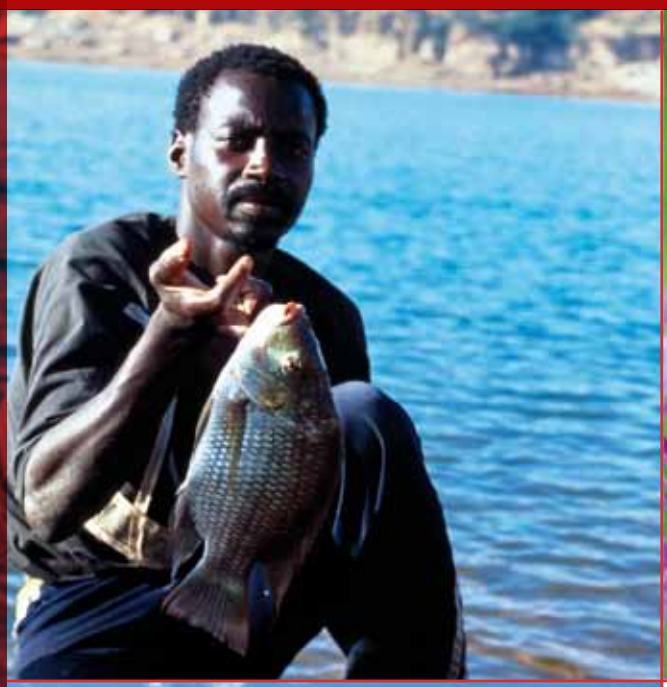
2010

Protecting biodiversity



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RÉPUBLIQUE FRANÇAISE

MINISTÈRE
DES
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Directorate General of Global Affairs, Development and Partnerships

Issues
and challenges at stake

Biodiversity is important not only for environmental reasons, but also for reasons of development and geopolitics. France occupies an odd position: it is both a developed country and a "hyper-diverse" one, especially with respect to the tropical forest of French Guiana; it is therefore one of the few countries to be concerned by questions both of access to and the sharing of the benefits from the use of genetic resources.
In a number of key areas, France goes further than most of our European and international partners.

The challenge for the environment

The serious extent of extinction of biological diversity has been measured by the Millennium Ecosystem Assessment. This scientific process was coordinated by the United Nations Environment Programme (UNEP) and, in 2005, produced a **series of reports on ecosystems and human well-being.** The assessment showed that over the last fifty years human activity has caused more rapid and more extensive modification of ecosystems than in any other period in the lifetime of our species, causing a substantial loss of the Earth's biological diversity, in many cases irreversibly so.

Many experts consider that **unless energetic measures are rapidly taken to arrest this erosion of biodiversity,** at the present rate by 2050, the area of forests and grasslands will shrink by a further 10% to 20%, fish stocks will continue to collapse, and the proliferation of invasive alien species will increase. In addition, this crisis of biodiversity and the loss of services rendered by ecosystems **will be further accentuated by climate change.**


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WHAT IS BIODIVERSITY?

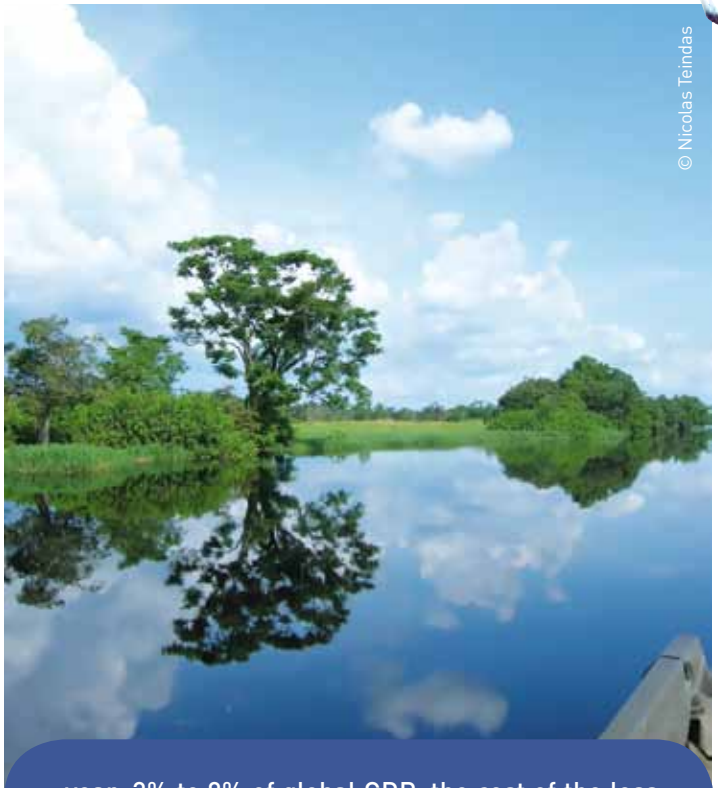
Biological diversity, or biodiversity, describes the **variety of life on Earth**, in other words the number, variety and variability of living organisms and the manner in which this diversity varies in space and time. It includes diversity within species **(genetic diversity)**, between species **(species diversity)** and between ecosystems **(ecosystem diversity)**. Article 2 of the **Convention on Biodiversity** (CBD, Rio 1992) states that "'Biological diversity' means the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems."

In many cases, however, the erosion of biodiversity is not irremediable, and in addition to the standard protective measures, it is possible to implement practices that **"restore" ecosystems**, particularly the most degraded ones. Experience with marine biodiversity has been encouraging *(see box on marine protected areas, page 5)*.

The challenge for development

The crisis in biodiversity mainly affects the poorest: 80% of the loss is estimated to directly affect the subsistence and daily lives of the 3.2 billion human beings living on less than $2 a day.
However, the modern economies continue to over-exploit natural resource. **It is precisely this extraction from ecosystems that is measured by four of the monitoring indicators selected for United Nations Millennium Development Goal 7:** proportion of land area covered by forest; proportion of fish stocks within safe biological limits; proportion of terrestrial and marine areas protected; proportion of species threatened with extinction. In all sectors, the results are poor:

• **Thirteen million hectares (50k sq.mi) of forests disappear** world-wide each year, causing irreversible ecological damage and threatening the way of life of the human societies that depend directly on them;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THE SILENT CRISIS OF BIODIVERSITY

The notion of biodiversity is even more complex to understand and measure than climate change, and some observers regret the simpler but misleading language used about "nature", the "protection" of charismatic species and the "beauty" of natural areas. It is also hard to assess the economic impact of a reduction in biodiversity: there is no single indicator of biodiversity as simple as temperature for climate.
To fill this gap, in 2007, the German government and the European Commission asked the **Indian economist Pavan Sukhdev to head a study of the economic value of services rendered by ecosystems, The Economics of Ecosystems and Biodiversity (TEEB)**, using an approach similar to that of the Stern report on climate change. Its initial report estimated at between $2 and $4.5 trillion a year, 3% to 8% of global GDP, the cost of the loss of "natural" capital caused by deforestation and the degradation of ecosystems.

In France, **a mission chaired by Bernard Chevassus-au-Louis** produced a report concluding that it would be possible to set reference values for ecosystems; for example, it gives an average reference value for all forestry services – timber harvesting, carbon regulation, biodiversity, walking, hunting, etc. – of €970 per hectare per year. (*Approche économique de la biodiversité et des services liés aux écosystèmes*, Centre d'analyse stratégique, n° 18, 2009).

Biodiversity is **crucial to the notion of sustainable development**, but any attempt to take it into consideration comes up against the typical dilemma of sustainable development, since the cost of protection is immediate but the benefits are long-term and not always easy to measure. Furthermore, the principle of **national sovereignty over natural resources has been accepted since the Rio Conference**, although these resources are sometimes referred to as "global public goods" or the "common heritage of humanity".

• **Sustainable management of fish stocks** remains a global problem. Overfished by international and local fleets, the stocks are declining, with serious effects on already deficient protein supplies. Since most stocks are shared (migratory species), international initiatives are essential: **fisheries regulation bodies have not always been effective** (as with the controversial management of red tuna stocks).

• **The 14% of the Earth's surface classified as protected areas,** the equivalent of Central and South America together, cannot be the sole response for the protection of biodiversity. These areas contain **less than one-fifth of the planet's biological diversity,** and this cannot release us from the obligation to protect the more "ordinary" ecosystems that have no specific protected status and **yet provide most of the goods and services** necessary for human activities.

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2010 International Year of Biodiversity

The UN has declared 2010 the International Year of Biodiversity. This year was chosen for the review of the commitment made by the international community at the 2002 Johannesburg Summit "to achieve by 2010 a significant reduction in the current rate of loss of biological diversity" at global, regional and national levels, as a contribution to poverty alleviation and to the benefit of all forms of life on Earth. The objective adopted by the EU is even more ambitious, since it was to "halt the erosion of biodiversity by 2010".

The Conference of Parties to the Convention on Biodiversity to be held in Nagoya, Japan, in October 2010 will examine the achievement of this objective, which appears to be far from being met: according to the Millennium Ecosystem Assessment carried out in 2005 and the work done by the International Union for Conservation of Nature (IUCN) on its "Red Lists", the current crisis in the extinction of biodiversity is unprecedented in human history for its speed and the extent of its effects.

The geopolitical challenge

Although **biodiversity is a global public good, its management cannot depend solely on the sovereignty of states.** But the essential tools for effective global action do not yet exist, namely a single recognised forum of scientific experts on the status of biological resources; universally accepted indicators and units of measurement. Funding mechanisms are extremely limited; and the intergovernmental negotiating forum, the Convention on Biodiversity, does not possesses the necessary instruments, since its decisions are not binding; some major countries, such as the United States, are not members.

In the 1980s and 1990s, however, a large number of international instruments emerged, global or regional in scope, to design approaches based either on **protecting nature or preserving endangered species** (International Whaling Commission, Rome Convention on Migratory Species, Bern Convention on the Conservation of European Wildlife) or on **protecting natural habitats** (EU legislation, Ramsar Convention on Wetlands, Alpine Convention).

Trade in endangered species and derived products is also strictly regulated by CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora), **the only binding international convention addressing the sustainable management of biodiversity.**

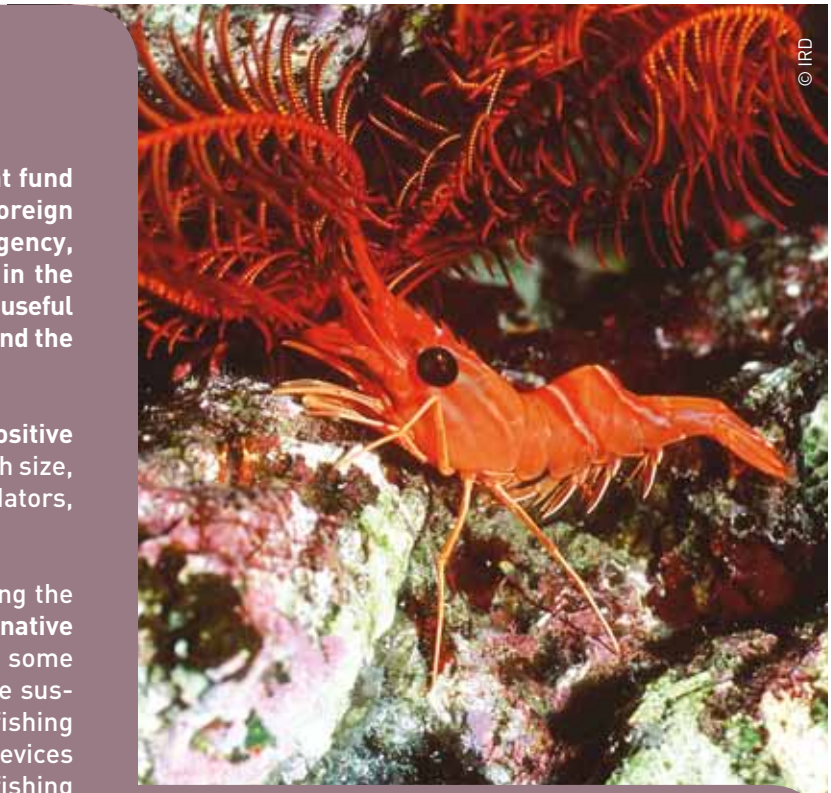
MARINE PROTECTED AREAS, A CRUCIAL INSTRUMENT

A study by the French global environment fund FFEM, jointly financed by the French foreign ministry and the AFD development agency, on 11 proposed marine protected areas in the tropics, most of which are fished, provided useful lessons on the management of fisheries and the preservation of the resource.

A number of projects demonstrate the positive effects of non-fishing zones: increased fish size, a shift in species mix towards apex predators, increased biomass.

These visible effects were useful in making the zones more acceptable to fishermen. **Alternative fishing activities** have been introduced in some projects: better use of fish products, more sustainable fishing methods, exchanges of fishing gear, introduction of fish concentration devices or artificial reefs. Changing traditional fishing methods **requires raising awareness and a participatory approach** (involving fishermen in the choice of techniques, constructing and testing solutions with them). A **fisheries management plan** is an effective tool, but insufficiently used.

For comprehensive action, it is necessary to **protect deep-sea fish stocks**. France supports the creation of deep-sea marine protected areas (MPAs) beyond areas of national jurisdiction in the framework of the Working Group on Marine Biodiversity convened by the UN General Assembly (2006, 2008, 2010) and of the OSPAR Commission for the North-East Atlantic, in accordance with the French Blue Book (Commitments of the Ocean Rounc table) on national strategy for the sea and the shore line (2009), (proposed Charlie-Gibbs MPA).



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Guidelines
of French strategy

The international community's objectives

In Johannesburg in April 2002, the Parties to the Convention on Biodiversity (CBD) undertook to achieve by 2010 a "significant reduction in the current rate of loss of biological diversity at global, regional and local levels": that is the "2010 objective". It will probably not be met. Even before the final results are published, the CBD Parties have decided to redefine a new strategy leading to the adoption of a new strategic plan in Nagoya in October 2010.

This is a complex exercise: the causes of this failure need to be analysed and new, and where possible, quantitative, objectives formulated. A number of discussion groups have begun this work; for example, the 2009 G8 meeting of environment ministers adopted the "Syracuse Charter", which recognises "the urgent need to support and strengthen the international process for the identification of an ambitious and achievable post-2010 common framework on biodiversity".

In January 2010, the European Commission published a Communication for the European Council and Parliament entitled "Options for an EU vision and target for biodiversity beyond 2010". On the basis of specific findings, it proposes four "levels of ambition" for Member States to define a new strategy for biodiversity:

- **option 1 :** Significantly reducing the rate of loss of biodiversity and ecosystem services in the EU by 2020.
- **option 2 :** Halting the loss of biodiversity and ecosystem services in the EU by 2020.
- **option 3 :** Halting the loss of biodiversity and ecosystem services in the EU by 2020 and restoring them as far as possible.
- **option 4 :** Halting the loss of biodiversity and ecosystem services in the EU by 2020 and restoring them as far as possible, and stepping up the EU's contribution to averting global biodiversity loss.

SUPPORT PROJECT FOR EFFECTIVE MANAGEMENT OF PROTECTED AREAS IN WEST AFRICA

This project is financed by the French global environment fund FFEM and has been implemented since 2006 by the IUCN Programme on Protected Areas in Central and West Africa (PAPACO).

It carries out assessments of protected area management at various levels (sites, national systems and regional networks), makes recommendations for training (one-off or continuous courses) for local capacity-building in the management of protected areas, particularly training to implement recommendations at specific sites and crosscutting studies to advance managers' decision-making processes.

France declared that it preferred the most ambitious option (option 4). The compromise finally agreed by European Union Member States (Environment Council meeting of 15 March 2010) adopted Option 4 with a slight change in the wording for the overall commitment: "as far as possible" was replaced by "in so far as feasible" to satisfy those Member States who argued for objectives that would be "ambitious but achievable".

France considers that protection of biodiversity and development must go together

France considers that **the protection of biodiversity must be compatible with economic development to the advantage of local communities.** It must not focus exclusively on biodiversity protection objectives but also address sustainable management. At all major international meetings (G8/G20, Millennium Development Goal Summits), the Ministry of Foreign and European Affairs (MAEE) endeavours to promote this vision, which more closely meets the needs of developing countries for natural resource management.

This objective is implemented together with other relevant ministries, and institutions working with the French government: French Development Agency (AFD), an operator in French bilateral aid, the French agricultural research for development organisation CIRAD, and the development research institute IRD.

The MAEE has also formed a number of strategic partnerships with :

- international stakeholders, such as the International Union for the Conservation of Nature (IUCN);

Ganvié (Benin) - © IRD

• major "hyper-diverse" countries (those that contain most of the Earth's species, both terrestrial and aquatic. They include Australia, Brazil, China, Colombia, Indonesia, Madagascar, Mexico and France with its overseas territories): Brazil, for example, signed two protocols with France in late 2008 on the sustainable development of the Amazon biome and the France-Brazil centre for Amazonian biodiversity; and Indonesia, where the AFD is implementing an ambitious programme designed to sustainably exploit forests.

TOWARDS AN INTERNATIONAL SCIENTIFIC EXPERTISE ON BIODIVERSITY

The proposed IPBES (Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services) meets the requirement for a **single, credible, recognised, independent international scientific expertise on biodiversity.** The IPBES would **summarise information available** at local, national and regional levels, submit it to a process of scientific validation and transmit it to policymakers.

Like the IPCC, the IPBES will publish **global reports at regular intervals** (4-5 years), but might also coordinate **regional reports.** The IPBES would in this way provide **political leaders with scenarios** enabling them to react effectively.

The IPBES's field of competence needs to be as wide as possible and include a variety of disciplines: biology, economics, anthropology, ethnology, etc. The IPBES will be able to work both on major ecosystems (forests, oceans) and questions relating to desertification and agroforestry.

The involvement of scientists from the global South in the IPBES is the essential condition for its success. To ensure this involvement, **regional and geopolitical balance** will need to be respected and **planning undertaken for capacity building.**

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France also argues for this vision of biodiversity protection in the negotiations on **access to and benefit-sharing from (ABS) genetic resources** (between countries of the Global South, all "providers" of biodiversity and those of the North, consumers and "beneficiaries". The drafting of a binding international regime was launched at the 2002 Johannesburg Summit.

Numerous issues are involved: economic ones, since intellectual property regimes and **conditions for patenting living organisms** influence investment in research and consequently innovation; political and cultural one, since sharing value is a factor of social justice to **remunerate communities, particularly indigenous peoples,** directly involved in preserving a resource, when it requires the use of traditional knowledge and becomes a tool of economic added value; and, given the role of researchers into taxonomy (description of living organisms classified in groups called taxa – genera, families, species, etc.) and systematics (hierarchy and classification of taxa), and in applied research fields, the issues are also scientific.

MANAGING THE QUIRIMBAS NATIONAL PARK IN MOZAMBIQUE

The Quirimbas park covers 7,500 sq.km, including 20% of marine areas, comprising some fifteen coral islands. It is home to considerable biodiversity: many endemic plants, remarkable land animals (elephants, leopards, lions) and a rich marine ecosystem (leatherback turtles, corals, dugongs, dolphins, sharks and sea birds).

Before 2002, Cabo Delgado province, which includes the Quirimbas region, suffered from frequent conflicts over the use of natural resources. Local fishermen were faced with competition at a time when fish stocks were dwindling and farmers' fields were damaged by elephants.
Faced with these difficulties, the 55,000 inhabitants of the region got together to devise a framework for protected development.

With support from local NGOs and the WWF, they managed to have the Quirimbas declared a national park in 2002.

The programme for setting up and developing the park has received €3.5 million in financial support from the French development agency AFD and the French global environment fund FFEM.

Early results show that the programme has been successful. Two years after it began, there has been a significant increase in fish catch and conflicts between human beings and wild animals have decreased. Within the park, 350 jobs have been created for local people.

PROTECTING THE CORAL REEFS OF THE PACIFIC

The Pacific Ocean contains 40% of the Earth's coral reefs. These maritime ecosystems are both an exceptional world heritage of biodiversity and an essential source of income for local communities.
However, the extraction of materials, aggressive fishing techniques, increasing emissions of pollutants in coastal areas, erosion and climate disasters are asphyxiating the reefs and endangering these fragile and yet vital areas.

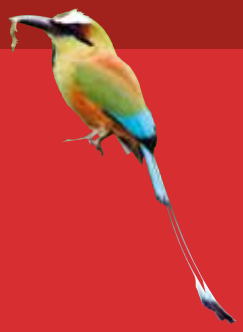
France, as a major stakeholder in the hemisphere via its overseas territories, has responded to appeals from the small island states of the South Pacific. The AFD and FFEM are contributing to a regional programme to preserve marine biological wealth. A €5-million budget is being used, together with local people, to:

• rehabilitate the corals and sustainably develop natural resources via waste water treatment, creation of a network of marine protected areas and the management of river catchment areas;

• develop programmes to diversify and establish long-term economic activities (fishing, aquaculture and sustainable tourism) to ensure the integrity of the corals;
• coordinate scientific research (biology, ecology, economics, sociology, law and anthropology);
• provide information about actions to preserve fragile, endangered ecosystems.

An appreciation of this difference in approach between developed and developing countries is essential if international positions are to be formulated. In the long term, any North-South alliance depends on a **better understanding of the concerns of developing countries:** action for development cooperation and capacity-building in these countries are therefore, here as elsewhere, crucial to achieving a collective treatment of global questions.

New Caledonia - © IRD



FRANCE'S FIVE OBJECTIVES FOR BIODIVERSITY

In addition to its "post-2010" objectives, France has set itself five challenges in order to respond more effectively to the global crisis in biodiversity:

Objective 1

Form an international group of experts on biodiversity, similar to the existing Intergovernmental Panel on Climate Change (IPCC), in order to bring together scientific expertise that is currently fragmented: negotiations for the IPBES – Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services.

Objective 2

Successfully complete the negotiations for **access to and benefit-sharing from the use of genetic resources:** known as ABS (Access and Benefit- Sharing).

Objective 3

Contribute to initiatives to preserve the world's **richest ecosystems:** forests, with in particular the REDD-plus negotiations, under the Convention on Climate Change; coral reefs, with France's joint secretariat with Samoa until 2011 of the International Coral Reef Initiative (ICRI).

Objective 4

Strengthen protection of marine biodiversity, especially in the deep seas; advance the work on the status of possible deep-sea protected areas.

Objective 5

Raise public awareness, with information campaigns in France and internationally. A number of operations of this type are planned, particularly in partnership with Unesco.

Mbandaka (Democratic Republic of the Congo) - © Nicolas Teindas

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The Ministry of Foreign and European Affairs and the Directorate General of Global Affairs, Development and Partnerships

The missions of the French Ministry of Foreign and European Affairs are:
- summarize information on the changing global economy and put it into perspective, prepare decisions on the French government's foreign policy,
- draft France's foreign policy,
- coordinate France's international relations,
- protect French interests abroad and assist French nationals outside France.

The creation of the Directorate General of Global Affairs, Development and Partnerships (DGM) in April 2009, as part of the reform of the Ministry, enables diplomacy to anticipate, identify and respond to the challenges of globalisation more effectively.
Confronted with global issues that have a direct impact on the lives of our citizens and multiple actors, the Ministry intends, through the DGM, to emphasise the need to tackle global issues, in the firm belief that every major economic, cultural and societal issue calls for collective action with more outward focus, anticipation, interministerial coordination, responsiveness, interdisciplinarity and a resolutely European approach.

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