

CIF 2013-2016

Biodiversity

CROSS-SECTORAL INTERVENTION FRAMEWORK 2013-2016

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If ecosystem disturbance reaches certain levels or tipping points, there is a high risk that a dramatic decline in biodiversity and the degradation of a large number of ecosystem services will occur. Poor populations will be the first to bear the consequences of such changes and they will also be the most affected. Ultimately, though, it is all layers of society and all communities that will suffer.

The measures which will be adopted over the next decade or two and the direction that will be followed as part of the Convention on Biological Diversity will determine whether the relatively stable environmental conditions on which human civilisations have depended for the last 10,000 years will endure beyond this century. If we do not seize this opportunity, a number of the Earth's ecosystems will change in unprecedented ways and whether they will have the capacity to meet the needs of current and future generations is highly uncertain.

On average, the number of wild vertebrate populations worldwide has dropped by one third (down 31%) between 1970 and 2006. The sharpest declines have been recorded in tropical ecosystems (-59%) and freshwater ecosystems (-41%).

Global Biodiversity Outlook 3 (2010)
<http://www.cbd.int/gbo3/>

Summary

Despite the complexity inherent in the diversity of living creatures and the ecosystems they form, and the difficulty of quantifying the benefits of biodiversity, the Convention on Biological Diversity is evidence of a growing planetwide awareness of the current degradation of global biodiversity, which is rapid and often irreversible. It destabilises all economies, increases their vulnerability to climate change, and hampers future development. The 11th Conference of the Parties to this convention held in Hyderabad in 2012 ended with specific financial commitments, which France will meet in full. The Agence Française de Développement (AFD) will contribute to these commitments as part of its mandates.

The regions where AFD carries out its work, including French Overseas Departments and Collectivities, are home to a wealth of biodiversity that is not just locally and regionally important, but globally so. Helping preserve it falls under AFD's mandates for «Global Public Goods» and «Development».

The diversity and health of ecosystems, as well as the priority given to them, will be decisive in determining future pathways to growth in all of these countries and regions. In order to be sustainable and inclusive, the economic growth that they achieve and need must put to use all services that ecosystems provide: ① production in the form of agriculture, livestock, fishing, lumber, and medicines; ② stabilising and regulating the climate such as the water cycle, protecting against natural catastrophes or mitigating their effects, neutralising pollutants, etc. ③ well-being and cultural identity.

These services provided by ecosystems are particularly important to the planet's poorest regions. The daily life of 3 billion people living on less than US\$2 per day is directly affected by the degradation of the living natural resources from which they draw a substantial share of their income. As they often possess traditional knowledge of and historical rights to those natural resources, these populations can play a key role in preserving and harnessing them in

sustainable ways, if given development opportunities and responsibilities.

Furthermore, in the places where AFD does its work, climate change and biodiversity are directly correlated. Climate change destabilises ecosystems by leading to rapid changes in plant life, to the point of desertification. These changes disrupt the food chain or reproductive relationships between flora and fauna. As these relationships are the by-product of a slow process of coevolution, such changes affect agricultural production. Climate change causes ocean acidification, altering many marine food chains that supply dietary staples to coastal populations. The destruction of certain ecosystems, particularly tropical forests, is a major source of greenhouse gases. Reducing woodland or wetland areas increases the effects of climate change. Conversely, healthy ecosystems that are able to evolve make it easier to adapt to climate change. This holds true for the gradual effects of climate change on temperature, rainfall and waterway patterns, and sea levels. It also holds true for the ability to recover from catastrophes, such as droughts, floods, and cyclones.

The strong economic and demographic growth in the areas where AFD works goes hand-in-hand with heavy pressure on natural resources. For this reason, infrastructure development, industrialisation, urbanisation, and the expansion of farmland may cause the irreversible loss of ecosystem services through destruction, degradation, fragmentation, pollution, or human appropriation. These losses can often be avoided or greatly reduced. Assessing them makes it possible to take appropriate measures and offset the inevitable losses.

Activities that rely on biomass production (farming, forestry, livestock, energy, cosmetics and pharmaceuticals, textiles, etc.) particularly depend on the biosphere (water, soil, air, pest and predator balances) functioning properly. Such activities are at the core of this issue. If performed unsustainably, they contribute to ecosystem degradation. Conversely, adopting intensive, environmentally friendly technical processes that rely on optimising photosynthesis

AFD's work will be to make the conservation and sustainable use of ecosystems an inclusive driver of growth and a component in sustainable development.

and atmospheric nitrogen fixation and positive interactions between the plants, including trees, that grow on farmland in the agricultural landscape will mean these processes help protect biodiversity or even expand it.

Consequently, making the conservation of ecosystems an essential element of development strategies, industrial policies, and investment programs appears to be a must for protecting biodiversity itself, for fighting climate change, and for inclusive, socially cohesive sustainable development.

AFD's financial commitments to biodiversity, all financial products included, have gradually grown over the past two decades to about €100 million per year beginning in 2010. In addition to initial support for implementing sustainable policies for managing tropical forests (particularly plans for managing forests in the Congo basin) and fisheries (West Africa, Madagascar), support was extended in 2003 to expanding and improving management of protected areas (Madagascar, Mozambique, Morocco, Kenya, Central Africa). With time, biodiversity has also become understood as an issue that cuts across AFD's other areas of work (energy, transportation, agriculture, water management), just as climate has been. Partnerships have been created over this period with nature conservation organisations, scientific research centres, and relationships with other financial institutions in this sector.

This Cross-sectoral intervention framework draws lessons from this experience and proposes both a change in AFD's commitments and an expansion of same. This is AFD's contribution to the international component of the French National Strategy for Biodiversity and its contribution to the international commitments made by France under the Convention on Biological Diversity.

Ultimately, the purpose of AFD's work will be to make the conservation and sustainable use of ecosystems an inclusive driver of growth and a component in sustainable development.

The actions, projects, and programs financed by AFD will be aimed at:

- ➊ Protecting, restoring, managing, and developing ecosystems and fairly sharing the benefits of their development;
- ➋ Incorporating the conservation of ecosystems in all industrial development policies;
- ➌ Strengthening partnerships between French

biodiversity players, international players, and national, public, private, scientific, and organisational players in the countries where AFD operates.

In 2013-2016, the average annual volume of AFD's weighted financial commitments will be at least €160 million, compared to €80 million over the 2006-2010 reference period adopted by COP 11 in Hyderabad.

AFD's financial commitments will be divided between objective 1 (75%, or €120 million), objective 2 (21%, or €34 million) and objective 3 (4%, or €6 million). Given the different partnerships with countries where AFD operates, as defined by the July 2013 CICID meeting, those commitments will primarily benefit sub-Saharan Africa and the Mediterranean.

The first objective involves continuing and increasing AFD's work in conserving, managing, restoring, and using resources, ecosystems, and the ecosystem services that rely on them. To further that objective, AFD will support actions devoted to managing protected natural spaces, making sustainable use of biological natural resources (forestry, fishing, hunting) and harnessing biological resources (ecotourism, food-gathering).

Special attention will be paid to the institutional, social, and technical dynamics specific to each territory or resource. They must be performed by local stakeholders, the people who live in those territories and who derive some of their resources from the land and have historical claims to it, as well as economic players if need be. In the long term, securing the preservation of a natural environment, improving the well-being of the people who depend on it, and strengthening their ability to manage their land together are inseparable. Additionally, sharing the fruits of sustainable ecosystem development through ecotourism, the sale of locally harvested products, fishing, forestry, and hunting must be at the core of any ecosystem protection action. This is why ecological management of a biological resource and the ecosystem that produces it must be built by and for the owners and users of the land in question, taking into account their legitimate aspirations for economic well-being and social, political, and cultural recognition as well as aspects of economic and institutional viability.

These actions must result in:

- Expanding and improving the protection of ecosystems and restoring them, with the help and for the benefit of local residents,
- Making use of biodiversity for the benefit of local residents through the development of sustainable commerce,

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- Building sustainable funding mechanisms for biodiversity protection institutions,
- Strengthening the policies and capabilities of institutions tasked with protecting biodiversity.

In its dialogue with its partners, AFD will take care to focus its efforts on the ecosystems that are the most biodiversity-rich, most threatened, and most helpful in fighting poverty and conducive to sustainable development dynamics.

Through its second objective, AFD will incorporate biodiversity protection into the development of sectors that have the most potential impact on biodiversity.

Biodiversity is diminished both by a dearth of land with protected status and by the pressure exerted by all human activities if pursued without considering their potential impact on biodiversity. Incorporating biodiversity protection in sectoral policies (economic, social, territorial, etc.) makes it possible to avoid the most destructive options, reduce impacts, and if necessary, offset the inevitable damage and restore degraded ecosystems.

Furthermore, it helps to be mindful of the opportunities that biodiversity offers for sustainable development in certain sectors: farmed biodiversity, the biodiversity of transformed landscapes, the protection of watersheds and water tables, urban biodiversity, companies that enhance biodiversity, etc. AFD Group will incorporate these principles in all of its operations, particularly those related to agriculture, energy, transportation, mining, and urban development.

The planned actions will make it possible to:

- Increase the inclusion of biodiversity as a concern in all phases of preparing and implementing projects supported by AFD, in partnership with those projects' owners,
- Facilitate private investment that sets out to preserve or improve biodiversity,
- Institute mechanisms to pay for the use of ecosystem-based services by the companies that benefit from them.

To that end, AFD Group will ensure that none of the projects that it funds, regardless of who has planned them, causes any net loss in the biodiversity of critical habitats. Critical habitats are defined as ① areas with a high biodiversity value; ② areas that are particularly important for endemic or limited-range species; ③ critical sites for the

survival of migratory species; ④ areas that are home to a significant population of congregatory species; ⑤ areas that have unique combinations of species or contain species that came to coexist through key evolutionary processes or that provide key ecosystem services; ⑥ land whose biodiversity is socially, economically or culturally important to local communities in a significant way. Primary forests or high-conservation-value forests are considered critical habitats.

Through its third objective, AFD aims to play a role in mobilising international efforts to protect biodiversity in the areas where it carries out its work, particularly sub-Saharan Africa, through actions aimed at:

- Strengthening the capabilities of those in the global South regarding issues under negotiation and in biodiversity protection policies, whether they are government agencies, organisations, scientific centres, or in the private sector;
- Building working partnerships with several major international nature conservation organisations, the IUCN and NGOs for their ability to innovate, mobilise resources, share experience, and facilitate dialogue between stakeholders and with governments and businesses;
- Playing a part in the international development of French biodiversity expertise, so that AFD's partners can learn skills developed in mainland and French Overseas Departments and Collectivities by government agencies, local authorities, research facilities, businesses, teams of scientists, conservation organisations, and international solidarity groups in all institutional, scientific, technical, and environmental education fields.

Through research and assessment activities conducted jointly with experts from outside AFD and shared with all of its partners, the purpose of knowledge production will be to:

- Better understand the functions and value of biodiversity and environmental services through work aimed at measuring the impact of biodiversity loss, economic assessments of the benefits generated by preserving biodiversity, and estimating the social value of biodiversity, particularly for the world's poorest people;
- Understanding the conditions under which public policies prove environmentally effective, through work dealing with mechanisms for sustainably funding the conservation of biodiversity and the institutional economics of biodiversity;

- Improving the quality and scalability of projects supported by AFD through ① historical assessments (lives-stock raising, agro-ecology, ESMPs, marine and coastal protected areas, participatory development, etc.) and ② research (pro-biodiversity economic incentives, green financing, interlocking aspects of governmental, community-based, and private environmental PAs, etc.).

This intellectual output may be distributed broadly. Holding seminars and using AFD's publishing resources for that purpose are the immediate goals driving its intellectual activity.

To achieve the objectives of the Cross-sectoral Intervention Framework, AFD's internal mobilisation will grow, in addition to the intellectual output mentioned above and the activities that are part of objective 2, through ① a training plan covering objectives 1 and 2 of the CIF, ② an internal electronic community centred on biodiversity, ③ the production of operational industry outlines (forests, marine resources, protected areas) and ④ the designating of biodiversity contacts in certain structures (Strategy, External Relations, Research, Assessment, Environmental and Social Support, Geographic Departments).

The implementation of the Biodiversity CIF will be tracked by an internal committee. An annual report will be presented to AFD's divisions. It will particularly include a look back at:

- New financial commitments and withdrawals made for each region and each financial product,
- A summary of the indicators provided by on-going dedicated projects, in aggregate form (areas subject to biodiversity protection) and in the form of a detailed analysis,
- A summary of how biodiversity conservation objectives are being taken into account in all of AFD Group's work.

This annual report will be presented to stakeholders and released to the general public. An outside audit will be offered in 2017.

2

Biodiversity & development: compatible objectives

Biodiversity & development: compatible objectives

2.1 | Defining biodiversity

The Convention on Biological Diversity (CBD) signed in Rio in 1992 defines biodiversity as «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.» Biodiversity includes the diversity of genes, species, and ecosystems, as well as their interactions with one another.

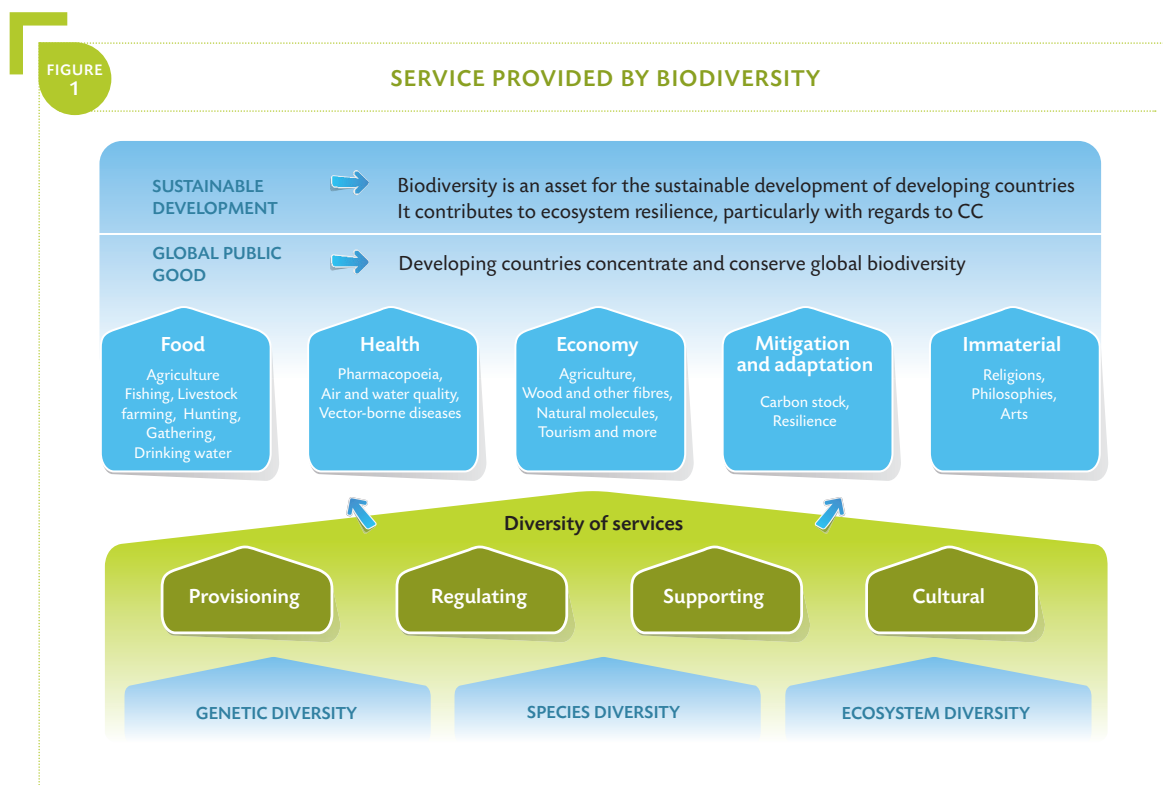
Appendix 7 gives an overview of the major biomes.

With respect to the mandates of AFD Group, the most helpful approach to biodiversity is an approach based on ecosystems, land, and landscapes, concepts which make it possible to holistically treat the diversity of creatures and their interactions, including with human beings.

The contribution of ecosystems to the goods and services required of human activities are called services provided by ecosystems, ecosystem services, or environmental services (AFD 2011, TEEB 2010, MEA 2005).

The Millennium Ecosystem Assessment proposed a classification of ecosystem services into four categories:

- **provisioning services:** These are services that serve as the basis for the production of all natural resources directly used by humans, such as food crops, fish, fibres, wood, game meat, water, medicines, etc.
- **regulating services:** These are the climate-stabilising and -regulating properties that ecosystems and the biosphere in general have (carbon sequestration, etc.), water and air purification and regulation, protection from natural disasters or mitigating their effects, recycling waste and neutralising pollutants, polymerisation, protecting crops by predators of pests in the context of complex food chains, etc.
- **cultural services:** These are ecosystems' spiritual, religious, recreational, and aesthetic contributions to the wellness and identity of human societies.
- **supporting services:** Also known as functions, they



are necessary for the production of regulation, cultural, and production services owing to their contribution to the makeup and retention of soil, the nutrient cycle, water, carbon, and oxygen, to the primary production of biomass and habitats, etc.

Ecosystems provide services

- ① directly to the local populations who collect natural resources
- ① to the neighbouring populations, who benefit from regulation services (e.g. for water)
- ① to the world population, via the globalisation of raw material trade, the effect on climate through carbon capture, and the preservation of world heritage.

Just as with climate where the fight against pandemics, biodiversity is a global public good (GPG), meaning that it is a resource, good, or service that benefits everyone and whose degradation affects all of humanity.

Although most ecosystems are managed locally, through traditional rules and formal rights and governed by the rule of national sovereignty over natural resources, the regulation of uses through local rules and practices (OSTROM, 2008) may be constrained by the limited ability of those local players to withstand globalisation or the loss of local control over the use of biological resources. This situation justifies national and international collective norms. Consistency and cohesion between these rules and levels is therefore essential, as the tensions and dynamics of appropriation and exclusion are substantial. Strengthening institutions that are needed to manage shared resources, including those that must possess all the knowledge needed to make decisions, is a must. Avoiding the «tragedy of the commons» requires a lot of social capital.

The inherent complexity of biodiversity makes it impossible to adopt a single unit of account. Although tonnes of CO₂ equivalent makes it easy to understand climate issues and allows choices to be made across different geographic areas, there is no single, simple tool for measuring biodiversity. This makes it hard to have criteria for assessing, tracking, and quantifying the erosion of biodiversity and its impacts, and therefore criteria for efficiency. It makes an international financial effort more difficult.

We have a limited understanding of biodiversity. Today, around 1.8 million species have been described, whilst the total number of existing species is estimated to be 10 to 30 million. This justifies applying the precautionary principle and not ignoring any category of biodiversity, even the most apparently «ordinary» ones (microorganisms, common plants and insects, etc.). Recognising the limits of our understanding of ecosystems has brought about

the principles of dynamic ecosystem management, which involves going beyond the approach of protecting the «islands of biodiversity» represented by protected areas in order to ensure dynamic management of an interconnected network of ecosystems – or ecosystem grid – at different geographic scales, as well as considering any developed land being used by humans to be a biodiversity space, within which biodiversity must be protected, restored, reconstituted, and even produced (planting hedges, trees, grass, etc.).

Biodiversity is subject to threshold and irreversibility effects. They are caused by the accumulation of negative effects on ecosystem over time and across space. They are the result of exceeding a certain «load capacity» that the ecosystem has, leading to the loss of its ability to recover over the very long term, on the scale of several human generations. Research programs have attempted to better identify those thresholds and better understand the cascade effects that have led to the collapse of ecosystems and their productivity.

Finally, the economic value of the goods and services provided by ecosystems is not (or rarely) counted in economic growth. The global contribution of ecological services, which are not reflected in GDP, is estimated to be 17 to 58 billion euros a year (including 5 to 8 billion in direct biological resource contributions). These ecosystems produce about one third of all of the global economy's raw materials. Although the importance of biodiversity to growth is scarcely recognised, the economic profitability of investments and conservation is just as little-known. However, protected areas annually contribute \$5 billion to the global economy (TEEB, 2010). Additionally, the transformation of open farmland (wide, terraced hedges, agroforestry, tree-filled parks) has direct economic effects on agricultural productivity. Just one-thousandth of this amount is currently being spent on managing ecosystems, though at least one-hundredth would be needed in order to manage them properly.

2.2 | Biodiversity, a development issue at a crisis point

70% of the world's poorest populations live in rural areas and directly depend on biodiversity for their survival and well-being. In the Sahel, for example, trees supply more than 70% of the populations' energy requirements.

Yet the capacity of ecosystems to supply provisioning services (food, natural resources, fresh water, or medicinal resources for example), regulating services (climate, soil, prevention of erosion or pollination), or cultural services (recreation, tourism, knowledge production) is now under threat: According to the Millennium Ecosystem Assessment¹, in 2005 sixty per cent of these ecosystem services were degraded.

Over the last 50 years, humans have transformed the biosphere like never before in the history of mankind, with an average of 25 to 35% of the net primary production of terrestrial ecosystems being harvested currently (Haberl et al. 2006; Imhoff et al. 2004; Vitouzek 1986). During this period, the global consumption of fish, meat, cereals and wood has multiplied by 2.44² on average. This rate of growth is slightly faster than that of the world population, which grew from 3 billion to 6.9 billion within the same period (WBG 2009)³.

At the current rate, two thirds of species will have disappeared by 2100.

This erosion of biodiversity is due to an increase in the following pressures:

→ the degradation of natural environments and changes in land use (e.g.: the forest is disappearing at a rate of around 0.5% per year (9.8 million hectares per year), which represents more than one fifth of the area of Metropolitan France);

→ the increase in chemical and organic pollution (e.g.: the considerable effects of Persistent Organic Pollutants (POP)⁴ on animal species and human health; the collapse of bee populations, which jeopardises the pollination of numerous cultivated plants);

→ the overexploitation of natural resources (e.g.: 57% of fish stocks are fully exploited, and 30% of stocks worldwide are now overexploited⁵);

→ the deliberate or accidental introduction of invasive species (e.g.: the introduction of weeds and pests, particularly in insular areas, is one of the factors responsible for environment degradation and it is made worse by increased international trade and the introduction of algae and bivalves transported by ships);

→ desertification resulting from human activities (deforestation, overgrazing, ploughing) and global warming;

→ global warming.

Biodiversity loss also has an economic cost: 14 trillion⁶ euros by 2050, according to the report entitled *The Economics of Ecosystems and Biodiversity (TEEB 2010)*⁷. And 80% of this loss of biodiversity directly affects the subsistence and daily life of the 3.2 billion humans who live on less than \$2 per day. Indeed, natural capital represents one third of the national wealth of poor countries. For example, almost half of Mozambique's total wealth⁸ comes from natural resources. Their degradation costs Ghana one percentage point of growth each year.

Although recognising the economic value of biodiversity can be an argument in favour of implementing policies aimed at improving its management and its protection, it is not sufficient for understanding ① how ecosystems

1 The Millennium Ecosystem Assessment (MEA) is a report published in 2005 by the UN. It encompasses the work of more than one thousand scientific experts who assessed the health of ecosystems around the world, established a typology of the services provided by ecosystems, and put forward recommendations for the sustainable management of ecosystems. <http://www.unep.org/maweb/fr/Synthesis.aspx>

2 MEA.

3 WRII, WBG.

4 Persistent Organic Pollutants are organic substances that are (i) persistent (the substance breaks down very slowly), (ii) bioaccumulative (the substance "accumulates" within living organisms), (iii) toxic (exposure to the substance is likely to cause harmful effects), and (iv) mobile over great distances (high levels of concentration far from the discharge points – in the Arctic region, for

example). POP's are governed by the Stockholm Convention and the Aarhus Protocol or POP Protocol of the Convention on Long-Range Transboundary Air Pollution.

5 FAO, *World Review of Fisheries and Aquaculture*, 2012.

6 Trillion = million million.

7 *The Economics of Ecosystems and Biodiversity*, <http://www.teebweb.org/>

8 Ollivier et al., 2009, AFD.

work and what their key roles are in producing services, and ② how biological diversity contributes to ecosystem resilience, or in other words to the capacity of ecosystems to continue to provide services over time, in situations of shock and degradation, regardless of the reasons for this degradation.

Consequently, any strategy in favour of biodiversity cannot limit itself to elaborating policies relating to the environment and the protection of biodiversity, it must also propose measures in sectoral policies such as those relating to agriculture, fishing, forest, energy, the extractive industries, transport, tourism and health.

2.3 | Biodiversity and climate change

Biodiversity and climate processes are linked via the cycles of water and carbon. They are interdependent and their equilibrium at both the local and international level is fragile. Thus, climate is at the root of today's biodiversity, and this biodiversity contributes to regulating climate.

The diversity of current ecosystems is in large part due to climate and to the changes the Earth has undergone over the course of its history, including previous collapses in biodiversity, changes which enabled animal and plant species to build relationships and evolve together in order to adapt to the environments in which they live. Conversely, the diversity of plant species and the distribution of the different types of landscapes directly influence local climate via evapotranspiration and plant height, amongst other things. Moreover, biodiversity also influences global climate regulation through, for example, plants which absorb carbon dioxide and produce, maintain, and stabilise atmospheric oxygen.

Climate change and biodiversity erosion have mutually reinforcing effects.

Climate change, which is associated with changes in temperature, precipitation, and water pH, worsens biodiversity erosion in several ways:

- ➔ invasive species;
- ➔ altering the lifecycles of fauna and flora (periods of migration, reproduction, flowering, egg-laying, the food chain, etc.);
- ➔ altering habitats due to the migration of plant species that follow the isotherms and isohyets that suit them;
- ➔ breakdown in the as-yet-largely-underestimated complex, symbiotic or commensal relationships between animal and plants species which, over the course of a long and common evolution, have established relationships that are necessary to their reproduction or survival (pollination of certain plants by insects, pest/predator equilibrium, etc.);
- ➔ ocean acidification.

Ultimately, certain species will not succeed in adapting to climate change and, as a result, they risk disappearing and leading others to extinction. Although climate change is obviously not the only culprit, and deforestation and/or intensive farming are often also involved, it is recognised as the main influencing factor for the next 50 years (MEA, 2005).

Conversely, changes in biological diversity have effect on the climate owing to the height of plants, changes in water and heat between plant life and the atmosphere, the albedo, etc.

The combination of these factors is therefore likely to accelerate the climate change that can already be observed. This dual process highlights the need for an integrated approach to biodiversity in climate change adaptation and mitigation strategies.

In sum,

- ① **climate change weakens ecosystems** through fast changes in vegetation; the breakdown of the relationships between plant and animal species – relationships which are the result of slow co-evolution; and ocean acidification;
- ② **ecosystem destruction results in greenhouse gas emissions:** deforestation and forest degradation; changes in land use; destructuring of soil and lands cultivated using bad farming practices;
- ③ **protecting ecosystems and helping them to evolve (reforestation, agroforestry) will facilitate adaptation to climate change** by protecting against the effects of global warming (wind, rain, drought, sea level rise) and maintaining the resilience of ecosystems and their ability to adapt by their own means.

When the most vulnerable populations of developing countries are those who are the most exposed to the consequences of climate change and whose life most relies on natural capital, we conceive that biodiversity, climate and development must be *considered simultaneously*.

2.4 | Biodiversity and economic growth

All human activities, particularly during periods of strong economic and demographic growth, which is the case in the countries where AFD carries out its work, may cause serious irreversible damage to biodiversity.

There are two major types of activities:

- business activities that **cause the destruction of natural environments or generate pollution** (of air, water or soil), and lead to the degradation, fragmentation or destruction of habitats or ecosystems. The challenge is to promote approaches which require little space and are less polluting. Biodiversity conservation will have to be included in sectoral policies and programmes.
- business activities that **use biological resources as the basis of their production**: paper and wood industries, cosmetics and pharmaceutical, textile industries, etc. If these activities are managed irresponsibly, there is a risk of overexploiting the ecosystems and biological resources from which their raw materials are harvested, and these productive ecosystems could even disappear. The goal is to promote processes that consume fewer resources (more efficient) and to encourage the procurement of biological resources produced in a sustainable manner.

Both points deserve to be examined in greater detail in the following sectors: Drinking and farming water infrastructure, sanitation, urbanisation, transportation and energy infrastructure, industrialisation, mining and quarrying, tourism, etc.

2.4.1 | Agriculture

In this sector, which includes both plant and livestock production, the issues for the plan involve 9 billion people to have enough to eat well without increasing their ecological food footprint. This involves producing more without expanding farmland to the detriment of ecosystem services and without negative environmental externalities, as well as losing less in the field and after harvesting, wasting less in food processing, and for some, changing dietary behaviours.

Furthermore, climate change plays a major role in the dynamics and productivity of developed, human-managed ecosystems (soil, prairies, hydrosystems, etc.) and in the health of plants and animals, particularly due to the role

of pollinating insects and those that carry diseases or act as pests, which are very sensitive to the climate.

This makes it essential to develop agricultural practices that are founded in biodiversity, from plots of farmland to agricultural landscapes, which must be a mosaic of environments (genetic diversity, within the species or combinations of species, hedges, agroforestry). This diversity of living creatures serves as insurance against risks, and encourages flexibility and responsiveness when faced with shocks. The reintroduction or invention of more productive agricultural practices based on the diversity of crops or human-managed plants must be considered.

At the same time, credible environmental systems for certifying farm products, such as those defined jointly between nature conservation NGOs and industry partners, must be promoted among both consumers and producers in order to encourage the rapid adoption of environmental and social best practices.

2.4.2 | Transportation, energy, mining and urbanisation

Human appropriation and fragmentation of natural habitats, owing to the expansion of cities, the development of transportation infrastructure, and extraction, particularly of fossil fuels, hydroelectric development, the installation of power lines and the production of biomass-energy (wood, biofuels), nuisance management, pollution and effluents related to transportation and urban areas, require the application of principles of avoiding, reducing, and offsetting the inevitable damage to biodiversity, with a constant effort to improve national regulatory frameworks and their implementation.

2.4.3 | Water

Les prélèvements d'eau dans le milieu naturel (pour l'agriculture, l'industrie, la consommation, les loisirs), la protection des milieux humides, le traitement des eaux rejetées dans les milieux naturels et la prévention des pollutions diffuses ou ponctuelles nécessitent des approches de gestion intégrée de la demande en eau au niveau des bassins versants et leur aménagements en mobilisant des espaces naturels forestiers et prairiaux, la protection efficace des périmètres de captage.

2.4.4 | Health

Ecosystem quality affects air and water quality, the risk of new vectors and pathogens emerging, as well as food diversity and quality. Natural pharmacopoeia plays a very important role for many populations in the countries where AFD carries out its work and for the pharmaceutical industry, and constitutes a wellspring of innovation for the pharmaceutical sector. Consequently, a long-term health policy must incorporate environmental preservation in general and biodiversity in particular.

2.4.5 | Tourism

The development of sites for accommodation and activities, and procurement for hospitality, catering and craft made from raw materials of biological origin can all have consequences on biodiversity. These impacts can be mitigated through ecodesign, site management, compliance with environmental standards, procurement from certi-

fied sustainable sources, etc. Ecotourism can contribute to the conservation of protected natural environments as long as its inclusion in the region's conservation and development objectives is properly managed.

2.4.6 | Other productive sectors

One of the main threats to natural capital stems from the industrial and service sectors, which use raw materials of biological origin. This can be an opportunity if harvesting limits are respected. Products must be certified according to their efficient use of resources. The obligation to state the legal origin of wood in order to access the European market (FLEGT action plan) demonstrates that traceability measures are applicable on a large scale.

2.5 | Biodiversity and Gender

In most countries where AFD operates, women are very close to nature, which is of great economic importance to them.

Due to their responsibilities with regards to feeding their family (gathering of condiments, roots, cereals, wild fruits, but also hunting, fishing, and rearing small animals), making clothing (dyeing, plant fibre, silk), the home, health (herbs), cosmetics and soaps (shea), gathering firewood and water, they utilise a large number of renewable natural resources through gathering activities for their own consumption but also to sell at the local markets. Moreover, the cultivated areas that are managed by women are often the places with the most diversity (home garden) and they are remarkably productive.

These activities are all the more important because women have less access to factors of production such as land or to paid employment so they must rely on these activities alone to survive.

Even though their use of natural resources generally maintains the natural equilibrium, they can sometimes be compelled to place a heavy strain on nature (wood, fodder).

Consequently, any degradation of the ecosystem in which these women live (polluted water, degraded forest) can have significant impacts on their life, their health and their social standing: loss of income, more time allocated to certain tasks such as collecting wood or water. This has direct consequences on the health of mothers and children (tiredness, time spent), as well as on the schooling of girls, who are expected to help their mothers.

Women are not only highly dependent on natural resources; they also hold often very precise knowledge about biodiversity and this knowledge can be put to good use.

Which is why when it comes to biodiversity protection measures, women must be involved in all the analysis, design and implementation phases of projects, so that these may contribute to their success and they may benefit fully from them.

In this respect, special attention must be paid to women's involvement in bodies that manage public goods (property, natural resources) and their responsibilities in participatory structures (water management).

2.6 | Tools for biodiversity protection in developing countries

2.6.1 | Environmental education

The capability of societies to limit the environmental changes that they generate depends greatly on a universally shared accurate view and understanding of the causes and consequences of environmental degradation. Awareness and education of the causes of degradation and the loss of productivity in natural environments as well as possible solutions is therefore essential in order to tackle the issues of biodiversity erosion on the local or national level.

2.6.2 | Environmental standards and regulations

These related particular to chemical and organic standards regarding water quality and waste discharge into natural environments, the maximum permissible levels in terms of environmental quality (air pollutants, nitrates and phosphates, organic pollutants, endocrine disruptors, etc.), the legal codification of peoples' environmental responsibility and the obligation to limit impacts (environmental impact studies, and measures to avoid, mitigate, and offset inevitable damage to biodiversity). Environmental law in countries where AFD carries out its work often suffers from incomplete development, obsolescence, and most of all poor compliance due to the combined laxness of environmental protection agencies, the capabilities of judges, and criminal penalties for environmental damage, as well as the lack of whistle-blowers among public servants and scientists.

To that end, AFD will support strengthening the public power of civil servants and environmental, biological, and ecotoxicological experts, as well as building awareness in the private sector. AFD will ensure that project owners comply with the principles of the Aarhus Convention. These principles, which are accessed information, the participation of the public in the decision-making process, and access to environmental justice, derived from Principle 10 of the Rio Declaration, which states: «Environmental issues are best handled with participation of all concerned citizens, at the relevant level.» At the national level, each individual shall have appropriate access to information concerning the environment that is held by public authorities, including information on hazardous materials and activities in their communities, and the opportunity to participate in decision-making processes. States shall facilitate and encourage public awareness and participation

by making information widely available. Effective access to judicial and administrative proceedings, including redress and remedy, shall be provided.

2.6.3 | Biodiversity initiatives

1. Protected areas

Protected areas (AP), as well as biospheres, are a highly effective tool for preserving critical ecosystems. The six categories of protected areas defined by the IUCN make it possible to adapt the level of protection to the type of ecosystem and the human activities that depend on it.

Likewise, biosphere reserves are sites designated by national governments and recognised by UNESCO as part of its Man and the Biosphere (MAB) Programme for promoting sustainable development based on the joint efforts of local communities and the world of science. The purpose of these reserves is to combine the conservation of natural and cultural diversity with economic and social development.

These currently cover 12.7% of the planet's land above sea level, or in other words 17 million square kilometres, and only 1.6% or 6 million square kilometres of seas and oceans. They present major challenges for economy and heritage, both at the local level (traditional practices and uses, sustainable production and use of resources, services provided by the ecosystems, quality of sites) and the global level (conservation of a global public good, science, world tourism, universal value of sites). They can also be tools for local development, combining sustainable resource management, activities that generate revenue, and promotion of the local cultural heritage. They contribute to improving local and national governance, because they require negotiation and the implementation of lasting compromises between the social, economic and environmental processes within a same region. "Strict nature reserves", in which no activity is permitted, represent less than 1% of all protected areas. The major goals, as outlined in Aichi biodiversity Target 11, are to extend the network of protected marine and coastal areas in order to cover 10% of them by 2020 (and 17% of terrestrial areas); to improve the effectiveness of the management of these areas; to increase their economic benefits; and to improve the financial mechanisms of these natural environments (budget allocations and the protected area's own revenue, sustainability, efficiency). These goals are particularly crucial for Sub-Saharan Africa and are

combined with current thinking regarding the conditions for effective aid in this sector, which supports long-term support mechanisms.

2. Forest conservation, management and logging:

The conservation of the three major tropical forest basins (Amazon, Congo Basin and South-East Asia) and the drastic reduction of logging rates by 2020 are undoubtedly one of the major challenges for conserving global biodiversity. The fight against the illegal timber trade and deforestation, setting up protected forested areas and ecological corridors, acknowledging the causes of deforestation (agriculture, mining, etc.), and the widespread adoption of sustainable forestry methods should be included together.

The questions of forestry governance, how it is funded, tax and raising public and private resources for these activities, as well as the fair and equitable sharing of products locally, are essential. Matters relating to access rights, transparency of contracts and concessions, and reco-

gnising local practices and laws are also crucial for establishing lasting solutions.

The exploitation of non-timber forest products also represents significant opportunities for local development. The legality and certification of forest-based products are a sustainable development tool that is now a condition for accessing certain markets.

Alongside these measures, the implementation of a more fluid voluntary forest carbon market, as well as the effective raising of funding for avoided deforestation, are two factors that could prove to play a determining role in stopping deforestation by 2020.

3. Preserving and sustainably managing fishery resources.

95% of the 110 million fishermen on this planet live in developing countries. Fish and fishery products are consistently one of the world's most traded staple foods. In terms of value, they represent approximately 10% of total agricultural exports and 1% of global commodity trade⁹.

TABLE 1: IUCN PROTECTED AREA CATEGORIES

IUCN category	Name	Characteristics and management objectives
Ia	Strict nature reserve	Protected area managed mainly for scientific purposes or for protecting wild resources
Ib	Wilderness area	Protected area managed mainly for the purpose of protecting wild resources
II	National park	Protected area managed mainly to protect the ecosystems and for recreational purposes
III	Natural monument	Protected area managed mainly to protect specific natural features
IV	Habitat/species management area	Protected area managed mainly for conservation purposes, and management includes active interventions
V	Protected landscape/seascape	Protected area managed mainly to protect the landscapes or seascapes and for recreational purposes
VI	Protected area with sustainable use of natural resources	Protected area managed mainly for the sustainable use of the natural ecosystems

⁹ FAO, 2012.

¹⁰ P. Chardonnet, 1996.

Globally, it is estimated that approximately 30% of fish stocks are overexploited (there was a significant increase in the 1970s and 1980s in particular), with an alteration of the trophic chains, the consequences of which include a sharp reduction in secondary consumers. The uncontrolled growth of fish-farming as an alternative to fishing may be causing an overuse of fragile species and overfishing among certain «fodder» stocks of fish. Less than 2% of marine areas (compared to more than 12% of land areas) are protected, and 4% of coastal areas are protected worldwide (New Zealand: 70%; Mediterranean: less than 2%). Meeting these challenges involves implementing:

- ① sustainable fishing policies based on scientific data regarding the dynamics of various stocks and resource-sharing, on a level appropriate to the stocks (local, national, subregional, and international);
- ② environmental fishery certification (via MSC, for example) and fish-farming certification (ASC, for example);
- ③ the development of protected marine areas.

4. Preserving and sustainably managing wildlife resources and hunting

This “forgotten resource”¹⁰ is the main daily source of protein for nearly half a billion people worldwide and particularly in the forests and savannahs of Africa. This resource is subject to three different types of pressure. First, the destruction of natural habitats, primarily through deforestation. Next, the lack of bag limits, particularly in sub-Saharan Africa, where hunting police and lease agreements, when they exist, are underfunded. Finally, the illegal trade of wildlife is perpetrated by international criminal networks with branches in the animals’ countries of origin, transit, and destination. Large-scale poaching, which endangers African species in particular (elephants, rhinoceros, gorillas, cheetahs, etc.) requires an international effort to influence its sponsors. In countries of origin, political commitments, including sub-regional ones, must be supported.

5. Agro-ecological intensification of cultivated areas:

Changing a number of agrarian systems or productive landscapes to forms in which biodiversity would increase significantly is desirable for the productivity of agriculture, the reduction of its dependence on chemical inputs and its adaptation to climate changes. Reforesting cultivated areas (hedges, gallery forests, agroforestry) whilst increasing the diversity of trees and shrubs present, makes it possible to increase biomass production and guarantee an animal biodiversity (insects, birds and rodents) that is favourable to pollination and the protection of crops.

2.6.4 | Land use and organising space

Planning how to use natural resources and making contracts between land stakeholders laying out their rights and obligations for preserving/restoring/producing ecosystem services are essential conditions for maintaining biodiversity, no matter what size the space is (mountains, forests, wetlands, watershed). This means recording the changes to the land needed for development (urbanisation, industrialisation, agriculture, forestry, transportation, hydraulic infrastructure, etc.) in a land project in which the risks of human appropriation of the environment, the fragmentation of biological continuity, pollution, etc. are identified in order to avoid, reduce, and if need be offset them, and in which every opportunity to protect, create, and restore biodiversity is employed in full.

Doing so involves mobilizing local stakeholders via existing governing bodies (village, town, department, region) or ad hoc ones (areas near the basin or forest, natural parks, etc.) Defining, negotiating, and instituting local charters, regulations, agreements, etc. normally requires scientific guidance and increased capabilities for local communities to take such contractual approaches and implement them over time.

For historical reasons mainly related to the coexistence of traditional customs and modern law inherited from colonial eras, in many of the countries where AFD carries out its work, local communities do not have all the skills and capabilities needed to plan out the use of their soil and natural resources and to manage their communities’ land rights. A clarification of the responsibilities between the national government, local governments and communities, and the private sector in various public, shared, and private «land domains» seems to be an essential condition for building a shared land project, particularly when it comes to communities with historical rights to that land. This is one of the land tenure guidelines adopted by the Committee on Food Security in 2012.

In the countries where AFD carries out its work, which are often undergoing a sustained push towards urbanisation, infrastructure development, industrialisation, and the expansion of farmland, planning the use of spaces is especially important.

Protecting the most vulnerable natural spaces (coastal areas, mountains, wetlands, forests) requires all of the following: ① accurate, enforced zoning of developed spaces (towns, industries, commercial zones, infrastructure, crops), ② development that takes ecosystem services into account, and ③ adherence to ecological continuity through «green frames», «blue frames», «ecological networks», and «green infrastructure».

2.6.5 | The regulation of species protection and harvesting

The limitation of harvesting, based on legislation or contracts (quotas, seasons or multi-year harvesting cycles), is the oldest instrument for regulating impacts and managing the stocks of wild resources. For endangered species, countries choose either to forbid all harvesting or to limit quantities. Observance of these instruments is poor because the legislation is inappropriate, nature police lack authority, and market demand is strong (see ivory, rhinoceros horn). The solutions must combine ① reasonable local development and protection, ② management capacity-building (hunting plan and license, fishing quota, forest development plan, etc.), ③ boosting the capacities of police (questioning, seizure), ④ regional and international cooperation (Convention on International Trade in Endangered Species of Wild Fauna and Flora, also known as CITES or Washington Convention, regional fishing management organisations, etc.).

2.6.6 | Incentives

Economic, social and tax measures can encourage stakeholders to adopt more virtuous practices in relation to biodiversity, and can discourage destructive practices. Suitable measures need to be implemented, including remuneration or benefits to maintain these services (carbon sequestration, catchment areas, heritage conservation, etc.), taxing of resource harvesting, environmental easements, etc. Given the low level of development of these measures in developing countries¹, one of the first steps to take (Aichi Target n°3) is to identify subsidies and incentives that directly harm biodiversity (for example: obligation of complete deforestation in order to be recognised as an agricultural land user, subsidy for the operation of certain fishing fleets). Several Latin American countries have pioneered this approach. They have instituted systems that pay small forest land-owners for environmental or conservation services, public support for environmental certification approaches, etc.

3

International mobilisation for biodiversity

International mobilisation for biodiversity

3.1 | The multilateral system

31.1. | The conventions

The protection of global biodiversity rests on six global conventions and a number of regional and multilateral agreements:

- ➔ **The Convention on Biological Diversity (CBD):** the Convention on Biological Diversity, which came into effect on 29 December 1993, has three objectives: the conservation of biodiversity, the sustainable use of biodiversity resources, and the fair and equitable sharing of benefits arising from the use of genetic resources. This convention provides the framework for global biodiversity negotiation. France's National Strategy for Biodiversity is directly inspired by it.
- ➔ **The Convention on International Trade in Endangered Species (CITES)** or Washington Convention, whose aim is to ensure that the international trade in species of wild animals and plants does not threaten their survival. The CITES was signed on 3 March 1973 and protects more than 30,000 wild species.
- ➔ **The Convention on the Conservation of Migratory Species of Wild Animals (CMS)** or Bonn Convention: it ensures the conservation of terrestrial, marine and avian migratory species. It also ensures their habitats are protected. This convention was adopted on 1st November 1983.
- ➔ **The International Treaty on Plant Genetic Resources for Food and Agriculture (1983)** aims to set up a global system to increase research into plants. It aims to guarantee food security and the sustainable use of resources.
- ➔ **The Ramsar Convention** or Convention on Wetlands of International Importance, adopted on 2 February 1971 in Ramsar (Iran), is the first convention to apply to a specific ecosystem.
- ➔ **The World Heritage Convention (WHC)**, adopted in 1972. The primary mission of this convention is to identify and protect the world's natural and cultural heritage.
- ➔ **The International Coral Reef Initiative (ICRI):** this is a partnership between governments, international organisations and non-governmental organisations. Its purpose is to preserve coral reefs and their associated ecosystems, by implementing Chapter 17 of Agenda 21 in particular.

Regional and thematic conventions complete these six global agreements. Thus, the management of species, the migratory kind in particular, relies on international cooperation agreements. This is the case for migratory birds (AEWA, ACAP), marine mammals (International Convention for the Regulation of Whaling, Agreement on the Conservation of Cetaceans in the Black Sea, Mediterranean Sea and Contiguous Atlantic Area (ACCOBAMS)), and the Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention).

Conventions make it possible to reinforce regional cooperation and, in particular, to implement the Programmes of Work of the Convention on Biological Diversity through protocols dedicated to protected areas and species. This is the case in Europe (Alpine Convention, Bern Convention) and in regional seas (Barcelona Convention in the Mediterranean, Cartagena Convention in the Caribbean, Nairobi Convention in the Indian Ocean, and Noumea Convention in the Pacific Ocean).

The CBD bodies are:

- ➔ **The Conference of Parties (COP)** is the governing body of the Convention and it convenes every two years (COP 11 in 2012 in Hyderabad, COP 10 in 2010 in Nagoya, COP 9 in Bonn in 2008, etc.). 193 countries out of 197 are parties to the Convention and 168 have ratified it. COP 12 will be held in 2014 in South Korea.
- ➔ **A subsidiary body responsible for providing Scientific, Technical and Technological Advice (SBSTTA).** To date, it has convened 16 times and produced a total of 176 recommendations for the COP. The 17th meeting will take place in October 2013, in Montreal, Canada, where the Convention's Secretariat is based.
- ➔ **A subsidiary body responsible for reviewing the implementation of the Convention (WGRI).**

The member countries draft national reports which are consolidated to produce the "Global Biodiversity Outlook (GBO)". 175 countries have submitted their fourth national report. The fifth national report is due to be submitted by end of March 2014 and will be used to produce GBO 4.

3.1.2. | The Nagoya strategic plan and the Aichi Targets

For the implementation of the CBD, a strategic plan for biodiversity 2011-2020 was adopted in Nagoya in 2010, along with 20 priority targets collectively called the Aichi Targets (appendix 3). The five strategic goals are:

- to address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society;
- to reduce the direct pressures on biodiversity and promote its sustainable use;
- to improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity;
- to enhance the benefits to all from biodiversity and ecosystem;
- to enhance implementation through participatory planning, knowledge management and capacity building.

Target 20 and the strategy for resource mobilisation also adopted in Nagoya commit each Party to the CBD to precisely calculate what resources it can offer and what its requirements are in terms of international financing. They require a diversification and an increase in the resources allocated to protecting biodiversity. 34 bilateral and multilateral donor agencies have decided to take the plan into account in their respective priorities with regards to development cooperation. A Multi-Year Plan of Action for South-South Cooperation on Biodiversity for Development, adopted by the 131 members of the G-77 and China, was welcomed by the Convention as an important contribution to the new vision.

One of the objectives adopted by the 11th Conference of Parties held in Hyderabad (October 2012) was to double total biodiversity-related international financial resource flows to developing countries by 2015, compared with the average annual spending over the 2006-2010 period, and maintain this level until at least 2020. To achieve this, the recipient countries must establish biodiversity-related priorities in their development plans. Although it

also targets private flows and innovative financing instruments, this objective, which France has committed to, applies in particular to the portion of official development assistance dedicated to biodiversity.

This commitment to developing countries is completed by the following measures:

- endeavour for 100%, but achieve at least 75% of parties having included biodiversity in their national priorities or development plans by 2015;
- endeavour for 100%, but achieve at least 75% of parties provided with adequate financial resources having reported domestic biodiversity expenditures, funding needs, gaps and priorities by 2015;
- endeavour for 100%, but achieve at least 75% provided with adequate financial resources, having prepared national financial plans for biodiversity by 2015, and 30% of those parties having assessed biodiversity values.

The CBD is completed by two protocols that are important to the countries where AFD operates:

- **the Cartagena Protocol** on the prevention of biotechnological risks, the aim of which is to guarantee the safe handling, transport and use of living modified organisms (LMO) resulting from modern biotechnology and which can have a harmful effect of biodiversity, whilst also taking into account the risks posed to human health. It was adopted on 29 January 2000 and came into force on 11 September 2003. Since 2010, it has been supplemented by the so-called "Nagoya – Kuala Lumpur" Protocol on damages and repairs (not yet in effect);
- **the Nagoya Protocol** on access and benefit-sharing (ABS), which aims to share the benefits arising from the use of genetic resources and associated traditional knowledge in a fair and equitable manner, including by appropriate access to genetic resources and by an appropriate transfer of relevant technologies, taking into account all rights over these resources and technologies.

BOX 1: ARTICLE 6 OF THE CBD: GENERAL MEASURES FOR CONSERVATION AND SUSTAINABLE USE

Each Contracting Party shall, in accordance with its particular conditions and capabilities:

a) develop national strategies, plans or programmes for the conservation and

sustainable use of biological diversity or adapt for this purpose existing strategies, plans or programmes which shall reflect, inter alia, the measures set out in this Convention relevant to the Contracting Party concerned; and

b) integrate, as far as possible and as appropriate, the conservation and sustainable use of biological diversity into relevant sectoral or cross-sectoral plans, programmes and policies.

BOX 2: ACCESS TO GENETIC RESOURCES AND SHARING OF THE BENEFITS ARISING FROM THEIR USE

In 2010, the member countries of the CBD adopted the Nagoya Protocol on access to genetic resources and associated traditional knowledge. The fair and equitable sharing of the benefits arising from their use, called “ABS Protocol”, constitutes an opportunity to improve biodiversity through the creation of greater legal security, in contrast with “biopiracy”. Its parties undertake to implement a legislative and regulatory framework to ensure that the stakeholders using genetic resources and traditional knowledge within their region comply with the provisions of the countries providing these resources, when it comes to access and benefit-sharing.

The countries that regulate access to genetic resources or associated traditional knowledge and the sharing of benefits on their territory must create predictable conditions for accessing and using genetic resources. They must clarify the rules for the fair and equitable sharing of the benefits resulting from the study of genetic resources or associated traditional knowledge and the commercialisation of any products that result from research and development on the genetic or biochemical composition

of these resources or on associated knowledge, between the user and the supplier of the resources or traditional knowledge.

The countries concerned were able to sign the Nagoya Protocol at the UN Headquarters in New York, between 2 February 2011 and 1 February 2012. It will come into force 90 days after the fiftieth country has ratified it. To date, the protocol has been signed by 92 countries (including 35 in Africa) and ratified by 18. The CBD Secretariat is pursuing its goal of an entry into force in 2015. This change in the rules governing the use of genetic resources will have a direct impact on the cosmetics, pharmaceutical, biotechnology, horticultural and agribusiness industries, as well as their research activities relating to genetic resources, as they will now have to comply with these rules by the time the protocol comes into effect.

This process is an opportunity for developing countries and their local communities to utilise their genetic resources and any associated traditional knowledge on different scales. The equitable sharing of the benefits arising

from the utilisation of genetic resources can indeed result in the creation of new financial resources for national budgets (taxes relating to authorisations for access to the resource or licenses for a patent developed based on these resources) and local communities (contributions to local development funds by companies dependent on locally-sourced resources or using the traditional knowledge of the communities, creation of local jobs, etc.).

It can also be a factor for national or local development through a transfer in kind of new technologies or technical capacities in terms of research and development on the fauna or flora of the country in question; or through the development of new sectors based on innovations created through the use of these genetic resources. The funds generated by the mechanism should be allocated to biodiversity preservation.

AFD will be able to finance national and local ABS capacity-building in priority regions (Africa, Mediterranean, and French Overseas Departments and Collectivities) or of forest or marine genetic resources.

Following the “Integrating Biodiversity into European Development Cooperation” conference held in Paris in November 2006, the CBD’s Secretariat set up the “Biodiversity for Development” initiative. It is supported by France, Japan and Germany. Its goal is to improve the integration of the Convention’s three objectives in development processes, in accordance with article 6b of the Convention.

3.1.3 | The Global Environment Facility (GEF)

The majority of the funds allocated to the implementation of the Convention come from multilateral ODA (USD 1 billion per year GEF, EDF, regional development banks

and United Nations agencies such as UNEP and UNDP) or bilateral ones (USD 1.5 billion per year, with Japan, Germany, the United Kingdom, France and the Scandinavian countries being the main donors). Private American foundations also represent a major source of financing (USD 0.6 to 0.8 billion per year).

The sixth replenishment of the Global Environment Facility (GEF-6), which will cover the period from 01/07/2014 to 01/07/2019, should take into account seven strategic sectors ¹ Biodiversity, ² the mitigation of climate change, ³ international waters, ⁴ land degradation, ⁵ chemical products, ⁶ sustainable forest management, and ⁷ an integrated approach to the environment to achieve sustainable development.

Where biodiversity is concerned, the GEF, which is the CBD's financial mechanism, will have to contribute to implementing the Nagoya strategic plan (COP 10), the financial commitments made in Hyderabad (COP 11), and help to implement the Cartagena and Nagoya protocols. Experts have estimated that GEF-6 will require between USD 5 and 29 billion in financing. At this stage, the Secretariat suggests focusing on four objectives for the allocation of GEF resources to biodiversity: ① improving the sustainability of protected area systems, ② reducing pressure on biodiversity, ③ making sustainable use of biodiversity, ④ incorporating the conservation and sustainable use of biodiversity in the production of landscapes and seascapes and sectors. These objectives are consistent with those proposed in this Intervention Framework from AFD.

3.1.4 | The United Nations Environment Programme (UNEP)

Created in 1972, the UNEP is the highest environmental authority within the United Nations system. Its headquarters are in Nairobi. Its mandate includes assessing environmental conditions and trends, developing national and international environmental instruments, reinforcing environment institutions, facilitating the transfer of knowledge and technologies, and facilitating partnerships within civil society and the private sector. On 21 December 2012, the United Nations General Assembly passed a resolution to strengthen the role of the United Nations Environment Programme and confirmed the universal membership of all UN Member States to the UNEP Governing Council. The UNEP houses the secretariat of a number of conventions, including the CITES, the CBD and the CMS, as well as a growing number of agreements relating to chemical substances, including the Stockholm

Convention (Persistent Organic Pollutants (POP)), the Rotterdam Convention (Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade (PIC)), and the Basel Convention (Control of Transboundary Movements of Hazardous Waste). The UNEP has developed the Global Resource Information Database and the World Conservation Monitoring Centre (UNEP-WCMC). The UNEP is responsible for a number of action plans aimed at preserving the marine environment in several regions around the world (Barcelona Convention, Cartagena Convention, Nairobi Convention, and Noumea Convention).

3.1.5 | The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES)

The IPBES (Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services) was formally set up during a plenary meeting held in Panama from 16 to 21 April 2012, under the aegis of the UNEP. Its first plenary session was held from 21 to 26 January 2012 in Bonn, where its Secretariat is based. The IPBES provides a mechanism recognised by both the scientific and policy communities to synthesize, review, assess and critically evaluate relevant information and knowledge generated worldwide, regardless of its origin. The IPBES to increase the use of science in decision-making at all levels, identify priority research needs, and build capacity in its area of expertise. The IPBES also aims to address the needs of the Multilateral Environmental Agreements relating to biodiversity. 109 countries are members of the IPBES. A multi-disciplinary group of 25 experts, including 5 from Africa, was formed by the regional groups in order to prepare the plenary body's scientific work.

3.2 | Strategy and experience of the World Bank Group

Between 1988 and 2009, the Bank financed 624 projects that partially or predominantly support the conservation of biodiversity in 132 countries, and also 60 multi-country projects. During this period, the Bank group provided USD 2 billion in loans, USD 1.4 billion in donations (GEF) and raised USD 2.9 billion in co-financing, for a total portfolio of 6.5 billion USD.

More specifically, in Sub-Saharan Africa and for biodiversity, over the last decade the Bank has financed 124 projects for a total of USD 1 billion, with a focus on protected areas and landscape management. An analysis of this portfolio¹² led the Bank to making recommendations which AFD can easily adopt:

¹² <http://documents.worldbank.org/curated/en/2012/10/16795968/toward-africas-green-future>

- protected area management must be reinforced to achieve conservation goals;
- when political borders share ecosystems, cross-border approaches are positive;
- planning and managing landscapes and regions makes it possible to extend biodiversity protection beyond protected areas, into productive landscapes;
- biodiversity financing must be structured for the long term, beyond budgetary revenue. Tourism is an option, as are innovative mechanisms such as carbon finance and conservation foundations;
- biodiversity conservation must be incorporated into development strategies.
- increase its commitment to landscape conservation approaches that include “biodiversity-friendly” production systems, concomitantly with the conservation of intact natural habitats within protected areas;
- work with client countries and the private sector to ensure that environmental best practices and payments to compensate for biodiversity loss are properly taken into account;
- promote the financing of conservation and biodiversity through innovative financial instruments such as consolidated compensation schemes at the national level, green bonds, eco-tourism;
- assist governments and international initiatives aiming to implement innovative approaches and partnerships against the illegal harvesting of wildlife, fish and wood, which reaches catastrophic levels in certain areas;
- assist governments and international initiatives aiming to promote and develop natural capital accounting, particularly as part of the WAVES partnership (Wealth Accounting and Valuation of Ecosystem Services).

Consequently, the Bank proposes to:

- incorporate biodiversity in its portfolio by applying environmental policies and best practices when planning and preparing its projects;
- pay greater attention to formulating and monitoring projects that demonstrate how biodiversity can be a vector for green growth and improved living conditions, through development of and payment for environmental services and an opportunity for sharing benefits;

3.3 | Europe’s policy and commitments

The EU has adopted a biodiversity strategy for 2020, through a Commission Communication dated 3 June 2011, entitled: “Our life insurance, our natural capital: an EU biodiversity strategy to 2020”.

This strategy aims to curb biodiversity loss and ecosystem degradation within the European Union (EU) by 2020, by establishing six priority targets:

- 1 to conserve and regenerate nature,
- 2 to protect and improve ecosystems and their services,
- 3 to ensure the sustainability of agriculture and forestry,
- 4 to guarantee a sustainable use of fish stocks,
- 5 to combat invasive alien species,

6 the sixth target is: to manage the global biodiversity crisis.

The Council of the European Union has adopted the strategy and asked the Commission to establish a common framework for implementation in close collaboration with the Member States, in order to provide details on how to implement the targets¹³.

Moreover, the Forest Law Enforcement, Governance and Trade action plan published in 2003¹⁴ and known as FLEGT, aims in particular to:

- develop a wood offering that is guaranteed to come from a legal source in the timber producing countries

13 A biodiversity and development working group was set up in 2013 for this purpose.

14 Application of the Forest Law Enforcement, Governance and Trade (FLEGT) regulations – Proposal relating to a European Union action plan /*

COM/2003/0251 and Regulation (EC) N°2173/2005 regarding the establishment of an FLEGT licensing scheme.

that have signed Voluntary Partnership Agreements (VPA) which establish a verification system coupled with an export authorisation system;

- ➔ stop the trade of illegally harvested timber in the European market.

In 2008, the European Council also set a goal of halting the loss of the planet's forest cover by 2030 and to reduce gross tropical deforestation by at least 50% by 2020 compared to current levels (5 December 2008).

In ACP countries, 2% of the 10th EDF programme is allocated to biodiversity (compared with 0.8 to 1% in national ODA2). The EDF is one of the three main multilateral donors for biodiversity.

3.4 | Bilateral agreements

Based on the official documents available, a 2010 review concluded that 12 of the 23 DAC countries of the OECD mention biodiversity as part of their development assistance policies, often as part of a highly climate-oriented environmental strategy. Only four countries (Austria, France, Germany, and the USA) are considered to have a dedicated strategy. Three countries (UK, Portugal, and Greece) do not mention biodiversity.

Along with France, Germany is the only European country to have adopted a bilateral strategy for biodiversity.

During COP 9 of the CBD in Bonn, Germany committed to allocating €500 million per year to its implementation. Given the partnership between AFD and KFW in biodiversity (forestry projects in Congo basin countries, Protected Area Foundations in Madagascar and Mauritania, etc.), the box below gives the five points of this strategy, built around the ones adopted in Nagoya.

BOX 3: GERMANY'S BIODIVERSITY STRATEGY

A Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society: Communication, education and public awareness, TEEB, environmental assessment.

B Reduce the direct pressures on biodiversity and promote sustainable use: Integration of biodiversity into other areas of development cooperation, Sustainable forest management, FLEGT, Forest certification, Agrobiodiversity as a key aspect of sustainable agriculture; Sustainable land management in dry

lands, Sustainable fisheries and aquaculture, Cooperation with the private sector: production, commercialisation and biotrade.

C Improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity: Protected areas, Ecological corridors, Marine and coastal protected areas, Biosphere Reserves and World Heritage Sites, Indigenous and community conserved areas, Financing of protected areas; Fight against international trafficking and poaching.

D Enhance the benefits to all from biodiversity and ecosystem services: REDD+, Access and benefit-sharing (ABS), Ecosystem-based adaptation, Restoration of degraded ecosystems.

E Enhance implementation through participatory planning, knowledge management and capacity building: National biodiversity strategies and action plans, South-South cooperation on biodiversity, ABS capacity development initiative, International Academy for Nature Conservation.

3.5 | France's policies and commitments for biodiversity in development

3.5.1 | The National Biodiversity Strategy 2011-2020¹⁶

The National Biodiversity Strategy (SNB) is the result of France's commitment to the CBD. It forms the biodiversity component of the National Sustainable Development Strategy (NSDS). It is placed under the responsibility of the Prime Minister. The National Biodiversity Strategy 2011-2020, adopted on 19 May 2011, put in place a coherent framework which allowed all the public and private French stakeholders, at the various territorial levels, and from all sectors of activity (water, ground, sea, climate, energy, agriculture, forestry, urban planning, infrastructure, tourism, industry, trade, education, research, health, etc.) to contribute to the preservation of biodiversity on a voluntary basis. A national committee is tasked with monitoring its progress. A national biodiversity observatory regularly publishes indicators that give an overview of the state of biodiversity, the levels of pressure, and the political responses that have been made. The SNB binds the authorities and invites the public and private stakeholders to carry out the twenty objectives that transpose the Aichi targets (*see appendix 4*). Objectives 16 and 17 are of particular importance for AFD.

3.5.2 | French Overseas Departments and Collectivities¹⁷

French Overseas Departments and Collectivities consists of territories located in both hemispheres, in four oceans (Atlantic, Pacific, Indian and Southern) and in sharply contrasting bioclimatic regions, ranging from the subarctic to Antarctic zones, via the tropical or equatorial regions. The diversity of the ecosystems, the total number of species and the number of endemic species are very high in these areas. 10% of the world's coral reefs lie in French waters. The level of endemic plant and wildlife species in New Caledonia is the equivalent of that of continental Europe (bearing in mind that New Caledonia is about as large as the Picardie region of France); French Guyana includes one of the largest expanses of primary rainforest in the world; Mayotte is home to one of the few double

coral reefs on the planet; French Polynesia includes a fifth of all the atolls on Earth.

The municipalities of French Overseas Departments and Collectivities implement a vast range of measures to protect this exceptional heritage: The national parks network (land and sea) and regional parks network is highly developed in French Overseas Departments and Collectivities (French Guiana, Martinique, Guadeloupe, Réunion, Scattered Islands). These parks offer opportunities for cross-border cooperation, particularly for creating vast protected marine spaces. For example, the Mayotte Marine Park, the first in French Overseas Departments and Collectivities, covers nearly 70,000 km² and includes a lagoon with a double coral reef and boasts some 200km of coral reefs. Guyana and Martinique both have a natural park.

Additionally, 45 natural reserves have been put in place by the national government, municipalities and local governments, including Grand-Cul de Sac Marin in Guadeloupe, the Presqu'île de la Caravelle in Martinique, to name but two, and more recently, Grand Matoury in Guyana, îlot M'bouzi in Mayotte. More than 10,000 ha of land have been incorporated into the scope of the national coastal and lakeside conservation agency, the Conservatoire de l'espace littoral et des rivages lacustres. Protection orders governing a number of species of plant and wildlife have been applied, covering turtles, coral reefs, birds, plants, mammal, molluscs and more. A botanical conservatory, the Mascarin CBN, is tasked with ensuring the recognition and conservation of flora. 482 sites of major community importance (zones naturelles d'intérêt écologique, floristique et faunistique, ZNIEFF) have been defined, (and are in the process in Mayotte and Saint-Pierre et Miquelon).

However this natural heritage is fragile. The threat of the destruction of natural habitats, overexploitation, pollution and the proliferation of invasive species is very high. These risks are aggravated by climate change.

Within the framework of the SNB, the French government and municipalities have drawn up priority action plans around four main themes ① Species and ecosystem conservation ② Immobilisation of stakeholders ③ Integration of biodiversity in sectoral policy and ④ Knowledge.

¹⁶ <http://www.developpement-durable.gouv.fr/Strategie-nationale-pour-la-22931.html>

¹⁷ <http://www.uicn.fr/>

BOX 4: THE NATIONAL BIODIVERSITY STRATEGY 2010-2020 AND INTERNATIONAL ACTION

Strategic Goal E: Ensure consistency across policies and the effectiveness of action

“acting in a way which takes into account the concerns of those who are located at a distance and with whom we sometimes interact without even being aware of it: the neighbouring region, the neighbouring country or a country on the other side of the world. The aim of the strategy is also to develop ecological solidarity and to guarantee solidarity between states based on strengthening international action”.

Target 16: Develop national and international solidarity among territories

In order to meet the challenges of preserving global biodiversity, international solidarity must be strengthened, ensu-

ring greater mainstreaming of biodiversity into French development assistance by facilitating and supporting actions in favour of global biodiversity by local authorities, research bodies, NGOs and companies, and by supplementing the array of tools, methods, approaches and means available, especially in the field of innovation, to step up the French contribution.

Target 17: Reinforce green diplomacy and international governance for biodiversity

It responds to the need to strengthen the environmental coherence of French action abroad and to find ways of improving the effectiveness of action in favour of biodiversity, notably by addressing sectoral policies pursued by

France abroad such as trade, agriculture, forestry, education and culture, etc. This involves mobilising all public and private stakeholders. It therefore entails involving all relevant partners – official missions, local authorities, businesses, NGOs, non-profit organisations and research bodies – each according to their own negotiating and/or implementation level, with the aim, on the one hand, of reinforcing the coherence and effectiveness of the activities of the different biodiversity agreements, their connections and complementarity and, on the other hand, of mainstreaming and better integrating biodiversity into arenas which will apply them or tackle them indirectly.

Given the scope of its mandate, AFD can contribute to these sub-regional action plans by providing support for local municipalities and strengthening international cooperation between the territories of French Overseas Departments and Collectivities and their neighbouring countries.

3.5.3 | The French Global Environment Facility (FGEF)¹⁸

In 1994, the French Government decided to create the French Global Environment Facility (FGEF) as an additional instrument of French Overseas Departments and Collectivities Aid. It seeks synergies with other cooperation and development structures or bodies working in favour of the environment, both from France and internationally (notably the GEF), and in the public and private sector. Having been allocated some 354 million euros since its creation, the FGEF currently has a budget of 95 million euros for the 2011-2014 period.

On 31/12/2012, nearly 50% of FGEF resources had been attributed to biodiversity with a portfolio of 119 projects and total spending commitments of 126 million euros. 65% of these projects concerned Sub-Saharan Africa, 26% were in Latin America or the Caribbean, 6% in Asia Pacific and 3% in Eastern Europe¹.

In the 2013-2014 financial year, commitments will be divided so that at least **35% is used for biodiversity** and 35% for climate change, with the other topics (desertification, international waters, chemical pollutants) receiving 20%. Five core themes have been identified, where conservation and the promotion of biodiversity are very important: ① sustainable agriculture, ② sustainable urban territories, ③ biodiversity funding mechanisms, ④ sustainable energy in Africa, and ⑤ integrated management of coastal and marine areas.

The synergies and complementarities between the work of AFD and that of the FGEF have been and will remain very significant. Between 2009 and 2012, 14 projects funded by FFEM were co-funded by AFD. The total cost of these projects is €176.1 million, with €19.4 million provi-

¹⁸ http://www.ffem.fr/...FFEM_CPS_2013_2014_fr.pdf

ded by FFEM and €119 million by AFD. These projects relate to:

- forests (total €119 million)
- natural parks on land (€21.1 million)
- eco-certified production (€15.1 million)
- the marine environment (€20.9 million)

These are essentially regional programs. A table listing these projects is available in appendix 8.

AFD helped create the priorities of the 2013-2014 action plan and will be one of the project contributors to the FFEM, particularly for biodiversity.

4

Learning from AFD's past work

4

Learning from AFD's past work

4.1 | Project mapping

All the projects funded by AFD between 1996 and 2008 in the areas of sustaining biodiversity have been mapped. These include protected area projects, forests, fishing and aquaculture, protection of water catchment areas, the urban environment and knowledge management). In addition, cross-sectoral retrospective assessments have also been carried out on the forestry sector in the countries of the Congo Basin, support for coastal fishing in West Africa and support for national parks in Morocco.

From these assessments, we see that the areas of intervention became progressively more precise from the end of the 1990s with:

- Initial work on sustainable management and the protection of ecosystems with “dedicated projects” in the areas of forestry, fishing and protected areas, working on specific territories, mostly in Africa. The experience thus acquired was then extended outside of Africa, whilst partnerships were also diversified to include large NGOs, private foundations and major initiatives,
- as were the areas of intervention and instruments used (projects, programmes, conservation trust funds, lines of credit), on a local, national or regional scale. les géographies d'intervention et les outils d'intervention (projets, programmes, fonds fiduciaires de conservation, lignes de crédit), à portée locale, nationale, ou régionale ;
- Support for public policies in countries where legitimacy has been acquired by «dedicated» projects. This support was put in place via capacity building, budgetary support and also international mechanisms such as REDD+.
- The implementation, from the beginning of this century, of a systematic risk management approach that was specific to biodiversity, with the objective of achieving non-destruction, management and even, for certain projects, compensation for damage caused to biodiversity;
- AFD's participation in the debate on international instruments, alongside the relevant ministries and other French stakeholders.

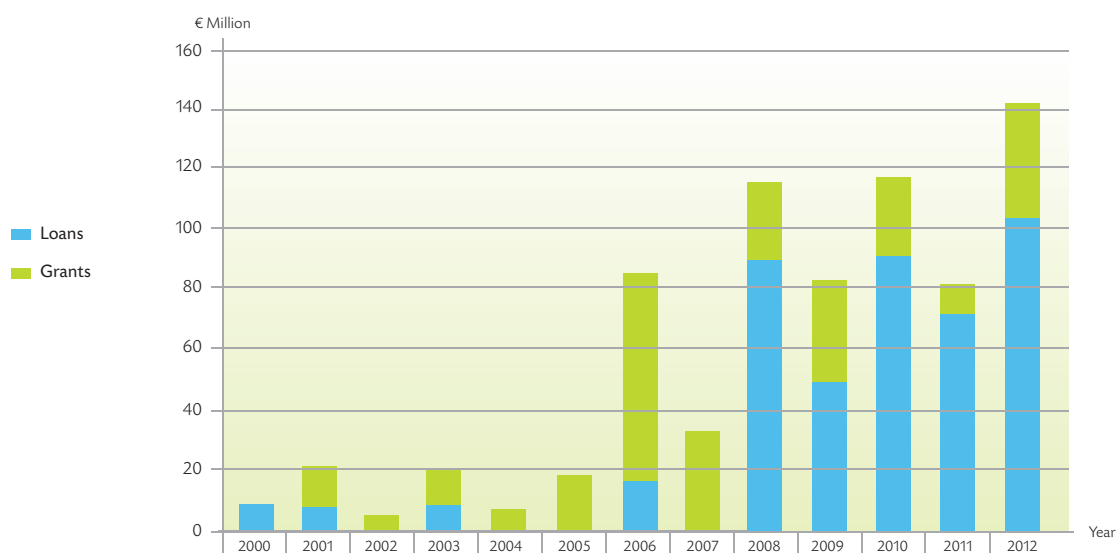
4.2 | Financial commitments

AFD's annual commitments in favour of biodiversity increased from a few million euros at the end of the 1990s to nearly 90 million euros per year from 2008. Since the end of the 1990s, the forestry and fishing sectors have represented new areas for application of the principles of sustainable management of renewable natural resources, through the funding of forest management plans (Congo Basin) and the sustainable management of fisheries (West Africa, Madagascar). From 2003, the first projects providing support for protected areas were financed thanks to sovereign loans (Morocco and Kenya), subsidies (Mozambique) and debt-swap agreements. In 2006, the budget and the number of projects experienced strong growth.

Financing, which was firstly concentrated into the core areas of biodiversity (protected areas, forestry and fishing) have progressively gained in importance in the other areas where AFD works, namely energy, agriculture and water management, becoming a cross-sectoral concern, comparable to the climate. In parallel, AFD contributes to research on the economic value of ecosystems and natural capital.

FIGURE 2

AFD BIODIVERSITY COMMITMENTS DISBURSED OVER THE PERIOD 2000-2012, BROKEN DOWN BY FINANCIAL PRODUCT

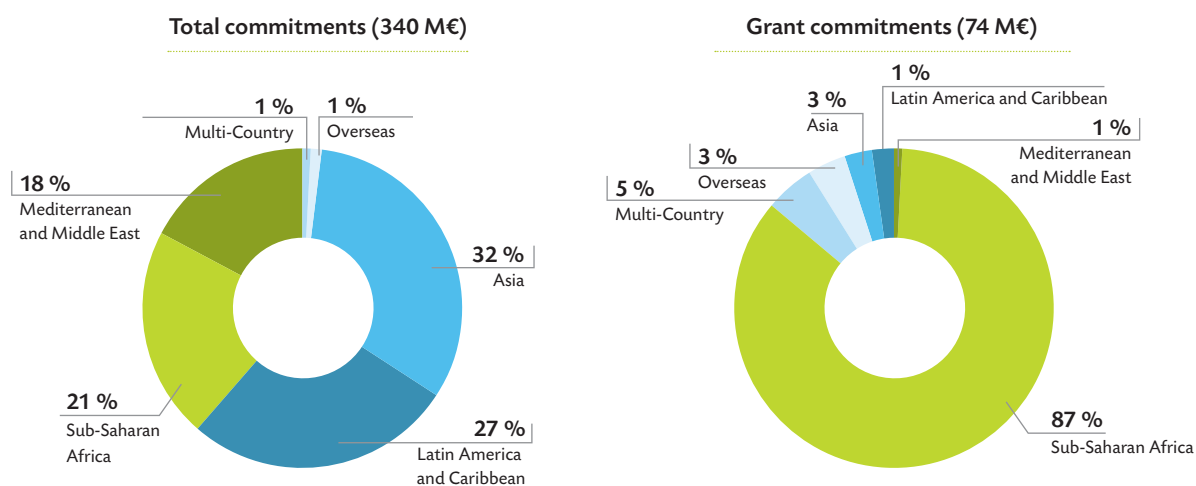


Until 2010, AFD had not been present in the field of biodiversity in French Overseas Departments and Collectivities because other competent public bodies were present

there and because it proved difficult for local and regional authorities to define projects that could be financed by AFD.

FIGURE 3

AFD BIODIVERSITY COMMITMENTS BY REGION DISBURSED OVER THE PERIOD 2010-2012



4.3 | Accounting method for AFD's biodiversity commitment

The accounting rules for national contributions to international biodiversity are being homogenized within the framework of the CBD, in order to make up for the shortcomings of the Rio Markers. In particular, 100% accounting of commitments not devoted to biodiversity but which make a positive contribution (Rio Biodiversity Marker 1) is on the table. Since 2009, the EU has applied a 40% weight to these commitments.

To have accountability for France's commitments to the Convention for Biological Diversity, standardizing their accounting method is essential.

When projects are being prepared, AFD project managers grade the projects' contributions based on the Rio «Biodiversity» Markers: 0- no significant contribution, 1- significant but secondary contribution, 2- main goal. The proposed accounting for AFD's Biodiversity commitments relies on these markers. For projects marked 2, all funding is retained. For projects marked 1, weighting is applied.

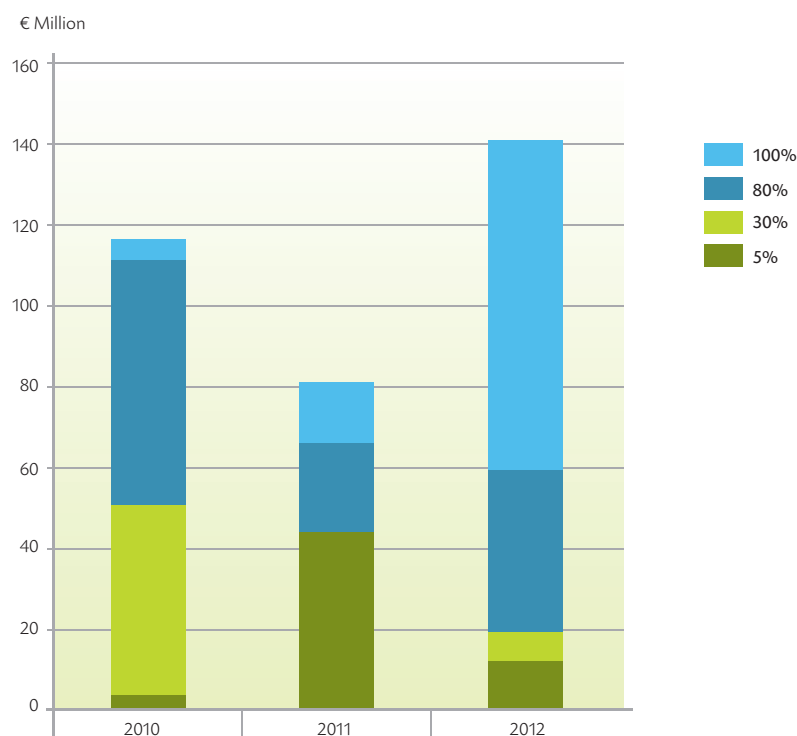
Environmental performance, particularly when favourable to biodiversity, is a desirable and explicit sub-objective of industry-centred or cross-sectoral projects. This

TABLE 2: ACCOUNTING FOR BIODIVERSITY PROJECTS

Type of activity	Subject (Exemples)	Percentage of funding	Goals
Marker 2 projects (Rio biodiversity)	<ul style="list-style-type: none"> → Protected area (marine or land) → Support for environmental NGOs → Biodiversity trust fund → Budget support for biodiversity 	100 %	1
Marker 1 projects (Rio biodiversity)	<ul style="list-style-type: none"> → Sustainable management of forests → Sustainable management of fisheries REDD 	80 %	1
Marker 1 projects (Rio biodiversity)	<ul style="list-style-type: none"> → Agro-ecology → Pastoralism - transhumance → Beekeeping → Sustainable management of fisheries → Local management of biological resources → Organic fair trade sectors → Wastewater treatment, IWRM 	30 %	2
Marker 1 projects (Rio biodiversity)	<ul style="list-style-type: none"> → Urban development with an urban biodiversity element → Sustainable waste treatment – Reducing waste impact → Lines of credit for the environment (non climate) Saving water → Urban development with an urban biodiversity element → Sustainable waste treatment – Reducing waste impact → Lines of credit for the environment (non climate) Saving water 	5 %	2
Marker 0 projects (Rio biodiversity)	<ul style="list-style-type: none"> → Responsible irrigation → Infrastructure with explicit and exemplary biodiversity compensation (mining sector, dams, etc.) 	0 %	3
AFD staff (FTE)	→ Value of FTEs allocated to biodiversity	100 %	3
Communication	→ Activity with a biodiversity aspect	50 %	3
Knowledge production	→ Study focusing on biodiversity	100 %	3

FIGURE
4

OVER THE 2010-2012 PERIOD,
THE BIODIVERSITY COMMITMENTS OF THE AFD ARE DISTRIBUTED AS FOLLOWS



performance requires a special effort from AFD and its partner, which often relies on a grant from the French government. This partial, positive effect on biodiversity is posted to the accounts whether it is explicit (one or more sub-objectives within the framework of the commitment mentioning biodiversity) or not explicit (no mention in the framework but highly likely positive effects on biodiversity). However, the contribution is only included in the amount of the positive effect, i.e. 5 to 99%. To make this accounting easier, a weighting table for projects marked 1 is provided. Three categories (5, 30, 80%) have been adopted.

For the years 2010, 2011 and 2012, AFD's weighted commitments in the biodiversity sector increased, going from 117 to 81 then €141 million, and the average amount

of the projects is €5.4 million (31 projects per year). At the same time, the share of subsidized loans is 78% of the commitments. «Integrated» projects (Rio 1 Markers), compared to dedicated projects, represent 70% of the total biodiversity commitment. This data varies greatly from one year to the next due to the number of projects and low commitment volumes.

This accounting method will be fine-tuned over the term of this CIF. The possibility of providing a net environmental statement on AFD actions, which is a complicated proposition, could be studied by a knowledge production project.

AFD's financial commitments will be presented based on this weighting.

Cross-sectoral
intervention framework
for biodiversity
2013-2016

Cross-sectoral intervention framework for biodiversity 2013-2016

AFD contributes to the implementation of the international component of France's National Biodiversity Strategy, within the framework of its various geographical mandates and according to the resources available to it.

Its work contributes to the Strategic Plan for Biodiversity 2020 of the Rio Convention on Biological Diversity, and the achievement of the 20 Aichi Targets. It also plays a part in the implementation by France of the commitments and agreements undertaken in the various topical and regional biodiversity agreements.

The growth of its activity will contribute to the doubling of financial flows of all sources from the North to the Global South by 2015, as decided by the 11th Conference of the Parties of the CBD in Hyderabad in 2012.

In order to «improve consistency and strengthen the transversal principles of the development policy» and «emphasizing the direct links between development and biodiversity», the government has asked AFD to finalise this CIF during the CICID of 31 July 2013 (decision #6).

5.1 | Logical framework

The common goal of all aspects of AFD's work is to make conservation and the sustainable promotion of ecosystems a motor for inclusive growth and a factor in the sustainable development of Developing Countries and French Overseas Departements and Collectivities. In doing so, AFD will contribute to fulfilling France's commitment

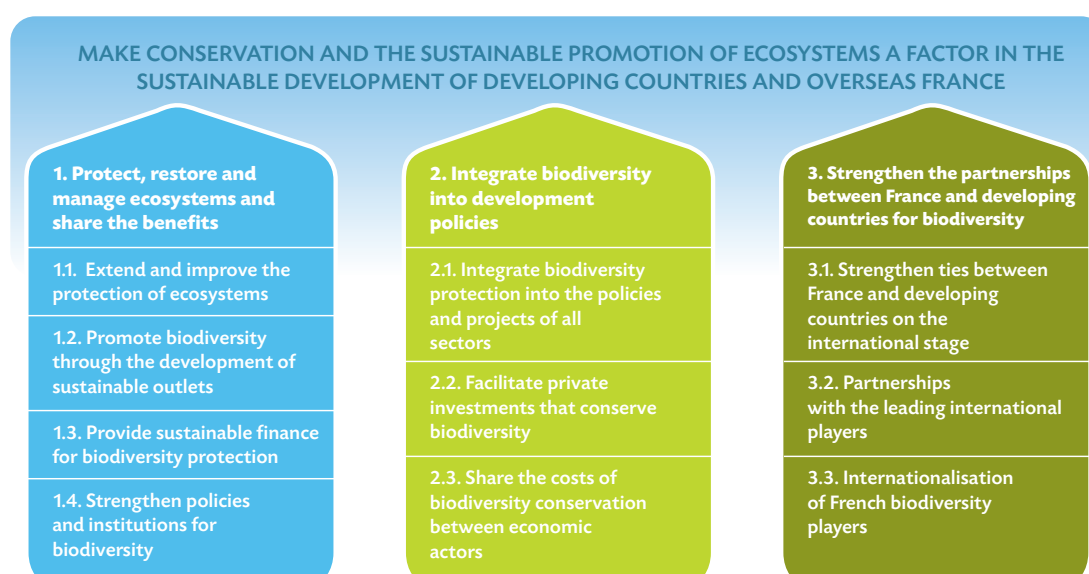
to curbing the erosion of worldwide biodiversity.

The actions, projects and programmes financed by AFD must have the following objectives:

- 1 to protect, restore and manage ecosystems and the services that depend on them, and fairly distribute the benefits of their promotion;

FIGURE 5

SUMMARY LOGICAL FRAMEWORK OF THE BIODIVERSITY CIF



- 2 to integrate the conservation of ecosystems and the services that depend on them into development policies and all their sectoral dimensions;
- 3 to strengthen partnerships between French stakeholders and developing countries for a worldwide governance of biodiversity and ecosystem services.

Figure 5 summarises the goals of the logical framework outlined in appendix 5. Each objective is detailed below.

In general, all of AFD's commitments in the name of this CIF must have impacts in terms of:

- poverty alleviation, the inclusion of the most vulnerable populations in the dynamics of economic, social, cultural and institutional development, their participation in the making of decisions that concern them and the consideration of their rights, their interests and their desires;
- improving the status and the quality of life of women and girls, fighting inequality between men and women, securing women's rights to natural resources and sharing the benefits that are derived from them, recognising and developing their knowledge of biodiversity, improving their skills and increasing their responsibilities.

5.2 | Financial commitments

In 2013-2016, the average annual volume of AFD's weighted financial commitments will be at least €160 million, compared to €80 million over the 2006-2010 reference period adopted by COP 11 in Hyderabad. AFD's financial commitments will be divided between objective 1 (75%, or €120 million), objective 2 (21%, or €34 million)

and objective 3 (4%, or €6 million). Given the different partnerships with countries where the AFD carries out its work as defined by July 2013 CICID, those commitments will primarily benefit sub-Saharan Africa and the Mediterranean.

5.3 | Objective 1: Sustainable protection, restoration, management and promotion of ecosystems.

The protection, restoration, management and promotion of an ecosystem requires institutional, social and technical solutions that are specific to each territory. They must be adopted by the stakeholders in the territories, the populations living there who draw some of their resources from it and have historical rights. Sharing the benefits that result from the sustainable promotion of an ecosystem, whether through tourism, selling harvested products, fishing, forestry or hunting, must be at the heart of all actions to protect ecosystems. In the long term, safeguarding the conservation of a natural environment and improving the well-being of the populations that depend on it inherently linked.

That is why the ecological management of a biological resource and the ecosystem that produces it has to be constructed by and for the rights holders and the users of the territory in question, taking into account their legitimate aspirations in terms of economic well-being and social, political and cultural recognition.

In the name of this objective, AFD will support actions

dedicated to the management of protected natural areas, the sustainable exploitation of biological natural resources (forest, fisheries, hunting) and the promotion of biological resources (ecotourism, food gathering networks).

These actions should contribute to four sub-objectives (S/O):

- **S/O 1.1.** Extend and improve the protection of ecosystems, notably with or for the benefit of local populations;
- **S/O 1.2.** Promote biodiversity, notably to the benefit of local population via the development of sustainable channels;
- **S/O 1.3.** Provide sustainable financing for biodiversity protection;
- **S/O 1.4.** Strengthen the policies and institutions responsible for biodiversity protection.

BOX 5: QUIRIMBAS NATIONAL PARK IN MOZAMBIQUE

The Quirimbas National Park (QNP) covers a surface area of 7,500 km² between its marine and terrestrial parts and is located in one of the poorest provinces of Mozambique. It was created in 2002 with the support of the WWF, with the explicit goal of generating a development dynamic thanks to the conservation of ecosystems and natural resources.

AFD and the FGEF are the main financial partners of the Park (7.5 million euros and 1.7 million euros). The first phase (2004-2009) resulted in the implementation of co-management mechanisms, a drastic reduction in the illegal exploitation of fishery and forestry resources, an

increase in agricultural and fishery yields and an increase in income from tourism.

In a context of growing pressures as a result of the fragmentation and destruction of habitats and the overexploitation of natural resources, particularly in the terrestrial part (pressure from the local population on forestry and hydraulic resources, pressure of poachers on large mammals, particularly the elephant population), the second phase (2010-2014) seeks ① to improve local socio-economic conditions through the conservation of natural resources, contributing to the fight against food insecurity, ② to structure the Park in terms of governance and management, ③ to create

the foundations for the financial sustainability of the Park (tourism income and carbon credits).

The project finances ① strengthening of local natural resource management committees, ② protection and monitoring activities in the marine and terrestrial parts, ③ the dissemination of sustainable practices (conservation agriculture, fishing, creation of marine sanctuaries), ④ the management of conflict between farmers and elephants, ⑤ the development of tourism by offering new sites for concession and support for community tourism.

In its dialogue with its partners, AFD will take care to focus its efforts on the ecosystems that are the most biodiversity-rich, most threatened, and most helpful in fighting poverty and conducive to sustainable development dynamics.

Under objective 1, the annual commitments will average €120 million over the period 2013-2016.

S/O 1.1. | Extend and improve the protection of ecosystems, with or for the benefit of local populations

Instituting a protected area (PA) or restoring a landscape's ecosystem services is a land project that must be granted consent by the human communities in question. Bringing in these communities during the design of the conservation or restoration project - its limits, its objectives, and its scientific and tourism value is key to success. Guiding communities in the evolution of their practices (agricultural, forestry, fishing, gathering, and hunting), when they endanger the ecosystem, must involve technically appropriate measures and financial support over time.

AFD will support ① the extension of marine and terrestrial areas that have been awarded Protected Area status, ② improvement of the management of existing marine and terrestrial protected areas through the strengthening

of their governance, their management and the skills of the staff working in them, ③ the economic promotion of biodiversity conservation in the protected areas, through ecotourism development and/or resource harvesting that is regulated on a scientific basis, ④ improvements in the living standards of people within the protected area or on its periphery, ⑤ monitoring the scientific assessment of the state of protected ecosystems and the promotion of the services that it provides, etc.

Cross-border or sub-regional cooperation will be strengthened, with the aim of ensuring the continuity of ecosystems and providing capacity building which will allow for information exchanges between peers from different countries.

AFD could support protected areas according to ad hoc statutes, in all our countries of operation and in all terrestrial or marine ecosystems.

Priority will be given ① to the development of protected areas, where the effects will be decisive for the conservation of critical sites and the development of the populations in question and ② to the consolidation of protected areas that have been supported in the past.

Examples of projects are shown in the boxes below as an example. They involve on-going projects which could receive a new phase of financing, and projects in the launch phase or that have undergone initial exchanges with partners.

BOS 6: A ROAD MAP FOR PROTECTED AREAS IN AFRICA: PRIORITISE TO IMPROVE CONSERVATION

Since 2007, the FGEF (in West Africa) and AFD (in West and Central Africa) have supported the IUCN (the regional office for this area) in a process of assessing the effectiveness of the management of protected areas in Africa. To take this further, the IUCN, with the World Commission on Protected Areas organised a meeting in October 2011 in Burkina Faso with the key conservation stakeholders in Africa to try and put forward concrete proposals for action that corresponded to the challenges that had been identified. Starting from the many proposals for actions that have been identified, a prioritisation exercise was carried out to draw up a road map for protected areas in Africa, which targets three major lines of approach: Good governance of protected areas and their peripheries, the management performance of these territories and the sustainability of their conservation. Broken down into nine directions, this roadmap offers a solid base for building a sustainable strategy to guide conservation actions. It will notably provide support in the collaboration between IUCN and AFD for biodiversity conservation in Africa within the framework of the France – IUCN partnership agreement for 2013-2016.

BOX 7: MOHELI MARINE PARK IN THE COMOROS ISLANDS

Created in 2001 by a decree from the Head of State of the Union of the Comoros Islands, the Mohéli Marine Park covers 404 km² of marine and terrestrial ecosystems and is currently the first and only protected area in the Comoros. Its aims are (i) to ensure the conservation of marine and coastal biodiversity, habitats and endangered species; (ii) to ensure the sustainable use of fisheries resources; and (iii) to encourage the development of eco-tourism and other income-generating activities. Ten years

after its creation, some of the achievements of the Mohéli Marine Park are indisputable, including its adoption by the community and the increased awareness of the need to preserve the environment and natural resources, recognition of the Park at the regional level (Indian Ocean) and protection of green turtles and scientific knowledge. Nonetheless, the Park's own financial resources remain very low, which requires it to operate using external aid; this is of irregular provenance and leads to a similarly

irregular operation. AFD supports the Comorian authorities (i) with the management of the MMP and its catchment area (ii) with the implementation of the Development and Management Plan, drawn up in 2009, (iii) with the increase in the self-financing capacity of the Park (regulatory resources, trust funds, development of tourism and alternative income-generating activities such as agriculture, sustainable fishing and aquaculture).

S/O 1.2. | Promote biodiversity, notably to the benefit of local population via the development of sustainable channels

Conservation of biodiversity can go hand-in-hand with the promotion of natural resources, providing it can be adjusted to their natural pace of renewal and it preserves the balance of the ecosystems in question.

AFD will support:

- Forestry policies, both national and regional, which enable ecosystem protection, the renewal of exploitable species, the economic viability of businesses and which offer a fair distribution of the products of forestry use between all players, particularly local communities

via appropriate forestry taxation. To this end, AFD will support the generalisation of sustainable forest development plans, the process of obtaining ecological and social certification for forestry operations, improvements in the economic, energetic, environmental and social performances of processing companies, capacity building of national authorities to ensure good governance of the sector and that best international standards are applied, notably FLEGT. In forest basins, AFD will work with FGEF to contribute to the support of approaches that reconcile environmental and biodiversity conservation with economic development, through a combination of active conservation of the most fragile ecosystems and the generalisation of sustainable means of exploitation that ensures the forestry resource will be

renewed, in close consultation with specialist NGOs. To that end, AFD will support the widespread promotion of sustainable forestry plans, ecological and social certification of production systems and logging (e.g. FSC), the improvement of the economic, energy, environmental,

and social performance of processing companies, the strengthening of the national authorities' abilities to provide good governance over the production system and to apply international best practices, particularly FLEGT.

BOX 8: RESTORING ECOSYSTEM SERVICES AND ADAPTING TO CLIMATE CHANGE IN THE SOUTH PACIFIC

The islands of the South Pacific are particularly vulnerable to the effects of climate change and anthropogenic pressures, which lead to a deterioration of natural environments and a loss of biodiversity. In this very specific island context, strengthening of the resilience of these communities and ecosystems in the face of climate change is a major challenge.

A project co-financed by AFD (4.5 million euros), FGEF (2 million euros), the European Union, the local authorities and private operators has been put in place in pilot sites in Fiji, New Caledonia, French Polynesia and Vanuatu. It seeks to implement action plans and improve regional capacity, in terms of biodiversity conservation and adaptation to climate

change via the dissemination of Integrated Coastal Zone Management (ICZM) protocols and Payments for Ecosystem Services (PES). It also seeks to contribute to food security, within a context of growing pressure on the environment.

This project contributes to the promotion of an integrated approach «from the mountain to the reef,» whose ambition is to combine catchment area management, and protection of coastal areas and coral reefs. This approach is necessary from an ecological point of view and encourages a shared vision at the community level, through a strengthening of dialogue with local communities and capacity building in risk management. In addition, the project participates in the implementation of economic and finan-

cial mechanisms that help to ensure the sustainability of ecosystem services. It plays a part in maintaining fishing, agriculture and tourism as well as the preservation of biodiversity and landscapes against the effects of climate change.

Project ownership is provided by the Secretariat of the Pacific Community. The project makes it possible to ① strengthen the integration of overseas communities in their regional environment, ② promote French expertise and develop scientific and technical partnerships, ③ strengthen the visibility of French cooperation within the regional bodies specialised in climate change and biodiversity, ④ ensure the dissemination and replication of models developed in other Pacific sites.

BOX 9: RESTORATION OF THE LIAONING WETLANDS IN CHINA

China is one of the 17 countries in the world considered to have biological megadiversity. It covers seven climatic zones with a wide variety of habitats and has 66 million hectares of wetlands, which is 10% of the world's wetlands and 8% of China's landmass. The significant environmental impacts of China's development have, in recent decades, led to the creation of an active wetlands conservation policy. The programme concerns the restoration of two major wetland areas in the province of Liaoning in north east China. These wetlands ensure the continuity of the migratory path for the birds of East Asia

and constitute important economic resources (reeds, fisheries and tourism).

Project activities include: restoration of the world's largest reed-bed (rehabilitation of hydraulic infrastructures, remediation, depollution), allowing it to resume its hydrological, ecological and biological functions; conservation and restoration of nesting and resting sites of migratory birds; the economic promotion of resources and sites (ecotourism, fishing and aquaculture, sustainable exploitation of reeds for the paper industry); environmental education and joint management of the territory. Within the framework of territorial ma-

nagement, a programme of ecological management will be developed.

A 50 million euro sovereign loan under market conditions allowed the People's Republic of China to finance a programme that could call on French experts (scientists, institutional specialists, companies, consultancy firms, developers and catchment area agencies) notably in the fields of engineering and ecological restoration, management and monitoring, satellite imagery, hydraulic engineering, cleaning, wastewater treatment, museology and ecotourism.

In accordance with the recommendations of the 20-year assessment of AFD's work in the Congo basin's forestry sector (box 10), AFD will ensure that the projects that it funds make it possible to:

- Expand the scope of those who implement FMPs, particularly small national operators and large international groups;
- Simplify and adapt Forest Management Plans to different types of forests;
- Redefine responsibilities between players with regard to the environmental and social services provided by forests.
- Strengthen governance in the sector by ① setting up forest cover instruments, ② providing institutional support, ③ facilitating dialogue within the sector at the national and regional level and ④ coordinating between donors.

AFD will ensure that forest management plans, particularly by creating paths, do not cause roads to be built into forests that would divide them, but rather that close off and rebuild the forest cover in those areas after the resource-extraction phase.

Finally, AFD will ensure that the FMPs do not lead to resource extraction from primary or old-growth forests or critical habitats. To that end, the methods and criteria for assessing the environmental benefit of forests will be specified with the support of international scientific partners.

→ **Policies for developing fisheries**, both national and regional, based on scientific data about fish stocks, long term management and a sharing of advantages between the various stakeholders of the sector. To this end, AFD will support: fisheries policies whose goal is to maintain or rebuild stock levels; the creation of added value by providing equipment to land-based stakeholders; the environmental certification of fisheries (e.g. MSC); and the strengthening of public and professional institutions that are essential to the permanent adjustment of the fishing effort and the respect of the agreed measures.

→ **The structuring of new outlets for the sustainable promotion of wild plants** (medicinal, cosmetic, aromatic, horticultural and food crops) for the benefit of local people who rely on limited gathering with no negative impact and/or on cultivation, in the context of agreements between private-sector players, communities and groups thereof, and independent international organisations that can ensure that those agreements make it possible to fairly share the benefits of that gathering for the communities who manage those ecosystems and sustainable use (see box 2 on the APA).

→ **Development of agricultural practices**, from the plot to the landscape, towards more ecologically-intensive practices, which are economical in their use of fossil fuels, which use the wide range of renewable natural resources to their best advantage (solar energy, carbon and nitrogen from the air) and which use the interactions between living beings to control pest and non-useful species, in order to render agriculture more resilient to

BOX 10: FORESTRY SECTOR IN CONGO BASIN COUNTRIES: 20 YEARS OF AFD WORK

The outside assessment of forest projects supported by the AFD for twenty years in the Congo Basin shows:

① that the work helped achieve the goal of guiding usage practices towards long-term sustainable management, through a partnership between national governments and private land-owners, particularly European ones, and helped place about 20 million hectares of forest in the Congo Basin under management, more than 5 million of which are certified under international standards; ② difficulty in supporting the informal and local sector, ③ the need to further

empower the public sector, civil society, and local development dynamics, and ④ mixed results in conserving biodiversity, both wildlife and otherwise. The assessment particularly recommends: On the industry level, the value of the forest's environmental and social services should be taken into account in a better way. The scope of the forest management plan might be extended to other players besides large land-owners. In order to improve uptake among local players, sustainable forest management could be incorporated into a vision beyond its own sector, particularly in

connection with climate. AFD should keep facilitating partnerships (public-private or NGO-landowners) and help them work together to understand and address the obstacles to forest management. Internationally, AFD should remain active in regional bodies in order to influence the approaches and instruments are adopted. Finally, AFD should keep strengthening the institutional capabilities of the public sector, particularly those of decentralised communities that act as project owners for socio-economic development in their territory.

BOX 11: REGIONAL DEVELOPMENT OF THE SOUTH-WEST FORESTRY REGION OF THE CAR

The forests of the south-west of the Central African Republic (CAR) constitute the main national dense rainforest (3.8 hectares). For the last decade or so, France has provided support for the implementation of sustainable management practices. Today the entire massif – with the exception of three operating and development permits (PEA) that have yet to be awarded – is operated according to the development plans. An agency for the sustainable development of forestry resources (Agence de gestion durable des ressources forestières - AGDRF) has been created to provide support for private operators in this approach. The sustainable management of the forestry resource generates significant tax revenue for the country (10% of the country's tax revenue and 60% of export income) but also for the municipalities in question.

However, the spending by the municipalities remains vastly inferior to the taxes paid by the forestry operators. Yet, this income is predictable and sustainable and the needs of the population are very high. The reason for this situation is the inability of the municipalities to draw up municipal development plans and the corresponding budgets. This project, financed by AFD, will help them to acquire these skills.

BOX 12: SUSTAINABLE MANAGEMENT OF MEDITERRANEAN FORESTS

The Mediterranean is a biodiversity hotspot, notably for the biological diversity of its forestry ecosystems (Vela et Belhouhou, 2007). It holds a central place in the rural, agricultural and pastoral economy and contributes to soil preservation, and the availability and quality of water resources.

These ecosystems are faced with ① climate change and ② the rapid transformation of rural territories through agricultural intensification and

urbanisation. In 2011, AFD became a partner of the Collaborative Partnership on Mediterranean Forests. For the last ten years, in Morocco, AFD has been contributing to the maintenance and improved management of cedar forests in the region of Ifrane. In 2011, it provided support to the General Directorate of Forestry in Turkey on adapting its forest management practices and technology with regards to climate change (risk of fire, and health risks), through a partnership with between the French

National Forests Office and the Turkish General Directorate of Forestry.

In years to come, AFD could continue its support in Morocco and Turkey and develop new partnerships, notably in Lebanon and Tunisia. Participative and integrated approaches could be made at the territorial level, also promotion of products other than wood (medicinal plants, honey, fruits, cork), ecosystem services and the wood fuel sector.

climate change. AFD Group will ensure that no project that it finances, regardless of who proposes the project, contributes to forest degradation or deforestation; on the contrary it will promote the conservation and restoration of forestry zones and ecological corridors. Programmes for the extension and/or rehabilitation of large plantations of perennial cultures and monospecific trees will apply an exemplary policy of «zero deforestation».

S/O 1.3. | Provide sustainable financing for biodiversity protection

In AFD's countries of operation, the financing allocated to biodiversity protection and, more specifically, the institu-

tions responsible for the management of protected areas, when this is not provided by annual budgetary awards, can be subject to substantial variations. In order to guarantee the continuity of conservation services and avoid the loss of trained human resources, it is essential to put in place funding measures that mean that at least part of the resources will be available over long periods. To this end, AFD will contribute to the structuring of:

- ➔ **International foundations** dedicated to the protection of a protected area, to all the protected areas of a country or a group of protected areas of a number of countries;
- ➔ **Payment for services rendered by the conservation of an ecosystem**, such as the protection of the quality of drinking water resources by the maintenance or the

reconstitution of plant cover, protection against flooding, erosion, siltation or encroachment of sand into reservoirs, infrastructures, urban areas and agricultural areas.

- ➔ **Compensation funds for biodiversity losses** caused by economic projects, which cannot be developed without the destruction of certain ecosystems and which must compensate for this loss by the protection or restoration of territories of at least equivalent biological value.

S/O 1.4. | Strengthen the policies and institutions responsible for biodiversity protection

The capacities of public bodies (government administrations, local and regional authorities, training and research institutions, agencies and bodies specialised in the sustain-

able management of natural resources), private bodies such as professional associations, and associations such as NGOs, is the object of particular attention in AFD's countries of operation.

To this end, AFD will support:

- ➔ The formulation of national sub-sector strategies, including in the form of sectoral policy matrices backed with budget assistance (see box below);
- ➔ Programs to strengthen the capabilities, training, and work in the field (particularly in Central Africa) of governing bodies tasked with policing forests and/or protected areas;
- ➔ The roll out of information systems on the state of natural resources;
- ➔ Systems for the surveillance and supervision of the legality of harvesting and the use of natural resources, particularly forestry, game hunting and fisheries.

BOX 13: FOUNDATION FOR PROTECTED AREAS AND BIODIVERSITY IN MADAGASCAR (FAPBM)

Madagascar is one of the world's 17 megadiversity countries and a hotspot of global biodiversity, with plant and wildlife that is unique and which is today threatened by anthropogenic pressures and climate change. In 2003, the Madagascan government undertook to triple to surface area of its protected areas, increasing them to some 6 million hectares, or 12% of its landmass. New protected areas have been created, bringing together civil society and local communities in their governance bodies.

The FAPBM was created in 2005 with the support of Conservation International and the WWF, plus financial support from France (AFD, FGEF, C2D) which is today the largest contributor/investor, with 16.3 million euros or some 45% of capital. This Trust Fund contributes to the recurrent costs of Madagascar's system of protected areas and to the improvement of living conditions of the populations that are the most dependent on these natural resources. A dozen land and marine protected areas benefit from biodiversity

protection actions (such as supervision, surveillance, ecological monitoring) and socio-economic activities (conservation agriculture, ecotourism, environmental education, social investments) in favour of local communities within or on the periphery of the protected areas.

The FAPBM is particularly active within the Consortium of African Funds for the Environment, creation of which was supported by AFD, FGEF and KfW.

BOX 14: SUSTAINABLE DAMS IN COLOMBIA: THE COMMITMENT OF EPM

Empresas Publicas de Medellin (EPM) is a Colombian public company working in the energy, water, wastewater and telecommunication sectors. EPM and AFD signed a financial and technical cooperation agreement. One of the themes of the technical cooperation addresses the integrated management of catchment areas within the framework of hydropower developments. This is because, despite having a strong hydropower potential as a result of the relief and the hydrography of the country, EPM is faced with substantial environmental problems such as agricultural diffuse pollution, forest fragmentation, soil erosion, etc. The aim is to strengthen the social and environmental management of catchment areas, and their territorial governance. The drawing-up of EPM's biodiversity strategy and the development of its REDD+ project to combat deforestation are also planned.

BOX 15: OFFSETTING DAMAGE TO ECOSYSTEMS AND BIODIVERSITY

One of the major causes of the accelerated loss of biodiversity is related to the destruction and fragmentation of habitats as a result of the construction of infrastructure (mines, energy, transport etc.), urban development and the expansion of agri-food plantations. The application of the principle of offsetting damage to ecosystems and biodiversity implies the implementation of a prioritised strategy for avoidance, reduction and compensation.

International best practices in this area require compensation for the residual impacts on biodiversity caused by development projects. This principle must result in there being no net loss to biodiversity and by the implementation of offset projects.

AFD and FGEF plan to jointly fund a

project promoting offset mechanisms in Africa, seeking to achieve a target of "zero net losses" of biodiversity, in partnership with the Wildlife Conservation Society and Forest Trends, members of the Business Biodiversity Offset Program. (BBOP) The project should cover Mozambique, Uganda, Guinea and Mozambique, and support the following activities:

- ➔ Institutional support for the introduction into legislation and national regulations of the principles of compensation mechanisms and zero net losses, notably in Impact Assessments and in the awarding of environmental permits.
- ➔ Training of staff in the government department in charge of drawing up and monitoring the application of

environmental regulations, plus training of companies, consultancy firms, investors, conservation bodies and local communities who are involved in the pilot projects.

- ➔ Support for the design and implementation of pilot offset projects with developers, consultants, and financing organisations.
- ➔ Development of financial compensation mechanisms, particularly in collaboration with the Conservation Trust Funds, in order to secure sustainable financing for biodiversity.
- ➔ Dissemination of lessons learned from African experience of offsetting, to ensure the adoption and effective application of best practices.

BOX 16: SANGHA TRI-NATIONAL FOUNDATION (STNF)

The Sangha Tri-National (TNS) Foundation covers three adjacent national parks, namely Lobeke in Cameroon, Dzanga Sangha in the Central African Republic and Nouabale-Ndoki in the Republic of Congo. Its total surface area is some 44,000 km². The TNS is one of the last sanctuaries of the great forest mammals of central Africa. It is home to an ecosystem that plays an essential role for all three countries, due to the environmental services it provides to the local and indigenous populations. The TNS was listed as a UNESCO World Heritage Site in 2012.

The Sangha Tri-National (TNS) Foundation was created in 2007. This Conservation Trust Fund is a pioneer in central Africa and is unique in the world because of its tri-national characteristic. It is also original in terms of the way its capital is formed: part of the capital comes from the private German company Krombacher (through the Regenwald Stiftung) alongside KfW and AFD.

The TNS Foundation has enabled the creation the Trinational Anti-Poaching Brigade.

AFD support will take the form of a component of projects or technical partnerships with the governing administrations in charge of policing the forest and/or protected areas:

- ➔ Capacity building, training and field intervention programmes (particularly in Central Africa).
- ➔ The implementation of sector policy matrices coupled with budgetary support (see box).

Amongst the measures to assist in the decision-making and supervisory process for protecting the environment, AFD will support: ① the REDD+ strategies, ② the use of satellite imagery and ③ biodiversity accounting.

① Strategy and pilot projects for reducing emissions from deforestation and forest degradation and their role in the conservation of biodiversity (REDD+)

According to a number of reports, the reduction and/or prevention of deforestation would be, at the world-

wide level, the most significant and immediate mitigation option in the short term.

The principle of REDD+, which stands for “Reducing emissions from deforestation and forest degradation, and the role of conservation, the sustainable management of forests and the strengthening of forest carbon stocks in developing countries”, is to remunerate developing countries via contributions from industrialised countries (through a market or a fund) for actions that avoid deforestation, reduce forest degradation or restore forest ecosystems.

While REDD+ represents an additional financial opportunity for developing countries, the socio-economic and environmental benefits must also be promoted and monitored. To achieve this, REDD+ needs to develop an integrated territorial approach where the questions of governance, land rights, the rights of civil society and indigenous population and the coherence of public policies are primordial.

AFD has supported the work of drawing up national REDD+ strategies, through the Forest Carbon Partnership Fund (FCPF) and the climate negotiations.

AFD continues to strengthen the national capacities needed for REDD+, notably through the availability of satellite images (see below) and the promotion of a REDD+ approach in local development projects in particular (PNDP in Cameroon, PDRSO in the Central African Republic for example).

In addition to drawing up strategies, capacity building for monitoring, and localised pilot projects (phase 1 of

the REDD+ mechanism), AFD will progress towards the formulation of integrated programmes on a larger scale (phase 2), notably in the Congo basin. Land-use planning and an approach that takes into account the causes of deforestation are needed, at least at the level of provinces or biomes/landscapes to ensure effective action, limiting the risks of displacement and deforestation.

2 The use of satellite data for monitoring natural land and marine resources, and supervising their condition and their use

Satellite data is a hugely effective tool for the governance of natural resources.

The satellite monitoring of forest cover is an essential tool for implementing mechanisms for reducing emissions from deforestation and forest degradation (REDD+). Satellite images are needed to define baseline scenarios from which emission reductions will be calculated. They also help to estimate avoided CO₂ according to the development of forest cover, and to monitor deforestation in order to best adapt environmental policies.

Satellite images can also be useful for the monitoring and repression of illegal fishing (IUU, Illegal Unreported and Unregulated fishing). It can also allow biological dynamics in marine areas to be monitored.

More generally, satellite images allow public bodies to appreciate the extent of their natural resources, to plan how to use and how to protect them and to follow developments at the lowest cost over very large areas.

High definition satellite images can be used to monitor the commitments made by industrial and agricultural

BOX 17: BIODIVERSITY BUDGETARY LOAN TO MEXICO

Natural Protected Areas (CONANP) is in charge of the administration of the 174 protected areas in Mexico, which cover nearly 13% of the country's landmass.

AFD's biodiversity programme seeks to reinforce the conservation of ecosystems and their biodiversity in Mexico, through Natural Protected Areas and the promotion of new instruments of sustainable land management. This programme is made up of three comple-

mentary parts:

- An untied budget loan of 60 million euros to the Ministry of Finances, coupled with a matrix of public policies in the area of biodiversity, outlining the priority objectives of the CONANP in the medium term.
- A technical cooperation programme to carry out studies and exchanges of experience on (i) the promotion of new methods of conservation inspired by the French model of Regional National

Reserves and (ii) the development through the creation of brands and labels of sustainable production alternatives in the protected areas;

- A pilot project financed by the French Global Environment Facility for the development of new sustainable local governance schemes, in order to ensure the integrated management of territories and their biological connectivity along the Ameca-Manantlán biological corridor (State of Jalisco).

companies, regarding the respect of ecosystems and the registration of land rights.

In many of AFD's countries of operation, the national capacity for use of this tool needs to be reinforced, and the institutions and departments for making these images available and for processing them need to be structured. AFD will continue and broaden its support in this area:

- Through dedicated forest management projects in the Congo Basin (see box);
- Through projects specialised in the surveillance of maritime areas and their resources;
- Through components or sections within agricultural, territorial or industrial development projects that allow mapping, at the various scales needed, of soil utilisation and the respect of the various land use decisions that have been taken: State, local and regional authorities, industrial sites, mines, etc.

1 Biodiversity accounting

National accounting systems do not take into account the depletion of natural resources and environmental degradation. Environmental and satellite accounts complete the national accounting systems by adding environmental statistics to economic statistics. Consequently, through environmental accounting the contribution of the environment to the economy and the impact of the economy on the environment can be appreciated. However, it only partially takes into account the services provided by ecosystems.

Ecosystem accounting makes it possible to extend environmental accounting and provide a more precise vision of the state of the ecosystems and the pressures they are experiencing. For example, whilst water accounting makes it possible to develop effective pricing of the water resource, an approach via ecosystem accounting will make it possible to refine the management of this resource.

The implementation of environmental accounting systems makes it possible to take the value of natural capital into account in development strategies and policies and in investment decisions.

This implies 1 the development of methodologies for ecosystem accounting within environmental accounting systems and 2 their implementation.

To this end, AFD is part of the WAVES initiative (Wealth Accounting and Valuation of Ecosystem Services), launched during the 10th COP of the CBD in Nagoya. This initiative notably includes the implementation of environmental accounting systems in five pilot countries: Botswana, Madagascar, Philippines, Costa Rica and Colombia. AFD will continue to support this joint initiative of donors (WAVES is financed by a World Bank-administered trust fund) and to support new candidate countries in the implementation of natural capital accounting.

BOX 18: SATELLITE DATA FOR MONITORING FOREST COVER IN CENTRAL AFRICA

AFD has financed a programme that makes high resolution SPOT images available to the countries of central Africa (Gabon, Cameroon, Central African Republic, DRC, Congo, Equatorial Guinea), thanks to a partnership developed with Astrium. This satellite data - covering 2 million km² - is made available to any stakeholder wanting to work on REDD+ in the Congo Basin. This project, of a total cost of 8.5 million

euros for 2011-2015, includes the following elements: 1 making available the data of the SPOT archives from 1990 - 2010 as well as new data acquired between 2011 and 2015; 2 creation of a web portal that allows satellite data to be downloaded by all project beneficiaries; 3 the creation of forestry maps based on archive images for the entire surface area of tropical rainforest in the Central African Republic and part of

that of Cameroon for the period from 1990 - 2010; and 4 support for the implementation, in specialist remote-sensing institutions in the countries of central Africa, of satellite data processing chains that will allow the forest cover to be monitored.

Project ownership is entrusted to IGN France International, IGN, the CNES and the IRD.

5.4 | Objective 2: integrate ecosystem conservation into development policies, in all their sectoral dimensions

The erosion of biodiversity and the loss of environmental services at the global level is not as much the result of weak nature protection tools as a consequence of the pressures that are placed on natural environments. Therefore, all economic sectors need to commit to development trajectories that are economical in their use of biological resources.

Integrating the protection and development of biodiversity into sectoral policies, avoiding the most destructive options, reducing impacts on the biosphere, systematically offsetting the inevitable damage and restoring degraded ecosystems are principles that AFD Group must fully integrate into all its operations, notably those relating to agriculture, energy, transports, mines, urbanisation and education.

In addition, the advantages that biodiversity represents for the development of certain sectors needs to be appreciated, in order to amplify them. These sectors include cultivated biodiversity, the biodiversity of transformed landscapes, intra-urban biodiversity and businesses promoting biodiversity. It is possible to protect and restore as well as create and produce new biodiversity and to facilitate its placement in historically transformed landscapes.

AFD Group will ensure that no projects that it finances, regardless of who proposes the project, contribute to the degradation of forests or to deforestation. Projects financed by AFD Group must not generate a net loss of biodiversity in critical habitats, as defined in AFD exclusion list²⁰:

Generally, the integration of conservation, restoration and biodiversity loss-limitation objectives must be envisaged at every possible opportunity.

This objective is broken down into three sub-objectives:

- ➔ **S/O 2.1.** Strengthen the consideration given to biodiversity in projects supported by AFD;
- ➔ **S/O 2.2.** Facilitate private investments that improve biodiversity conservation;
- ➔ **S/O 2.3.** Share the costs of biodiversity conservation between economic agents to remunerate biodiversity conservation and restoration services;

AFD's average annual commitment for objective 2 is expected to be €34 million per year, weighted according to the method proposed in 4.2.

S/O 2.1. | Strengthen the consideration given to biodiversity in projects and programmes supported by AFD

1 Exclusion list and biodiversity

AFD Group's exclusion list indicates the types of projects that the group refuses to finance for ethical, regulatory (major international agreements), environmental or social reasons. Adopted in 2009, it particularly forbids AFD from investing in projects that encourage:

- ➔ The production or trade of any illegal product or any illegal activity with regard to the legislation of the host country and France, or any international regulations, conventions or agreements;
- ➔ Trade in animals or plants or any natural product not in accordance with the provisions of CITES;
- ➔ Fishing activities using a drift net that is more than 2.5 km long;
- ➔ Any operation that leads to or requires the destruction of a critical habitat, and any forestry project that does not implement a sustainable development and management plan.

Projects funded by AFD group must not cause a net loss in the biodiversity of critical habitats as defined in AFD's exclusion list: «The term critical habitat encompasses natural or modifies habitats that deserve special attention. This term includes 1 areas with a high biodiversity value as defined by IUCN classification criteria, particularly including habitats needed for the survival of endangered species defined by the IUCN red list of threatened species or by any national legislation; 2 area that are particularly important to endemic or limited-range species; 3 sites critical to the survival of migratory species; 4 areas that are home to a significant population of congregatory species; 5 areas that have unique combinations of species or contain species that came to coexist through

²⁰ «Exclusion list» approved in 2011 by the AFD Board of Directors.

key evolutionary processes or that provide key ecosystem services; ⑥ land whose biodiversity is socially, economically or culturally important to local communities in a significant way. Primary forests or high-conservation-value forests are considered critical habitats.»

② Integrating biodiversity into AFD's intervention frameworks

The ecosystem and biodiversity dimension will be integrated into strategic documents during the drafting or updating of AFD's Sectoral Intervention Frameworks (SIF) or Regional and Country Intervention Frameworks (RIF, RIC).

③ Ex-ante analysis of projects financed by AFD Group

AFD Group applies the principles and instruments of social and environmental responsibility, which particularly apply to biodiversity, including the social and environmental assessment sheet based on the Environmental and Social Impact Assessment, project classification and the implementation of a social and environmental management plan for projects that have the most impact. However, areas for improvement have been identified²¹.

Improving internal environmental responsibility procedures with regards to biodiversity demands an approach that is firstly based on assessment, in accordance with IFC performance standard n°6 (PS6): looking at how avoidance, reduction and offsetting criteria for damage to biodiversity are gathered and, if necessary, defining ways of improving project impact studies.

During the period covered by this Cross-sectoral Intervention Framework (CIF), we will assess how current procedures and project impact assessment documents provide information on the following points:

- Assessment of the sensitivity of environments and ecosystems where projects are developed and their capacity to integrate the project (analysis of biodiversity by taxon in addition to a functional assessment of these environments);
- Assessment of ecosystem services related to environments and ecosystems affected by the project using the methodology being developed as part of the EFES project (French assessment of ecosystems and ecosystem services) currently being carried out by the MESDE;
- Definition of measures for the avoidance, mitigation and, if necessary, offsetting of the impact on ecosystems, biodiversity and ecosystem services²²;
- In the latter case, defining offsetting measures (zero loss and net gains for biodiversity);

➤ Defining optimal implementation conditions for these measures (defining policies in terms of biodiversity, mapping sensitive areas, training agents, creating partnerships, costs, etc.);

➤ The question of the protection of intellectual property rights on genetic resources and the fair distribution of advantages and benefits gained from biodiversity by the project, between the various stakeholders and rights holders.

Based on this assessment, new requirements in this area may be proposed for the preparation of projects and their instruction by AFD, in keeping with the spirit of PS6.

As an example, the production of a template Ecosystem Service Assessment Sheet to be used by consultancy firms and AFD's counterparts, would be an interesting development. Ultimately, the aim is to include the measures and actions defined by these assessments in the legal documentation (specific E&S clauses, E&S action plans for Proparco) governing these commitments.

As part of the implementation of its Operational Social Responsibility Action Plan, AFD will strengthen its tracking of Environmental and Social Management Plans and the processes for consulting people affected by projects as well as Stakeholders.

A system for monitoring the implementation of these measures will be put in place using performance indicators, particularly following the implementation of the social and environmental management plans, and particularly in the case of offsetting residual damage to biodiversity.

Furthermore, pilot schemes covering one or many sectoral projects (infrastructures, mines, etc.) will be launched with a target of zero-loss of biodiversity (in the case of natural habitats) or biodiversity net gains (in the case of critical habitats).

④ Sustainable Development Second Opinion

During the appraisal of projects funded by AFD, the contribution of these projects to sustainable development is subject to an independent assessment, provided by the Second Opinion department, in addition to its regulatory opinion. It covers five dimensions of sustainable development: ① Economic development, ② Poverty alleviation, ③ Tackling inequality, ④ Preservation of biodiversity and ⑤ Fighting climate change.

This Sustainable Development Second Opinion is annexed to the report presented to the decision-making bodies of AFD, and is formulated at the first stage of the appraisal

21 See BBOP, Alvarez I., 2012, Biodiversity Offsets. Review of Offset Practices and AFD Strategy, AFD.

22 Idem.

cycle of AFD projects. It can lead to the completion of the measures recommended by the environmental and social assessment.

For Goal 4: Preservation of biodiversity, management of environments and natural resources, we consider:

- Management / protection of biological / genetic diversity (species), diversity of habitats (ecosystems / natural environments) and the usefulness of the environment (networking of natural or agricultural areas, etc.).
- Combating water and soil pollution (for air see Goal 5).
- Rational management of natural resources (water, soils, materials) and waste.
- Preservation of landscapes.

Each project will be scored from 0 to 5 ('no contribution' to 'very strong positive contribution').

Consolidating the scores obtained by projects with regards to this Goal will give an idea of the Group's action for biodiversity.

5 Implementation of best options for "avoidance, reduction and compensation", restoring and producing biodiversity in the various sectors

Generally within the framework of the dialogue that AFD maintains with its partners and counterparts, at a sectoral level as well as at a development strategy level, AFD Group will encourage, facilitate, and nourish discussions on the integration of ecosystem protection as part of the project appraisal process, the preparation of multi-year intervention frameworks, or the production of knowledge of the dynamics and advantages of development.

When it is timely and possible, AFD will encourage and support measures for formulating and implementing contracts between local stakeholders and the authorities for the development and promotion of a territory where it operates, with the aim of preserving or restoring biodiversity. Contracts could include territorial charters, catchment area contracts, integrated management of coastal area contracts, local management contracts, usage, zoning and allocation of land contracts and the fair and sustainable management of land usage and land rights.

In addition, interventions in the sectors that can have the strongest impact on biodiversity (see 2.5 above) should be designed and implemented with "biodiversity" as a priority, which will be the subject of analysis, indicators and specific activities, given below as indication.

In terms of agricultural development and rural development²³, AFD will support:

- **From an agronomic perspective:** Ecological intensification limiting the pressure on natural areas; agricultural practices and rearing of livestock that encourage the biodiversity of cultivated and domestic species; ecosystem diversity; biodiversity of the farmed landscape (agroforestry, living hedges); soil biodiversity and consequently the soil's ability to store carbon and water and its fertility; and the protection of local know-how.
- **From a social perspective:** Building the capacity of rural communities to be able to define and ensure the application of land destination plans for their territories, in order to maintain the functions of the ecosystem and avoid the overexploitation of local commons, as well as to ensure fair management of land use rights and the rights to natural resources.

The AFD Group shall ensure that no farming project it funds, regardless of who has planned them, contributes to the degradation of forests or to deforestation, but rather promotes the conservation and restoration of forested areas and ecological corridors. Programs to expand and/or rehabilitate large plantings of perennial crops and single-species wood production areas shall apply an exemplary «zero deforestation» policy.

➤ In terms of energy²⁴, drinking water, and transport, AFD will ensure:

- that natural spaces that can improve the lifespan and effectiveness of infrastructure are preserved: Tree cover of dam watersheds and catchment areas, slopes overlooking the transportation infrastructure, wetlands, animal migration routes, wildlife corridor continuity, etc.
- that the footprint of infrastructure in biodiversity-rich areas is limited, and if warranted, offset such footprints with sufficient space and quality.

➤ In terms of extractive and processing industries, AFD will ensure that the direct impact of industrial sites is the subject of adequate offsetting measures and that the treatment of effluents does not have a negative impact on water resources²⁵ and catchment areas.

➤ In terms of urbanisation, particular attention will be paid to the geography of urban expansion in order to preserve useful ecosystems, whose protection could be assured by their recreational function. There will be

23 See SIF "Food Security in Sub-Saharan Africa 2013-2016".

24 See SIF "Energy 2013-2016".

25 See SIF "Water And Sanitation 2012-2015".

support for the maintenance of biodiversity in the urban fabric. The protection of water catchment areas could be used as an area for conservation. AFD will also ensure that its projects consume the smallest amount of surface area possible.

- In terms of river basin development, irrespective of their use (energy, agriculture, drinking water, navigability) the ecological functions of wetlands, watercourses and other bodies of water will be studied to ensure the preservation, restoration or offsetting of any losses, through the implementation the principles of integrated water resource management, of wildlife movement and access in and around the bodies of water, and the preservation of wetland ecosystems, including on riverbanks.

AFD will take care to ensure that education in biodiversity conservation is included in all the training programmes that it supports (at the primary, technical or superior level). Training in biodiversity-related professions (managers and guides in nature reserves, foresters and fishermen, naturalist-assessors) could give rise to dedicated projects.

S/O2.2. | Facilitate private investments that improve biodiversity conservation

Conservation of biodiversity must be taken into account by economic players in their investments, whether this involves limiting any eventual impacts or whether these investments have a bearing on the economic promotion of a natural resource. AFD could support private invest-

ments including biodiversity conservation objectives, with all the financial tools that can be used by the private sector.

The following measures can also be envisaged:

- The award of concessional lines of credit to local banks, to be used by businesses for environmental purposes and/or for financing their projects for promoting biodiversity (ecotourism, eco-sectors, sectors that offer the populations alternative ways of life in order to preserve natural resources, etc.). Adequate measures will be put in place regarding project eligibility conditions and the repercussion of the concessionality on businesses.
- Participation in Eco-responsible Investment Funds, such as those that have been developed in Latin America, based on objectives such as those mentioned for lines of credit. AFD could intervene by combining a technical assistance facility with support for promoters and venture capital.

S/O2.3 | Share the costs of biodiversity conservation between economic actors

Long-term financing of biodiversity protection actions can not only be based on budgetary awards or the income from entrance fees to parks and reserves, which only rarely cover the full costs of surveillance and the maintenance of infrastructures. AFD could help to structure or widen innovative systems where the activities benefiting

BOX 19: ASSESSMENT THE IMPACT OF PASTORAL PRACTICES ON BIODIVERSITY IN SAHEL COUNTRIES: THE CASE OF NIGER

Throughout the Sahel, modern agros-technology techniques make it possible to describe rangeland both quantitatively and qualitatively using satellite imagery correlated with field data. The dynamics of rangeland areas are measured on a regular basis and it is possible to cross-reference them with anthropogenic changes generated by the projects. At the same time, specific methodologies for measuring the impacts of new practices on the plant life are being developed, and this could prepare pastoral organisations for access to the various carbon finance markets.

In Niger, in the Zinder region, AFD has financed a project to secure pastoral systems (7 million euros, 2006-2011), based on infrastructures (water points, passage corridors, grazing areas, markets), anchored into the territorial development plan (communal development plans), managed by committees that bring together all users, both permanent and transient. Environmental monitoring has been awarded to the CNSEE (the national centre for ecological and environmental monitoring/ Centre National pour le suivi écologique et environnemental) and this has made

it possible to quantify the new areas that have emerged thanks to the new water access points. Plant cover is also monitored, and is subject to a better integration of livestock raising and agricultural practices.

This approach has been replicated in other regions of Niger using either AFD funding (Tillabéry) or funding from other financial partners (Maradi, Tahoua, Dosso for the CTB).

from the services provided by the ecosystem, or the activities that are inevitably responsible for the damage to ecosystems contribute financially to their protection. As an indication, we can mention:

- The management companies of large-scale hydraulic structures (electricity, drinking water, irrigation) would pay for services provided by the maintenance of plant cover that limit erosion, regulate water flow and contribute to the quality of the water;
- Recurrent contributions to funds responsible for offsetting of losses caused to biodiversity by private investments (mines, hydrocarbons).

In addition, when it can be shown that the mitigation of greenhouse gas emissions or the adaptation of economies to climate change can greatly benefit the protection of ecosystems, an active process of securing “climate” financing for projects that impact on both Climate and Biodiversity will be started. The REDD+ mechanism would be part of this process with regards to forest ecosystems. This could concern other ecosystems. AFD could consider pilot actions in this area.

5.5 Objective 3: Strengthening partnerships between French and developing country stakeholders for better worldwide biodiversity governance

Global and local efforts to promote biodiversity necessarily rely on a large number systems of standards and institutions, many of which are voluntary. All of these mechanisms must be supported by highly diverse scientific bases. AFD’s mandates allow it to help build the capacity of private stakeholders, associations, institutions, and scientific bodies by putting French expertise to work.

There are, therefore, three sub-objectives for this SIT:

- **S/O 3.1. Building the capacity of the Global South’s biodiversity policy stakeholders;**
- **S/O 3.2. Strengthening partnerships with international biodiversity governance stakeholders;**
- **S/O 3.3. Supporting the internationalisation of French biodiversity expertise**

The cross-sectoral resources that have been used so far rely on several small grants and on a larger historical financial commitment with two partners (Conservation International, nearly €4 million/year over 2009–2012 and the IUCN, about €1.2 million/year over 2009–2012). For the period 2013–2016, the same level of support is proposed for action partnerships, better divided among all partners, particularly for the benefit of French partners and NGOs and for local project owners and with the aim of assigning at least 50% to priority countries. In total, this represents an estimated amount of €6 million per year.

S/O 3.1. | Building the capacity of the Global South’s biodiversity policy stakeholders

Building the capacity of key development stakeholders of the Global South, particularly those in African countries, to deal with political negotiations in support of biodiversity should be a cross-sectoral objective of all AFD operations, whether these operations involve policy support (REDD, biodiversity accounting), university training courses or training on projects in the field.

AFD’s intellectual output (research, assessment, capitalisation), when it is primarily conducted in partnership with experts from the South and shared with them, also contributes to this training. The objectives of such output are illustrated in Point VI.

S/O 3.2. | Strengthening partnerships with influential international players

With a dual aim of relying on the large international organisations’ ability to mobilise and their expertise, and to facilitate their commitment to France’s geographic issues and priorities, AFD will take care to ensure collaborations with them.

With major international nature conservation organisations (NGOs, IUCN), partnerships will be adjusted, taking into account the resources that are available and the assessment that will be conducted on them.

BOX 20: THE IUCN AND THE FRANCE-IUCN FRAMEWORK AGREEMENT 2009-2016

This organisation was founded on 5 October 1948, following an international conference held at Fontainebleau. It was originally called the International Union for the Protection of Nature (IUPN) but was given its new title in 1956.

The IUCN brings together a number of States and government bodies, over 1000 NGOs and over 11,000 experts and scientists from more than 160 countries. It employs over a thousand people. It has helped more than 75 countries to prepare and implement conservation and biodiversity strategies. The IUCN is also the advisory body which the World Heritage Committee consults when considering including natural sites on the World Heritage List and is responsible for assessing the state of conservation of such sites.

The organisation's Species Survival Commission (SSC) keeps the IUCN's Red List of Threatened Species™ up to date. Its World Commission on Protected Areas (WCPA) has set out six categories of protected area and supports a worldwide network of marine and terrestrial protected areas.

The French Committee for the IUCN was set up in 1992 and brings together 2 ministries, 13 public bodies, 41 non-governmental organisations and over 250 experts. Local authorities and businesses are also involved. The aim of IUCN France is to respond to biodiversity issues in France and to promote French expertise internationally.

The IUCN has had a «Business and Biodiversity Programme» for many years now and this is used to talk to businesses and business organisations, particularly in mining and the extractive industries, in tourism, the agro-food industry, biofuels and aquaculture. The IUCN helped to develop the Commission on Large Dams. Finally, the IUCN works on developing small companies in the biodiversity sector.

The IUCN programme for 2013 to 2016 is organised around three themes: (i) Valuing and conserving nature by highlighting the tangible and intangible value it offers (ii) Effective and equitable governance of nature's use, 'people – nature relations', rights and responsibilities, and the political economy of nature (iii) Deploying nature-based solutions to global challenges in climate, food and development: nature's contribution to solving the problems of sustainable development, particularly climate change, food security and economic and social development.

Since 2005, France has been one of the IUCN's ten framework partners through the France-IUCN Framework Agreement, which involves the Ministry for Foreign Affairs, the Ministry for Ecology, Sustainable Development and Energy, the Ministry for French Overseas Departments and Collectivities and AFD (from 2009 onwards). The framework agreement underwent independent assessment in 2012. Amongst the

successes of the agreement in Africa has been the creation of a roadmap to strengthen the network of protected areas, which now acts as a common basis for the work of a range of partners (governments, NGOs, donors (the GEF, the EU, KfW, AFD). In French Overseas Departments and Collectivities, the framework agreement has contributed to the European strategy for biodiversity and to a long term financing tool (BEST, the Voluntary scheme for Biodiversity and Ecosystem Services in Territories of the EU Outermost Regions and Overseas Countries and Territories). The assessment recommended increasing synergies between activities under the France-IUCN framework agreement and bilateral cooperation (particularly the FGEF and AFD).

The third phase of the 2013-2016 programme will focus on three programmes: ① strengthening the network of protected areas in Africa (using the outline provided by the roadmap for protected areas in Africa (box 6) ② Preserving the oceans and valuing their resources within the Priority Solidarity Area (PSA) and in French Overseas Departments and Collectivities ③ Biodiversity governance. The total budget over a four year period is estimated to be €7,525 million. AFD may contribute €5.2 million.

With organisations like the WWF, WCS and CI, to list just a few examples, co-financing is a possibility, particularly in subregional operations where those NGOs have comparative advantages and the ability to put other funding to use.

With the International Union for Conservation of Nature (IUCN), the France-IUCN framework agreement that covers the period of this CIF will be an opportunity to strengthen the operational ties between AFD and that

organisation on concrete issues. The IUCN also produces knowledge, particularly on the state of ecosystems (red list of species and ecosystems, etc.) which can help AFD do better work on biodiversity.

Contributions to several multi-donor initiatives that have proven their worth and effectiveness in developing countries (environmental accounting: WAVES, REDD+ strategy: FCPF) will be renewed. Participation in new coalitions (e.g. Global Ocean Partnership) will be studied.

BOX 21: FUNDING SMALL INVESTMENTS FOR BIODIVERSITY: THE CRITICAL ECOSYSTEM PARTNERSHIP FUND (CEPF) AND VERDE VENTURES

The 'biodiversity hotspots' are considered the richest but also the most threatened areas on the planet. Close to half of all plant species and 35% of vertebrate species are endemic to these hotspots. There are 34 such eco-regions. They are irreplaceable and, as such, a priority for biodiversity conservation. A large number of hotspots are on French territory (the Mediterranean, the Indian Ocean, New Caledonia, the Caribbean, and French Polynesia).

The Critical Ecosystem Partnership Fund (CEPF) is a multi-donor fund dedicated to the protection of threatened ecosystems in the hotspots by civil society stakeholders. It was set up in 2000 and renewed in 2007. The fund finances the projects of NGOs working on the conservation or sustainable management of biodiversity in the 'hotspots'. The NGO Conservation International (CI) is a founder of the fund and co-finances and manages it. The CEPF provides financial support and technical assistance to civil society organisations (with donations ranging from US \$3,000 to US \$400,000, and the average being US \$150,000). To date, the CEPF has provided support for 1,650 civil society organisations (small agricultural cooperatives, community associations, private sector partners and international non-governmental organisations) in 19 of the 34 biodiversity hotspots. Before an investment is made in a hotspot, an 'ecosystem profile' is prepared and discussed with all stakeholders locally to identify the desired aims and agree an investment strategy for the hotspot

concerned. A board made up of representatives of each of the partner institutions manages the fund. It is currently chaired by Jean-Michel Severino. The council of large donors governs the fund and approves new areas for operations and investment strategies.

AFD provides the Fund with subsidies to the tune of 19.5 million euros and has been a CEPF partner since 2007, alongside Conservation International, the Global Environment Facility, the Japanese government, the John D. and Catherine T. MacArthur Foundation and the World Bank and, more recently, the European Union. France had three objectives in joining the initiative:

- 1 To improve biodiversity conservation and sustainable management in critical ecosystems and selected hotspots, particularly those within the Priority Solidarity Area (PSA)
- 2 To build capacity and increase involvement of civil society and local NGOs, particularly French-speaking ones, in the area of biodiversity management, and
- 3 To extend CEPF funding to other hotspots in countries where AFD operates, with a particular emphasis on four priority geographical areas: French Polynesia-Micronesia, the Caribbean, the Mediterranean, New Caledonia.

AFD's contribution to the CEPF will be assessed by independent experts in 2013 (steering and funding by the Evaluation and Knowledge Development Unit of the Research Department, call for tenders underway, expected start date mid-2013). It will focus in particular on CEPF

funding allocated to NGOs in hotspots located in AFD's areas of operation in recent years, in particular Madagascar, countries on the Indo-Chinese peninsula, West Africa (the forests of Guinea).

Verde Ventures:

For the last 10 years, the Verde Ventures (VV) programme of the NGO Conservation International has been providing loans for privately-owned small and medium-sized enterprises, producers' groups and agricultural cooperatives whose work has a positive impact on biodiversity (organic farming, agro-forestry, eco-tourism and the sustainable use of forests).

By the end of 2012, VV had invested over US \$23 million, helping to protect almost 513,000 hectares, which are home to 483 endangered species (species on the IUCN's Red List) and affecting 58,000 people around the world (including a small but growing number in Africa). The initial results of VV's operations have been positive and have confirmed the existence of demand which is not being met by traditional financial institutions. Work began on creating an investment fund that will be independent of CI, Verde Ventures 2, in 2012 and this may increase the size and number of investments Verde Ventures can make.

AFD has been supporting the VV programme and the expansion of its activities in Africa since 2009 through a loan of US \$3.5 million to CI.

S/O 3.3. | Help French biodiversity players expand internationally

In the Centre for International Cooperation for Agricultural Research for Development (CIRAD), the Institute for Research for Development (IRD), the National Forests Office (ONF), the French Research Institute for Exploitation of the Sea (IFREMER), the French National Geographical Institute (IGN), and so on, France has a number of public bodies whose expertise on various aspects of biodiversity is acknowledged by stakeholders in the countries in which AFD operates. This expertise has been gathered during the course of longstanding activities in developing countries and in tropical French Overseas Departments and Collectivities. The same can be said of a number of consultancies, which work with the above bodies and with AFD (on tropical forests, fisheries) and firms working in Africa (particularly in the timber and fisheries industries). However, there are other French organisations which work mainly in France or Europe but which could be usefully deployed by AFD's partners. Like the international cooperation and culture services and the Foreign Affairs Ministry's network of environment correspondents, who support the promotion of French environmental expertise abroad, AFD will also support such developments

In particularly this will include:

- 1 **French public bodies** responsible for biodiversity conservation on French soil, whose institutional logic and relationship with the State and local authorities can provide a model in terms of governance, environmental taxation and experience of the conclusion of contracts between local stakeholders on conservation and development objectives. In particularly this will include: These include: The national and regional parks authorities, the French Coastal Conservation Authority, the Technical Workshop for Natural Areas (ATEN), the Foundation for Research into Biodiversity, central and decentralised offices of the Ministry for Ecology, Sustainable Development and Energy and the Ministry for Agriculture, Agri-Food and Forests.
- 2 **Consultancies and other firms** which have not worked abroad a great deal but would benefit from doing so and could thus make their expertise available to AFD's partners, particularly in emerging countries, where there is a demand for skills transfer. The fields concerned are restoring degraded areas, particularly wetlands, decontamination and effluent treatment, ex ante environmental assessments of infrastructure and large projects.

- 3 **Local authorities**, particularly forest municipalities, departments and regions, which are responsible for land management, land use and the environment and therefore have experience of negotiation between stakeholders and applying land use rules
- 4 **Nature conservation organisations** created to deal with French issues but which could broaden their expertise through partnerships with stakeholders from the Global South, who would benefit from their experience of activism, advocacy and environmental education.

There is a large network of organisations (expertise, field work, education) working on French Overseas Departments and Collectivities. In 2012, AFD signed a partnership agreement with France Nature Environnement (the federation of all the French nature protection organisations) which will support their activities as well as synergies with AFD activities.

In general, however, French NGOs could become more involved in promoting biodiversity. Between 2009 and 2013, out of a total of 323 projects presented by French NGOs to the Division for Partnerships with NGOs (the DPO), only 6 projects dealt with Biodiversity.

A Sectoral Innovation Facility for NGOs (FISONG) in the area of biodiversity was first proposed by AFD in 2012. It met with some success (around forty projects put forward). AFD will propose establishing further FISONGs for biodiversity.

In order to strengthen this dynamic, AFD will facilitate dialogue between French nature conservation associations and international solidarity organisations with the goal of encouraging the inclusion of Biodiversity in projects that request funding from the DPO (NGO Partnership Division), whether for projects that are dedicated to biodiversity or that incorporate the preservation of biodiversity throughout its scope.

While respecting its partners' public procurement procedures, AFD will ensure that French stakeholders are kept informed of calls for tender.

It will use the full range of financial tools at its disposal to encourage partnerships amongst NGOs (FISONG), French local authorities and similar organisations in the Global South, the availability of French expertise in emerging countries (FEXTE) and the use of French scientific expertise for knowledge production activities.

BOX 22: 'BIODIVERSITY AND DEVELOPMENT' FISONG

The Sectoral Innovation Facility for NGOs (FISONG) is a funding tool which makes the most of NGOs' specialist know-how and ability to innovate.

A call for themed projects was launched in 2012 around the theme 'Biodiversity and development: sharing the benefits of biodiversity for village communities'.

For inhabitants of the countries of the South, most of their means of subsistence and development depend on the productivity of agricultural, forest, pastoral and marine ecosystems. But there is increasing pressure on natural resources, which causes degradation and even mass destruction and primarily affects the poorest people. Community

management of natural resources can protect ecosystems better and ensure that they are used sustainably while at the same time improving the flow of socio-economic benefits back to local people. Thus, sharing the benefits of biodiversity provides a tool for local development, although it often meets political, technical, economic and cultural obstacles.

NGOs were therefore asked to propose answers to these problems. A selection committee chose three projects, which will receive a total of €2.5 million of AFD funding:

→ Fondation IGF's 'Socio-environmental Corridors on the Maasai plain and in

the Rift valley in northern Tanzania' project;

→ NGO Noé Conservation's 'Partnership for the sustainable management of Sahelo-Saharan biodiversity in the Termit and Tin Toumma National Nature Reserve in Niger' project;

→ The 'Biodiversity, development and governance: Towards a model for the new marine protected areas of Madagascar' project, to be run by the French NGO GRET in association with international NGO WCS and the Malagasy NGO Fanamby.

6

Geographic breakdown

6

Geographic breakdown

AFD's operations depend on resources (grants and interest-rate subsidies) provided by the French government and on requests sent to it by its partners, starting with the national governments in countries where it carries out its work, but also including their local communities, businesses, and civil society organisations.

Additionally, AFD's work is framed by the mandates it is given by the French government based on the level of the development of the countries where it carries out that work (development, green and widely shared growth, global public goods). It is difficult at this point to lay out levels of commitment for each country and region in too much detail. However, the projects that could be funded

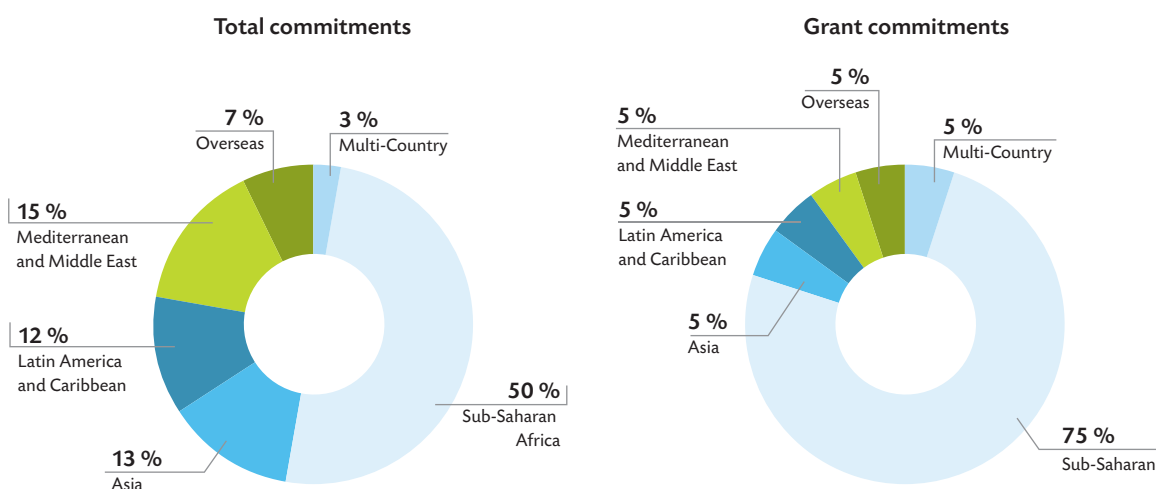
during the period covered by this CIF will necessarily follow on from the on-going dialogues and partnerships begun in previous years, and will include improving on the approaches that have been taken so far.

The figure below gives the relative values of the Biodiversity commitments weighted by subregion, with total commitments on the left and grants alone on the right.

Besides the growth of all AFD commitments to Biodiversity (€160 million per year), a special effort to find new candidates will be undertaken to help sub-Saharan Africa. 75% of the grants for biodiversity conservation will go to priority countries (particularly West and Central Africa, Madagascar, and Haiti).

FIGURE 6

AFD BIODIVERSITY COMMITMENTS BY REGION



6.1 | Foreign countries

In the poorest countries, biodiversity protection is inextricably linked to combating poverty. Healthy ecosystems improve food security, access to water, resource management and access to energy from biomass for people living there. They have an important role in health through the traditional pharmacopoeia. Gathering, hunting and

fishing contribute to diets and incomes. Extensive livestock farming depends entirely on the diversity and quality of the vegetation. Healthy ecosystems make people more resilient to extreme climate events. Traditional arrangements for managing natural resources regulated their use and prevented and managed conflict over such use. Often,

population and socio-political change have weakened these arrangements, yet new institutions regulating such matters (local authorities, parks and reserves, forestry and fisheries monitoring services) are perceived as lacking in legitimacy or sufficient, stable resources to fulfil their role. In these countries, since the 1970s, the international community (including AFD) has been supporting experiments aimed at combining economic development with conserving natural capital through village-level land use management, local development, pastoral land management, forest management, fisheries management and support for the establishment of protected areas to benefit sustainable local development, with the support of the international donor community.

Because the budgets that these States can muster for resource conservation objectives are so small, because harvesting natural resources (lumber and firewood) is necessary for their survival, and also because of weak governance (privatisation of the commons, large-scale land acquisition), they are facing a critical situation (Haiti, Madagascar, Laos). This is made worse by the fact that global warming and declining rainfall affect them particularly severely (all the countries of the Sahel). In these countries, (re)building local governance structures and public institutions and implementing sustainable forms of funding which are, at least partially, independent of national budgets must be priorities. AFD operations there are funded primarily by subsidies.

As an example, in such countries, the projects might particularly relate to:

- ✦ improving the management of existing protected areas and setting up sustainable funding mechanisms through foundations (West Africa, Madagascar), including marine areas (Indian Ocean);
- ✦ restoring forest cover (including mangroves), through planting and regeneration, and its sustainable use by local communities or governments, particularly for supplying the urban consumption areas with renewable energy (Sahel, Madagascar);
- ✦ preserving grazing resources and preventing conflicts between users of farm-tree-grazing spaces (Sahel);
- ✦ improving the quality of urban life by improving the quality of waterways, and through tree plantings such as green spaces or green belts (all countries);
- ✦ restoring ecosystem services in farmland by intensifying the planting of rain-fed crops, agroforestry, the protection and restoration of wetlands used for crops (ranges, tidal flats), the management of farmed landscapes, including in areas where irrigation is developed, through the management of their land by rural local governments (West Africa, Madagascar, Haiti, Afghanistan);

- ✦ the use of natural products by locals in production that adds value to certification (all countries).

Middle income countries that are a priority for France (sub-Saharan Africa, Africa north of the Sahara, Southeast Asia) are faced with a need for inclusive growth, fighting against poverty, and preserving noteworthy ecosystems (Congo Basin forest, hotspots in East and South Africa and Southeast Asia). Issues of governance can be as critical there as in poor countries. The private sector can be a high-impact player for biodiversity (mining and hydrocarbons, wood in the Congo Basin, tourism in East and South Africa). There, AFD can make use of all of its financial instruments.

As an example, in such countries, the projects might particularly relate to:

- ✦ improving the management of existing protected areas, improving their impact on the status, living conditions, and powers of affected local communities next to or within the protected areas (Africa, Southeast Asia).
- ✦ the sustainable management of forests and reforestation via the implementation of strategies to reduce deforestation and the degradation of forests, the strengthening of governance in the industry and the abilities of local communities to use their skills on their natural resources to ensure that their production is legal and that income from its use is fairly shared, empowering local players (businesses, communities) to sustainably manage their forests, environmental and social certification of wood producers, increasing added value in wood production (sub-Saharan Africa, Southeast Asia).
- ✦ improving the quality of urban life by improving the quality of waterways, and through tree plantings such as green spaces or green belts (all countries).
- ✦ improving and adapting ecosystem services in farmland by intensifying the planting of rain-fed crops, agroforestry, the protection and restoration of wetlands used for crops (ranges, tidal flats), the management of farmed landscapes, including in areas where irrigation is developed, through the management of their land by rural local governments (all countries).
- ✦ the use of natural products by locals in trade that adds value to certification (all countries).

In quickly growing or emerging middle-income countries (Asia, Mediterranean, Latin America, and the Caribbean), which play an important role in Multilateral Environmental Agreements, AFD works to promote «green, broadly shared growth». Some of these countries are home to noteworthy ecosystems (Amazonia, Maritime Southeast Asia, Himalayan foothills, etc.). They often experience deep social inequalities and very strong investment dynamics that threaten their natural capital

(deforestation, erosion, and desertification). AFD will provide those countries with its expertise to preserve or even restore ecosystems threatened by growth and demographic pressure, and encourage careful, sustainable use of natural resources for inclusive growth. Whenever possible, AFD will put the knowledge and expertise of French players to use for that purpose.

AFD will also seek to promote environmental and social best practices in those countries, as their businesses are now major players in certain developing countries that partner with AFD. Because of the borrowing power of those nations' governments, AFD's financial tools are loans, potentially accompanied by the ease of technical support (FEXTE). In «very large emerging countries», AFD will provide support at no financial cost to the French government (besides technical expertise).

As an example, in such countries, the projects might particularly relate to:

- ✦ improving the management of protected areas (Mexico);
- ✦ reforestation and sustainable forest management to offset greenhouse gas emissions (Turkey, Morocco, China, India);

- ✦ restoring ecosystems, particularly wetlands, affected by urban, industrial, or agricultural growth strategies that until recently had paid little attention to environmental sustainability (China);
- ✦ setting up payments for environmental services to benefit the preservation of watersheds by operators of large hydraulic infrastructure (all countries);
- ✦ improving the quality of urban life by improving the quality of waterways, and through tree plantings such as green spaces or green belts (all countries);
- ✦ cutting emissions through agroecological intensification (all countries);
- ✦ the use of natural products by locals in production that adds value to certification (all countries).

6.2 | French Overseas Departements and Collectivities

As has already been mentioned, its diversity and the extent of its maritime zones mean that French Overseas Departements and Collectivities is home to a living heritage which is of considerable importance both for France and for the planet as a whole.

AFD may contribute to the conservation and promotion of that heritage by:

- ✦ Making available its expertise and experience to the authorities in French Overseas Departements and Collectivities, alongside those of other French institutions, to help in drafting their biodiversity conservation strategies;
- ✦ Providing the authorities of French Overseas Departements and Collectivities with financial support for the implementation of their biodiversity strategies;
- ✦ Providing the overseas private sector with economic incentives to invest in the sustainable management of natural resources (fisheries, reforestation, eco-tourism, the transition to environmentally-friendly farming and diversification of agriculture, etc.);

- ✦ Including the overseas authorities in sub-regional nature conservation programmes and projects generally, encouraging involvement of overseas stakeholders in sub-regional biodiversity-related processes and particularly: to conserve lagoons and coastlines in the South Pacific and to develop marine protected areas, to create networks of such areas, to conserve the coastline, to monitor fisheries and to build capacity among biodiversity experts in the south-western Indian Ocean.

Supporting the actions of NGOs in French Overseas Departements and Collectivities is not part of AFD's mandate, but in the context of the partnerships it will build with international organisations (particularly IUCN and WWF); it will contribute to their operations in those places whenever possible.

Knowledge production

Knowledge production

The aim of AFD's knowledge production activity is:

- To anchor the Agency's operational strategies in the use of knowledge and learning from experience gained;
- To contribute to the policy making of development partners;
- To support the authorities to which the Agency answers in preparing and positioning France's development assistance policy in the international sphere;

- Finally, to help to lead debate and participate in international networks on issues around the environment and development assistance.

The production of knowledge on biodiversity to support AFD's operations will have three objectives.

7.1 | Understanding the functions and value of biodiversity and environment services to ensure better decision making

One of the underlying challenges for the sustainable use of biodiversity is to ensure that all development stakeholders (governments, NGOs, local communities, donors, economic players, etc.) have enough of the knowledge they need to make choices which are, in fact, sustainable. In order to inform decisions, AFD's knowledge production work will focus on developing and refining scientific, economic and social knowledge.

The aim will, for example, be to help to:

- Assess and describe the effect of biodiversity loss by deepening understanding of its environmental functions (identifying thresholds of no return, simulating chain reactions caused by biodiversity loss, etc.);

- Take work on underlining the economic value of biodiversity further, the price of failure to act to conserve biodiversity and economic assessment of the benefits of conserving biodiversity;

- Understand the social value of biodiversity, particularly for the poorest people.

From decisions to development measures; how can we encourage environmental performance?

7.2 | Understanding the features which make policies and measures taken by the various developing country stakeholders environmentally effective

The primary aims will be:

- To know what sustainable financing mechanisms are used for biodiversity conservation and to understand these mechanisms: understanding and optimization of existing capital flows, analysis and development of innovative funding mechanisms to better respond to needs;
- To understand the institutional logic around biodiversity, to analyse the interplay of institutions, stakehol-

ders' strategies, public policy on environmental issues, conflict management, the role of local community involvement, consultation and negotiation;

- To choose operations with the features to make them effective identified through an analysis of sectoral and geographical challenges and priorities.

7.3 | Learning from AFD-funded projects for quality and scaling up

AFD will aim to:

- ➔ Further develop its monitoring, assessment and capitalization on the projects that it funds in order to feed lessons learned from the issues set out above across the Agency;
- ➔ Develop follow-up indicators specifically for biodiversity.

For illustrative purposes, the following work could be published during this CIF period:

- ➔ Retrospective assessments and capitalising on AFD-funded operations;
 - Pastoralism in Chad (begun in 2013);
 - 15 years of AFD support for agro-ecology (begun in 2013);
 - Assessment for the French contribution to the CEPF (Critical Ecosystem Partnership Fund) (begun in 2013);
 - Ex-post assessment of the implementation and performance of ESMPs (environmental and social management plans) (several projects, programme in preparation by AFD's evaluation and capitalisation and environmental and social support units).
- Assessment of the 'local and participatory development' aspects of conservation projects (on a sample of AFD and French Global Environment Facility projects).
- After-action assessment of conservation actions via marine and/or coastal protected areas.
- Proposals from a list of the projects' biodiversity impact indicators based on the nature of the projects, impacts, and biomes.

➔ Research

- Tools for what kind of trade? An analysis of the use of economic tools considered to benefit biodiversity.
- Protected public, private and community areas: How can they work together for the environment?
- What can we expect from the standardisation of biodiversity protection issues in French Overseas Departments and Collectivities? The case of certification.
- From global rules to local contexts: debating the environmental potential of agro-ecology and the role of donors.
- Green finance and biodiversity: What environmental levers are available?
- Feasibility of a «biodiversity balance sheet» for financial institutions incorporating biodiversity gains and losses.

These assessments and research will be carried out in partnership with research institutes both in France and abroad, with NGOs, consultancies and with the countries concerned.

This knowledge production work may be widely disseminated. Organising seminars and using AFD's publications for this purpose constitute explicit intellectual production objectives.

8

Internal mobilisation, accountability and monitoring the CIF

Internal mobilisation, accountability and monitoring the CIF

8.1 | Internal mobilisation

8.1.1 | Human resources

Implementing the cross-sectoral intervention framework will require extensive involvement on the part of AFD teams in all departments.

Full time posts have been and will continue to be assigned to this task:

- In the Operations Directorate within the Sustainable Development Department (Agriculture, Rural Development and Biodiversity Unit) and within the cross-sectoral Support Department (Environmental and Social Support Unit)
- In the Strategy Directorate, within the Research Department, in the Evaluation and Knowledge Development Unit and the Research Unit.

In order to insure sectoral integration by strengthening the biodiversity component in project instructions, these experts will be assigned to project teams as needed, in all regions and at different stages in project lifecycles. “Biodiversity” focuses may be designated as the needs of other entities require them (Geographic Divisions, External Relationships, Partnerships with NGOs).

A ‘Biodiversity’ online work community will be set up within AFD (intranet area, membership required) to further the training and awareness-raising work.

8.1.2 | Training

Awareness-building and training for agents who are not biodiversity experts, which has been on-going for several years in partnership with FFEM and CEFEB and with the support of ATEN up to this point, will be continued, at a rate of at least 25 agents a year, including a significant share of managers (agency directors, headquarters structure managers) during the period of the CIF.

This training will particularly be aimed at ① providing insight into issues of Biodiversity and Development, ② informing AFD agents of French expertise that can be put to work for the people they are in contact with, and ③ sharing the experience acquired in AFD-funded operations. It will also be a chance for dialogue between French players in the sector and AFD agents about biodiversity in the context of development. It will take a balanced approach to covering category 1 issues (dedicated conservation operations) and category 2 issues (taking biodiversity into account in sectoral policies).

8.1.3 | Operational framework notes

Based on experience acquired in AFD-funded operations and in accordance with the objectives of this CIF, «framework notes» intended for AFD agents and their counterparts will specify how AFD will carry out its work in three domains where the issues, tools, and players and partners are fairly specific:

- the sustainable management of fisheries and aquaculture (2014),
- the sustainable management of forests (2014),
- the management of protected areas (2015).

These «framework notes» will be the subject of discussion with the relevant French stakeholders with a panel of French experts.

8.2 | Monitoring CIF implementation

An annual report monitoring the implementation of the CIF will be presented to AFD's governing bodies and, publically to AFD's partners (public meeting and the report will be available on AFD's website).

It will include the following:

- An annotated list of actions carried out, categorised by region, with respect to the CIF's three components (volume, number of projects, sectors, percentages of dedicated and integrated projects - Rio Markers 1 and

2, percentages of financing methods) and intellectual output;

- An annual overview of commitments (amounts, number of projects, sectors, proportion of dedicated projects to integrated projects – Rio 1 and 2 markers, proportions of the various funding types) and a summary of actions;
- Summary of the second opinions on sustainable development for all projects funded by AFD over the course of the year under Goal 4, Biodiversity;

TABLE 3: OUTCOME INDICATOR

Definition	<p>The indicator expresses the surface area affected by AFD funding, for which:</p> <ul style="list-style-type: none"> ➤ Areas with sustainable modes of exploitation are in place (routes, seas, forests, agricultural landscape) ➤ Protected areas have been funded, in accordance with the 6 IUCN (International Union for the Conservation of Nature) categories: Ia (Strict nature reserve), Ib (Wilderness area), II (National park), III (Natural monument), IV (Habitat/Species management area), V (Protected landscape/seascape), VI (Protected area with sustainable use of natural resources).
Unit	Hectares
Type of operations involved	<ul style="list-style-type: none"> ➤ Type 1: Projects involving the establishment, extension, improvement of or sustainable funding of protected areas (6 categories) ➤ Type 2: Projects for the sustainable management of land or sea areas which are not under cultivation and have not been classed as protected areas but where the conditions relating to their use contain an explicit objective on renewing and conserving biodiversity (forestry, fisheries, rangeland, river basins, dams and catchments which are protected) ➤ Type 3: Projects for the development of areas under cultivation or which have been changed by man, where biodiversity conservation objectives (including for cultivated biodiversity) constitute explicit objectives.
Fields	Project data
Calculation method	<p>The indicator value is calculated based on the hectares and the type of project</p> <ul style="list-style-type: none"> ➤ Type 1: 100% of the surface area concerned ➤ Type 2: 40% of the surface area in the areas concerned ➤ Type 3: 20% of the surface area in the areas concerned
Data source	Counterparts, project management (project data)
Frequency	Yearly
Scope	Support implemented or completed in the year concerned

- A summary of the results, based on a standardised indicator that can be used to grade AFD's action based on the Aichi targets (B.5, B.6, B.7, C.11) with regard to the area of protected spaces. This indicator covers areas that benefit from a biodiversity conservation, restoration, or sustainable management programme.
- An assessment of AFD's biodiversity portfolio for 2013 – 2016 will be prepared for dissemination at the start of 2017 and the CIF will be updated at the same time.

Additionally, based on work that will be performed in 2014, a list of results indicators will be offered to the owners of each of the projects in a way that accounts for

the unique features of every type of project and major biome, but can nonetheless be consolidated. Similar to the review that was conducted in partnership with the French Scientific Committee on Desertification (CSFD); these indicators take into account biophysical, economic, and institutional results.

An assessment of AFD's biodiversity portfolio for the period 2013-2016 will be prepared for release in early 2017 and the CIF will be updated for the next period.

9 Appendices

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FGEF-AFD co-financed projects, 2009-2012

List of acronyms

ABS	Access and benefit-sharing (access to genetic resources and the fair and equitable sharing of the benefits arising from their utilisation)
AFD	Agence Française de Développement (French Agency for Development)
ATEN	Atelier technique des espaces naturels (Technical Workshop for Natural Areas)
BBOP	Business Biodiversity Offset Program
BEST	Voluntary Scheme for Biodiversity and Ecosystem Services in Territories of the EU Outermost Regions and Overseas Countries and Territories
CBD	Convention on Biological Diversity
CC	Climate Change
CEPF	Critical Ecosystem Partnership Fund
CI	Conservation International
CIF	Cross-sectoral Intervention Framework
CIRAD	Centre international de recherche agricole pour le développement (French research centre working with developing countries to tackle international agricultural and development issues)
CITES	Convention on International Trade in Endangered Species
CMS	Convention on Migratory Species
DFID	Department for International Development
E&S	Environmental and social
FCPF	Forest Carbon Partnership Fund
FFH	EU's Flora Fauna Habitat directive (21 May 1992)
FGEF	French Global Environment Facility
FISONG	Sectoral Innovation Facility for NGOs
FLEGT	Forest Law Enforcement, Governance and Trade
FNE	France Nature Environnement (French Federation for the Protection of Nature and the Environment)
FRB	Fondation pour la recherche sur la biodiversité (French Foundation for Biodiversity Research)
FSC	Forest Stewardship Council
GBO	Global Biodiversity Outlook
GEF	Global Environment Facility
IFC	International Finance Corporation
IFREMER	French Research Institute for Exploitation of the Sea
IGN	French National Geographic Institute
IPBES	Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services
IRD	Institut de recherche pour le développement (French Institute for Development Research)
IUCN	International Union for the Conservation of Nature
IWRM	Integrated Water Resource Management

MEA	Millennium Ecosystem Assessment
MESDE	French Ministry for Ecology, Sustainable Development and Energy
MMP	Moheli Marine Park
MOF	Ministry of French Overseas Departements and Collectivities
MPA	Marine protected area
MSC	Marine Stewardship Council
NBS	National Biodiversity Strategy
NEPAD	New Partnership for Africa's Development
NGO	Non-governmental organisation
NSDS	National Sustainable Development Strategy
ONF	Office national des forêts (French National Forests Office)
PA	Protected area
PGI	Protected geographical indication
PNF	Parcs nationaux de France (French national parks)
PSA	Priority Solidarity Area
QNP	Quirimbas National Park
REDD	Reducing Emissions from Deforestation and Forest Degradation
RIF	Regional Intervention Framework (AFD)
RNR	Regional Nature Reserve
SIF	Sectoral Intervention Framework (AFD)
TEEB	The Economics of Ecosystems and Biodiversity
TNS Foundation	Sangha Tri-National (TNS) Foundation
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
VPA	Voluntary Partnership Agreement (as part of the FLEGT action plan)
WBG	World Bank Group
WCMC	World Conservation Monitoring Centre (UNEP-WCMC)
WCS	World Conservation Society
WWF	World Wildlife Fund

Glossary

Biodiversity:

"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." (definition from the Rio Convention on Biological Diversity, 1992).

Ecosystem:

The complex formed by a combination or community of living beings (or biocenosis) and their environment including its biology, geology, soil, water and climate (the biotope). From water, minerals and the sun's energy, the components of the ecosystem (producers, primary consumers, secondary consumers, decomposers) develop a web of exchanges of energy and material which supports life and allows it to develop. The make-up and productivity of ecosystems evolves in response to internal factors (population change processes, etc.) and external factors (anthropogenic pressures, environmental changes, etc.) Examples of ecosystems: a forest, a coral reef, an oasis, a meadow, a watercourse or a savannah. Coral reefs are the most endangered ecosystems on the planet, and have seen over 30% of their surface area degraded over the last 20 years. Around 13,000 km² of forest is lost per year.

Species:

The species (e.g.: man, the brown bear, the river trout, wheat, the dandelion, brewer's yeast, the plague bacillus) is often considered the basic unit of the diversity of life (definition Ernst Mayr, 1942): 'a species is a population or a group of populations whose individuals actually or potentially interbreed and produce viable, fertile offspring under natural conditions'. Over 1.8 million different species have been described by science. Vertebrates constitute a tiny minority of these (60,000, of which only 5,400 are mammals), while micro-organisms and arthropods make up the majority (over 1.1 million insects). There are also 313,000 species of plants (of which 260,000 have flowers). The rate at which species are becoming extinct has multiplied by between 100 and 1000 since the industrial revolution, and around ¼ of the species being monitored (a sample of around 60,000) are threatened with extinction.

Genetic resources:

The CBD defines genetic material as any material of plant, animal, or other origin containing functional units of heredity. It defines genetic resources as genetic material of actual or potential value. The Nagoya Protocol regulates the utilisation of genetic resources and defines their utilisation as 'the conduct of research and development activities on the genetic and/or biochemical composition of genetic resources, including through the application of biotechnology, etc.' The protocol therefore focuses on the potential or proven utility of the coding contained in the genes in the cells of living organisms or their biochemical composition for a given use or to a given economy. This information (in the form of molecular code, including the famous DNA) underpins the biological formation of proteins, which are a major component of organisms. It is the source of substances which are vital or useful in food and the agri-food industry, the pharmacopoeia, the decomposition of organic waste and management of contaminants, biogenic fuel production processes, cosmetics, etc. Historically, this genetic information has been in the public domain and it has been used extensively by farmers and breeders around the world to select crops and breeds. More recently, it has been subject to private appropriation (protected varieties, industrial applications), which is often controversial (patents on life), and to a new international framework regulating access and the sharing of benefits from its utilization (the Nagoya Protocol to the Rio Convention on Biological Diversity).

Biological resources:

Consist of all raw materials from natural or cultivated ecosystems (wood, fibres, fish, crops, meat from farmed and wild animals, medicinal plants, natural molecules, etc.), that are a result of biological processes which transform the sun's energy and turn minerals into organic matter. Biological resources are considered to have a market value to the world economy of between 4 and 8% of global GDP (3 to 7 trillion dollars).

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The CBD, the Nagoya strategy and the Aichi Targets

Goal A:

Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society

Target A.1:

'By 2020, at the latest, people are aware of the values of biodiversity and the steps they can take to conserve and use it sustainably'.

Target A.2:

'By 2020, at the latest, biodiversity values have been integrated into national and local development and poverty reduction strategies and planning processes and are being incorporated into national accounting, as appropriate, and reporting systems'.

Target A.3:

'By 2020, at the latest, incentives, including subsidies, harmful to biodiversity are eliminated, phased out or reformed in order to minimize or avoid negative impacts, and positive incentives for the conservation and sustainable use of biodiversity are developed and applied, consistent and in harmony with the Convention and other relevant international obligations, taking into account national socio economic conditions'.

Target A.4:

'By 2020, at the latest, Governments, business and stakeholders at all levels have taken steps to achieve or have implemented plans for sustainable production and consumption and have kept the impacts of use of natural resources well within safe ecological limits'.

Goal B:

Reduce the direct pressures on biodiversity and promote sustainable use

Target B.5:

'By 2020, the rate of loss of all natural habitats, including forests, is at least halved and where feasible brought close to zero, and degradation and fragmentation is significantly reduced'.

Target B.6:

'By 2020 all fish and invertebrate stocks and aquatic plants are managed and harvested sustainably, legally and applying ecosystem based approaches, so that overfishing is avoided, recovery plans and measures are in place for all depleted species, fisheries have no significant adverse impacts on threatened species and vulnerable ecosystems and the impacts of fisheries on stocks, species and ecosystems are within safe ecological limits'.

Target B.7:

'By 2020 areas under agriculture, aquaculture and forestry are managed sustainably, ensuring conservation of biodiversity'.

Target B.8:

'By 2020, pollution, including from excess nutrients, has been brought to levels that are not detrimental to ecosystem function and biodiversity'.

Target B.9:

'By 2020, invasive alien species and pathways are identified and prioritized, priority species are controlled or eradicated, and measures are in place to manage pathways to prevent their introduction and establishment'.

Target B.10:

'By 2015, the multiple anthropogenic pressures on coral reefs, and other vulnerable ecosystems impacted by climate change or ocean acidification are minimized, so as to maintain their integrity and functioning'.

Strategic Goal C:

To improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity.

Target C.11:

'By 2020, at least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well-connected systems of protected areas and other effective

area-based conservation measures, and integrated into the wider landscapes and seascapes’.

Target C.12: ‘

By 2020 the extinction of known threatened species has been prevented and their conservation status, particularly of those most in decline, has been improved and sustained’.

Target C.13:

By 2020, the genetic diversity of cultivated plants and farmed and domesticated animals and of wild relatives, including other socio-economically as well as culturally valuable species, is maintained, and strategies have been developed and implemented for minimizing genetic erosion and safeguarding their genetic diversity’.

Strategic Goal D:

Enhance the benefits to all from biodiversity and ecosystem services

Target D.14:

‘By 2020, ecosystems that provide essential services, including services related to water, and contribute to health, livelihoods and well-being, are restored and safeguarded, taking into account the needs of women, indigenous and local communities, and the poor and vulnerable’.

Target D.15:

‘By 2020, ecosystem resilience and the contribution of biodiversity to carbon stocks has been enhanced, through conservation and restoration, including restoration of at least 15 per cent of degraded ecosystems, thereby contributing to climate change mitigation and adaptation and to combating desertification’.

Target D.16:

‘By 2015, the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization is in force and operational, consistent with national legislation’.

Strategic Goal E:

Enhance implementation through participatory planning, knowledge management and capacity building.

Target E.17:

‘By 2015 each Party has developed, adopted as a policy instrument, and has commenced implementing an effective, participatory and updated national biodiversity strategy and action plan’.

Target E.18:

‘By 2020, the traditional knowledge, innovations and practices of indigenous and local communities relevant for the conservation and sustainable use of biodiversity, and their customary use of biological resources, are respected, subject to national legislation and relevant international obligations, and fully integrated and reflected in the implementation of the Convention with the full and effective participation of indigenous and local communities, at all relevant levels’.

Target E.19:

‘By 2020, knowledge, the science base and technologies relating to biodiversity, its values, functioning, status and trends, and the consequences of its loss, are improved, widely shared and transferred, and applied’.

Target E.20:

‘By 2020, at the latest, the mobilization of financial resources for effectively implementing the Strategic Plan for Biodiversity 2011-2020 from all sources, and in accordance with the consolidated and agreed process in the Strategy for Resource Mobilization, should increase substantially from the current levels. This target will be subject to changes contingent to resource needs assessments to be developed and reported by Parties’.

Logical framework

Goal	Priority themes
To make sustainable conservation and promotion of ecosystems a contributory factor in the sustainable development of developing countries and French Overseas Departements and Collectivities	1. To sustainably protect, restore, manage and promote ecosystems
	2. To include ecosystem conservation in all sectoral applications of development policies
	3. To strengthen partnerships for the global governance of biodiversity and its impact on developing countries

Objectives	Activities
1.1. To extend and improve protection of ecosystems with and for the benefit of local communities	Marine and land-based protected areas
1.2. To use biodiversity for the benefit of local communities by developing sustainable sectors of activity	Sustainable economic use sectors, certification
1.3. Financer durablement la protection de la biodiversité	Payment for environment services, trust funds, compensation
1.4. To strengthen the policies and the public and private sector bodies responsible for biodiversity protection	Biodiversity accounting, REDD + Satellite pictures
2.1. To include biodiversity protection in policies, programmes and projects in other sectors	Inclusion of biodiversity and ex-ante E and S analysis of all projects
2.2. To facilitate private sector investment in improving biodiversity conservation	Environmentally responsible credit lines and investment funds
2.3. To ensure that biodiversity conservation costs are shared amongst the economic stakeholders	Payment for environment services, fund for compensation for losses
3.1. To strengthen ties between developing countries and France on the international stage	Training, knowledge production, improving funding instruments
3.2. Partnerships with the leading international players	IUCN and international NGOs
3.3. Internationalisation of French biodiversity players	Business, research, specialist French institutions, associations

AFD's biodiversity commitments for the 2000 to 2011 period

As a result of a mapping exercise carried out on the Agency's portfolio of biodiversity projects, a database has been set up which brings together data on projects dedicated to biodiversity or including a major contribution to biodiversity for the period 1996 to 2008²⁶. This exercise was carried out on the basis of a concept of biodiversity centred around the sustainable management of ecosystems, including support for protected areas, forests, fisheries and aquaculture, protecting river basins, the urban natural environment and the treatment of wastewater which is discharged into natural environments. The calculation also includes expenditure on the production

of knowledge relating to biodiversity. It does not cover projects focussing on agriculture unless they have explicit environmental objectives. The data for activities in 2009, 2010 and 2011 have also been added to the database.

Between 2000 and 2011, AFD's spending on activities to support biodiversity totalled €599.76 million. This figure increased tenfold over the period, going from around ten million euros to close to 100 million euros.

In 2012, spending on biodiversity activity reached €141.2 million. This represents 2,3% of AFD's commitments for 2012.

AFD BIODIVERSITY COMMITMENTS (IN € MILLIONS)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Biodiversity grants	0,00	13,27	5,30	11,30	7,40	18,50	67,54	33,17	25,90	33,62	26**	9,70	38,30
Biodiversity loans	9,00	8,20	0,00	9,00	0,00	0,00	17,40	0,02	89,40	49,08	91,00	71,60	102,90
FGEF*	2,28	2,96	0,94	0,87	3,90	1,86	5,47	0,89	0,50	1,49			
Total biodiversity commitments	11,28	24,43	6,24	21,17	11,30	20,36	90,41	34,08	115,80	84,19	117,00	81,30	141,20
Total AFD commitments***	1 257	1 381	1 724	1 735	1 644	2 166	2 790	3 148	3 810	5 362	5 906	6 144,2	6 168,5
Percentage of AFD*** commitments dedicated to biodiversity	0,9 %	1,8 %	0,4 %	1,2 %	0,7 %	0,9 %	3,2 %	1 %	3 %	1,6 %	2 %	1,3 %	2,3 %

* FGEF projects led by AFD. From 2010 onwards, they are no longer included.

** Of which, €12 million on behalf of third parties.

Although the energy efficiency project in China (€120 million) and the urban development project in Laos (€2 million) were declared under 'secondary contribution to biodiversity', they were removed from the 2009 total due to insufficient technical reasons. The environment support project on Mauritius (€120 million Environment Aid Programme) was not included in the end because there was no actual contribution to biodiversity in 2009.

²⁶ See Cartographie de portefeuille des projets biodiversité – Analyse sur la période 1996-2008 AFD – Research Department/ Evaluation and Knowledge Development Unit. C. CORBIER-BARTHAUX, A. AMOUCHE, C. BRIAND

Specificities of major biomes

Every major biome has unique features determining its productivity and resilience. Every territory requires a unique set of arrangements to manage its ecosystems sustainably. This governance system is a result not only of its natural history but also of its human history. To understand and influence the development and conservation processes of a territory requires skills in both life sciences and social sciences. Land ownership systems, usage rights over common resources, local resource-management rules and arrangements for sharing access and benefits are all specific both to the ecosystems and to the cultures of the people living on a given territory. It is, therefore, impossible to suggest ecosystem governance principles out of context. The specific features of the challenges, threats and solutions facing each of the planet's major biomes are described below simply in order to provide some context for AFD's operations.

Tropical savannahs and dryland forests

Non-forest arid to sub-humid intertropical environments where agriculture and pastoralism are possible cover over 60% of the territory of developing countries and an even larger proportion of the territory of the countries that AFD considers a priority. In Africa, these are the areas where there is most large animal biomass, while human population density ranges from a few individuals per km² to over 100 depending on the soil and weather conditions. The main problems in terms of the management of biodiversity, natural spaces and biological resources in these areas are the following: the rapid rate at which natural ecosystems are being converted into agricultural land, a trend which is likely to continue over the coming decade; significant levels of conflict between people and wild animals; high heritage value of natural spaces (which can, however, quickly deteriorate) allowing use for lucrative (East and southern Africa) or less lucrative (serious degradation in West and central Africa) tourism and game hunting activities, with fairly rapid recovery (fauna, vegetation, soil) being possible under the right conditions provided

the soil is not too badly degraded. Land ownership issues and the problem of the recognition of local rights, the decentralisation of forest, game and gathered resource management, good management and local use of forest reserves and reserves producing firewood and game and protected areas, the emergence of strong, entrepreneurial civil society movements on these issues; all of these questions are at the heart of the matter in terms of sustainable management of biological resources in this region, which is central in the fight against poverty. In West and central Africa, this region is experiencing a real biodiversity crisis with ecosystem productivity collapsing and species loss over the last thirty years. The use of the Rio Convention to combat desertification relates directly to this region and its natural resources.

Mediterranean environments

In the Mediterranean, biodiversity management issues are basically related to a combination of very intense pressures on habitats and resources. On land it is primarily a matter of urbanisation and building on the coasts, abstraction of water resources, and widely divergent situations as regards fodder and forest resources on the southern and northern shores (to simplify – overgrazing and insufficient reforestation to the south and abandonment of agricultural land and forest fires to the north). Basically, solutions for this region would involve Integrated Coastal Zone Management and spatial planning, the establishment of coastal defence areas, pastoral and forest resource management and protection of ecosystems which produce fresh water. At sea, the pressures are a result of some of the heaviest shipping traffic in the world (pollution, waste material, disturbance, invasive species), pollution from land-based sources, overfishing of some species and to the effect of coastal activities and development on the environment (destruction of seagrass beds, etc.). The solutions would include better enforcement of environmental regulations (combating illegal degassing, equipment en STEP, application of fisheries quotas

based on the scientific data, respect for coastal protection measures, application of penalties, stronger regional governance of the Mediterranean), including 10% of the Mediterranean in a marine protected area (sedimentary coastlines and lagoons, canyons, seagrass beds, sea mounts, etc.), and systematic awareness raising for all stakeholders. There are a number of regional instruments already in existence, including the Barcelona Convention with its various subject groups and protocols, Plan Bleu, many MPAs, regional fisheries policies, along with stakeholders who work for the whole Mediterranean on biodiversity issues (IUCN Malaga, WWF Marseille) and donors (France, Spain, Italy, the Prince Albert II of Monaco Foundation, the MAVA Foundation, etc.). Overall, land and marine biodiversity in the region ranges from somewhat degraded to seriously degraded.

Tropical rainforests

The three main tropical and equatorial forest regions (Amazonia, the Congo Basin, South East Asia) cover around 2.2 billion hectares, thus providing 55% of the world's forest cover. The challenges, at both global and local level, in terms of biodiversity, climate change, economics and development are insurmountable and face significant but diverse pressures and processes. In the Congo Basin, the overall level of conservation is fairly good, but pressures come from clearing of more and more small areas of land for agriculture, which is facilitated by infrastructure development, unsustainable exploitation of the forests, unsustainable harvesting of wildlife, land clearance for agribusiness plantations and large scale livestock farming. Given the weak or non-existent public governance, a combination of solutions will be needed including the systematic use of sustainable methods of forest exploitation which have the lowest impact possible, stronger forestry services (on the ground, administration, monitoring of concessions, etc.) and civil society, support for the sustainable local development of family farms, the establishment and good management of protected forest areas, sustainable management of forest wildlife and stronger policing, the development of monitoring tools at local, national and regional level to monitor the state

of forest cover. Use of carbon finance (voluntary markets, FCPF²⁷ etc.) could contribute significantly to the implementation of these solutions, including through funding for avoiding deforestation (REDD+), provided solutions can be found over the next few years to issues around funding, reliability of scenarios and carbon accounting, rights holders and local governance and actual inclusion of the biodiversity dimension in verification and monitoring criteria. Although we cannot provide a detailed analysis here of the complex situations in Amazonia and the forests of South East Asia, it is important to highlight the clearance of land for intensive agriculture, livestock farming and plantation agriculture, the greater need for institutional capacity building, active use of sustainable management and protection tools (protected areas, extractive resource zones, indigenous areas, certification, planning), and to note that there has been little progress in Amazonia and the situation is rapidly deteriorating in South East Asia, particularly in Indonesia.

Fresh water environments and wetlands

Wetlands cover around 500 million hectares of the planet. They play a crucial role in regulating, storing and cleaning water resources and constitute extremely productive natural habitats which are home to a wealth of species. The services they provide are all the more vital when the wetland is in an arid area, in savannah or in the Mediterranean. However, almost 30% of these environments were lost in the course of the 20th century, particularly in Europe, Asia and North America, as they were drained and turned over to farming with a resulting loss of environmental services valued at over €1000 per hectare of wetland lost. The continuity of river environments is interrupted by infrastructure built on them and water levels fall ever lower due to water abstraction and the workings of hydropower plants. They are also subject to pollution from untreated discharges and they are overfished. Possible solutions advocated primarily in the Ramsar Convention involve protecting priority sites, sustainable use and management of wetlands, integrated territorial approaches (IWRM, Integrated Water Resource Management), appropriate management of

27 Forest Carbon Partnership facility, <http://www.forestcarbonpartnership.org/>

abstractions and minimum flow rates for river structures, crossing mechanisms to allow the passage of fish, inclusive governance systems, combating pressures (pollution, quantitative management of water, overexploitation of species, building and draining), capacity building for local managers and national and regional monitoring of the state of wetlands.

Oceans and coastal areas

The oceans cover two thirds of the planet and constitute the basic temperature regulation mechanism for both the planet and its climate through ocean-atmosphere exchanges, ocean circulation and as its largest carbon sink. They are home to deposits of mineral resources, huge reserves of energy and biomass but they also accumulate pollution and waste. Marine and coastal ecosystems contribute to the food security and health of around 2 million people, providing goods and services whose total annual value is estimated at almost 30 billion dollars, including tourism (9.6 billion dollars), fisheries (5.7), coastal protection (9) biodiversity (5.5) and carbon capture. Against the background of these general issues, there are more localized challenges which justify a regional approach in line with AFD's mandates: The Mediterranean (marine pollution, development along the coasts, competition for space severely affecting fishing and tourism, which is one of the region's main sources of income), East and West Sub-Saharan Africa (governance, trade-offs between local consumption and export, income from fisheries and jobs, local use of catches, protection of fragile environments such as mangroves, coastal lagoons, erosion, regional cooperation), French Overseas Departments and Collectivities (France is the third largest world maritime power, exceptional biodiversity, 10% of coral reefs, pollution, building and development, overuse of resources, protection of coasts).

Island environments

Island biodiversity (here we mean small island developing states and not islands which are continents or countries like Madagascar or Indonesia) is characterised by often very high levels of endemic species and high exposure to pollution, overexploitation and various other kinds of damage, which is exacerbated by the local geography or economy (lack of space leading to degradation of sensitive areas due to building of infrastructure and urban development, difficulty financing sanitation and waste management, etc.). Invasive species often have a serious effect. On islands, protecting coasts and protecting against natural risks are especially important functions of forests, mangrove swamps and coral reefs. In such fragile environments, emphasis should be laid even more heavily on the use of integrated systems such as coastal management including river basins. Island issues concern both the many foreign countries in which AFD operates and French Overseas Departments and Collectivities.

FGEF-AFD co-financed projects, 2009-2012

FGEF project	Decision years	Project title
CZZ 1451 01	2009	Support for the Verde Ventures investment fund
CZZ 1454 01	2009	Developing eco-certified economic production systems for supplying the aquarium market with reef fish and crustacean post-larvae of the South Pacific
CZZ 1545 01	2010	Support for co-certification of forest claims in Central Africa (ECOFORAF)
CZZ 1603 01	2010	Forests and adaptation to climate change in West Africa (ACFAO)
CCN 1037 01	2010	«Rural carbon» project and strengthening capabilities in Sichuan and Yunnan provinces
CMZ 1096 01	2010	Climate change adaptation in Quirimbas national park
CKE 1050 02	2011	North Kenya conservation project
CZZ 1686 01	2012	Support for banks to fund sustainable management of tropical rainforests
CZZ 1756 01	2012	Natural projects certified for preserving biodiversity and supporting local development in southern Africa
CZZ 1754 01	2012	Sustainable development SEP
CMX 1021 01	2012	Protecting biodiversity and forests in the Ameca-Manantlan Corridor
CCF 1151 01	2012	REDD+ pilot integrated into the southwestern forested region
CZZ 1667 01	2012	RESCCUE project (Restoration of Ecosystem Services against Climate Change Unfavourable Effects)
CZZ 1753 01	2013	Contribution to the sustainable development and preservation of the marine environment in the southwestern Indian Ocean - support for local innovation and partnerships

Country	AFD funding	FGEF funding	Total amount
Africa / Regional	2,463,860	990,000	7,038,846
South Pacific / Regional	700,000	500,000	1,200,000
Afrique / Régional	90,000	1,500,000	3,712,500
Africa / Regional	350,000	1,640,000	3,909,025
China	73,800,000	1,000,000	75,300,000
Mozambique	4,000,000	1,000,000	8,456,566
Kenya	8,000,000	1,500,000	12,642,000
Africa / Regional	15,000,000	2,700,000	18,344,000
Africa / Regional	1,000,000	900,000	3,100,000
Africa / Regional	1,500,000	1,500,000	5,454,000
Mexico	600,000	1,500,000	5,477,500
Central Africa	5,000,000	1,500,000	10,500,000
Pacific / Regional	4,500,000	2,000,000	12,053,000
Africa / Regional	2,000,000	1,200,000	8,873,000

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