

## Editorial

# 'Externalities and biodiversity valuation'

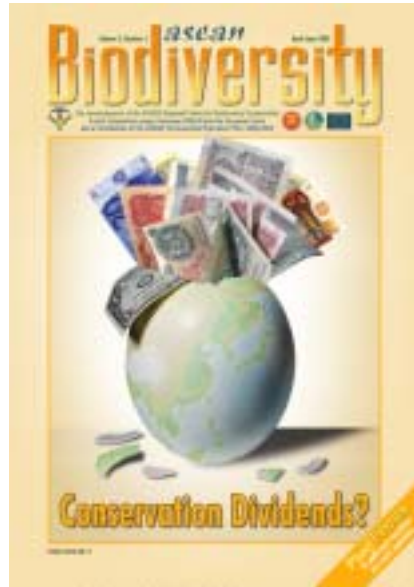
■ By Glyn Davies

One of the most important reasons for loss of biodiversity, is that conservation and sustainable use of natural resources is generally not a viable financial option, and this is because of a combination of market and policy failures. Put simply, natural resources are under-valued because no account is taken of the time it takes to produce the next harvest, nor any costs involved in managing lands for future harvests, nor the environmental and social costs associated with loss of products. Internalising these costs, so that parties trading in a particular product pay a larger part of these costs, is a central element in dealing with the "externalities" that are driving biodiversity loss.

A number of approaches have been taken to address these externalities, and these can be thought of in terms of incentive measures to support conservation and sustainable use of natural resources. First, and probably the most important incentive in many areas is to remove perverse incentives – policies, subsidies and low commodity prices which make it profitable to exploit natural resources without concern for long-term outcomes.

Thereafter policy incentives that can be implemented to contribute directly to improving the management of biodiversity can be divided into four categories:

- i. trade liberalisation and property rights – which can encourage greater benefits to local stewards of natural resources, thereby providing an incentive for them to engage in sustainable production systems.



- ii. standards, regulations and restrictions – these are standard institutional instruments used to set maximum acceptable levels of resource depletion, for example by restricting harvest off-takes.
- iii. fees and environmental charges – these can be used to recover costs of maintaining or replacing natural resources, and include timber taxes, fishing licenses, and park entrance fees.
- iv. public financing and environmental funds – financial incentives can be offered to those who harvest in ways that reduce natural resource losses.

However, none of these incentives will be effective without well-regulated markets, nor will they work without strong political commitment to ensure that policy incentives are appropriate and implemented. Furthermore, giving values to biodiversity values that are long-term and intangible poses many problems.

Finally, the outcomes of policy incentives are often uncertain. Care is needed in their planning, therefore, to ensure planned outcomes are realised, and Strategic Environmental Assessments should be used to look at the likely environmental and social impacts of planned policy changes. Thereafter, the real impacts of policy change need to be monitored.

In this issue, the articles featured in the Special Reports section were presented during the Third Research Conference on the "Economic Valuation of Biodiversity", which was sponsored and conducted by the ASEAN Regional Centre for Biodiversity Conservation (ARCBC) in June 2002.

Arguing that valuing biodiversity is a key policy interest, the papers stressed that the economic valuation of biodiversity is a powerful tool for management, and a convincing argument for conservation especially when used alongside social, scientific and spiritual studies on biodiversity. Although there are some who insist that putting a high value on biodiversity would not always guarantee its conservation, the correct incentives and mechanisms to capture the resource values should be put in place. Without such incentives, value estimates would only represent values on paper that would have limited impact on the decision-making process or none at all.

Notwithstanding its weaknesses, the economic approach facilitates comparisons in a world where resources are limited and choices have to be made. ■

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