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Change Towards Sustainability in Resource Use: Lessons from the Forest Sector

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Summary

Initiatives that treat forestry as a 'sector' seem to be increasingly prone to failure. Forests are resources that other sectors use, in many different and often competing ways, to produce both public and private goods and services. The result of this use can vary widely in their contribution to sustainable development, from forest asset liquidation (land clearance for agriculture and infrastructure), to direct productive uses (plantation and natural forest management), to protective uses (wildlife conservation and water supply).

The actual uses of the forest have tended to reflect the economic and political powers of particular forest stakeholders, and their support from government agencies and policies. They have also tended to reflect beliefs, policies and political intentions that express how society wants to organise itself, divide its wealth, consume the products of wealth, and embark on what it believes are the best paths for development. Thus forests are also symbols of people's relations with nature. Today, there is often no clear or shared vision of this. Typically, unchanged forest policies reflect the desires of previous (possibly colonial) governments, and clash with the values of more impetuous stakeholders.

Clashes tend not to be about forests as such, or about the various goods and services. Rather, they tend to be about what comes in between: forest management. It is the forest management regime that defines the boundary between the public functions of forests (notably environmental services) and private benefits (notably timber). This is why forest management is so contentious and why managers are often viewed with suspicion. There have been attempts in the 1990s to define sustainable forestry. However, many 'top-down' policy interventions (and especially the international initiatives that emerged before and after the 1992 Rio Earth Summit) have been discredited: it is now clear that, by and large, local specificities disallow global solutions.

If the forest problem is one of entrenched policy and institutional inequities – which many recent well-meaning initiatives have not really been able to tackle – where can we point to real progress since Rio? What pressures are building up that need to be deal with? And what ideas are emerging for the future? The following brief 'report card' reflects key findings from IIED's collaborative research with government institutions, NGOs and private sector groups in many countries, especially through its two recent programmes 'Policy that works for forests and people' and 'Instruments for sustainable private sector forestry'.

A. Ten Years And Five (Tentative) Transitions

Sustainable development is a journey. We have not arrived. But we can look back to Rio and see how we have been doing:

1. **Routine expectations of multi-stakeholder involvement.** We have progressed beyond an earlier assumption (or faith) that leadership by (inter)governmental bodies would bring about sustainability. The experiences of collaborative forest management, 'parks for people', and the increasing albeit faltering participation through the Intergovernmental Panel/Forum on Forests, etc, are establishing the expectation of multi-stakeholder involvement as a norm. 'Prior informed consent', a novelty in 1992, is becoming routine. We acknowledge that initiatives can and should be 'with people'

rather than 'for' people, although we are struggling with the mechanics, costs and politics of 'full' participation.

2. **Evolution of pragmatic national systems containing a number of elements for continuous improvement**. We no longer rely on neat, 'supply-driven', international precepts that are manifest in master plans/dreams such as the TFAP, or the idea of a global forests convention. Instead, in the last decade, many countries have assembled a number of elements of good forest sector governance: legally-recognised Permanent Forest Estate with designated use categories for multiple goods and services; updated management plans; more fora for multi-stakeholder debate (such as the national certification working groups); and partnerships (including an extraordinary growth in company-community partnerships). The new understanding of national forest programmes (NFPs) is much more about systems of continuous improvement for understanding and coping with change, than of 'master' plans which grow ever more out of date. And, indeed, that NFPs can be quite eclectic and 'messy'.

3. **Growing consensus on sustainable forest management (SFM).** We have progressed from routine confusion and argument amongst stakeholders (leading to imposed, stalled and parallel initiatives), to a somewhat clearer and more widely shared vision. The decade has seen the emergence of a range of initiatives to define principles, criteria and indicators (PC&I) of SFM – which have both allowed a lingua franca to evolve and resulted in a 'distillation' of knowledge which can be interpreted in local policy and plans whilst remaining globally recognisable. We have also see the emergence of SFM fora internationally, building on the unique role of the International Tropical Timber Organisation in the 1980s. The Forest Stewardship Council is a great example, being structured around sustainable development principles.

4. **The emergence of 'consumer' discrimination between production processes.** Ten years ago, most consumers literally did not know what they were buying. Such 'wood-origin-blindness' certainly contributed to rampant asset-stripping. Where government action had failed, consumer action is achieving results. It is now possible to know where a piece of wood or paper has been grown, and even how it has been grown. Certification has developed rapidly as a consumer-led approach to judicious buying (more properly this was retailer-led – the branding possibilities are good). Whilst this has had the immediate effect of benefiting existing good producers, rather than the need of stopping asset stripping or helping weak but willing producers – it is all helping to increase transparency.

5. **A significant environmental clean-up.** We have progressed from environmental damage as a routine part of forest management (deforestation, waste, erosion and pollution), to routine environmental management – at least in some big companies. In one decade, many companies moved from defensive attitudes, to promoting vanity projects and 'greenwash', to genuine business objectives for sustainability (spurred on by some market forces, cost-savings, emerging legislation, and aided by tools such as EMS which were rapidly taken up). By 1995, IIED was able to reveal figures showing how a majority of international companies now adopt most of the environmental practices studied. For such companies, most environmental problems are largely a thing of the past (although their 'first-mover advantage' is partly also in defining 'good' environmental practice in ways that suit them). The challenge is now integrating social externalities.

If some of these areas of progress are still more evident in forest stakeholders' thoughts and words than in the forest, and if there is still a confusing 'policy inflation' resulting from piecemeal approaches to sustainability, we can at least recognise some strong trends. Yet most forests, particularly in the tropics, are in worse shape than in 1992. So also are many forest-dependent poor people, hundreds of whom are murdered every year trying to protect their forests. And crime pervades the tropical timber trade, a significant proportion of which is from illegal sources.

B. Five Big Trends That Won't Go Away

Five trends accelerated in the 1990s, but were not really handled at Rio or by its immediate successors:

1. **Globalising economic power.** The majority of traded forest products derive from fewer and fewer countries and companies. Almost half the annual wood harvest is processed by the top 50 forest products companies. Most products also derive from simpler forests that have 'weeded out' diversity through the technologies and scale economies of larger corporations. Corporate mergers and buyouts are on the increase. With all this comes increasing (foreign) consumer/ retailer powers to set the local standards for forest management. This includes environmental and social standards, operating through today's discriminating markets. The question is whether, in the drive to ensure 'nice' globalisation, we are making the mistake of assuming that 'nice' corporations alone can meet all livelihood and forest needs…
2. **Globalising advocacy and knowledge production for SFM.** Intergovernmental discussions in the 1990s highlighted the need for shared obligations and called for action on 'all forests' and not just tropical forests. Whereas groups such as WWF and the World Bank used to fight their own corner, they are now forming powerful alliances - indeed, there is a World Bank/WWF Alliance with bold targets for both production and protection forests. Such dominant players and their values and targets can easily come to dominate research and policy agendas and the definition of 'correct' knowledge. As with other forms of globalisation, some groups will be marginalised. The question is whether such developments can help – and not threaten – local voices and knowledge systems.
3. **Privatising forest land, resources, management and services.** It is significant that every one of the 23 countries recently studied by showed this trend – and none was nationalising. Hence the growing concern for the public benefits of forest. The dilemma is whether this privatisation is 'giving away' government or improving its effectiveness and efficiency. At present, there are still many a priori objections amongst forest stakeholders to market-based solutions: how much is this due to ignorance or mistrust of the new policies and institutions required to control the market?
4. **Localising decision-making and resource control**. It is remarkable how many countries are in the midst of decentralisation processes, some in order to 'downsize' governments, but others (as in parts of the Sahel) in response to new understanding of the potential of making local people effective forest managers. In addition, there is increasing advocacy for rights-based development, and the expectation is now of a balance between 'top-down' and 'bottom-up'. The question is: how much can localised control achieve in the face of entrenched inequities and the other trends above?

5. **No stable financial basis for SFM.** Not so much a trend as an enduring constraint to turning SFM dreams into realities, markets for SFM are immature, price discovery for sustainable 'commodities' is difficult, and in any case externalities are rarely included in prices. The financial basis for actual cases of SFM ranges from 'no profit' to windfalls. Meanwhile, the terms of trade for primary products appear to decline and big business investment leads to boom-bust price cycles. Whereas many call for 'new and additional finance' for SFM from outside the forestry system, recognising its public benefits, we might ask what we really know about finance flows within the forestry system, and where might the leverage points for SFM be?

C. Five Challenges for the Future

1. **Think and act 'extra-sectoral'.** Ghettoised 'forestry' solutions to 'forest' problems often fail because they deal with only the proximate cause of the problem, and not the underlying cause which may be extra-sectoral (and often international) policy, such as for trade, finance, and land use. 'Forestry' is an open system, not a closed one, and needs to be treated as such.

    - There is a huge need to engage with international processes in the WTO, with Finance for Development, as well as to support those national and local processes that are set up for cross-sectoral integration of environmental and social concerns (national strategies for sustainable development and Local Agenda 21) – and not to do so only through the World Bank, as so often at present. A poverty focus can help both to address these structural issues and to keep forestry's profile high.

2. **Consider 'governance PC&I' to complement 'SFM PC&I'.** The main bridge we need between the neat SFM words and thoughts of the 1990s, and real-world action, must surely be one of improved forest governance – stakeholders jointly forming the SFM 'meta-institution'. It is increasingly clear that there are limits to continued (inter)governmental action without local involvement.

    - At global level, we must review the UN bodies involved in forestry, rationalise them and improve their accountability. At national level, nfps have promise for integrating all the 'magic bullets' such as certification and forest fora into a system for continuous improvement. Since the 'magic bullets' have tended to make the good forest players better, and left the bad alone, a focus on stopping illegal activities may be desirable. But the principal need is to improve local governance for 'forest goods & services' – which itself is often the best tactic to forge demand for SFM and for integration 'at the top'.

3. **Ensure markets for environmental services really work. 'MES' will become increasingly sophisticated – the political and commercial drivers are ensuring this.** The challenge must be to ensure they work not just for those with the scarcest commodity (currently information and contacts, which favours the 'brokers'), but for forest-dependent people, and especially the poor.

    - The various environmental conventions require better coherence to do this, so that e.g. the Kyoto Protocol is better informed about forest biodiversity and does not just favour large tracts of plantations. There is also a need to clarify rights to the

'commodities', reducehe transaction costs for poorer groups, and ways of achieving accountability.

4. **'Responsible forest business' from a Southern perspective.** The past decade has accumulated codes of practice and standards for 'good forestry' that are inevitably based on what big, well-resourced Northern companies practice. Good practice by small groups, in their own environments, has been much less visible.

    - There is now a need to focus on small/medium enterprises – and especially their role in creating jobs. Opening IIED's 30th Anniversary Conference, Ashok Khosla noted the huge challenge for India in creating 15 million new jobs each year. Given that small-scale forestry plays complex roles in people's livelihood systems, and in environmental services, there is a need to encourage local visions and standards for forestry (that will also tackle the 'social standards' dilemma still being faced by bigger companies). The retailer incentives that dominated success in 'greening business' in the 1990s may need complementing by different forms of incentives, e.g. access to land and resources such as (micro) finance, and insurance. There is also a need for a strong information drive, so that other countries understand what is right for Southern conditions. Model (partnership) forests may be a useful vehicle.

5. **Information on how forest assets are really being used**. The 1990s saw a sea change towards 'people-first' approaches to forestry. But these have often now outstripped capacities to avoid the risk that we are merely democratising forest degradation. Although there is awareness of a multitude of stakeholders, goods and services in the SFM equation, we are still usually in the dark about who uses what forests, and how well they are managed. A business that managed its assets (and stakeholder relations) in that way would be in trouble. True, we are collecting more and more data – indeed, a forest manager can hardly get started without being required to do so today – but we are not really making good use of it, especially in making decisions on social and environmental aspects. Such information will become increasingly important in a world of considerable uncertainty in economic, climatic and social systems.

    - It is surely time to broaden national assessment capacities and to make active use of them in policy and planning. This will involve better links amongst existing sources of information (for example, all that detailed information from certified forests currently does nothing to build up a good national picture) and encouraging participatory monitoring to keep track of the values that really matter locally. Simple indicators of SFM progress – and publicity for that progress – will enable a more sure-footed approach along the path to SFM in the next decade. Resilience will elude us without it.

Finally, although we have made some useful transitions towards SFM, there are still a long way to go within the forestry profession. Some would say there is still a crisis amongst foresters. The above challenges need to be addressed as much through the education of foresters – and those who use forests – as through policy change and field programmes.

1 Introduction

Sustainable development presents an awe-inspiring range of challenges. How can environmental protection, poverty alleviation, and money-making objectives be integrated in practice? How can long-term needs be balanced with short-term imperatives? How can local demands be balanced with broader national and global requirements? And how do you get a decision-making process 'with the maximum possible participation' (as called for by Agenda 21) that will also work with corporate and political realities and does not cost the earth in time or money?

The texts emerging from international processes (Agenda 21) as well as from national processes (sustainable development strategies and 'green plans') tend to be overwhelming in their all-encompassing nature. Comprehensive sets of objectives, in their entirety, tend to be ignored: no one person or group is interested in all of them. They are too vague or too remote from day-to-day realities. Together, they may lay out a vision, but not the changes required for getting there.

So how do stakeholders in the mining sector make the transition to sustainable development? One approach might be to trace the course taken by a not dissimilar sector.

In this paper, we look at the forest sector. Much of the argument has been over the public functions of forestry (notably environmental services) and of the need to reconcile this with private needs; and over local specificities disallowing global solutions. Over the past two decades the sector has begun shifting from 'asset-stripping' approaches towards regenerative, cyclical systems. A shift has begun from narrow objectives (largely timber production) towards balancing multiple public and private goods. The scarcity of the range of forest goods and services is beginning to be signalled through a range of regulatory, market and informational means. Local and global stakeholders are becoming involved in decisions that had principally been the concern of government and corporations. Corporate codes, civil society watchdogs and formal certification schemes are beginning to improve scrutiny of forest management.

In effect, a new 'institution' (in the broadest sense) of a 'sustainable forest sector' has been in formation, in response to various pressures that are described in Part 2. Ten key initiatives that have contributed to this are outlined in Part 3. The primary challenges that have been met, or are yet to come, are principally governance issues, discussed in Part 4.

2 Background on the 'Forest Sector'

2.1 The 'Forest Sector' And Its Relation To Policy

The forest 'sector' is not a sector in the normal sense. Forests are *resources* that other sectors use, in many different and often competing ways, through:

- asset liquidation e.g. land clearance for agriculture
- extractive uses, e.g. logging natural forests for wood industries and export

- regenerative uses, e.g. plantation and natural forest management for the wood and paper industries, and local agroforestry as a complement to cropping
- protective uses, e.g. by wildlife conservation and water supply industries.

The actual forest uses have tended to reflect the economic and political powers of forest stakeholders, and their upport from government agencies and policies. It has also tended to reflect overall development and macro-economic policies and political intentions that reflect how society wants to organise itself, divide its wealth, consume the products of wealth, and embark on what it believes are the best paths for development. As such, forests are not only 'resources' but are also *symbols* of people's relations with nature. The tension in many countries today is between historically anomalous laws and policies and today's forest-people relations and aspirations. Many state policies still reflect previous beliefs about forestry. They were often largely structured to remove forest rights from local people, to promote the timber extraction rights of a few powerful operators, and/or to retain forests in state hands as a 'land bank' for future allocation.

2.2 Public And Private Forest Values

Whatever the shape of the forest 'sector' (and there are still a few places where timber extraction is dominant), the *scarcity of the broad range of forest values* is being communicated with increasing effectiveness.

Forests are valued for both private benefits (notably wood consumption and trade) and public benefits (climatic, biodiversity, landscape beauty, cultural heritage and other services). The values you *seek* depend upon who you are (Table 1). The values you *get* depend largely on the policy and regulatory environment, your own rights and access to decision-making and to forest resources, your skills and resource base, and your understanding of your responsibilities. Many of the developments in forestry in the last twenty years have centred on arguments about values and associated rights, resources and responsibilities.

Table 1 Forest Values Depend Upon Who You Are

FOREST INTEREST GROUPS	Approx No. (Million)	IMPORTANT FOREST VALUES
Urban People	2500	wood, non-timber forest products (NTFPs) water, climate moderation
Rural Poor/Landless	1000	food/fibre/health components of livelihood support to farm systems
Shifting Cultivators	250	much of livelihood, cultural values
Forest Communities	60	sole means of livelihood, cultural values
Agribusiness	10	land, water, support to farm systems
Oil/Mining Business	7	Minerals
Logging Business	5	Timber
Retailers of forest products	3	timber, ntfps, environment
Ecotourism Business	3	landscape, recreation, biodiversity, culture
Environmental Groups, Scientists	1	carbon storage, climate, biodiversity, culture

Aspiration to capture particular values also explains why sustainability arguments and initiatives have tended to concentrate on different levels or scales. Hence the great contention over forest policies and management standards – they lie at the *interface of private and public benefits*. However, there is often confusion in discussions of 'sustainable forest management' (SFM), as people talk at cross-purposes, depending on what their primary level of concern is:

- The individual tree – for cultural and spiritual values
- The individual forest species – for biodiversity and heritage values
- The forest stand (natural or plantation) – for balance of goods and services
- The forest enterprise – for economic and social sustainability
- The forest user group/community – for income, rights, and empowerment
- The forest landscape/ecosystem – for balance of goods and services at a regional level
- The nation – for forestry's contribution to development and international obligations
- The global level – for conservation of forest biodiversity and carbon storage

At each of the above levels, the sustainability issues will be different. And, over time, they will change. For example, "biodiversity" was a word coined only in the 1980s, and carbon sequestration values were unheard of a few years ago, but independent valuations of many forests now show these to be as high as the values of consumable products such as timber.

2.3 Forest Stakeholders [1]

Where before the key stakeholders might have been government – and a few companies licensed to log state forests, the larger private forest owners, and a few recognised traditional groups living in the forest – the numbers of stakeholders and their demands are now much more diverse. In recent years, NGOs, scientists, intergovernmental fora, and retailers have been responsible for forcing attention on wider interests in forests (Table 1).

National governments are not homogeneous in their perception of forestry. They have traditionally been involved as 'guardians' of forest land and trees, as regulators to ensure wood security, and as timber enterprises. Their perceptions depend upon the country's status as forest-rich or -poor, and income-rich or -poor countries. This shapes how governments see the country's own forests, those of other countries, and the concept of 'global forest issues'. For example, income-poor countries with a wealth of forests (e.g. Guyana or the Democratic Republic of Congo) tend to treat forests as a capital source to be drawn down, in order to create other forms of capital - physical, financial, or social. In contrast, an income-rich country with few forest assets (e.g. the UK) will be concerned for conservation of its unique forest heritage, and for its secure and low-cost access to timber and environmental services from better-forested countries.

Intergovernmental institutions include those concerned with forestry (FAO), forest products trade (ITTO), environment (UNEP), development (UNDP) and forest-dependent groups (ILO) are late-comers or poor siblings in the intergovernmental family of institutions; with limited capabilities to correct international inequities, as they derive their powers from governments which retain sovereign control over forests, limited executive capabilities, and almost no influence on the market. None the less, they do provide certain routine functions such as forest monitoring (but they have limited powers to call on for information and to extract the truth), aid disbursement (but they are obliged to spread this thinly, rather than focus it on where the real needs are), and debate, now through the UN Forum on Forests, UNFF (although their function is more that of 'leveller' to common denominators, than supporting progressive new approaches).

NGOs*:* In the 1980s, an international sense of crisis about deforestation was largely created by NGOs but it gave both narrative and language to the WCED and UNCED debates. There has been a gradual improvement in facilities and rules that circumscribe an NGO's ability to affect intergovernmental outcomes. These have progressed from demonstrations outside UN halls, to open-mike sessions within the halls, to actually taking part in the drafting of policy text. Partnerships with forestry corporations, but more particularly with forest product retailers, through buyers' groups organised by WWF, have become particularly powerful, and certification (3.2.9) has been the main instrument serving them.

Communities: Over 1 billion people (about 20% of the world's population) depend on forests, woodland or farm trees for their subsistence needs and/or livelihood. But (except for some poorer, landless groups and forest-inhabiting indigenous peoples) they are rarely *fully* dependent on forestry – their multiple livelihood strategies embrace some farming, itinerant employment and petty trading, etc. As such their social organisation to pursue forest rights

[1] This section is largely from Mayers and Bass 1999

and resources has been weaker than it has for other social needs, for which there may be outside assistance and their forest dependence has often been invisible to the state. In developing countries, aid agencies and NGOs have supported 'social' and 'community' management of forests for both poverty alleviation and (in the absence of government capacity to manage forests) for environmental protection. The result is a growing expectation by many communities that they will be recognised as legitimate forest managers and will be given rights to forest (or have those rights returned where they were removed, often decades ago, by the state). NGOs have sometimes hauled in charismatic and exotic representatives of indigenous peoples to join their campaigns.

Forest companies: An IIED review of 23 countries, North and South, showed that every country was privatising forest ownership, management and/or services provision (Landell-Mills and Ford 1999). Most of the highest-yielding forests in the world today are now owned or leased by corporations, which have access to the genetic resources, technology and other inputs needed to achieve high yields. Most of these forests are devoted almost entirely to one or a few species for wood production, with no other goods having as high a priority. Those companies whose business model favours a longer-term view are moving towards plantations - or highly intensively-managed forests with plantation-like characteristics. Although such forest industries are responding to increasing pressure from NGOs and governments – and occasional consumer action – to clean up their act, they still tend to be site/asset-focused rather than stakeholder-focused.

In countries with weak governmental and civil society controls, asset-stripping companies can still thrive. These are principally interested in underpriced, high-value resources – such as natural forests with good timber stocks, but they are often involved in a number of poorly-controlled industries. Stock markets, which value listed companies on a daily basis, still place a higher premium on companies which can secure such assets at the lowest cost (which means those with lowest social and environmental provisions).

Large companies are now dominant in forestry. Perhaps fifty corporations control over 140 million hectares of the world's forests, through ownership and leases. Most of the 5.9 million hectares of tropical forest logged annually during the late 1980s, were harvested by the private sector. Nationally, a very few companies can dominate. Whilst many companies are already large, there is a trend towards mergers, acquisitions and the formation of multinational companies – entities with often very significant policy influence.

2.4 Forest Practice – The Many Types of 'Forestry'

In seeking to realise the various forest values, forest stakeholders have evolved a range of type of forest practice. The main "colours" in the *spectrum of land uses* from which forest-related goods and services can be derived are now: simple plantations/intensively-managed forests; complex natural forests with 'wild' characteristics, set aside for non-consumptive purposes; natural forests and woodlands managed for multiple 'livelihood' purposes; and small farm landscapes with trees.

In the commercial forest sector, an increasing proportion of 'forest' products now derives from *plantations* and from commercial *agroforestry* farms, as natural forest has become economically less accessible (with increasing distance from processing and markets) and

politically more contentious. Plantations are relatively low-cost, low-risk, and 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. Plantations currently provide 20 per cent of wood, and will provide 50-75 per cent by 2050 according to FAO predictions. They will, increasingly, be the only economically- and socially-acceptable source of wood. But natural forests will remain important for specialist woods – such as fine-grained hardwoods for which there is no real substitute – as well as for certain non-timber forest products such as wild medicines.

The notion of "sustainable forest management" (SFM) has to apply to all colours in this land use spectrum. No one form of land use is *a priori* more sustainable than the others. They play different roles in the search for security of forest goods and services:

(a) In deciding land use, the trade-offs with *food production* are key and food security goals will need to be integrated. This means both food production in forests (and more companies are allowing this – see 3.2.6) and planning forest/agriculture land mosaics.

(b) At the national level, choices can be made to *import forest goods and services*, rather than to produce them domestically. Although wood is the third biggest commodity in international trade, most trade is intra-regional. There are almost no exchange or futures markets, and trade proceeds through a wide range of complex bilateral deals and relations. The key issue here is the ecological and social "footprint": whether the importing nation is sending out signals that encourage good forest management abroad - or alternatively is triggering asset-stripping. But whilst it does not matter where, or in what form, carbon is stored, much of the world's biodiversity is dependent upon specific forests.

(c) Choices can also be made to *substitute* for forest goods and services e.g. by employing metals or plastics. Whilst price and product specification has dominated such decisions so far, there are still few ways to compare the social and environmental impact of different production processes for unlike products. Many stakeholders worry that, as forestry becomes more transparent about its production methods, an incompletely informed public may turn away from some forest products.

(d) *Recycling* of forest products has taken off only in the paper industry (3.1.4), but this has been fuelled by legislation. In many European countries, the economic and practical limits of recycling have almost been reached (there are issues of energy and transport costs, and the more limited utility of recycled paper). Pro-recycling policies are not well-informed about SFM, and eco-label schemes have not taken off significantly – consequently the consumer is not given information to judge SFM and recycling relative merits. Some forest certification schemes are certifying the recycling of timber in construction and furniture, to a very limited extent.

(e) Finally, changes in *technology* can redefine the possibilities for all the above. Technological developments in products made from woodchips (plywood, veneer, and MDF) have had enormous influences on the forests of SE Asia. Whilst woodchips permit a diversity of products, they favour uniformity in forest management.

2.5 Sector Problems

Forest problems are, of course, locally specific. But there are some general trends:

- Forest resources are *diminishing* in both quantity and quality
- The major proximate cause is *competition for land* – notably land clearance for agriculture, linked to expanding (but fluctuating) markets for agricultural products
- At the same time, *demand for forest products* is rising, linked to expanding markets for wood and paper, and overlogging is a major cause of forest loss in some localities
- The underlying causes of these forest problems are a *multitude of governance (policy, institutional and market) failures*. These *both* undervalue forests and their goods and services, *and* overvalue the benefits of deforestation for e.g. agriculture. Those who degrade forests or convert them to other uses do not have to compensate those whom they harm in the process. Those who practice SFM are incompletely rewarded.
- Many underlying causes lie *outside the forest sector* (trade liberalization policies and rules, debt repayment, agricultural and mine planning and development control), affecting the costs, benefits and risks in the forest sector (e.g. by altering prices for transport, infrastructure and employment, etc) and the sector has little influence on them.
- There are often appalling *inequities between groups* in their ability to express demands (especially through the market), to exercise their rights to forests, or to influence decisions. We have witnessed the steady marginalisation of forest-dependent poor groups, who have suffered most from deforestation
- This has led to *spiraling conflicts* e.g. between indigenous peoples and logging companies
- *Investment in good forest management* is rendered unprofitable or risky by such policy and market failures, or is limited to little more than symbolic actions in the absence of real improvements of governance

The net result is that land remains under forest only when its value as such is signaled as being greater than alternative uses (notably agriculture). The question is how to ensure that this 'value' reflects not just the profit for a few (private) operators but also SD goals, and notably those shared by many stakeholders and weaker groups, such as resolving poverty. The challenge for the forest sector can then be described as *achieving security of those forest goods and services that are needed at specific levels*:

- How to *signal* scarcity effectively, through regulations, information and market incentives?
- How to *realise* multiple values efficiently through technical and commercial models?
- How to *pay for* all values, especially those with no market and attract little investment?
- How can the costs and benefits be *shared*?

3 Changes Towards Sustainability in the Forest Sector

3.1 The Major Forces on Forest Actors

Stakeholders, in their pursuit of many forest values, are putting increasing pressure on those who control forests. These are a mixture of economic and political incentives and disincentives:

- 'People-first' and community empowerment pressures
- Environmental transparency and clean-up pressures
- Commercial intensification pressures
- Government institutional change pressures

3.1.1 Pressures for 'People-First' Approaches and Community Empowerment

Access to land and resources is the biggest forestry institutional challenge for those rural people who depend most on forests for their livelihood strategies. The key issue is (re)distribution of forest assets and roles. If the 'internationalisation' pressures were fuelled initially by environmental concerns, it was not long after that 'localisation' advocacy would follow. Four influences were key:

- Where initially 'the poor' were considered to be the cause of deforestation, field studies by environmentalists and anthropologists made it clear that successful cases of forest retention and for multiple values, could often be correlated with communities having the rights and resources to exercise their traditional knowledge. The 1980s were boom years for the likes of Survival International and Cultural Survival; and such groups were able to legitimise, promote (and glamorise) social movements such as the Indian Chipko tree-huggers and the Brazilian rubber tappers.
- Studies by FAO of the distributional impacts of forest sector development made it clear that investments in large-scale forest industry had not had the 'trickle-down' income-generation effects that had been expected.
- Studies of rural development showed that an emphasis on cash crop farming, to the detriment of attention to forestry as a source of fuel and complementary livelihood, was not having the livelihood-improving impacts that were expected.
- The movement for joint forest management (starting in India as state government-village partnerships) has shown what can be acheived, by giving (or returning) communities access to land, in terms of securing both public and private benefits. There are now many models of governments forming partnerships with communities.

Thus both technocratic and social movements have evolved to achieve 'forestry for poverty alleviation' (although the degree to which any form of forestry can help reduce poverty is being seriously questioned, e.g. Wunder 2001) and to promote access to forests as a right for indigenous peoples. Where initially these impacted most on government policies and the work of forest authorities (the call for forest officers to become development agents rather than policemen is increasingly accepted), the experience of social/community/participatory forestry is giving rise to lessons on social involvement that cannot be ignored by companies.

Increasingly, these 'people-first' lessons are being treated as norms and expectations, which has given rise to some serious debates about the social purpose of forestry (although the sector has yet to really think through the obligations and limits to social standards and the dangers of badly-organised 'people-first' approaches, i.e. the democratisation of forest destruction). On the one hand, we are learning of ways to involve people in sharing decisions, resources, costs and benefits. On the other hand, powerful groups can manipulate expectations of 'community' access to forests.

3.1.2 Pressures For 'Environmental' Transparency and Clean Up

Forests have always been a principal subject of formal conservation policy, largely because of their role in biodiversity conservation and ecological services such as soil and water conservation. Their almost universal occurrence and appeal, their visible destruction, and their role as habitats of threatened animals and people alike, have ensured that they are employed in the front-line of environmentalists' battles. Sometimes the environmental arguments are less about the local forest issues than those of the consuming society. Forest products – especially paper – have become stigmatised as symbols of profligacy and waste. Non-forest companies have been pilloried for their involvement in forests (Mitsubishi in logging, BP in oil exploration in forest environments). Forest companies (but more particularly the retailers who stock their products) have faced consumer boycotts and campaigns and, increasingly, shareholder and investor questioning about their environmental practices. Amongst those companies with a longer-term view, this has led to a considerable increase in environmental provisions, investment, and reporting (3.2.3).

But many companies are responding to a very complex set of pressures that are not always what they seem. The role of the consumer in calling for environmental improvements is a recent but powerful phenomenon in forestry. But often (as in the case of forest certification), it is retailers who 'create' or at least articulate consumer demand. And, under the surface of many ostensibly pro-environment campaigns, the real purpose is in fact anti-capitalism or pro-local empowerment. Campaigns about Eucalyptus trees argue about the tree's water consumption and suppression of biodiversity, but really aim to keep the forest corporations who plant these trees at bay. Finally and more insidiously, campaigns to clean up environmental aspects have sometimes had the effect of excluding weaker groups (e.g. locking poor groups out of forests for 'biodiversity conservation', even where such groups' forest use could be benign, supportive of biodiversity, or at least an acceptable local trade-off). At the global level, there is now a more mature understanding that the provision of global forest services (biodiversity, carbon storage, etc) is a legitimate need, but one which must be provided by global payments and markets (3.2.10).

3.1.3 *Commercial Intensification and Efficiency Pressures*

With the exception of many Asian companies, which are family-owned and -financed, large forestry companies are increasingly financed by outside investors who are seeking commercial returns. But, as with other primary producers, the terms of trade are worsening and pressures to intensify, to improve economies of scale and to improve vertical integration are strong. Whilst not yet one of the most concentrated industries globally, mergers and acquisitions are on the rise. And, as they get bigger, large companies are increasingly

vulnerable to changes in demand. For example, the European forest industry is highly susceptible to downturns 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. Under these conditions, integrated firms are under pressure to develop new wood-based products and materials, both to provide outlets for surpluses and to make greater efficiencies in times of relative raw material shortage.

We have noted how corporations are investing in large, intensively managed plantations. Waste levels are reducing in both forest and processing plants. Post-consumer recycling has increased, in part due to legislative pressure, but I usually a separate industry (and separate policy sector) from the forest industry, and still forms only a limited part of paper production.

But this industry concentration, and the dominance of a few companies over forests,[2] also increases the potential for coordinating a transition to SFM – because it would entail the coordination of only a relatively small number of actors, and because it could leave 80 per cent of the world's forests untouched by commercial harvesting activity. The ENGOs have noted this, and are increasingly concentrating their environmental advocacy on this small number of companies, with many ENGOs (and notably WWF as a leader) moving from a position of adversary to organiser of joint initiatives (see Global Forest and Trade Network below) (WWF 2001). But it would also mean that ENGOs are furthering the trend of industry concentration. They do seem to be largely ignoring the interests of smaller producers (except as 'niche' players in 'boutique' markets). There could be a backlash from public supporters of NGOs whose underlying interest in 'environment' is as much one in fighting corporations (3.1.2).

3.1.4 Pressures For Institutional Change, Especially On Government

Where forest policy was once the concern of government alone, and consequently both local and global forest stakeholders were marginalised, there has been huge pressure on government forest authorities to change approach:

- From forest departments as 'guards' of the forest (with forest-first policies and attitudes) to local development agents (with people-first approaches)
- From forest departments as sole regulators to organisers of multi-stakeholder consultation and (in some cases) policy-setting processes
- From forest departments running subsidised forest enterprises, or allocating commercial rights to favoured groups, to managing competitive processes of privatisation
- From a policy focus on timber production to creating conditions for multiple goods and services (as production forestry is increasingly privatised, there is now a role for government in organising roles in the 'set-aside' conservation and 'livelihood' forests).

[2] Over 90 per cent of industrial wood production comes from 600 million ha (a fifth of global forest area) in just 25 countries (the biggest five being USA, Canada, China, Brazil and Russia. Processing is more concentrated, with half the annual wood harvest being processed by 50 companies (the top three all being American). Similarly, the top 50 users of wood consume 10 per cent of this total.

These pressures have been associated with government downsizing. Not surprisingly, there is huge resistance to change in the staff of many forest authorities, who see all these changes in policy process and content as eroding their power base, and who have a traditional idea of 'the public interest' which s very different from the new trends. But increasing numbers of forest authorities are now 'unfrozen' to the need for change. The work of internal change champions, NGOs, international organisations, and aid agencies is revealing 'what works' in moving from a forest sector defined by government, to a forest sector populated by a variety of institutions. Partnerships are increasingly seen as the solution.

3.2 The Top Ten Initiatives Intended To Improve Sustainability

The pressures described above have worked both separately and together through a range of initiatives aimed at sustainability. Although many of these initiatives, at the time of their launch, were touted as 'miracle' cures or 'magic bullets', none of them have been enough on their own to give rise to real progress. The challenge now is to integrate effective initiatives into a mature set that works for local circumstances, but is credible globally (part 4). Ten initiatives stand out as both significant in causing key forest stakeholders to make progress towards sustainability, and as being of potential interest to mining. They are all flawed in some way, but have produced useful lessons:

1. *FAO's Global Forest Resource Assessment* – as the major acknowledged database on forest quantities and (to some extent) qualities, which inspired and justified actions to reduce deforestation
2. *The International Tropical Timber Organisation*, a commodity agreement with equal concern for trade promotion and conserving the resource base – as a forum for debate, consensus and catalysing action between producers and consumers
3. The UN Forest Principles, the Intergovernmental Proposals for Action, and the failure to reach agreement on a global forest convention – as a necessary process of mutual information, but also a lesson in the practical limits to global control over forests and the importance of sovereignty
4. *The Tropical Forestry Action Plan and its successors* – as a series of lessons in how to move from 'top-down' national planning of 'wish-lists' by experts, to more consultative, step-by-step approaches to agreeing a vision and priorities
5. *International Model Forests initiative* – as key means by which forest stakeholders can identify, share and develop best practice in the field
6. *Corporate-community forestry partnerships* – as means by which corporate profits and other 'globalisation' pressures can be reconciled with the 'localisation' pressures for empowerment and poverty alleviation
7. *Corporate voluntary codes of practice, reporting, and management systems* – as means for corporations to learn, and to contribute both to on-site sustainability and to policy development

8. *Principles, standards, criteria and indicators of sustainability* – as *lingua franca* for communication between stakeholders and initiatives, and as raw material for policy and standards
9. *Certification of forest management and labelling of its products* – as incentives to improve forest practice, as means to improve accountability, and as a multi-stakeholder input to policy and governance change
10. *Markets for environmental services* (watershed management, biodiversity and carbon storage) as emerging means to cover the incremental costs of sustainability

3.2.1 *FAO's Gl*obal Forest Resource Assessment

Throughout the 1970s, increasing but isolated anecdotes and research results were pointing to alarming rates of tropical deforestation. These were largely dismissed as scare stories by many governments until 1982, when UNEP and FAO published their first Tropical Forest Resource Assessment.. The figures – 11.3 million ha of tropical deforestation each year (albeit flawed) – were directly influential in:

- Calls by UNEP, WWF, IUCN and others to establish more *protected forest areas* (which occurred over the next decade, albeit many as 'paper parks' only)
- The development of the international *Tropical Forest Action Plan* (see 3.2.4)
- The development of the *International Tropical Timber Organisation* under the UNCTAD umbrella (see 3.2.2)
- *Further Forest Resource Assessments* coordinated by FAO (for 1990 and 2000)

The availability and comprehensive coverage of FAO's information also makes it a useful baseline for the media in reporting on forests, and for environmental watchdogs to challenge.

Where forest area is considered to be a simple proxy for SFM (and it is clearly a *very* simple one – what really matters is the goods and services, rather than the area), the FAO figures continue to have an authoritative influence. The Forest Resource Assessments 1990 and 2000 subsequently covered most of the world, and not just the tropics, and have begun to add some measures of forest quality as well as quantity. But such information is constrained by the lack of national monitoring capacity, because FAO's information is a compilation of national government reports rather than independent data especially on forest quality. National information is especially weak in many countries with the worst forest problems – complicit or inert forest authorities have no incentive to monitor the problem) [3]. It is also constrained by a lack of international agreement on what constitutes quality. As a result, we still do not know the extent of SFM is the world, by any definition.

[3] It is interesting how little FAO has done to help build national capacity for data generation – its own institutional needs in preparing the global assessment have always seemed to come first.

3.2.2 *The International* Tropical Timber Organisation

The International Tropical Timber Agreement resulted from over 7 years of negotiation under UNCTAD. Its particular interest lies in the linkage it established between a flourishing timber trade and the sustainable management of the resource upon which that trade was based. It remains the only commodity agreement with an equal concern for the resource base.

The 2000 independent review of ITTO concluded that 'ITTO has probably done more in the 15 years of its existence than any other organisation to advance the idea of sustainable tropical forest management'. Its 1988 survey of the extent of SFM on the ground (conducted by IIED) first alerted forest authorities, the trade and the public to the dire state of the management of forests by governments throughout the tropics – only 0.1 per cent of the area was found to be sustainable. This finding 'also caused the countries with temperate and boreal forests to look over their shoulders to see whether they were doing better'. ITTO followed up with a logical sequence of steps: an action plan for itself; a series of guidelines on natural forest, on plantations, on biological diversity and on fire management; and a sequence of work on incentives for sustainability. Criteria and indicators for SFM (3.2.8) were also first developed in ITTO.

Overall, perhaps the major contribution of ITTO was its role as the first (and until the 1990s the only) forum for debate between wood producer and consumer countries. The forum has always depended upon consensus, which means that it has been slow – however, it does mean that when a decision *is* made, all 54 country parties tend to be committed to it. There have been bold moves in terms of both analysis undertaken and commitments made. Of the latter, the mutual 'Target 2000' for achieving SFM by 2000 stands out. Parties stuck with the Target over the 1990s even as cumulative learning made it clear how much needed to change for SFM than originally thought.

However, both debate and progress of the member states has been too slow for many NGOs, which 'defected' to more 'fast-track' initiatives such as the Forest Stewardship Council (FSC) in which they could be drivers rather than observers, as in ITTO. The role of ITTO was certainly more important in the earlier days of defining problems, agreeing language, and carrying out studies, than it is now when solutions and incentives are required.

3.2.3 The UN Forest Principles, The Intergovernmental Proposals For Action, and the Failure to Reach Agreement on a Global Forest Convention

Initial responses to the 'tropical deforestation crisis' were clumsy, and most proposed greater controls on developing country forest sectors (there were even serious calls by US NGOs to 'internationalise the Amazon'). This led to a dismal climate of North-South mistrust and, although forests were one of the hottest topics at the 1992 Earth Summit, little more could be agreed than a set of 'non-legally binding Forest Principles'. Various proposals for a global forest convention were offered. These were ill thought out, essentially proposing 'what could be done if we had a convention?' The real question should have been 'what forest issues are best dealt with by international regulation and, for each, how could today's regulatory environment be improved?' to assess what it is that can *only* be done through a

convention. The South saw the North as demanding tropical forest conservation at the cost of their own forest-based development and, as the North was unwilling to pay for this, the South was not interested. However, at a time when North and South mistrust over forests prevented anything more concrete, the Forest Principles at least established a desiderata of desirable local actions.

Beyond the Forest Principles, no less than three expensive UN processes have been designed to keep forests on the agenda. But they have come up with little other than bland recommendations. The Intergovernmental Panel on Forests (IPF), and subsequently the Intergovernmental Forum on Forests (son of IPF) produced no less than 250 'Proposals for Action' which countries are supposed to consider and act upon. The UN Forum on Forests (grandson of IPF) now aims to monitor progress in implementing these Proposals and to continue discussion. Such initiatives have by now truly established that progress needs to be country-driven and bottom-up. The obvious reason for continuing a global process – defining some form of international agreement to complement national efforts and other global agreements that touch on forests (notably the biodiversity and climate conventions) – remains on the agenda, but couched in very cautious diplomatic language. [4] There may be more potential in regional agreements: the Central American forest convention and conference of ministers on forestry is proving more effective as it tackles shared issues. [5]

The Earth Summit/IPF/IFF/UNFF sequence has thus progressed, over many years and at huge cost, from forest 'principles' to voluntary 'proposals' (albeit with some political and moral obligations attached). But there is little by way of direct action. This experience exposes the limits to what can be achieved through global intergovernmental initiatives: a low action: talk ratio; constructing overly-comprehensive policies that expose no individual country and present escape clauses and excuses for inaction; and the assumption – fundamentally flawed in today's world – that governments can shift behaviour towards sustainable development. But there are also positive lessons:

- Forests were established as an important international concern, and many top officials' awareness was improved (albeit incompletely and expensively)
- The importance of country-led, multi-stakeholder national forest programmes (3.2.4) was agreed, as was the need to avoid imposing international programmes
- The process improved coordination between the UN bodies with responsibility for forests – FAO, UNEP, UNDP, ITTO
- Whilst the formal agenda for IPF/IFF was global and very large, technical 'intersessional' workshops acted as catalysts for synthesis of knowledge and ideas on key themes
- Successive meetings improved their involvement of NGOs and the private sector, albeitonly at the margins.
- Other global initiatives such as criteria and indicators (3.2.8) and certification (3.2.9) could be showcased, discussed, and (tacitly) accepted

[4] The UNFF work programme includes a task 'Consideration with a View to Recommending the Parameters of a Mandate for Developing a Legal Framework on All Types of Forests'. The title suggests how this will be tackled…

[5] The regional level looks to be increasingly important for reconciling the twin trends of globalisation and localisation wherever national capacities are weak.

- It is becoming clearer what global solutions would help – coordinating financial mobilisation, and improving coherence between environmental conventions with respect to forests

3.2.4 The Tropical Forestry Action Plan and its Successors

The baby of FAO, UNEP, World Bank and World Resources Institute, the TFAP could be characterised as a top-down, quick - but none the less comprehensive - fix to the perceived tropical deforestation crisis of the 1980s. The response was essentially a bureaucratic and technocratic one, led by professional foresters, and lubricated by development aid.

Dozens of countries prepared TFAPs, based on an international diagnostic and planning framework. These may have helped people to glimpse a vision of a better world for forestry. They certainly conjured an illusion of progress for the bureaucrats in charge. But they depended critically on 'new and additional funds' from the aid system, which did not materialise. And, as they did not involve many people outside government, they consequently did not demand fundamental institutional change. [6]

The TFAP's very standardisation, and the exigencies of the aid system that supported it (which often meant that many expatriates actually led the 'in-country' planning), meant that the TFAP did not adequately recognise diverse local perceptions, values, capacities and needs. Finally, and despite efforts to house TFAP exercises in powerful but 'neutral' bodies such as planning ministries, the TFAP failed to generate real political support to the broad range of forest values. Thus they were encyclopaedic project lists, rather than compelling strategies for fundamental policy and institutional change.

The Intergovernmental Panel on Forests (IPF) concluded that, in spite of the incomplete success of the TFAP, some kind of *national forest programme (nfp)*[7] was still desirable. This time they should cover all countries, and not just the tropics, and take the form of country-led participatory *processes*, rather than *proformas* developed by governments and external advisers. Special efforts are called for to get the private sector involved – the failure of previous "planners' dream" approaches often being ascribed to the lack of involvement of the actual investors and risk-takers.

The main components of national forest programmes are intended to be: a political National Forest Statement; an analytical sector review; a policy and institutional reform process; strategy d and action plan development; an investment and capacity building programme; a monitoring and evaluation system; and co-ordination mechanisms.

[6] Because it was closely associated with the government-to-government aid system, the TFAP was not able to challenge the inequities and perverse policies that underlay deforestation, and then to build the necessary trust between governments, NGOs, local people and the private sector.

[7] The lower case letters in 'nfp' are a conceit to imply that the national programme is a generic name for a local construct, rather than a brand name for yet another international initiative.

3.2.5 International Model Forest Network

The IMFN is a modest initiative bringing together examples of working, commercial forestry that also attempt to meet conservation and livelihood needs. The Network began as a Canadian initiative but now covers Canada, Mexico, Russia, the United States, Chile, Argentina, Japan and Malaysia, with others such as the UK and southern African countries keen to join. It is coordinated by Canada's International Development Research Centre (IDRC).

Many model forests (e.g. in Canada) were identified through competition, and all are run as learning exercises with multi-stakeholder committees. The Network offers a means by which on-the-ground managers can share their learning, sometimes through twinning. Thus it provides an operational complement to the many governmental and policy-related discussions, which can be rather otherworldly as they do not deal with working forests. However, to be of most value, there need to be stronger ties between Model Forests and the national policy process.

3.2.6 Corporate-Community Forestry Partnerships

Over the years, many types of deals have been struck between companies (who have sought secure access to land and labour, and continuous supplies of wood – as well as responding to pressures for good neighbourliness) and communities (who have sought access to technology, infrastructure, social services and financial support, as well as to a wide range of goods from forests). IIED has examined 56 examples in 22 countries. They cover a wide range from farmer outgrower schemes to supplement company-grown fibre, to community agricultural and livestock intercropping between company trees, to local hunting and tourism concessions, to joint ventures where communities put in land and labour, to plantation protection services, to access and compensation agreements.

The more successful deals are fully informed by market and social conditions, are based on SFM practices, have government support, are flexible and routinely reviewed through transparent and sometimes independent means, and do not tie the community to one producer. Investment in negotiation (and negotiation capacity), especially about risk sharing as well as cost-benefit sharing, is crucial. Mutual education about business and livelihoods principles respectively has been helpful. Challenges often remain, notably: to ensure weaker community members also benefit; to improve downstream distribution of benefits; and to develop independent brokers of such deals. (Mayers and Vermeulen 2001, forthcoming).

3.2.7 Corporate Voluntary Codes Of Practice, Reporting, And Management Systems

In the last decade, some forestry companies have become acknowledged leaders in SFM (IIED, 1996). The 1990s saw fairly rapidly progress: from merely defensive statements to fend off criticism and litigation, to promotional campaigns (advertising and 'vanity' projects to conjure a green image), to real commitment to change in investment and practice (through environmental policies and management systems). Codes of practice have been key. Here, there has been progress from first-party codes and reporting only (on selected issues and usually reporting only 'good' things), to including second party scrutiny and

reporting (such as by producer and trade associations of which the corporations are members) and finally to independent third party certification of the management system and/or forest management according to acknowledged independent standards (3.2.9). Responsibilities for sustainable development have moved from the portfolio of public relations staff to distinct divisions in their own right, often with board level representation.

Leading businesses have become involved in partnerships to research, define and promote best practice – notably with WWF (through the Global Forest and Trade Network), with the World Bank (through a periodic seminar of forestry CEOs [8]) and with the WBCSD (through its forestry working group, and through contribution to the IIED-led Sustainable Paper Cycle study). IIED (1995) found that corporate forest management was becoming increasingly information-intensive and adaptive, with more diverse objectives than in the past.

Such progress has increasingly been justified by the need to reduce production risks, to protect brand names and company reputations, to develop market advantages, to anticipate legislation. Most progress has been made where CEOs themselves are committed, and make SFM central to business planning (rather than remaining 'satellite' concerns).

Yet there are still few compelling studies of the business case for SFM, with reliable figures. Thus the leaders still tend to be moving forward partly on the basis of faith. Theseare also often the biggest companies with the resources to undertake the investments and handle the risks. There is a danger that defining good practice using the experience of a few, successful, influential companies alone can damage prospects for other, smaller or poorer groups. Amongst other companies, however:

> Scepticism remains the norm. Within business itself, many companies continue to exist in a state of denial -- unaware, evasive or openly hostile to the changes that sustainable development requires. This situation should shock no-one. Business is hardwired to generate profits for shareholders from satisfying consumer wants: it is simply not programmed to deliver the major public goods – clean water, social justice and accountable governance – that sustainable development implies… [Where progress has been made towards sustainable development] the question is now whether these initiatives are prefiguring new regimes for governing global corporations – or just trimming the excesses of the status quo.
>
> (Robins, 2001)

At present the international forest industry appears divided by competition, pricing power, and the processes of acquisition and merger, and this also applies to the leaders in SFM. *Better industry organisation* is needed to spread best management practice locally and internationally. The WBCSD forestry working group has not invested enough resources in promoting SD (it is still only part way through considering the recommendations of the Sustainable Paper Cycle).

[8] The World Bank/CEOs Forum is an *ad hoc* initiative bringing the Bank together with heads of environmental groups and forestry business, albeit very informally and with no strong agenda. This has sent important signals about the need for dialogue – and for commitment to change amongst the private sector. But it has been viewed as 'elite' and representing mainly a certain 'Washington set'.

3.2.8 *Initiatives to Define Principles, Criteria, Indicators and Standards of Sustainable Forest Management*

Throughout the late 1980s/early 1990s, it was increasingly clear that the varied strands of international debate, and the practical searches for SFM at the forest, landscape and national levels, required better definitions of SFM. But it was also clear that, whilst there were similarities in 'good forestry' between forest types, enterprise types and different countries, local differences in values and practices were important and needed to be accommodated in any descriptions of SFM. Globally-defined targets, policies and prescriptions would no longer be acceptable in local contexts. The result was a creative period of defining 'principles, criteria and indicators' (PC&I) of sustainable forestry. This approach was seen to offer a *lingua franca* for communication between stakeholders and initiatives (and, for carefully chosen circumstances, for comparison between them) and as guides to the process of transformation to SFM (for use in designing policies, plans or monitoring frameworks).

C&I were first developed (based on an IIED study) by ITTO, with separate sets for natural forests and plantations. Other country groups followed suit. The Montreal process was a North-South group kicked off by Canada, which had been a strong but unsuccessful protagonist for a convention, and which sought in PC&I a *lingua franca* to keep international debate going. The Europeans followed with a Helsinki process, the Africans with a 'Dry Zone' initiative, the South Americans with the Tarapoto process, and there was a British-Indian initiative. By 1996, there were several intergovernmental sets and some multi-stakeholder initiatives (notably those developed by the Forest Stewardship Council for certification). Some were originally developed to cover sustainability issues at the national level, but have subsequently been adapted to cover the forest level as well (in the case of Helsinki, to permit certification).

A study by IIED (Nussbaum *et al* 1996) revealed considerable similarity between them – they all covered maintenance of sustained yields of goods and services and biodiversity, and optimising socio-economic impacts. There were differences in apparent weighting and in the precise interpretation of principles into criteria and indicators. None the less, the sets appeared to represent a parallel triumph of logic in many places over the same period (although, admittedly, there was much cross-fertilisation during their development). It is interesting how they seem to be applicable to all forest types, with special considerations being needed only for plantations.

As envisaged, PC&I have turned out to be very useful for policy development, planning, standard setting, monitoring and certification, and generally as checklists of the dimensions of good practice. For example, Great Britain has rationalised its policies and procedures using the Helsinki criteria. Many companies have used PC&I sets in their policies and EMSs. PC&I can unite global, national and local actors whilst acknowledging their separate situations. They enable locally-driven initiative, but (deliberately) do not prescribe that initiative. At their best, C&I are tools of compromise (and the ability to make compromises, as Edmund Burke postulated, is the foundation of all progress). They may, therefore, even prove to be of value if and when a global forest convention is agreed (although at present they are seen as an alternative to such a convention).

But problems and requirements remain to be addressed:

- Whilst there remains considerable similarity between sets of PC&I, there is still no universal global set (although thus might be developed through the UNFF – see 3.2.3)
- Perhaps because of this, the biodiversity and climate conventions are not yet informed of the dimensions of good forestry – SFM PC&I need to be integrated with them
- Recent sets of forestry C&I tend to have been centralised "quick fixes", and thereby may be predisposed to top-down control and implementation, whether intended or not.
- PC&I can contribute to the creeping trend towards "policy inflation", because of their comprehensive nature. (Even now, a forest manager can scarcely begin work until he or she has conducted impact surveys and consulted with many groups)
- Local/thematic development of C&I has sometimes got so complex that its original value of 'distilling' the sustainability elements is obscured (*viz*. CIFOR's ten-part volume on developing C&I)

3.2.9 *Certification of Forest Management and Labelling of its Products*[9]

Where PC&I have really had teeth is through *certification*. From humble beginnings amongst woodworkers and small NGOs in the late 1980s, the idea of forest certification became a reality when the Forest Stewardship Council was launched in 1993. FSC's aim is to create market-based incentives for products that can be proven to have been harvested from well-managed forests. The attraction to NGOs and concerned companies was that this could encourage good forestry. Forest certification has been hailed as one of the most significant advances in forestry in recent years. Within one decade, it has emerged from just an idea to become common practice in all continents.

Unlike ecolabelling (which presents difficulties of life cycle analysis and product tracing through a complex production chain – or network, and which has not taken off in forest product markets), forest certification is a single-issue label which has taken off well (except for paper which again has a complex production chain to trace). Perhaps this demonstrates that the forest management end of the value chain is the overriding consumer concern in relation to sustainability.

Until the introduction of the Pan-European Forest Certification scheme in 1999, FSC was the only fully integrated, international system of forest certification. FSC is a membership organisation, with a General Assembly divided into three equal chambers: social, environmental and economic; each with equal Northern and Southern sub-chambers. Governments are not entitled to participate, even as observers. FSC has a set of ten Principles and related Criteria (P&C) of Forest Stewardship, which apply to all forests in the world. These P&C serve as a basis for the development of national and regional forest management standards, through National Working Groups. Certification standards that are consistent with both the P&C and with FSC's process guidelines for standards development

[9] Much of this section has already been presented to MMSD at a workshop in Johannesburg (May 2001)

are eligible for FSC endorsement. FSC owns a trademark, which may be used according to strict rules to label and advertise products from certified forests. Summary information about each certificate is made publicly available by the FSC-accredited certifiers.

FSC was supported heavily in its early stages by WWF. It took off through 'Buyers' Groups' (notably in Europe) that made commitments to stocking only certified products by a given date; prominent among these are DIY retailers. Forest companies have a range of incentives to be certified. The incentives derive mainly from the retail buyers of solid wood products in W Europe and especially the UK; risk and reputation management, staff learning, and first-mover objectives have also been significant motivations. There are also signs that investment and insurance bodies will favour FSC-certified enterprises, again as a result of NGO lobbying, which could improve the incentive effect.

IIED has assessed what FSC certification *in practice* has added up to (Bass *et al.*, 2001):

The numbers are growing: 20+ M ha have been certified, albeit 84% in industrialised countries; and 85% in large operations. Products cover <20% UK trade, 5% EC; 1% USA. Growth in these numbers has been almost exponential in the last three years, but is levelling off.

The forest impacts are modest: Certification has publicly recognised so many good cases of forest management that this cannot be bad (especially when contrasted to ITTO's depressing findings in 1988). However, FSC certificates to date have identified *existing* good practice in the field – mainly in richer countries and companies – and actual improvements have been limited (some environmental and documentation changes). Certification has not yet offered an incentive to significantly improve forest management, and has not stopped 'asset-stripping' companies.

The trade impacts are significant, but in limited areas: FSC has helped to develop a niche, which is very dependent on the buyers' groups in W Europe. Whilst many buyers have helped their existing suppliers to be certified, others have switched suppliers. There has been very little impact on the big, domestic markets of 'problem' forest countries (Brazil, India). The main benefit to the producer is market access. A premium has been elusive except where there is a shortage of certified product (some hardwoods). Certification is beginning to make the producer more aware of the consumer (but this is clouded by retailer dominance). It has signalled the value of improved market transparency on social and (especially) environmental issues – but this is establishing a new basis of trust that antagonises some of the older trade players.

The policy impacts could be significant: These may turn out to be more enduring than the cumulative effect of many forest certificates. FSC National Working Groups – and their work of local standards development and testing – have offered participatory, multi-stakeholder fora which have been defining good forestry, how to assess it, and who should be responsible. In countries where such provisions did not exist, these impacts have had knock-on implications, changing the forest policy agenda where it may often have been static, and pointing to legitimate actors who may have been invisible (e.g. certification has raised the political profile of certified producers, thereby helping community groups to get land title). It has also become used for non-market purposes, e.g. 'privatising' some government controls in Indonesia, Bolivia and the UK; and assessing the quality of aid

projects. Internationally, FSC has been likened to a 'soft', multi-stakeholder forest convention. It is significant that a *voluntary* initiative with what first appeared to forest managers to be a frighteningly comprehensive agenda, can effectively extend that agenda to other stakeholders – including the government – and potentially lead to mutual role changes.

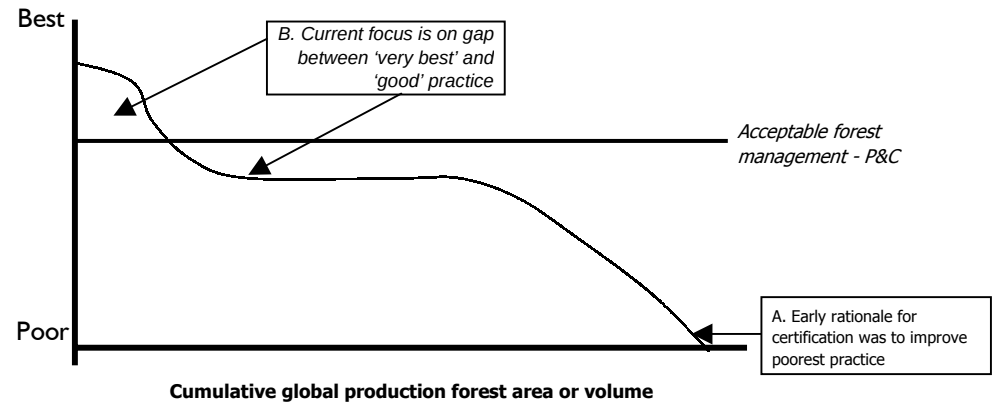
There are several dilemmas for FSC as a means of sustainable development:

(a) As FSC was essentially a quick, international, centralised solution to forest problems, it attracts criticism of its authority, mandate and means for stakeholder representation: FSC's rapid success has unsettled some groups, notably some industry players, small producers and government bodies. They criticise the 'self-appointed' nature of FSC; the ability of ENGOs to dominate FSC governance and thus restrict its freedom to learn and develop (or 'compromise'); the lack of recognition of alternative 'bottom-up' local schemes; and the fact that FSC maintains both the global standard and a global accreditation system. If codes of practice have been led by corporations, and suffer some lack of stakeholder credibility for it, forest certification schemes have been led by non-industry actors (largely NGOs) and suffer from a lack of economic and operational practicability because of it. (This might be contrasted with the Marine Stewardship Council – which evolved as a joint NGO-industry initiative.)

(b) Several equity problems have arisen through FSC operations: FSC certification is dominated by bigger, Northern producers who have the resources to implement FSC standards (many of whom have also been through ISO14000 certification, which is useful preparation). Smaller producers find FSC certification and associated (export) markets more difficult or expensive to access (although group certification schemes have emerged), the benefits are not high for those not exporting to European markets, and the P&C do not recognise some of the more complex land use systems of livelihood-based forestry. Certifiers have been much weaker on social assessment than on environmental issues, applying some curious 'social engineering' to certificates of community enterprises, as well as making conditions that demand external assistance if they are to be fulfilled.

(c) FSC is not directly tackling the worst forest problems: Whilst FSC's genesis lies in concerns about bad, asset-stripping forestry (to the right of Figure 2), its practice has focused on identifying and rewarding good producers (to the left). Essentially, all the investment in time, money and emotion has been on competition between producers just above, and those just below, FSC's single threshold of acceptable forest management. Moreover, some FSC members propose 'raising the bar' to ensure that only an elite of forest producers meet the FSC grade, which has been criticised as anti-trust (critics say the threshold should be raised only when new science and values are apparent). To avoid 'the best being the enemy of the good', the need for several thresholds (step-wise approaches) is being discussed. However, some people are promoting totally different instruments to tackle 'illegal logging', suggesting that certification would never offer effective incentives to bad producers.

Figure 2 Illustration of how FSC certification has developed



*NB The curve is illustrative only, as there is little empirical basis on which to construct a precise one. (*Adapted from Kanowski, Sinclair, Freeman and Bass 2000)

(d) FSC has made few inroads in some big export markets – notably construction timber and paper – and in domestic markets of 'problem' forest countries: If confined to some European and N American retail markets, FSC will define a 'niche' only. This is why FSC is aiming higher, with e.g. advances in percentage-based labelling for paper and buyers' groups in regions such as SE Asia (now 'Forest and Trade Networks' as they unite more players in the supply chain).

(e) The big pro-FSC drive by DIY retailers does not necessarily reflect real consumer demand: The fact that there is no premium for FSC-certified produce, and that retailers are not investing in 'branding' this produce to realise the associated value, suggests that a cartel may be emerging. If demand derived directly from consumers, more retailers would demand certified products, a premium would emerge, and buyers groups might break down. On the other hand, it could reflect genuine concern on the part of buyers to force a level 'sustainability playing field'. This needs to be tested.

(f) As there is not yet enough certified produce, stakeholders are worried by the lack of equivalent certification of wood products' competitors (metals, concrete, plastics): The market is necessarily dominated by 'evil' timber. It is feasible that the (DIY) multiple retailers who have driven FSC certification may promote similar approaches in other sectors.

(g) FSC is no longer the only game in town: The above problems, and the associated differences in motivation, have led to a proliferation of certification schemes. The Pan-European Forest Certification scheme (PEFC) was driven by European small producers who felt that FSC was too expensive and discriminated against them; it is essentially system-based, giving rise to criticisms about the vagueness of performance thresholds.

But it does employ the intergovernmental Helsinki criteria, increasing its acceptability to European governments. Already the PEFC-certified area exceeds that of FSC, reinforcing perceptions of it being a weak standard. Two dozen national schemes exist or are under development (some driven by industry e.g. Canada's, and others by government's suspicion of FSC as an international initiative with heavy ENGO involvement e.g. Ghana's). They mix performance and process standards to different degrees; some e.g. Indonesia aim directly to offer stepwise standards and linked exemptions from government regulations.

(h) Global mutual recognition between certification schemes is now being promoted. But not by FSC's supporters, who want to keep FSC predominant and thus to control the rules of the game and eliminate producer/consumer confusion. The fact that FSC has just received a $10 M grant from the Ford Foundation will also help it to maintain market power among 'competing' certification schemes.

(i) Although certification has had useful policy impacts, it cannot be seen as a principal tool for improving policy. The limits to government involvement set by FSC rules may have limited the potential policy impact. And it cannot be assumed, on the basis of early observations in some countries, that certification will always play a key policy role in every country. One of the major reasons for certification's policy impact – the existence of a national working group – offers an innovation in only those countries which do not already have multi-stakeholder forest round tables or fora, or at least fora not dominated by government. Furthermore, successful policy processes tend to build on elements that work within the cultural and institutional context of the country. There is no a priori reason to select certification unless it is more effective, efficient, equitable and credible than other means, and if it can fit within an integrated set of instruments for SFM that works well in local contexts (see part 4).

3.2.10 Markets for Environmental Services.

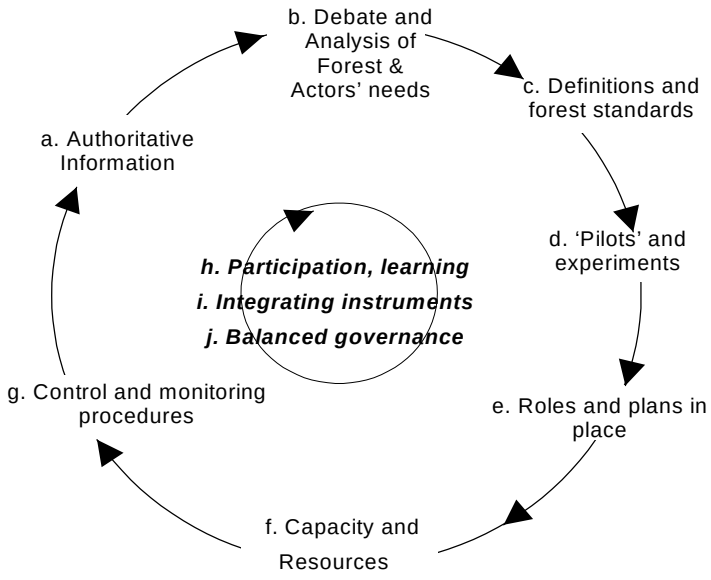
Forest environmental services (biodiversity, carbon storage, watershed regulation, landscape beauty) benefit local and global communities but have no market. The conventional approach to ensuring such 'public goods' are provided has been government provision. But government weakness and shrinking budgets have been constraining this, just as public demand has risen. In the last decade, the idea of privatising their provision has been developed (for cost-savings, efficiency and equity – as the beneficiary pays). Proponents are eclipsing both 'old-school' interventionists and free-marketers as offering a workable compromise. (Landell-Mills *et al*., 2001)

Payments for watershed protection services have evolved spontaneously at local levels, between forest owners and municipalities (especially in the Americas) and forest owners and water user groups (in Asia). Various approaches have been organised at the international level to market biodiversity conservation and carbon storage. IIED has reviewed 290 such examples. One of the difficulties in such markets has been in defining, creating, protecting and trading the commodity (carbon offsets, bioprospecting rights, tradable emissions reductions, watershed protection contracts, water quality credits, entry charges, tourism

concessions, etc). It appears that often several commodities will be needed to secure the service in question. Local and national commodities and markets can be used for global services. Intergovernmental and government bodies have critical roles to play (not only as customers, but also in designing regulations and advisory/support services). Demand-side drivers are most closely associated with market creation to date (e.g. a growing appreciation of benefits provided by forests, awareness of threats to supply of services, company initiatives to improve their public image, efforts to exploit niche market opportunities, ethical concerns). But supply-side and regulatory drivers are gaining ground. However, most such markets are not yet mature, and are characterised by unsophisticated payment mechanisms, low levels of price discovery, high transaction costs and thin trading. Thus at present it is difficult to ascertain how competitive and efficient they are. Such lessons are important, as they will help to design more effective and equitable approaches. (Landell-Mills *et al* 2001.)

4 Conclusions and Tentative Principles Behind Sector Change Towards Sustainability

Figure 3 A participatory, continuous improvement approach to forest policy



The 'top ten' initiatives outlined in part 3 are significant because they have highlighted, individually and in combination, the core functions needed for the forest sector's transition to sustainable development. Moreover, most have gone further than highlighting these functions, to rehearsing what some of them should be like, and even to providing some of them routinely.

Figure 3 identifies many of these key processes and instruments required for sustainability. Where they work best, they have targeted the right incentives. The notional 'cycle' in Figure 3 is, in effect, incentive-driven. [10]

(a) Authoritative, independent and regular global information on forest assets, use, prices relative to substitutes, and pressures on them: Good information covering the global situation (from FAO) was critical for building intergovernmental confidence and credibility in setting up both ITTO and the TFAP. Today, however, it is difficult for intergovernmental agencies to provide the more subtle information (on qualities as well as quantities) that reflect further sustainability issues. Consequently we do not yet know the global extent of SFM on the ground, nor on the relative impacts of trade, recycling and substitutes. There is much to be done to get a balanced picture of the sector and its operating environment, and nfps offer a way to construct it.

(b) Equitable fora for debate and analysis of focused issues: ITTO's governance provides for an equal balance of tropical timber producers and consumers, and is focused on tropical timber. FSC's governance is balanced between environmental, economic and social chambers, with an equal North/South balance, and is focused on certification standards. National certification working groups have provided welcome fora in countries that have so far not had the chance for multi-stakeholder debate. And nfps are considering tiered local to national participation fora (but will need to think carefully about subsidiarity rules for decision-making). In contrast, the IPF/IFF/UNFF have proven to be too constrained by intergovernmental norms to do anything other than develop bland principles that ensure sovereignty is not infringed. Regional intergovernmental fora have been more effective, as they are focused.

    Multi-stakeholder policy initiatives can be divided into two basic types: relationship-maintaining (where it is seen as important to keep the status quo and ward off external threats; these can often be influenced by covert or informal needs); and purpose-led (where there is a perception of the need to change, some idea of what is desirable, and commitment albeit to varying degrees). More of the latter are needed.

(c) *Agreed forestry definitions and standards*. The development of principles, criteria and indicators (PC&I) has been of major importance, allowing mutual understanding but avoiding the imposition of single (international) precepts. It provides a reasonably harmonised basis for national forest plans and for certification, so that a level playing field is permitted in associated trade and aid relations. However, because the emphasis is on local interpretation of broad principles, it still needs to be accompanied by a better understanding of critical global needs, so that the latter are not forgotten. [11] To be acceptable and credible to stakeholders, the PC&I (and related codes of practice and certification schemes) need to cover economic, social and environmental aspects (as often at present) but also to directly address issues of equitable governance. Those PC&I that address only one 'pillar' are of limited utility and are perceived as smokescreens, devices for unwarranted discrimination, or simply not informed by the multiple underlying causes of forest problems. There is much to learn from the recent processes of developing and testing forestry standards: ISO norms have proven to be useful (FSC

[10] The figure also indicates how the functions can be linked in a cycle of continuous improvement. Note that this is just an illustration – the functions are also linked in more complex ways.

[11] This is unlikely to take off until there are stable markets for global environmental services.

used them) but inadequate in ensuring the multi-stakeholder participation that is most vital to the credibility of the standard.

(d) *Pilots and experiments*. There is growing realisation that SFM is a process of eternal experimentation – forest management being a hypothesis about the correct balance of goods and services that needs to be constantly reviewed. [12] EMS and other tools are increasingly used at corporate level to achieve this. Certification schemes that emphasise management processes as much as performance outcomes offer further incentives. But there remains a problem with groups (many NGOs in particular) that wish to see perfection now. Their high standards can so easily lead to 'perfection being the enemy of the good' (dissuading those who are not confident of immediate success of even trying, and promoting sub-optimal management that never has the chance to seek newer and better solutions through learning).

(e) *Agreed roles and plans for SFM in place*. The process of sector change depends critically on renegotiating roles. Roles may usefully be thought of as comprising rights, responsibilities, rewards/returns and relationships (the 4Rs).[13] In general, government roles are now accepted to have been too all-encompassing, and to need redefining as regulator, adviser and monitor – but here there are issues of overt and covert institutional powers and inertias to be addressed. A huge process of institutional change is still needed amongst 'policy holders' and forest authorities to understand the value of sustainability. There has been growing realisation (through community-based work) of the real potential of local groups to be an effective manager of forests, if their rights can be restored and responsibilities clarified. The same applies for private companies, if only conditions and accountability were improved.

Thus the process of 'planning' sector change is as much about the process of renegotiating roles as it is about planning the use of forests. At national sector level, the lessons of the TFAP have been invaluable. Whilst having a comprehensive view, and incorporating all stakeholders, an encyclopaedic, perfect 'master plan' is less valuable than one which targets a few agreed areas and moves forward through a process of continuous improvement. Much participation is required, but 'policy by brainstorm' is rarely good enough, and better efforts are needed to ensure good analysis. To summarise, a national forest sector plan needs to be:

1. Developed through effective, multi-stakeholder participation
2. Based on comprehensive and reliable analysis
3. Aimed at building consensus on a long-term vision
4. Comprehensive and integrated across relevant sectors
5. But also targeted with clear budgetary priorities
6. People-centred in its content

[12] Forest ecosystems, and the human systems with which they interact, are neither uniform globally nor deterministic in their responses to different uses or interventions. We have to manage forests today, not knowing what products will be in demand tomorrow. Forest managers need to constantly keep track of changes, attempt approximate solutions, and revise approaches in light of monitoring. (Bass, 1997)

[13] IIED has found the 4Rs framework to be both a useful diagnostic and an agenda for parties to renegotiate their roles.

7. With an emphasis on signalling scarcity of forest goods and services
8. Linking global, national and local levels
9. Developing and building on existing capacity
10. Building on existing processes and strategies
11. Incorporating monitoring, learning and improvement
12. Country-led and nationally-owned
13. With high-level commitment from government and influential lead institutions
14. Financially viable and driven by incentives where possible

(f) *Capacity and resources for SFM in place.* Partnerships have been key to the kinds of *capacities* that can deliver SFM. Since the range of goods and services obtainable from forests is so wide, and since there are many stakeholders with different incentives and skills to sustain particular goods, partnerships with mutual checks and balances are proving increasingly useful. Independent facilitation and certification is proving to be useful in maintaining partnerships to the satisfaction of all parties.

The question of *resorces* available to SFM is complex. For some time, it was assumed that SFM would cost more, because it would require more selective management of forests, reducing the possibilities of economies of scale. But it is also proving to be a cost-saving approach where resource-intensive and wasteful models of production are being replaced with information-intensive models that can benefit from the growing information base on SFM and specific forests. The question then is – who pays the transition costs to build such an information-intensive model? Certain niche markets (through certification), and certain international donors, have been doing this to some extent (and the UNFF is still discussing some kind of international investment promotion agency that would have to take account of PC&I in the region concerned), but we await the final take-off of markets for environmental services (3.2.10) to move forward in a big way. Problems of both capacity and resources can be eased if sector plans and instruments are driven by *incentives.* For example, although certification was set up to make use of possible retailer-driven incentives for improving forestry, there are emerging possibilities for investor-, landlord- and insurer-driven incentives for which the current schemes (notably FSC) are beginning to be used but are not ideal.

(g) *Control and monitoring procedures.* The most progress in both monitoring and control has been made through certification, with its market-led incentive. However, certification has only helped at the level of the individual enterprise (more specifically, individual certified forests under its control). The great information potential of the cumulative results of forest certification do not appear to have been fed into policy development, least of all at the critical national level. Indeed, overall there remains a paucity of good monitoring at national level – partly because of the lack of incentives for government to report internationally until payments for environmental services become routine – but also because of the (unsure) implications of being placed low in any resulting country rankings.

Whereas certification has become a voluntary means for control and monitoring for those businesses that compete through good practice (which is dependent upon stable

incentives), there are very few effective controls for businesses intent on accessing the lowest priced assets. *Illegal* logging and associated trade is one of the biggest problems facing tropical forestry today. Economists and other experts have dreamt up numerous schemes to include externalities in concession allocation, pricing and control, and in taxing production and trade, often these have not been accepted politically, or have been nullified by corrupt officials. One of the few sparks of hope has been where governments have privatised the 'police' work to groups such as SGS, driven by the increased timber export revenue that this offers (but note they are not really driven by the need to protect public forest benefits). There is still a strong need for independent watchdogs. But these, e.g. Global ForestWatch, are only just emerging, and need to work to recognised standards (see c. above).

(h) *Participatory, learning processes.* Many of the successful initiatives have depended upon participatory, learning approaches. This is now accepted to the extent of being obvious to all. But there are still not enough pointers to 'who should participate, when, how, and to what extent?' and on how to make participation and learning lead to policy change. CIFOR's work on the C&I processes have developed innovations on 'who counts most', to ensure that *local forest actors* are fully identified and weighted, according to their:

- *proximity* to forests, woodlands or trees on farms
- *dependence* on forests for their livelihoods
- *cultural linkages* with forests and uses of forest resources
- *knowledge* related to stewardship of forest assets
- *pre-existing rights* to land and resources, under customary or common law
- *organisational capacity* for effective rules and accountable decision-making about forest goods and services
- *economically-viable forest enterprise* that is based on environmental and social cost internalisation, bringing equitable local benefits
- *power deficit* (Colfer 1995)

A participatory, learning approach does take time. Key here is to ensure that stakeholder representatives in any process have adequate time and resources to consult with their own constituencies – and to conduct any necessary experiments – in ways that suit those constituencies. Also key is continuity – forest fora should be structured on a continuing basis as multi-stakeholder 'learning groups', tiered where necessary to catch different levels.

Independent facilitation is important for multi-stakeholder learning. Institutions that are able to balance research, synthesis, communication, consultation, debate and consensus-building in proportions sensitive to the dynamics of individual sectors – questioning both 'science' and 'policy' rather than being a servant to either – will become more important in the transition to sustainability. Independent institutions are especially important where an institution's reputation, incentives and funding are not currently conducive to allow for learning from mistakes. It has taken independent groups to call for, and to conduct, reviews of whether TFAP, ITTO, and certification were 'working' (IIED has assessed all these initiatives).[14]

[14] When NGOs have undertaken such work, their concern to make 'one-liner' policy messages has pushed other learning under the surface. For example, WWF's 'Forest and Finance Initiative' looked

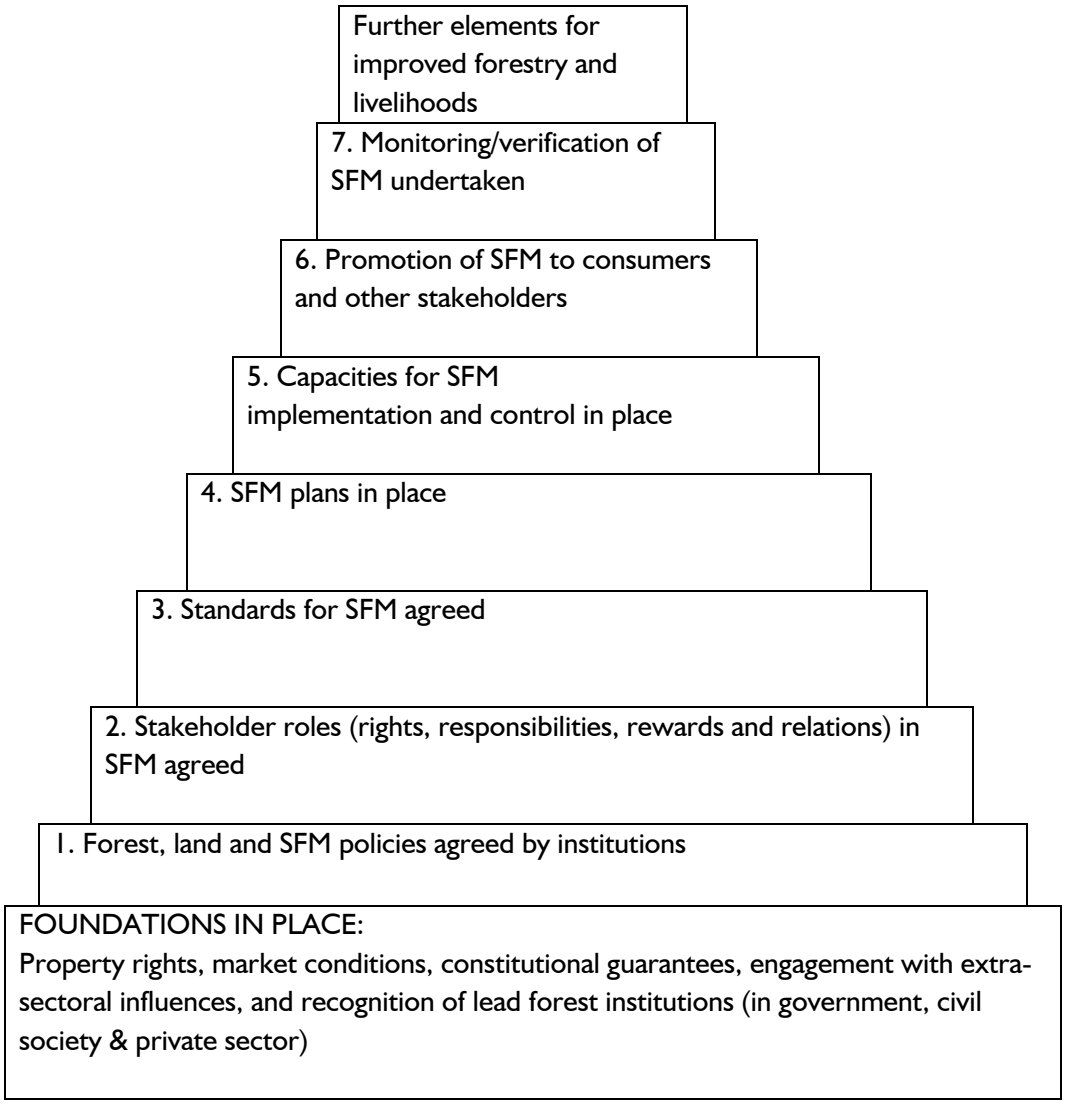
(i) *The* need to integrate and balance instruments for sustainability. We have touched on a range of initiatives designed to achieve sustainability. One problem is that they have tended to take on the status of 'miracle cures', imposed without reference to the conditions needed to make them a success, such as other instruments for SFM. Leaders in the forest sector are becoming more aware of the need to bring these instruments together into a mature set. For example, with IIED's help, WWF and the World Bank are developing a national-level diagnostic to help country stakeholders set out the requirements for SFM at the national level and monitor progress. The initial impetus was to show how WWF's work on certification and the Bank's work on policy reform[15] might link. A simple 'pyramid' approach is illustrated in Figure 4.

Integration of initiatives should not, however, be equated with eradicating *'duplication'*. The need for experimentation and learning amongst many groups means that, for a time at least, different certification schemes and planning models are advantageous. They increase the chance of innovation, competition, 'buy-in', and thus equity. Eventually (and as we are now experiencing with PC&I and certification) the disadvantages of continued proliferation (in this case, stakeholder confusion and inefficiencies when being introduced as market instruments or regulations) outweigh the advantages. Consensus-building, mutual recognition or harmonisation are then justified.

at many issues regarding finance mobilisation within and outside the forest sector, but chose to put one message alone to the finance community i.e. 'FSC certified forests are the best bet'.

[15] The World Bank has tended to focus on structural adjustment as a tool to link loan financing to key forest policy changes. But such reforms have simultaneously reduced the capacities of forest authorities to control producers, and have led to social problems.

Figure 4 An illustrative 'pyramid' of elements of SFM at national level



The 'process wiring' that links the layers – the mechanisms needed for participation, information, training and investment (see Figure 3) – should also be the subject of diagnosis and design

Source: Mayers and Bass 2000

(j) *Balanced governance.* Developments in the forest sector over the last 20 years might be summed up as the search for improved security of forest goods and services at the levels where they are getting scarcer. Stakeholders who were in conflict or isolated ('fortress forestry' national authorities, corporations squeezed into narrow ways of operating, and 'invisible' forest-dependent groups), have begun forming 'meta-institutions' based around the aspiration of SFM. But SFM is still on shaky ground, as the forms, norms and roles of such institutions have not been fully established yet. Most stakeholders now see resolving governance issues to be the biggest challenge in the sector:

– *The need to focus on 'forest security' at different levels:* The importance of distinguishing *global* issues (such as climate change and the total of biodiversity resources, systems

and processes), from *international causes* of local problems (such as debt and trade rules), from *common problems* shared between nations (such as poverty alleviation and pollution), from truly *national and local* problems. This is muddied by the extent to which, for example, nations consider human rights (especially the notion of economic rights) to be a global issue or a purely local issue. This will be the challenge when the forest convention idea is revisited.

- *The need to avoid 'policy inflation'*. The huge number of international initiatives concerning forests has bombarded individual countries with often conflicting or overlapping international obligations, principles, and programmes, which somehow need reconciling and marrying with local needs. It is not surprising that many international links remain 'ghettoised' within individual government departments, who are perhaps unwilling to coordinate with others, or else the links are plainly ignored. The current approach of complex policies and simple, unchanged institutions needs to be 'reversed': we need simple, clear policies and regulations based on a strong, shared vision (of SFM) – with complex, adaptive institutions and optional operational approaches. (Mayers and Bass, 1999)
- *The need to tackle 'bigger' extra-sectoral issues.* The powerful extra-sectoral forces that cause forest problems have not really been tamed, although many have been analysed. Foresters persist in formulating forestry-based solutions to what are really extra-sectoral problems, which are therefore bound to fail in some way. Global trade rules, debt, foreign investment, technology access, etc, remain critical determinants of forestry. Initiatives emerging to solve them – international negotiations, national sustainable development strategies, poverty reduction strategies, climate change mitigation strategies, etc – need to be better informed about good forestry and the conditions it requires.
- *The limits to voluntary approaches and the boundaries of corporate social responsibility.* The last decade's emphasis on voluntary approaches for sustainable development has not introduced any fundamental changes in rights and powers. It has been, in effect, a gradualist approach. This leaves a particular area of confusion in social standards and certification: the degree to which the corporation can be held liable for social conditions beyond the immediate concerns of worker welfare and minimising negative impacts on neighbours of the forest in question. Where forest enterprises are operating in countries with poor governmental social provisions, some NGOs (if not yet certifiers) are holding the corporation liable for improving welfare as part of its 'licence to operate' in such countries. But the scope of companies' voluntary contribution is ultimately constrained by the prevailing frameworks for institutional behaviour and ethical action: poverty and environmental unsustainability are system faults – and system solutions are what are needed. Governments alone frequently do not have the skills, desire or ability to put these frameworks in place. Getting progress thus means redefining anew the boundaries of responsibility for the state, the corporation and the citizen. (Robins 2001)

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