

## *Sustainable financing of biodiversity conservation*

*Creating and financing protected areas for the conservation of biodiversity – particularly in developing countries – presents great challenges. Nature conservation funds and “payments for ecosystem services” should play a part in the preservation of biological diversity.*

The preservation of biological diversity requires conservation of the relevant habitats and ecosystems. Many of the world's important ecosystems, and those most worth protecting, are in the developing countries – where, because of the prevailing poverty, they are often subject to a high level of competing land use pressure. This is one of the reasons why sustainable management of natural resources in developing countries is an important component of the German government's development cooperation work. However, the financial sustainability of interventions aimed at biodiversity protection is frequently precarious, since these interventions cannot compete with other forms of land use that are less environmentally friendly. Environmental factors such as water balance, climate and species diversity are to a large extent public goods, and under current conditions they are not yet – or only to a limited extent – marketable. At present prices their creation does not cover the costs incurred. This applies in particular to the protection of valuable ecosystems on public land, in the form of protected areas. Also affected are schemes for the sustainable and resourcesaving use of private

and municipal land use which aim to achieve both income-related and conservation goals. Examples of such land use are afforestation, agroforestry systems and erosion protection.

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### *Financing protected areas*

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In order to conserve biological diversity in as comprehensive and representative a way as possible, the aim is to extend the worldwide system of protected areas. The targets are 15 percent (currently 12 percent) of the world's land area and 20–30 percent (currently 0.5 percent) of the seas and coastal areas (WPC 2003). It is already apparent that the longterm financing of these protected areas is not secure. At the World Parks Congress of the IUCN in 2003 it was estimated that a comprehensive global system of protected areas would require US\$ 20–30 billion per year over the next 30 years. Only US\$ 6.5 billion is currently being invested annually in protected areas, most of this in the industrialised coun-

tries. The underrepresented developing countries are faced with additional challenges, because:

- The prevailing socioeconomic situation in the developing countries means that the creation of protected areas is usually associated with higher opportunity costs, because these areas could often also be used for the production of food or merchandise.
- The problems of poverty exacerbate the competition for scarce resources and mean that nature conservation and the protection of particular areas have relatively low priority.
- Many developing countries make a much larger contribution to ecosystem protection – at least in terms of surface – than many industrialised nations.
- The protection of ecosystems is a global task; it cannot be regarded solely as the responsibility of the developing countries concerned.

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Photo: Jörg Böhling

*Protected areas must generate their own income.*

To improve the funding situation, protected areas must generate or increase their own revenue. One avenue for doing this is tourism. Only in particularly favourable locations, however, do revenues suffice to cover costs; the remaining shortfall must be covered by external means. An example of a favourable location is the Kruger National Park in South Africa. The most promising source of external funding is nature conservation funds.

A substantial contribution can in particular be expected if these funds are set up as endowment funds, from which only the interest on the deposited capital is used. Such funding requires conditions of subsidiarity and good governance to be met by the partners, including the following:

- Transparent administration and supervisory structure in accordance with civil society principles;
- Criteria for awarding grants from the funds on the basis of priorities;
- Functioning management structures for the protected areas under consideration;
- Existence of management, operating and financial plans;
- Clearly formulated target indicators and work indicators for the administration of the protected area;
- The partner's ability to make their own contribution, either financially or in kind;
- Mechanisms for resolving conflicts with neighbours.

### *Payments for ecosystem services*

Payments for ecosystem services encourage private landusers to introduce environmentally friendly and sustainable land use practices. The aim is to ensure that sustainable resource management and conservation apply not only in specially designated protected areas but also on productive land – as a competitively viable type of use. The concept is based on the innovative idea of making payment for the provision of ecosystem services. Under such a scheme both the buyer and the seller of ecosystem services profit from a contractual relationship based on transparency and legal certainty – conditions which do not always readily exist in developing countries. At the same time such an agreement contributes to the conservation of natural resources. The demand (willingness to pay) for ecosystem services as “scarce” and therefore “marketable” goods is always the deciding factor. For example, the likelihood of being able to negotiate payments for the conservation of water catchment areas in rainforest areas – where there is an excess of water – is extremely small.

*In poor countries funding of nature conservation competes with poverty alleviation programmes.*



Photo: Jörg Böhling

### **Zusammenfassung**

Ein erheblicher Teil schützenswerter Ökosysteme zur Erhaltung biologischer Vielfalt befindet sich in Entwicklungsländern. Ihre Finanzierung gilt als langfristig nicht gesichert. Eigene Einnahmen aus der Nutzung wie bei Natur- und Wildparks reichen meistens zur Kostendeckung nicht aus. Zur externen Finanzierung gelten Naturschutzfonds als wichtigste Variante, die besonders die Kriterien transparenten Finanzgebarens, der Subsidiarität und einer angemessenen zivilgesellschaftlichen Beteiligung erfüllen müssen. Durch „Zahlungen für Umweltleistungen“ sollen Bewirtschafter auf privaten und kommunalen Flächen motiviert werden, umweltverträgliche und nachhaltige Landnutzungspraktiken einzuführen. Kern dieses Konzeptes ist, dass der jeweils Begünstigte (z.B. Wasserversorgungsgesellschaft) für eine Umweltleistung zahlt, was einen Anreiz zum Erhalt natürlicher Ressourcen bieten soll. Zugleich sollen Käufer als auch Verkäufer von der Vertragsbeziehung profitieren.

### **Resumen**

Una parte considerable de los ecosistemas dignos de protección para la conservación de la biodiversidad se encuentra en los países en desarrollo. Su financiamiento no está asegurado a largo plazo. Los ingresos propios a partir de la explotación – como en el caso de las reservas protegidas de flora y fauna – por lo general no alcanzan para cubrir los costos. Para el financiamiento externo, los fondos de protección de la naturaleza son la variante más importante, ya que éstos deben cumplir en mayor medida con los criterios de transparencia financiera, subsidiariedad y adecuada participación de la sociedad civil. A través de “pagos por servicios ambientales”, se aspira a motivar a los actores en las zonas privadas y comunales a introducir prácticas de uso de la tierra que resulten sostenibles y ecológicamente compatibles. El concepto se basa en que el respectivo beneficiario (por ejemplo, una empresa de abastecimiento de agua) paga por un servicio ambiental, lo cual representa un incentivo para la conservación de los recursos naturales. Tanto el comprador como el vendedor deben salir beneficiados de esta relación contractual.