the forest departments of countries as diverse as the UK, Guyana, Ghana, and Laos. The indications are that these will be more effective where various stakeholders have helped to develop them, since they will understand them and be more committed to their implementation.

Certainly stakeholder involvement should include representation of those that are to be regulated and those that are to be protected. This can be demonstrated quite effectively in Figure 1. Where negative externalities are important, charges can be levied to reflect the damage done. Economic theory suggests that the efficient level of effort to reduce environmental damage, E*, occurs when the marginal cost of additional effort at damage abatement equals the marginal cost of additional damage. Thus a regulator, who as a representative of society as a whole balances the interests of the regulated firm as well as the interests of the damaged parties, needs information on both the cost of damage abatement as well as the cost of the damage. Since the regulated firm commands the abatement cost information and the damaged parties determine the damage cost function, both of these parties need to be involved in the regulatory process. For instance, a regulator in the process of determining the efficient width of buffer strips around waterways to reduce soil erosion and

flooding in a logging concession would require information on the lost value of timber in the buffer zone as well as the damages averted from buffer strips.

In the case where a clear individual or community is affected, the use of a market solution may be preferable to a regulation. Rather than the government setting the efficient level of abatement administratively, it may assign a property right to the damaged party. The company creating the damage must then compensate the damaged party by an amount which the latter is willing to accept.

5.4 Finance and tax instruments

Subsidisation has been discussed in section 4.2. A number of commentators question the case for subsidies for commercial plantations, for example:

> Economic theory tells us that it's all right to subsidise education because it benefits the whole society. But while eucalyptus and pulp and paper industries earn profits for some, they cause problems for society. Therefore, economic theory tells us, they should be taxed. But instead the government does the opposite. This is a matter of influence and power (Pasuk 1995 cited in Carrere and Lohmann 1996).

IIED (1996) contends that, at least at the global level, the commercial potential for plantations over the next 25 years is so good that there is no strong case for subsidy – except perhaps occasionally to subsidise significant environmental and social goods and services from plantations where these cannot be adequately produced by the surrounding landscape.

In contrast to the subsidy of commercial activities in many developing countries, in western Europe, subsidies to the private forest owner are increasingly intended to encourage the maintenance of forests for public goods and services such as landscapes, wildlife and recreational opportunities (Grayson 1993). For example, the main reason for woodland grants in the UK now is for landscape and associated reasons; grants are tied to a set of prescribed planting and management operations which are closely-monitored by government (Box 5).

Indeed, Price (in Harris 1996) calculates that for temperate conditions at least, "plantations... would [not] be expected to attract private investment funding on a scale commensurate with national or global objectives – unless large and assured government subsidy is provided. Which leads to the question of whether new forests are a very suitable subject for private investment". He implies that carbon storage could rectify this, provided global payment protocols are established.

Price's main suggestion is that the state should continue to own certain forests to promote public benefit, and private investors should undertake management work for the state, thereby "achieving for themselves a rapid return on machinery, and for the national finances the oft-argued efficiency gains of market competition".

In a similar vein, Mansley (in Harris 1996) also suggests that a clear distinction needs to be made between two distinct forestry activities when targeting fiscal and financial incentives:

- *forestry investment* – the long-term ownership and maintenance of forest assets; and
- *forest operations* – harvesting, replanting, and other operations.

He notes the confusion between these two roles in many instances e.g. logging companies own concessions, but not for long enough a term; and they run commercial operations, geared to very short-term profit, which makes sustainable forestry difficult over the short term. If forestry is to become sustainable, the incentives facing both activities need to change; and they should usually be different incentives.

5.5 The stock market and investment instruments

There is a trend for the larger local forestry companies to become listed on the stock exchange, to acquire listed subsidiaries, or to be closely connected to listed companies. In this way, companies gain better access to finance for developing new operations, and/or they benefit from tax concessions. Since 1992, the number of timber companies listed on the Kuala Lumpur stock exchange, for example, has nearly doubled, with market capitalisation increasing by over 1300 per cent (Grieg-Gran *et al.* 1997).

The stock exchange permits wholesale movement of capital in response to daily valuations of companies. At its worst, Korten (1996) suggests that this encourages short-term profit generation through extraction or speculation – rather than the productive investment that requires longer time frames, and especially investments which include social and environmental provisions. He notes that companies subject to take-overs often have such provisions cut back, to "externali[se] every possible cost". However, his case may be over-stated.

Mansley explains the chain of factors which result in stock markets not yet being conducive to SFM (in Harris 1996). This stems from government policy failure, which the stock market has (so far) been unable to correct.

1 The pricing of forest assets by public authorities rarely reflects their true value (as little as $1-10 per ha, against a true market value of several hundred dollars). This is due to a lack of information and to collusion between the private sector and public authorities. It leads to windfall gains by certain international logging companies. But the exact amount being given away is hidden from scrutiny.

2 Financial practices encourage poor forest management. The emphasis on windfall gains leads to a focus on acquiring cheap forest assets – rather than on investing in plantations and best-practice management. Value is gained only through deforestation, rather than by management of the cut and regrowth balance. Often accounting systems fail to account for reforestation obligations or the full value associated with growing stock, and they overstate financial performance.

3 As a consequence of the underlying policy failure to value forest assets properly, logging companies are over-rewarded. Investors may assume that the activities of the logging companies are sustainable, whereas in reality they are not. The US Securities Exchange Commission, however, does include requirements for disclosure of environmental liabilities (Grieg-Gran *et al.* 1997).

4 Poor government control of concessions and of the companies to which they are allocated, allows for improper or tax-avoiding transfer pricing and other illicit practices.

The recent increase in the access of such companies to international finance in the absence of social and environmental conditions attached to this finance is cause for concern. Corporations can capitalise their future income, and receive an immediate reward for unsustainable behaviour. In comparison, the entry

costs of SFM appear too high and the benefits too long-term and uncertain (in part because of the advocacy of some groups which put wood products in a bad light compared to alternatives).

There is another area that leads to instability. The wood industry tends to be cyclical. This leads to sudden surges and declines in involvement of investors. For example, in the last three years, there has been a reduction of investment in Malaysian forestry. Grieg-Gran *et al.* (1997) summarises the reasons given by investors and analysts for this recent downturn:

- small amount of stocks and lack of liquidity;
- low timber prices and sustainability of income streams;
- low expected returns and high volatility;
- lack of reliable information on timber companies;
- lack of credible management of some timber companies; and
- lack of independent verification of concession values.

The introduction of a *futures* market in sustainably-produced timber, or pulp, might help to increase transparency and stability in pricing. Futures are standardised, openly-traded contracts to deliver a fixed amount of commodities. They would make it much easier for investors to be certain of potential future returns, and to realise the value of sustainable forestry practices.

Certification may also help to generate a stable market in sustainably-produced forest products; and it could improve performance accountability to the finance sector in terms other than mere revenue. For example, stock markets might be encouraged to develop company rating systems that include social and environmental factors, and certification or other means of audit could provide the evidence required for rating[8].

However, neither futures nor certification provide any actual investment. Mansley's suggestion is that fixed rate sustainable forestry bonds may provide an appropriate instrument for long-term investment in forest *ownership*. Value could be added if ways are found to realise the value of external benefits such as biodiversity and carbon storage. Equity investment may be more suitable for investment in day-to-day forest *operations*.

Ethical investment funds currently account for a minute fraction of all private investment (Grieg-Gran *et al.* 1997). Few funds are involved in forestry, and some deliberately avoid tropical forestry. However, a few attempts have recently been made to set up ethical investment funds for sustainable forestry. But they have found it difficult to find investments which are capable of producing a high return as well as fully meeting high standards, such as those of the FSC. One of the newest ethical investment fund initiatives proposes tiered ratings, with FSC certification being the highest.

Grieg-Gran *et al.* (1997) suggests three non-exclusive approaches regarding investment:

- restrictions on investment in unsustainable forestry;
- promotion of investment in SFM; and
- the establishment of coalitions of shareholders or pension scheme members to influence companies to subject themselves to audit.

The first approach is difficult because of: possible trade concerns; the difficulty

[8] There are moves to do this outside the forestry sector.

of establishing criteria relevant to the producing country; and the expense of routine audits. It would have to be a voluntary approach. The second is constrained by a lack of information on good investment opportunities; high barriers to entry and innovation; and a lack of tailored forestry financing vehicles (Rachel Crossley, personal communication 1997). It requires governmental support to be effective, such as tax concessions, and also requires auditing. The third is being considered by groups such as WWF, but is complicated by the fact that many companies only have part of their interests in forestry.

In general, this is an area where better information would help both the finance houses and individual and corporate investors. There is a growing awareness that most unsustainable forestry is not a good long-term bet; and that accounting rules and company ratings should better reflect the real values of a company's forest assets and its social/environmental risks and liabilities. The preferences of investors also need to be better investigated.

5.6 Trade laws

There have been recent advances in incentives for sustainable forestry, notably certification and fair trade movements, which may be rendered impotent by current trade laws. Trade laws do not, in fact, strictly apply to voluntary certification programmes. But they are supposed to be implmented in countries which have pledged themselves to the WTO Code of Good Practice on Technical Barriers to Trade (TBT). Strict implementation of trade accords may soon result in certification programmes being held to be illegitimate. This is particularly because of the social standards in certification programmes, and especially in fair trade. These standards may appear to limit the degree to which a company can employ e.g. low-cost labour. And many countries will construe environmental discrimination as unwarranted protectionism. It is expected that WTO Panel decisions in this area will have significant ramifications. Korten (1995) is pessimistic about how far trade laws can help social and environmental concerns. He claims that trade laws have become a "casualty of globalisation", and are no longer able to protect the public from unaccountable corporations.

5.7 Private sector self-regulation and accountability

As noted in Chapter 4, there are many industry leaders who are improving their environmental performance, in response to rising stakeholder pressures and perceptions of environmental risk. At the enterprise level, the tool most commonly used by these businesses is *the environmental management system* (EMS). An EMS helps an enterprise to define its own environmental performance targets – based on its own environmental policy commitments, the environmental aspects of its activities, regulatory requirements, and the views of interested parties – and then to monitor and continually improve both targets and performance. EMSs have been used routinely by large companies in processing operations, but only very recently for forestry. ISO maintains a standard for the design and operation of EMSs (ISO14001), which is beginning to be used in the context of forest certification (5.8).

EMSs have offered a useful means of monitoring and learning. They work by enabling managers and workers to define individual areas of concern and then to close the 'loop'. The successful achievement of one objective helps to create the capability and boost morale for further improvements.

The continual improvement philosophy is compatible with SFM (Chapter 1) – good forestry performance can be defined and achieved only through an organised process. EMS can help by providing this process. However, the other side of the SFM coin – achieving certain levels of performance – is very much left up to the enterprise, and may not immediately meet stakeholder needs. And, even though continually improving, performance may at any one time be to low standards. Other criticisms are that it is difficult to integrate social standards into EMSs (it really is a tool that was established for dealing with environmental aspects of industrial operations); and that it puts the enterprise too much at the centre of decision-making. Some observers worry that the ISO14001 standard for EMS will achieve an unassailable status (ISO standards are compatible with free trade in the eyes of GATT/WTO), and will enable corporations to undermine the substance of environmental debate, and thereby stymie real innovation (Krut and Gleckman forthcoming).

The main approach to public accountability has been the *company environmental report* (CER). In Britain, 79 of the FTSE 100 companies now produce a CER, although only one in ten has such reports independently audited (KPMG 1997 quoted in The Times 1997). The rate of audit is much higher – 43 per cent – in the US. In the forest sector, most of the largest companies produce a CER, especially in Canada and Scandinavia, but they often use idiosyncratic criteria, obfuscate the difference between aspirations and actual achievements, and few reports are audited. As such, it is difficult to compare companies. In general, most companies appear still to use the CER as a public relations vehicle rather than as a means of accountability.

EMSs and CERs apply at the individual enterprise level. In recent years, groups of forest producers have formed industry associations, which have promulgated *forestry codes of practice*. These include the American Forest and Paper Association's 'Sustainable Forestry Initiative' (AF&PA's SFI), the Alberta Forest Products Association's 'ForestCare', and, in 1997, the 'Sustainable Forestry Vision and Elements' drafted by an international meeting in Chile of national private sector forest product associations.

The AF&PA's SFI comprises principles and guidelines with performance requirements for individual members. It is subject to an annual country-wide 'review of experts', but only with first-party reporting. The SFI has been awarded a Certificate of Appreciation by the Bureau of Land Management, which believes that the initiative "exemplifies the spirit of public-private cooperation". In contrast, Bill Mankin, on behalf of the Global Forest Policy Project (a coalition of three US NGOs) concludes that the SFI is "a completely useless public relations ploy because it has very weak 'standards' and no ability for anyone to independently determine whether any AF&PA member company has improved its performance in any individual forest" (Mankin 1997, cited in Counsell 1997).

In spite of claims that 24 members of (the approximately 250 members of) the AF&PA resigned because they felt they could or should not meet the standards, and a further 17 being dismissed for failure to confirm their participation, these measures are essentially defensive. At best, they may facilitate a learning approach. At worst, they could be misleading. Most observers outside the private sector consider that codes such as the AF&PA's SFI will be less effective in improving private sector behaviour than government organised codes of management, and less effective still than certification standards. This is because the private sector requires transparency and stakeholder pressure to improve their performance (4.1) and independent audit and public reporting appear to do this better than self-regulation.

Industry codes have been developed in a climate where the private sector anticipates that more demanding external standards may be developed and become, effectively, mandatory. These external standards are, most notably, the certification programmes, but tax systems, insurance policies, and regulatory agencies will also produce standards. Private sector associations often state that their codes are more 'appropriate' to their conditions. This may indeed be the case, and it substantiates the need for improved multi-stakeholder dialogue in developing certification programmes that more truly reflect local conditions. A comparison of the AF&PA SFI standard with FSC's Principles and Criteria shows that the AF&PA SFI is not much less rigorous. Rather, the conditions attached to it are less onerous in terms of who will audit; but the standards are also much vaguer, allowing local (and presumably favourable) interpretation. IF the AF&PA moves to include independent verification, FSC will have serious competition in the USA.

Industry codes of practice are thus a good first step for an industry to work together to begin to improve environmental and social practice on a basis of cooperation – towards everyday good housekeeping – rather than on a basis of competition. They help businesses to learn their way into the issues and to share experiences. But they are no substitute for independent audit and publication, especially where businesses have responsibility for key public assets such as areas of watershed and biodiversity value.

Industry associations have started to form around the subject of SFM or sustainable development, partly so that the private sector can play a coordinated role in key discussions. At the global level, the World Business Council for Sustainable Development is still "on honeymoon" with intergovernmental bodies and certain NGOs. (The original BCSD was formed to represent the private sector at the biggest conference ever – the 1992 Rio Earth Summit – from which organised private sector representation would otherwise have been absent). Its unifying concept is that of eco-efficiency – producing more with less – and it has sponsored some key studies on the paper industry (IIED 1996) and on dealing with market externalities. It has a forestry working group, including some of the biggest forestry corporations – many of which are leaders in terms of economic and environmental performance (if not social performance). Yet it still has no strict criteria for membership and for pledging to specific actions.

The WBCSD provides a good consultation forum for the leaders in industry, but has yet to make serious commitments to other stakeholders and to governments. None the less, its global and voluntary nature make it a very promising change agent.

In conclusion, the private sector has moved from ignoring environmental and social aspects, to a range of strategies:

- from defensive reactions to complaints about its performance; to
- reducing environmental risks that directly affect its own economic performance
- self-assessment of performance; to
- forming codes of practice and other initiatives to facilitate response to environmental and social concerns; to
- public pledges, third party verification, and transparency.

Market and regulatory pressure have been key in encouraging movements towards the more ambitious strategies, with environmental NGOs having a strong catalytic effect.

5.8 Certification

Forest management certification is an established and recognised procedure, by which a third party gives a written assurance that the quality of forest management conforms to specified environmental and social standards. Certification links market demands for sustainably-produced forest products with producers who can meet those demands (Bass 1997).

Certification is perhaps the most powerful 'soft' forest policy instrument to be designed and implemented outside government. The key actors have been NGOs and the private sector. Certification appears to be having at least as much impact on private sector forestry in some countries as, for example, legislative changes in forestry. The private sector's involvement may partly be explained by their determination to avoid possibly very severe approaches such as boycotts by consumers (and even by governments of importing countries).

Certification thereby provides an incentive for forests to be well-managed. At present, the *Forest Stewardship Council* (FSC) and its accredited certifiers operate the only established international system of forest management certification. FSC was established precisely for the purpose of forest certification. It operates a complete package: a forest management standard, an international accreditation programme for certifiers, a trademark which can be used in labeling products from certified forests, and a communications/ advocacy programme. Several buyers' groups, notably in western Europe, have been set up – including some very large retailers – and have committed themselves to obtaining forest products from FSC-certified forests only.

The *International Organisation for Standardization (ISO)*, through its ISO 14000 series, offers a framework for the certification of environmental management systems (EMSs). This covers similar ground to forest management certification, except that it does not specify forest management performance standards, and does not permit a label to be attached to products. The EMS is certified, rather than the forest. Although not strictly a forest certification programme, the ISO approach offers much potential for assessing the environmental quality of forest management. An ISO Technical Committee Working Group is preparing an information document on the various forest performance standards available, to help enterprises incorporate relevant standards into their EMS. It is notable that there are no buyers' groups favouring an ISO approach to certification.

The larger private sector actors have tended to promote the ISO 'management system' approach to certification, because: it encourages the development of internal management capacity; the standards are set by the company and not by outsiders, and therefore there is greater freedom e.g. to take local conditions into account; industry has been using ISO standards in other operations such as processing; and it is usually cheaper than FSC certification. In contrast, many NGOs (and certain retailers who advertise their green credentials to consumers) have promoted the FSC 'high performance standards' approach, because they have a guaranteed impact on the *forest* (rather than an impact in terms of continual improvement of the *corporation*'s management capacity).

The irony is that FSC was really set up for improving forest management, and yet FSC's label is probably best placed to help marketing, with buyers' groups promoting it. In contrast, the ISO 14001 forestry initiative was set up to defend markets (although it doesn't even allow a label); yet ISO 14001 offers, in the long run, an excellent tool to improve forest management capability.

Almost all the certified operations to date are private sector forestry enterprises. Moreover, most of these enterprises are in Northern countries.

There are, however, a large number of exceptions, including community-based enterprises in Mexico, Honduras, Bolivia, and Papua New Guinea, as well as some Polish government-managed forests. And the relatively small number of certified operations is the 'tip of the iceberg'. Many more enterprises have been through initial audits prior to certification.

The question is: have any of these enterprises been encouraged by the certification 'incentive' to move from clearly unsustainable forestry to SFM? The answer at present is probably 'no'. Most certified operations are those which have been practicing adequate forestry for some time. Certification is having the effect of recognising the good producers and rewarding their performance by enabling them to maintain, or to reclaim or improve, their market share. In other words, certification at present is more of a marketing tool, that can apply only to well-managed forest operations, than it is an instrument for encouraging *improved* forest management – although ultimately the two are connected, since altered demand will drive supplies. As certification becomes more widespread – encouraged by the (Northern) buyers groups which are committed to trading only in products from certified forests – then either:

- so many forest enterprises will be shut out of environmentally discriminating markets that they will have to improve their forest management to enter such markets; or
- forestry corporations that do not see themselves as capable of being certified, for reasons of cost or of skill deficit, may divert their products to undiscriminating markets such as those of Asia.

To increase the positive effects on forest management of certification, i.e. to get it to apply to more forests than those which are already well-managed and to minimise the costs, there needs to be:

a An amalgamation of both process and performance standards – this is happening in the new national certification programmes evolving for e.g. Canada, Finland, Norway, and Ghana;

b Development of further national and local standards which are meaningful for local forest conditions, through national working groups with broad stakeholder representation;

c Development of mutual recognition between such programmes;

d A means to ensure that multi-national companies, and other operations having significant impacts on forests, are held more strongly accountable for their actions than small, local groups which may only occasionally cut timber and are motivated by broader livelihood concerns (whilst avoiding the creation of 'loopholes')[9];

e More attention to monitoring the impacts of certification on forests, on management capacity, and on trade and stakeholder relations;

f Development of buyers groups in markets for which currently most supplies emanate from unsustainable forestry – such as in southern Europe and especially East Asia (especially as this is where demand for forest products is expected to increase most); and

g Resolution of ISO's labelling rules, and associated national legislation – to cut out possibilities for "greenwash".

In addition, the lessons of certification may help in the development of simpler

[9] The new Bolivian forest law standards permit this.

and cheaper means of audit – which could be applied to more forests than just those which are exporting to environmentally-discriminating markets. Impacts on the quality of forest management may be achieved by three strategies, each mutually reinforcing. The first two are: *improving policy and law* and *improving management systems*. These are of almost universal applicability, irrespective of whether products are marketed (in discriminating markets). The third strategy, *verification of performance*, may be justifiable financially in certain cases, especially if paid for by some markets. But verification of the first two would also be valuable for keeping track of broader (private sector) action.

5.9 Other market mechanisms: fair trade, buyers' groups, and procurement policies

IIED (1997) argues that the "fair trade" movement – which permits consumers to discriminate in favour of goods produced and traded in a way which maximises the proportion of benefits going to the workers involved – is beginning to deliver genuine social, environmental, and economic benefits locally. The movement began with cash crops such as coffee and tea, and is expected to have an effect of the production of clothing and sports goods in developing countries.

While timber and other forest products may easily meet the requirements of the developing fair trade markets (Barratt Brown 1993), there has been little application of the fair trade approach to date. However, a few products of certified forests such as those of the Bainings Community in PNG and SWIFT in the Solomons are promoted as being socially sound. In theory, fair trade may present potential for improving the transparency and equity of certain elements of the private sector involved in forestry. In reality, it is more likely to involve the entry of new players (in particular, community enterprises) and the exit of certain middlemen. It may well be an easier set of 'hoops' for community enterprises to 'jump through' than certification. Fair trade criteria may, however, need modifying to ensure long-term goals such as environmental protection are included; they do not provide sufficient guarantee of SFM at present.

Nevertheless, there is much to be gained from an investigation of the opportunities for extending fair trade approaches in forestry, as well as a thorough analysis of the distribution of costs and benefits.

Other market strategies include: buyers' groups, such as WWF's 1995 Plus Group of approximately 80 UK companies committed to purchasing products from FSC-certified forests only and procurement strategies that are similar in effect to the above, except that they run their own systems for checking the quality of forest management, and as such are suitable only for very large buyers such as government agencies and local authorities.[10]

5.10 Partnerships between the private sector and local groups

Large forestry corporations are not always interested in, nor are especially competent at, producing goods and services other than fibre, and will make no extra effort to produce them unless there are incentives to do so. However,

[10] A dozen more such national buyers groups are already established or are in the process of formulation

there are apparent advantages in putting the private sector together with other actors. Communities, for example, seek both fibre and other goods and services important for livelihoods. But often the private sector controls large areas of forest and, as a consequence, communities' access to forest resources is limited.

The most common partnership between companies and communities is the outgrower approach, where companies enter into agreements with farmers to share the costs, benefits and risks of *fibre* growing. For example, often the company will provide plants and inputs, and will guarantee the purchase of resulting wood.

IIED (1996), from investigations in Brazil, India and the Philippines, notes a number of motivations for large companies to obtain fibre from small private outgrowers:

- other wood sources may not be available, or may be expensive;
- social risk is reduced by involving local groups; and
- company costs and financial risks associated with land-holding and fibre-growing can be reduced.

For farmers to benefit from outgrower schemes, certain conditions appear to be necessary:

- secure land tenure and rights to the trees being grown;
- access to financial support or sources of income while the trees mature;
- higher net returns from trees than from alternative activities, such as agriculture;
- secure markets for the wood – but not a company monopsony; and
- good means of participation with the private sector, and transparency of operations.

Furthermore, the better organised that farmers are, the better their chance of striking good deals with the forestry company. These prerequisites were not always present in the partnership schemes studied by IIED. Consequently, the partnerships were hindered by perceived inequalities and the adoption of the schemes was limited.

Outgrower schemes are very much focused on fibre rather than other goods and services; and they were principally instigated by industry to meet its needs. However, Clarke and Foy (1997) cite a number of examples of partnerships between large South African forestry companies and local communities. From the community's point of view, these partnerships were not generally based on commercial fibre production alone, as in the usual outgrower scheme, but often on goods and services of (sometimes non-commercial) livelihood importance. Partnerships cover:

- land sharing (with community rules to protect the company's forest resource);
- access agreements for grazing and firewood;
- joint ventures in wood and fruit production; and
- communities holding equity in the company.

In the new political climate of South Africa, some very large companies have had to come to terms with working in very poor rural environments. Clarke and Foy note that, while promising, these schemes are the exceptions to the 'rule' of conflict between corporations and communities; and they call for increasing the frequency and quality of these forms of partnership. Other

observers go further and call for partnerships as a *condition* of government sanction of commercial forestry operations, in areas where people have a strong dependence on land for reducing their poverty (IIED 1996).

One potential for the future is to develop partnerships between companies and well-organised local resource user groups. There is far more experience of this, and in outgrower schemes generally, in agriculture than in forestry; and research is warranted in extending the lessons of agriculture. One of the approaches which may help to improve the corporation's market benefits from partnerships is fair trade; this, of course, is also designed to increase local social and environmental benefits (see 5.9).

5.11 International mechanisms: joint implementation

So far, we have been addressing whether the private sector can deliver social and environmental services at local and national levels. One of the key areas where insecurity of forest services may be felt, however, is carbon-fixing and storage at the global level.

The 'Joint Implementation' (JI) schemes have attempted to exploit the private sector's greater willingness to invest in good forestry if some of the externalities (in this case, carbon benefits) are paid for. They have been establishing a bilateral market in global benefits. Plantations have been established in Guatemala, Ecuador, Bolivia, Peru, Costa Rica, and Brazil, principally as deals between northern electricity generating companies and forest foundations and bodies in the afforesting countries. Natural forest conservation, enrichment planting and reduced-impact logging have been paid for in a similar way in Sabah through agreements between Dutch and Malaysian corporations. Private sector forest conservation and sustainable forestry JI projects are also under way in Belize and Costa Rica.

The motivation of the electricity companies involved in many of these projects has been a mix of public relations and, possibly, anticipation of legislation setting out mandatory carbon emission targets. The cost of reducing emissions in the electricity and cement manufacture industries, for example, could be several hundred dollars per tonne of carbon dioxide avoided, whereas the cost of carbon sequestration through forest rehabilitation in some developing countries has been estimated to be less than one dollar per tonne (Stuart and Moura-Costa 1997).

Price (Harris 1996) notes that carbon fixing offers potentials that can counteract some of the problems of forestry which currently limit its attractiveness as a commercial concern:

- benefit arises the moment net photosynthesis begins – defeating the "bogey of compound interest";
- carbon fixing has value irrespective of the dimensions or quality of stem, branches, roots, etc;
- transport of carbon dioxide benefits is costless - forest location does not matter; and
- product (removal of carbon dioxide) and capital (fixed carbon) represent immediate and compatible benefits.

He notes, however, that it will take some time before international legislation and payment protocols for carbon storage/sequestration compensation are established. Clearly, they should be based on close observation of the current bilateral markets. UNCTAD (1995) suggests that, once operational, the

international market for carbon-reduction projects could be worth tens of billions of dollars each year.

Some observers are worried about the quality of the ensuing forestry, and the distribution of costs and benefits – it is all too easy for a country or local forest company/foundation to 'sell' its forest's carbon-sequestration services to the cost of local people who seek other goods and services. Moreover, others worry that Joint Implementation acts as a disincentive for Northern companies to improve their pollution control – claiming it is another form of 'waste dumping' in the South. And it is undeniably in the North where the burden of major changes to alleviate climatic deterioration should lie. Nonetheless, the large areas of existing forest and the high growth rates of forest in the South provide a tremendous comparative advantage for the South; furthermore, there should be no harmful effects of such "waste dumping".

Whilst JI initiatives to date have been instigated by northern investors, some developing countries now have a more proactive approach. For example, the Sri Lankan JI pilot programme offers a huge range of potential investments, including reforestation, plantation management to optimise sequestration, and conservation of natural forest soils. (It also includes emission-reduction programmes). The Costa Rican government is beginning to regulate JI. Its office of JI has a portfolio of forest conservation and afforestation projects (the production costs of which are confidential), and sells certificates of carbon offsets internationally. With the support of the Earth Council and the World Bank, it is launching these 'Certificates of Tradable Offsets' onto the Chicago Board of Trade (Stuart and Moura-Costa 1997).

As Stuart and Moura-Costa (1997) point out;

> "as carbon offsets move from being a series of good deeds with PR value to being financial hedges with bottom line values, the temptations to engage in marginal practices will become more apparent. It is vital that the regulatory systems which have emerged over the past five years be maintained and enhanced to ensure that potentially abusive projects are not allowed to profit from participation on the commercial system. Independent third party verifiers.....will also support this need". [Indeed, SGS has begun a carbon offset certification system].

5.12 International mechanisms: development assistance to the private sector

As early as 1975, Jack Westoby of FAO was expressing worries that multilateral aid had merely been identifying forest resources for exploitation by the private sector, and notably by foreign capital. Later he described how:

> In not a few cases [international aid] has compiled the data, and helped provide the justification, for international financing agencies to provide loans to create some of the infrastructure needed to assist the penetration of foreign capital. It has helped to train some of the manpower to be placed at the service of foreign enterprises [and] assisted some irresponsible governments to alienate substantial parts of their forest resource endowment... The international financing agencies knew what foreign investors wanted, and the multilateral and bilateral agencies fell into line (Westoby 1987).

A number of other commentators have noted how support to the TFAP process has benefited both foreign and (more often) local private sector actors by removing constraints to their access to forest resources, but *without* redressing

the policy and institutional failures that allow an asset-stripping approach (e.g. Carrere and Lohmann 1996 in the case of FINNIDA's support to NFAPs/FSMPs in Thailand, Philippines, Nepal, Sri Lanka, Tanzania, Zambia, and Kenya).

Most development assistance agencies are now aiming to balance their support to governments with a judicious promotion of the private sector, so that the latter can undertake production and service provision roles in forestry. This support, of course will also have to address the policy and institutional failures in order to be successful. It will also have to be "faster on its feet" to deal with market dynamics.

DFID's policy on the private sector ackowledges that "the private sector is the main engine of growth in our partner countries"; and describes how there are

> many different strands to support the local private sector, ranging from macroeconomic reform (including technical advice for difficult privatisation and market reform programmes) to promotion of small and micro business [through business infrastructure development, individual enterprise restructuring, and investment promotion], to investments in the health and education of the work force (ODA Technical Note 11 no date).

However, there is a DFID guidance note (ODA 1997) on using UK business as partners in development, which suggests that much of the support to the local private sector will be undertaken through UK businesses: "the goal of [this] initiative is to increase the resources behind our development effort". This note pays special attention to partnerships between UK and developing country businesses that will have a "positive impact on society", such as: demonstrating ethical business management; dealing with issues of social audit, child labour, worker health and environmental protection; ensuring business increases livelihood opportunities to smaller communities; and linking up with UK importers of environmentally/socially sound products.

DFID is also currently reviewing approaches to public sector forestry, which (should) include ways in which the public sector and civil society initiatives such as certification set the policies and instruments for private sector roles. As we have stressed, a strong institutional environment is essential for many instruments, and development assistance for institutional strengthening can be a good contribution.

A number of the development assistance agencies are also supporting the development and application of specific instruments – notably certification, as a catalyst for SFM. DFID has supported the Soil Association's Wood Mark scheme, and consideration of certification by Ghanaian stakeholders. The EC is developing an extensive certification support strategy, with emphases on the Congo Basin and improving information flows.

UNDP is looking at developing different public-private sector forestry partnerships. This theme is common in development assistance, but it appears the rationale is as much to increase the financial leverage of aid as to helping renegotiate local roles in forestry.

In general, development assistance agencies have far stronger strategies for engaging with governments and communities than they do for engaging with the other 'apex' of the 'sustainable development triad' – the private sector. This is an area for considerable research and development; some agencies that are beginning this, such as DFID, have the right approach – addressing the private sector with and through the other stakeholders, as well as directly. It is certainly critical to build a potential host country's capacity to assess foreign investors as to their qualification to bid, as DFID is attempting to do in Guyana.

WCFSD (1997) notes the power of the development banks, and calls for greater exertion of their influence on governments to control trans-national company behaviour. The case of the World Bank cancelling PNG's structural adjustment loan, because of weak government control over private sector forestry, is cited.

6 Preliminary conclusions on mechanisms and instruments for sustainability

Many promising instruments are not yet effective in practice. Common constraints to many of them are institutional weakness and a lack of good information. Certain instruments cannot be effective without a minimum of institutional capabilities. Analytical and administrative capabilities are key. Specific instruments have their own particular reasons for not yet being effective:

a Some, such as self-regulatory approaches, *cannot tackle the root causes* of unsustainable private sector behaviour;

b Some are widely promoted, but in practice are of only *narrow applicability*. These include certification programmes, which depend upon the existence of an environmentally discriminating market;

c Some, such as ethical investment vehicles, *will not be effective levers* for SFM until basic forest policies and regulations are improved;

d Others, such as community/business partnerships and improved concession enforcement, require much stronger *institutional conditions and local capacities* to work well;

e Some, such as current certification schemes, are *high-cost*;

f Some run the risk of falling foul of current *trade barrier rules* e.g. buyers' groups, fair trade, labelling and certification

g Some, such as competitive concession allocation, will be side-lined by *covert relations*, between the private sector and friendly officials, which seek to maintain the status quo; and

h Others, such as certain privatisation processes, are *subject to political mishandling* and short-term policy reversals.

The basic steps to improve instruments that will encourage private sector contributions to SFM are:

a For specific forest goods and services, develop a clear understanding of which forest goods and services should be in state hands as opposed to private hands and which are suited to a mixture e.g. through defining specific property rights. This may be based on an analysis of the excludability and subtractibility of goods and services sought from the forest, as discussed in 3.2.

b For those goods and services that should be in state hands, develop controls to close off opportunities for the private sector to indulge in illegal practices, strengthen state institutions, and create systems of incentives for private managers and compensation for private land owners where necessary.

c For those goods and services that should be in private hands, a secure and transparent business environment for producing social and environmental benefits will be needed. This will in large part be created by mechanisms and instruments that tackle the root causes of forest problems – namely market failure and associated government and institutional failures, as well as mechanisms to encourage local

stakeholder involvement. The institutional failures of the private sector itself will need particular attention.

d Work with the private sector to examine more closely the impact of current instruments and the institutional and other constraints to further progress. This should start with companies and associations that have proven their ability to improve environmental and social performance and their commitment to further action. The WCFSD and the WBCSD both propose to do this.

e Distinguish between instruments aimed at forest land owners from those aimed at managers of forest operations. For owners of forest land, the long-term value of SFM needs to at least match the asset-stripping value (usually implying the need for an incentive). For managers of forestry operations, responding to the needs of SFM for multiple values will initially cost more, but may ultimately produce more benefits, as more goods and services may be marketable. Incentives may be needed to generate such markets. Social and environmental benefits require measurement in order to establish the level of incentives.

What is often perceived as the "threat" of private forestry companies is, in fact, more a function of the vulnerability of government and other local institutions and the lack of effective instruments that can be used by these institutions – especially those in poor countries. Based on the preliminary review in preceding sections, the *promising instruments* are governmental, intergovernmental and civil society-based. Some of the governmental instruments are almost prerequisites for the others to work – but the point is that they are unlikely to emerge satisfactorily without civil society pressure. Hence the need for a parallel track approach, involving:

a) Governmental and intergovernmental mechanisms and instruments for influencing the private sector

Privatisation processes should encourage a locally-meaningful and equitable distinction between private and public forest assets, and target forest owners and managers with the following instruments:

- *Property rights regimes* that allow a distinction between users of different goods and services on the same piece of land, but encourage compatible management regimes;
- *Concession allocation and market instruments* for leasing defined use rights to public forest lands at prices which reflect the full value of the resource, and cover the costs of government monitoring and control; together with incentives to improve forest assets;
- *Subsidies* restricted to the production/provision of social and environmental benefits, and commensurate with their value;
- *Joint implementation* for carbon sequestration, biodiversity conservation, and other public benefits, subject to protection of local interests, and allied to efforts to improve (international) legislation on mandatory targets;
- *National systems of transparent forest information,* which are open to government and civil society actors, and which account for the extent, condition, tenure, management and use of forest management units[11]; and

[11] ITTO, DFID, WCMC and IIED are promoting the Forest Resource Accounting methodology for this purpose.

- *(Inter)national systems of transparent information on the performance of companies; perhaps together with an international agreement on controlling international private sector involvement in forestry* – aimed primarily at the asset-strippers, but also developing minimum standards for all investment[12].

b) Civil society mechanisms and instruments for influencing the private sector

These civil society mechanisms which should be analysed and promoted where they are found to be worthy include:

- *Partnership models*, building on both formal and informal mechanisms which have involved the private sector and local communities;
- *Third party certification and other audit* initiatives that are simpler and lower-cost, and not necessarily tied to environmentally-discriminating markets; (for other recommendations see 5.8)
- *Fair trade initiatives*;
- *Investment vehicles* that discriminate in favour of sustainable and productive forestry;
- *Valuation protocols* for forest businesses, which give a realistic picture of their stocks/flows/growth rate balances and social and environmental liabilities; and
- *Shareholder associations* to influence companies to practice SFM and to subject themselves to audit.

This brief paper has managed only to touch on some of the key issues. It is an opening issues paper and not, by any means, the 'last word'. IIED and its partners intend to conduct research to enable the further analysis, effective development and implementation of the above instruments, in the context of different institutional environments (Box 8).

IIED's research will cover global developments, country conditions (country case studies) and individual corporate conditions (company case studies). An immediate priority will be to establish what works best in countries with poorly-developed institutions and weak information flows. It will also be valuable to examine cost-effective instruments for countries with more sophisticated institutions. Recommendations would thereby cover institutional development and instruments together.

These concerns are very significant for the beginning of the next century. IIED and its partners can begin to open up the debate, by generating improved information and analyses. Other research bodies are encouraged to collaborate. Politically significant initiatives such as the Intergovernmental Forum on Forests, the WBCSD and the WCFSD are called on to help move us from better understanding, to pledging improvements, to widespread action that will help forests and people.

[12] The idea of an independent 'ForestWatch' organisation or network is being promoted by WCFSD.

Box 8: Notes on IIED research project for 1998 to 2000

Instruments for sustainable private sector forestry

1. The project's aim:

To identify effective market and regulatory instruments for ensuring that the private sector produces social and environmental benefits from forest management; and to promote these instruments.

2. The approach:

Based on collaborative research with local, multi-disciplinary teams in six focal countries, and on assessing key experience elsewhere.

The work will cover:

Research on best practice mechanisms/instruments; on how to improve them; and on how to apply them, especially in weak institutional environments:

1. privatisation processes
2. partnerships between corporations and communities
3. certification and audit
4. other innovative instruments affecting public and private lands (concession allocation and pricing, investment vehicles, etc)

Research on companies: potentials and constraints facing selected companies

Research on countries: processes in six developing countries to develop options for instruments and the institutional/policy environment for private sector forestry

Workshops/dissemination: feeding findings and recommendations into international fora, as well as into national processes in the six focal countries

Design of pilot activities: to develop/test instruments and to improve capacities, focusing on the six countries

An Advisory Group will be appointed, to ensure that work coordinates with other key initiatives

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