

HOW EASTERN AFRICAN COUNTRIES ARE USING ECONOMIC INCENTIVES TO MAKE BIODIVERSITY ATTRACTIVE

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Calls for the use of incentives in the Convention on Biological Diversity

Between 15-26 May more than a thousand government delegates and non-government observers will gather in Nairobi for the Fifth Meeting of the Conference of the Parties (COP5) to the Convention on Biological Diversity (the CBD). One important agenda item that will be under discussion is the use of incentive measures to support the conservation and sustainable use of biodiversity. This is not the first time that incentives, and especially economic incentives, have been identified as a priority tool for biodiversity conservation. Meetings relating to the implementation of the CBD, at global, regional and national levels, have called repeatedly for the identification, development and use of economic incentives for biodiversity, and for the documentation and sharing of experiences relating to their use.

The emphasis placed on incentive measures echoes the requirement in Article 11 of the CBD that “... *each contracting party shall, as far as possible and as appropriate, adopt economically and socially sound measures that act as incentives for the conservation and sustainable use of components of biological diversity* ...”. In turn, an incentive can be defined, within the context of the CBD, as “... *a specific inducement designed and implemented to influence government bodies, business, non-governmental organisations, or local people to conserve biological diversity or to use its components in a sustainable manner*...”.

In other words, incentives are a means of persuading people that it is worthwhile for them to conserve biodiversity and to use it sustainably.

The relevance of economic incentive measures to biodiversity

So why is there this recurrent focus on economic incentive measures, and why should they be used in support of the CBD? Perhaps most importantly because one of the main reasons that biodiversity is degraded, and used unsustainably, is due to the fact that this appears to make good economic sense to people. Economic activities and forces lead directly to biodiversity loss.

Individuals, households, businesses and governments all over-exploit biological resources, employ damaging production techniques and technologies, convert and destroy ecosystems and pollute the natural environment because they can profit from it, or because it is cheaper for them to do so. For example illegally-logged indigenous timber often has a lower price than sustainably-harvested timber, it is cheaper to dispose of harmful effluents directly into rivers than to pay to treat them properly, higher immediate profits can be gained from converting wetlands to agriculture than by using them wisely. Conversely, people fail to conserve biodiversity because they perceive little economic gain in doing so.

Clearly there is something wrong in the economic signals that people face. While there exist few positive economic inducements for conserving biodiversity, or economic discouragement against degrading it, there are many economic forces that encourage people to carry out economic activities in ways, or at levels, that harm biodiversity.

Setting in place economic incentives for biodiversity involves identifying and understanding these economic forces, and instead making sure that conservation is perceived as an economically attractive, and desirable, course of action – for governments, the private sector, communities, households and individuals.

How economic incentives have been incorporated into Eastern Africa's NBSAPs

Despite various experiences of the use of economic incentives for biodiversity conservation (see for example the six main categories of economic incentives described in Box 1 that have been used in Eastern Africa), these experiences have tended to be relatively isolated. Although often an effective contribution to biodiversity conservation, they have rarely been developed as part of a co-ordinated strategy.

BOX 1: EXPERIENCES OF THE USE OF ECONOMIC INCENTIVES FOR BIODIVERSITY IN EASTERN AFRICA

Property rights: measures that allocate private or group rights to own, use or manage biological resources or biodiversity areas (for example joint forest management agreements with local communities in Kenya, Tanzania and Uganda);

Market measures and charge systems: measures that rationalise and improve existing, or introduce new, prices and markets for goods and services (for example the introduction of certification for organically-grown crops in Kenya);

Fiscal measures: budgetary measures that raise and allocate taxes and subsidies (for example the return of hunting revenues and taxes, through the Treasury, to wildlife conservation activities in Tanzania);

Financial measures: measures that mobilise and channel funds to biodiversity conservation (for example the Bwindi Trust Fund in Uganda);

Bonds and deposit systems: measures that charge in advance against possible damage caused to biodiversity (for example the requirement in existing and draft environmental legislation in Kenya, Tanzania and Uganda for refundable bonds to be paid before certain types of industrial developments are undertaken in environmentally sensitive areas);

Livelihood measures: measures that strengthen and diversify the livelihoods of biodiversity users or residents of biodiversity areas (for example, throughout the region, protected area revenue-sharing arrangements that allocate funds to community development activities).

One of the first steps in using economic incentives for biodiversity, as part of a broader more strategic approach to conservation, is to incorporate them into National Biodiversity Strategies and Action Plans (NBSAPs). Over the last 3 years countries in Eastern Africa have been developing NBSAPs. Almost of all of these planning exercises have targeted economic incentives as key components of national strategies and plans to conserve biodiversity, and have yielded some very useful information and insights. In particular, three general themes have emerged from NBSAP experiences in Eastern Africa:

It is necessary to justify biodiversity conservation in social, economic and developmental terms. Biodiversity conservation must be demonstrated to be attractive to donors, to other divisions of government, to the private sector and to local communities, because it depends on their acceptance and active support. As exemplified in the case of Djibouti, outlined in Box 2, quantifying the economic benefits associated with biodiversity conservation, and the economic costs associated with its loss, provides

a strong – and often much needed – justification for the development and implementation of NBSAPs.

BOX 2: BIODIVERSITY ECONOMIC VALUES AS A JUSTIFICATION FOR THE DJIBOUTI NBSAP

Economic assessment demonstrates that biological resources, ecosystems and their diversity have a high economic value in Djibouti. With a quantifiable gross value in excess of US\$ 430 million a year, biological resource utilisation and ecosystem services also form the basis of some of Djibouti's major economic sectors, including pastoralist production, fisheries and tourism, which together account for the bulk of income, employment and foreign exchange earnings in the country. Economic assessment shows clearly that the benefits of biodiversity accrue throughout Djibouti's economy and population, and that biodiversity degradation and loss would impose significant private and public costs by eroding some of the most productive sectors of the economy. By demonstrating the economic importance of biodiversity, and by highlighting the fact that biodiversity degradation would give rise to untenable costs for most sectors of the population, economic assessment provides a strong justification for the development and implementation of a NBSAP in Djibouti.

There is an urgent need to overcome perverse incentives and to mainstream biodiversity into all sectors of the economy. Much of the impetus driving biodiversity degradation in Eastern Africa comes from the perverse incentives that are presented by policies and economic instruments used in other sectors of the economy. At the best many of these other sectoral policies contain little explicit mention of biodiversity, at the worst they set in place a number of economic conditions that actually encourage biodiversity loss. As Box 3 illustrates for the case of Eritrea, identifying and overcoming these perverse economic incentives has formed a key part of NBSAPs, as has the integration of actions to ensure that biodiversity concerns are reflected in the policies and plans of these other sectors.

BOX 3: ECONOMIC MEASURES TO OVERCOME PERVERSE INCENTIVES IN ERITREA

Macroeconomic and sectoral economic policy in Eritrea do not self-evidently support biodiversity conservation, and sometimes contribute to its degradation and loss. They do this by promoting particular types of economic activity and particular production technologies which have the potential to erode biodiversity (such as arable agricultural expansion into arid and semi-arid rangelands, fisheries commercialisation, increased mining activities, industrial and infrastructural development), by omitting consideration of biodiversity (such as the lack of environmental impact assessment procedures in urban and industrial planning) and by using economic instruments which manipulate prices and profits to make particular biodiversity-degrading activities and products desirable to producers and consumers (such as subsidised and below-market resource pricing in water, forestry and energy sectors, implicit subsidies to export crop producers, subsidies to water consumption and inducements to rapid and unplanned investment in industry). Structural and historical characteristics of the Eritrean economy – most notably three decades under external occupation and civil war, which resulted in severe economic stagnation, population displacement and environmental degradation – have also exacerbated these biodiversity impacts. The NBSAP specifies a number of actions that can help to overcome these perverse incentives, including the integration of penalties against biodiversity degradation into industrial and natural resource development activities, the full-cost pricing of natural resources and the improvement of prices in the agricultural sector.

It is of overriding importance that positive incentives and enabling circumstances are set in place for users, managers and impacting sectors to conserve biodiversity. Economies throughout Eastern Africa are already limited and vulnerable, at both national and local levels. Although it is most effective to combine “packages” of mutually-reinforcing positive inducements and disincentives to biodiversity degradation, there is a limit to the extent that it is possible, or acceptable, to increase the controls and restrictions that people. As Box 4 demonstrates for the case of the Seychelles, positive incentives which reward consumers and producers for biodiversity conservation because they save them money, increase production efficiency or decrease production costs, tend to be far more effective, appropriate and acceptable than economic instruments which penalise producers and consumers by raising production costs or increasing domestic prices.

BOX 4: POSITIVE ECONOMIC INCENTIVES FOR BIODIVERSITY IN SEYCHELLES

The activities of two major groups in the Seychelles particularly contribute to biodiversity degradation and loss – industrial producers, and users of biological resources in the tourism, marine and wildlife trade sectors. Both groups benefit in financial and economic terms from depleting biodiversity, because it is cheap or free for them to do so. Economic assessment of biodiversity makes it clear that the characteristics of the Seychelles economy influence the choice of economic instruments for biodiversity conservation. Due to a high dependence on imported products, already severe taxes and accordingly high domestic prices, and because of the high cost of exporting Seychelles products overseas, a major concern is not to increase consumer prices or production costs unduly, or to make Seychelles goods uncompetitive on the world market. A wide range of positive incentives for biodiversity conservation are recommended for the Seychelles NBSAP which target industrial producers and users of biological resources. These include the imposition of deposit bonds on marine tourism operators and industrial developers which are fully refundable on good environmental practice, relatively lower rates of duty and taxation on cleaner and more efficient harvesting equipment and production technologies, differential land use and property taxes, the introduction of secure and tradable rights over resource management and utilisation, and the provision of credit on preferential terms to sustainable resource utilisation activities and alternatives to biodiversity-depleting enterprises.

Lessons learned in choosing economic incentives for biodiversity in Eastern Africa

The development of economic incentives as part of NBSAPs in Eastern Africa has also pointed to the ways that economic incentives for biodiversity can be used to their best advantage in the light of different countries' specific conditions and circumstances. Especially, four target areas for economic incentives have emerged as priorities in meeting obligations under the CBD at the same time as overcoming key regional, national and local constraints to biodiversity conservation in Eastern Africa:

Incentives that reduce government expenditures Government budgets are over-stretched in the region. While a number of new environmental management agencies have been established or are under development (including parastatal environmental, wildlife, forestry and biodiversity bodies), available donor funds and central government subventions are becoming increasingly scarce, and in many cases inadequate consideration has been given as to how these agencies will fund themselves. The use of economic incentives that raise and allocate finance to biodiversity or dismantle existing subsidies can provide strong support to the operations of these agencies, because they are cost-effective, because they can generate funds, and because they save money through placing a much lower burden on public funds than traditional command and control measures. They are also a source of support for implementing Article 20 of the CBD, dealing with financial resources.

Incentives for community biodiversity conservation Many of the most biodiversity-rich ecosystems and species in Eastern Africa lie in remote rural areas that are — physically or financially — beyond the reach of government environmental and protected areas agencies. Their conservation depends primarily on the actions of local communities. Meanwhile, many of these communities are poor, must cope with a limited and insecure livelihood base, and often have few alternatives but to depend on biodiversity for their day-to-day subsistence and income. The provision of economic incentives for these community members to conserve biodiversity is of paramount importance in the region, as a conservation and development necessity. Community economic incentives that are based on allowing local populations to benefit from conservation provide a strong source of support to the implementation of Articles 8j and 10 of the CBD in East Africa — those dealing with benefit sharing and sustainable use.

Incentives that are both economically and socially sound Article 11 of the CBD emphasises that incentive measures should be both economically and socially sound. Experience shows that, where incentives have been adopted in the region, they have not always been based on sound economic and social principles. The most glaring example of this is the introduction, over the last decade, of revenue-sharing arrangements around protected areas. Although undoubtedly improving relations between local communities and park authorities, such arrangements have had only limited success because they have tended to be seen as externally-imposed, have been de-linked to the economic reasons why local communities degrade biodiversity, and have often failed to take social factors and social differentiation into account. Economic incentives for biodiversity need to be both acceptable and appropriate to the groups at which they are targeted, including conforming to broader social goals and institutions.

Using the market to implement incentives Economies in Eastern Africa have, over the last decade, become increasingly liberalised, privatised and market-driven. These trends continue to form a major component of macroeconomic policies and national development strategies throughout the region. Economic incentives for biodiversity, because they depend primarily on influencing the individual economic decisions of producers and consumers, and because they target private profitability, fit in well with these economic and policy trends. Especially, the emerging liberalisation of prices and markets, the dismantling of subsidies and monopolies, widespread privatisation, and the on-going development of new mechanisms for using, managing and trading in biodiversity present an ideal environment for using economic incentives — both to regulate and improve such markets, as well as to ensure that their workings favour biodiversity conservation.

Ways forward and future needs in the use of economic incentives for biodiversity in Eastern Africa

The integration of economic incentives has undoubtedly strengthened NBSAP processes in Eastern Africa. By providing an economic justification for biodiversity conservation, and underlining the need to make conservation activities economically attractive and financially sustainable for different groups, it has been particularly useful in ensuring that NBSAPs gain broader acceptance, and are practically implementable.

The application of economic incentives to biodiversity is however still in its early stages in Eastern Africa. A major concern is, having successfully built economic issues into NBSAPs, to maintain and extend this momentum in the future. A number of lessons learned and recommendations for future action have been identified from Eastern African countries' experiences, including:

- ❖ ***The need to build regional capacity and awareness in the economics of biodiversity:*** in most Eastern African countries there are still very few people who have skills and experience in the application of economics to biodiversity conservation. Although both awareness and acceptance of the importance of economics to biodiversity is growing, there is a need to extend this capacity still

further, among both biologists and economists, and within both conservation and development agencies.

- ❖ ***The need for continuing dialogue between economic and biodiversity planners and practitioners:*** in many countries the integration of economic incentives into NBSAPs has provided the first opportunity for economists and natural scientists to collaborate in formulating strategies and action plans. It is vital that this dialogue is maintained in the future so that economics concerns continue to be integrated into biodiversity planning, policy and practice, and if possible expanded so that biodiversity concerns are routinely incorporated into economic and development planning, policy and practice.
- ❖ ***The need to build economic incentives into the on-going implementation, review and reformulation of NBSAPs:*** the programmes, projects and activities specified in NBSAPs are yet to be implemented in most Eastern African countries. Both economic conditions and the status and integrity of biodiversity will change as NBSAPs are implemented. There is a need for economic incentive measures to be continuously monitored, reviewed and reformulated as necessary in response to these changing conditions.