

# Valuation and Incentives

## Economic Tools for Sustainable Forest Management

### UNFF-3 AGENDA ITEMS:

- Economic aspects of forests
- Maintaining forest cover to meet present and future needs
- Forest health and productivity
- Enhanced cooperation and policy and programme coordination
- National forest programmes

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### Summary

It is clear that over recent years significant advances have been made in the development and use of economic tools and measures for sustainable forest management. Yet, despite this, there is still low awareness of these economic methods and tools among both economic and forestry planners and policy makers, and most economic measures for sustainable forest management are yet to be institutionalised at the national level.

IUCN would particularly like to highlight economic valuation and incentives. These two tools should be viewed as means to an end, and not as ends in themselves. A more holistic set of forest values (including both use and non-use values) should be incorporated in decision making that affects forests and the communities who depend on them. Valuation studies need to pay much more attention to the distribution of market and non-market values to different socio-economic groups, particularly the rural poor.

Incentives and environmentally and trade-distorting subsidies for forest-related land-use activities need to be re-orientated and reformed to enhance, rather than undermine, the functionality of forest landscapes and, in doing so, to improve future prospects for the poor. Markets should be used to provide incentives for ensuring the long-term viability and sustainability of forests and of the communities that depend on them.

The UNFF should urge countries to:

- ☑ Make use of existing tools to integrate comprehensive economic valuation of forests into national income accounting, macro-economic, sectoral and cross sectoral planning
- ☑ Incorporate a more holistic set of forest values (including both use and non-use values) in decisions affecting forests, including poverty reduction processes.

The members of the Collaborative Partnership on Forests and others, in supporting the efforts of countries on full cost internalization, should be encouraged to:

- ☑ Analyze experiences with valuation to identify what works, where valuation has made a difference, why it has, and how it can be applied more systematically
- ☑ Ensure that valuation studies pay adequate attention to the distribution of market and non-market values to different socio-economic groups, particularly the rural poor.

The UNFF should also call on countries and multilateral agencies to:

- ☑ Phase out environmentally harmful and trade distorting forest subsidies or subsidies for other activities having an impact on forests, and redirect the resources thus liberated towards environmentally sustainable and socially viable activities, such as forest landscape restoration and venture capital funds for small-scale harvesters
- ☑ Explore means of building new market opportunities for forest ecosystem services, and make sure that these new markets do not harm and are accessible to poor people.

The UNFF may also wish to invite governments, institutions and others to:

- ☑ Carry out further research into the nature of forestry subsidies and subsidies for other activities having an impact on forests, with a view to identifying those that are environmentally harmful and trade distorting and those that support sustainable forest management and forest dependent communities
- ☑ Support the building of capacity in developing countries to make use of valuation methodologies.

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## Introduction

Economic instruments can be wielded either to benefit or undermine conservation and sustainable management of forests. It is clear that over recent years significant advances have been made in the development and use of economic tools and measures for sustainable forest management. Yet, despite this, there is still low awareness of these economic methods and tools among both economic and forestry planners and policy makers, and most economic measures for sustainable forest management are yet to be institutionalised at the national level.

Two that IUCN would particularly like to highlight for consideration by UNFF-3 are economic valuation and incentives. These two tools should be viewed as means to an end, and not as ends in themselves.

Valuation should be used to:

- Clarify trade-offs among alternative uses of forest resources, through comprehensive assessment of both market and non-markets costs and benefits;
- Identify winners and losers (especially those marginalized groups such as the landless and women) and the resulting incentives of both forest and other sectoral projects, programmes and policies;
- Estimate the potential magnitude of additional revenue that could be captured through appropriate incentives that reflect non-market values, that is, by "internalizing externalities".

Incentives should be assessed for their impacts on forest management and on different forest stakeholders, and should be designed to support the long-term economic, social and ecological sustainability of forests.

Sustainable forest management has to make tangible economic sense to all the groups whose activities have the potential to impact on forests. Being able to demonstrate the full range of economic benefits yielded by sustainable forest management is one part of this equation. Another is to find ways of sustainably capturing these benefits, so that they accrue equitably as real revenues for local communities, private sector actors and governments working to achieve sustainable forest management. Finally, action is needed to overcome the policy and market distortions that lead people to degrade forests in the first place.

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## Key Issues

### A. Mainstreaming valuation into decision-making

Many studies have shown how sustainably managed forests yield high economic returns because they support international trade, earn government revenues, generate sectoral income, underpin household livelihoods and provide the basic goods and services which enable human survival. Studies also show that the returns to sustainable forest utilisation and management can in some cases be far higher, at the local level, than the profits accruing from forest-degrading activities.

However, the true societal value of forests is still poorly reflected in market prices and practices. For example,

many tropical forests yield economic benefits far in excess of commercial timber and wood products: they also provide subsistence goods and environmental services of considerable value. Until recently, economists found it difficult to value these non-market benefits. As a result, they were often neglected in economic policy and decision-making.

However, as economic valuation techniques have advanced and as human needs and demands from forests have changed, so there has been an increasing recognition of the importance of such non-timber values – to commercial profits and trade, to national-level economic welfare, and to household production and consumption.

At the same time it has become clear that there is a need to be able to express these wider forest values in economic terms, if the full range of social, economic and environmental trade-offs implied by alternative forest land use and management options are to be more fairly compared.

Advances over the past decades in economic valuation methods have meant that non-market forest benefits can now be much more reliably estimated in monetary terms. Methodologies for planning are seldom perfect, however, and that is still the case for some valuation approaches.

However, tools are best improved by regular use; those that exist provide a strong basis for helping to ensure that better valuation figures are reflected in national statistics and reporting. This information is essential so that governments can have a more complete picture of the status of their economy. This is particularly important in light of the scale of non-market benefits which are believed to exist.

The real challenge is making sure that a better understanding of non-market values, made possible by advances in valuation methodologies, is ultimately reflected in real-world decision making that affects forests. This means, *inter alia*, integrating forest valuation into macro-economic, sectoral and project-level planning and investment decisions. This will require a much stronger commitment than currently exists to routine and comprehensive valuation of forests by governments and the private sector.

Economic valuation methods cannot answer all questions and they are therefore best used in conjunction with other, participatory planning processes that allow all stakeholders (but especially those most dependent on forest resources to sustain their livelihoods) to define how much forest they want, what kind of forest, where they want to see it, and what they want to see it used for. Methods are available and should be much more widely used.

### B. Distributing Market and Non-Market Values Equitably

Forest policy and decision-making need to pay much more attention to the distribution of market and non-market values to different socio-economic groups, particularly the rural poor. In the past, most economic studies of forest values have focused on identifying and quantifying the magnitude of market and non-market benefits derived from different types of forests in different locations.

These studies generate more-or-less rough monetary estimates of different types of value, typically expressed in terms of net US\$ per hectare (i.e. benefits minus costs, either as an annual flow or as a Net Present Value). The estimated values of non-market benefits (e.g. biodiversity, carbon, watershed protection) under "sustainable" forest management are then compared to the financial net benefits of alternative uses, e.g. "conventional" forest management, conversion to agriculture, etc.

This approach is good as far as it goes, but it does not go nearly far enough. In particular, it does not really clarify how the costs and benefits of alternative management regimes are shared (distributed) among different stakeholders. In other words, who wins and who loses? Does SFM offer better prospects for rural poverty reduction than conventional management? What mechanisms are in place to compensate the losers and do they provide adequate compensation for both monetary and non-monetary losses?

There is also increasing empirical evidence that non-market forest use values play a particularly important role for the poorer and more vulnerable sectors of the population.

In Lao PDR, for example, studies around Nam Et Phou Loui Protected Area have found that the relative contribution of forest products (up to half of per capita GDP) is directly correlated with poverty status, measured in terms of livestock ownership, food security, cash availability and access to land. Clarifying the role of forests in the livelihoods of the poor, including both market and non-market benefits, is a key step in ensuring that forest policy contributes to poverty reduction. Governments and development agencies need to include the full range of forest values in poverty assessments, and ensure that new market-based incentives for sustainable forestry do not exclude the poor.

### C. Reforming Incentives

Subsidies or incentives in the forest sector can take several forms, including:

- Implicit subsidies (when the market price does not reflect all the costs of producing timber, including environmental and social costs);
- Direct and indirect incentives (such as support for infrastructure that facilitates logging of High Conservation Value Forests or fuel subsidies facilitating the extraction of logs from remote areas);
- Fiscal incentives (such as tax rebates or exemptions for investment in plantations of fast-growing exotic species that provide little or no environmental or social benefits); and
- Export promotion incentives (including export subsidies and/or price supports).

Some subsidies or incentives are environmentally harmful and trade distorting and as such constrain the effective implementation of forest conservation and sustainable forest management. Subsidies distort markets and make some forestry practices financially viable which would otherwise not be. This acts to disfavour other practices and land uses that might be more economically, socially and environmentally appropriate.

Often incentives subsidize production-based activities for which well developed markets already exist. Such incentives are short-sighted, particularly where they are combined with a failure to support the provision of non-market goods and services,

Incentives and subsidies for forest-related land-use activities need to be re-orientated and reformed to enhance, rather than undermine, the ecological functionality of forest landscapes and, in doing so, to improve the livelihoods of the poor. Examples include payments to farmers in the UK to maintain hedgerows, and incentives for conversion to organic farming in Switzerland. These sorts of incentives are particularly vital in regions where widespread poverty and increasing alienation from land and the natural resource base comprise major underlying causes of forest degradation.

Other types of initiatives include the provision of credit sources and venture capital funds, targeted both at small-scale harvesters and larger commercial enterprises. The real challenge is to mobilize international funding to channel such "sustainable" incentives towards forest land users in the developing world, where rural poverty and forest degradation are endemic.

### D. Building new market opportunities

Markets must be supported by appropriate policies and institutions in order to provide incentives for the long-term viability and sustainability of forests and of the communities that depend on them. In many cases, the economic significance of forest ecological services is actually increasing as they become more important to the global community or as the supply of forest goods and services declines in other parts of the world. One example is the potential economic value of South America's forests as carbon sinks, which has become a topic of global debate and focus over recent years.

Building new market opportunities and making sure that these new markets are accessible to poor people, such as ensuring that small-holders can tap into opportunities that the Clean Development Mechanism offers, is a major challenge for the international community.

The Scolel Te project in Chiapas, Mexico, was one of the first to explore how small farmers could become active members of a global carbon market. So far more than 700 individuals in 40 communities have signed up to the scheme and planted over 700 hectares of trees, primarily native pines and cedars, with food crops planted under the trees. Sales of carbon by the project in 2002 amounted to around \$180,000, with the main buyer being the Federation Internationale de l'Automobile, which purchased over 13,000 tonnes of carbon credits to offset the emissions spewed into the atmosphere by Formula One racing and the World Rally Championship.

But Scolel Te is about more than planting trees; it is helping to restore a degraded environment and improve the quality of life of Mayan villagers. The system pioneered in Chiapas is currently being tested in southern India and Mozambique.

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## Recommendations

The Secretary-General's report on Economic Aspects of Forests proposes that the UNFF:

- *Urges countries to take appropriate measure to increase rent capture from forest resource utilization and to ensure necessary re-investment in sustainable forest management;*
- *Invites the member organizations of CPF to support activities to assist countries in their efforts of full-cost internalization of the production chain and use of wood products and their non-wood substitutes, and in developing payment mechanisms for environmental services of forests.*

IUCN welcomes these recommendations and suggests that these be enhanced by the UNFF urging countries to:

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IUCN recommends that the UNFF urge members of the Collaborative Partnership on Forests and others, in supporting the efforts of countries on full cost internalization, to:

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## **A Valuation Tool Kit:**

### **The South American Experience**

Aware of the important information that forest valuation can provide, and of the important role of economic measures that support sustainable forest management and are consistent with poverty reduction strategies, IUCN has been promoting the use of valuation techniques to assist countries to better weigh up the economic costs and benefits of different forest management options, and to point to ways of maximising sustainable forestry values, setting in place economic incentive measures for forest conservation, and raising finance for the forest sector.

IUCN has produced a toolkit focused on South America with the involvement of a wide range of partners and collaborators. The process was initiated in 2000 with a review of literature and institutions concerned with forest valuation in South America, followed by a regional workshop to present the findings of this review, and to discuss forest valuation issues with key stakeholders (representatives of governments, civil society and international organisations) in the region.

The toolkit may offer some useful information and tools for other regions. It is divided up according to four key themes that contribute towards the use of economic tools and measures for sustainable forest management:

1. Description of the concept of the total economic value of forests, and methods for quantifying these values and expressing them in monetary terms
2. Illustration of how in the light of information about such values, economic incentive measures can be developed and used for sustainable forest management
3. Generating sufficient finance for sustainable forest management, at local, national and global levels
4. Ways in which forest policies interact with economic management issues and tools, including a country-by-country analysis.

Throughout the toolkit, economic methods, concepts and applications to on-the-ground forest management issues are illustrated by real-world examples and case studies from the South American region.

**For more information on this toolkit, please contact:**

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