



WWF'S GLOBAL CONSERVATION PRIORITIES



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Mountain gorilla – one of WWF's 'flagship' species.
WWF-Canon/Martin Harvey



PREFACE

Over the last four years, WWF as a global network has updated and clarified its Global Conservation Priorities; the focus is now on six global issues and the 'Global 200 Ecoregions'. In addition, we have refined the strategic approaches to our work through what we now describe as Target Driven Programmes (TDPs) and Ecoregion Action Programmes (EAPs). This two-pronged approach not only represents a modern vision of conservation and creates synergy between global policy and solution-oriented fieldwork in ecoregions, but also provides an answer, I believe, to that ambitious goal in WWF's mission statement: 'harmony between man and nature'.

This ultimate goal of WWF is a direct derivative from its statutes, as laid down by the founders who established a direct link between the conservation of natural resources and the well-being of mankind. It is a sad coincidence that on the very day of WWF's 40th anniversary, 11 September 2001, the world's attention should be drawn so tragically to the fact that we are a long way indeed from the harmony we all seek. Harmony between man and nature cannot exist without peace between human beings, while peace itself often hinges upon a respectful relationship with nature: societies in a destroyed environment are unlikely to live in peace for long.

The fundamental interdependence between the fates of man and nature, though still poorly recognized by many – not least mainstream economists – is at the core of WWF's understanding of 'sustainable development'. However, we also have to recognize that this term, now at the centre of preparations for the World Summit on Sustainable Development in Johannesburg in September 2002, will continue to be misunderstood and misused.

In this document we attempt to explain how WWF's global priorities interact in fulfilment of our mission: creating and influencing global policies for sustainable livelihoods in the areas of forests, freshwater, oceans and coasts, species, climate change and toxics, and thus help set the framework conditions for effective work in ecoregions. Ecoregion conservation, meanwhile, is a concept that allows us to upscale conservation at geographic levels that matter, and in sum contribute to the global policy goals.

WWF has had considerable success with this two-pronged approach – this publication cites some examples. However, the recently defined targets for our Target Driven Programmes and the focus on a limited number of ecoregions should allow us to align our programmes further, across the network, and thus multiply conservation successes.

WWF as an international conservation organization is almost unique in its approach and experience, combining global policy with practical field-based work. To my mind, this today, more than ever, is the most effective way to make a lasting difference. Beyond this, working at the global as well as at the local level has also nurtured a climate of cooperation and integration between the different sectors and various disciplines in the organization, and thus helped forge the particular persona and culture of WWF.

Working across sectors in a multicultural organization above all furthers the crucially important understanding for partnerships with others and the fact that there can never be an ultimate answer to harmony between man and nature – only continued effort, experimentation and learning.

Dr Claude Martin
Director General

INTRODUCTION

Since its inception in 1961, WWF has worked to conserve nature and ecological processes through a combination of action on the ground, national and international advocacy work to establish appropriate policies, and international campaigns to highlight and demonstrate solutions to crucial environmental problems. Over the course of its 40-year history, WWF has contributed significantly to the development and impact of the world conservation movement and to sustainable development in a period of great pressure on the world's natural resources.

It is clear that no single organization can claim to credibly cover the entire conservation agenda. In setting WWF's agenda for the 21st century, during which the quest for natural resources will become even greater, it is essential that WWF sets clear priorities for its work. The purpose of this document – a revision of WWF's Global Priorities to the Year 2000 published in January 1994 – is to better define WWF's global conservation priorities and WWF's approach to address these priorities, with the ultimate goal of achieving the conservation of biodiversity.

Through conservation successes in a few well-chosen areas, and effective communication of the results, WWF aims to create the momentum necessary to challenge the root causes of the degradation of our planet's environment.

WWF's Purpose

WWF's Purpose, as laid down in its Statutes first established in 1961 and slightly modified in 1993, is "to conserve the natural environment and ecological processes worldwide". This is taken to include fauna and flora, the landscape, water, soils, air

WWF is a network organization with almost 5 million regular supporters, over 50 country or regional offices and 4 Associate Organizations, led and coordinated by an International Secretariat in Gland, Switzerland. By careful application of its resources and expertise, and through strategic partnerships with governments, different sectors of business and industry, civil society groups and indigenous peoples across the world, WWF conducts those activities which are necessary to fulfil its aspirations and attain its mission. In the 2001 financial year WWF channelled more than CHF 400 million into conservation solutions.

WWF's trademark symbol has become synonymous with the conservation of nature worldwide.



and other natural resources, with particular emphasis on the maintenance of essential ecological processes and life support systems, and on the preservation of genetic, species and ecosystem diversity, and on ensuring that the utilization of wild plant and animal species and natural ecosystems is sustainable.

To further tighten and focus its institutional forces, in 1989 WWF adopted a Mission Statement and seven Guiding Principles. The mission clearly recognizes that WWF's aims cannot be achieved without taking into account the underlying causes of environmental degradation.

Mission Statement

WWF's mission is to stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature, by:

- ***conserving the world's biological diversity***
- ***ensuring that the use of renewable natural resources is sustainable, and***
- ***promoting the reduction of pollution and wasteful consumption.***

Freshwater – crucial to all life on Earth.
Ola Jennersten



Approved by WWF's International Board in 1989 and adopted by the entire WWF Network, the mission statement has played a crucial role in modernizing WWF's approach to conservation, particularly the integration of WWF's field-based activities with its expanding policy work at both national and international levels.

With the mission in place, positioning WWF as a conservation organization focusing on biodiversity conservation, WWF has since identified a small number of global conservation priorities and devised several conservation tools to move the organization towards the achievement of its ambitious mission. These global priorities, and the approaches developed to address them, are described in the following sections.

Guiding Principles

To guide WWF in its task of achieving the Mission goals, the following principles have been adopted. WWF will:

- be global, independent, multicultural and non-party political
- use the best available scientific information to address issues and critically evaluate all its endeavours
- seek dialogue and avoid unnecessary confrontation
- build concrete conservation solutions through a combination of field-based projects, policy initiatives, capacity building and education work
- involve local communities and indigenous peoples in the planning and execution of its field programmes, respecting their cultural as well as economic needs
- strive to build partnerships with other organizations, governments, business and local communities to enhance WWF's effectiveness
- run its operations in a cost-effective manner and apply donors' funds according to the highest standards of accountability.

GLOBAL CONSERVATION PRIORITIES – WHAT AND WHERE?

To maximize its impact, WWF has chosen a set of global priorities for its work. These priorities cover six globally important issues, and some of the most important places in the world for biodiversity conservation ('The Global 200 Ecoregions'), where WWF will apply its effort and support.

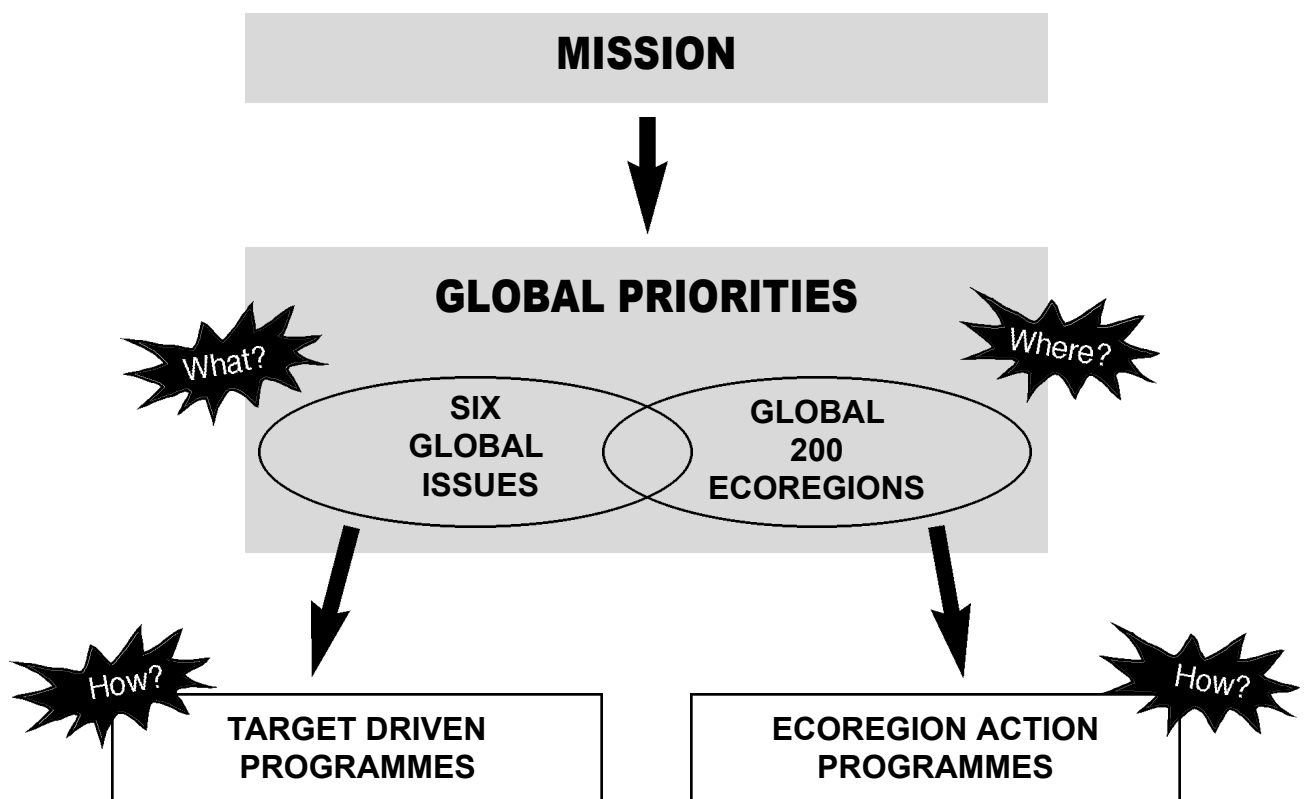
The Six Global Issues

Firstly, there is the conservation of the three biomes of Forests, Freshwater Ecosystems, and Oceans and Coasts. These contain the bulk of the world's biodiversity and provide the environmental goods and services upon which all life ultimately depends.

Secondly, WWF has identified a small number of flagship Species whose conservation is of special concern and which act as powerful icons for the conservation of other species and habitats.

And thirdly, WWF has targeted two of the most globally pervasive and insidious of the threats to biodiversity: the spread of Toxic Chemicals and the phenomenon of Climate Change. Both of these have grave and often invisible impacts upon the security of all life on Earth.

For each of the six global issues WWF has established a programme with clear conservation targets that identify those actions required for WWF to achieve its



ambitious mission. The programmes are hosted by various parts of the WWF Network (currently the WWF International Secretariat in Gland, Switzerland, WWF-Netherlands, WWF-UK, and WWF-US) and work in a coordinated fashion with WWF offices and Ecoregion Action Programmes across the world.

The Global 200 Ecoregions

Biodiversity is not spread evenly across the Earth but follows complex patterns determined by climate, geology and the evolutionary history of the planet. These patterns are called 'ecoregions'. In 1997, WWF embarked on ecoregion conservation as a response to the increased pace of degradation of the world's endangered habitats and species.

To begin with, WWF identified the most valuable and sometimes vulnerable ecoregions in the world which best represent the breadth of biodiversity and ecological processes. The list of priority ecoregions identified by WWF scientists is known as 'The Global 200 Ecoregions' (see map inside back cover or visit <http://www.panda.org/global200/mainmap.cfm>).

Ecoregions defined

WWF defines an ecoregion as a "large unit of land or water containing a geographically distinct assemblage of species, natural communities, and environmental conditions." The boundaries of an ecoregion are not fixed and sharp, but rather encompass an area within which important ecological and evolutionary processes most strongly interact.

The Global 200 recognize the fact that, whilst tropical forests and coral reefs harbour the most biodiversity and are the traditional targets of conservation organizations, unique manifestations of nature are found in temperate and boreal regions, in deserts and mountain chains, which occur nowhere else on Earth and which risk being lost forever if they are not conserved.

WWF has selected a subset of the Global 200 where it is best placed to carry out conservation programmes at an ecoregional scale. WWF encourages others to take up the challenges of conserving the rest of the Global 200 ecoregions.

Relationship Between the Six Global Issues and the Global 200 Ecoregions

There is a clear synergy both between and amongst these two sets of priorities. The six global issues are a set of globally important processes which are WWF's priorities for conservation action; the Global 200 identify those large landscapes WWF has prioritized for broad-based conservation action.

Work on the global issues both inside and outside ecoregions, for example in the area of sustainable forest management or improving the way in which freshwater is used in agriculture, will support the conservation of ecoregions. Global advocacy campaigns will help to create the appropriate political and policy context to enhance the chances of conservation success in the ecoregions. Conservation of the Global 200 will address the long-term security of their biodiversity by integrating the six issues with other conservation approaches, addressing the full range of socio-economic factors which are the root cause of biodiversity loss, leading to concrete conservation solutions. As we learn more about the root causes of biodiversity loss in the ecoregions, so this will inform the policy work that is carried out for the six global issues.

DELIVERING CONSERVATION – How?

Target Driven Programmes

A Target Driven Programme (TDP) is the delivery mechanism for focused and targeted work on one of the Global Priority issues central to WWF's mission. TDP activities are aimed at policy change, introduced either through existing instruments (e.g. conventions, legislation), market forces (certification, buyers groups), or voluntary commitments (e.g. Gifts to the Earth, Climate Savers). Issues lending themselves to the TDP approach typically are those where a short- to medium-term critical mass effort leads to a new level of conservation or magnification of its effects (e.g. the adoption of WWF's forest targets by the World Bank).

Each of the six TDPs focus on two or three global targets (see below), and lead WWF's effort to achieve those targets, also assuring appropriate links to Ecoregion Action Programmes.

The TDPs develop whatever strategies are needed to achieve their targets: for example, working the corridors of power (as on subsidies), seeking innovative partnerships such as those that led to the creation of the Forest Stewardship Council (FSC) and the Marine Stewardship Council (MSC), or working to engage the public. Not all targets will necessarily be in the public eye – certain targets may be best addressed by a more political (less visible but still 'high profile') approach and only emerge into the public arena at certain stages or when successfully completed. Other targets may be best addressed by highly visible activities, motivating and mobilizing the media and public opinion to achieve the targets.

Global Conservation Targets

Forests

WWF's vision for forests is for the world to have more extensive, more diverse and higher quality forest landscapes which will meet human needs and aspirations fairly, while conserving biological diversity and fulfilling the ecosystem functions necessary for all life on Earth.

To achieve this, WWF's 'Forests for Life' Programme aims to halt and reverse the loss and degradation of forests and all kinds of woodlands worldwide. This will require the establishment of forest protected areas; sustainable management of unprotected forests; restoration of degraded forests; minimizing forest loss due to climate change and pollution; and responsible trade in forest products.

Mangrove forests are important for coastal protection and fish breeding grounds.

WWF-Canon/Michel Marie Gunther



Three global targets have been set:

- **Protection:** By 2010, the establishment and maintenance of viable, representative networks of protected areas in the world's threatened and most biologically significant forest regions
- **Management:** By 2005, 100 million ha of certified forests, distributed in a balanced manner among regions, forest types and land tenure regimes
- **Restoration:** By 2005, at least 20 forest landscape restoration initiatives underway in the world's threatened, deforested or degraded forest regions to enhance ecological integrity and human well-being.

Freshwater Ecosystems

Freshwater is a precious resource, necessary for all life on Earth. Its future is far from secure. The failure of modern society to deal with water as a finite resource has led to the unnecessary destruction of rivers, lakes, marshes and other wetlands that provide a life support system for the planet. Globalization of trade and water privatization are now further

Shallow water coral reefs and red mangrove, Belize, Central America.
WWF-Canon/Anthony B Rath



adding to the demands on freshwater ecosystems.

WWF believes that healthy freshwater wetlands the world over will enhance the quality of life, but that this will only be achieved when nature is recognized and valued as the source of water.

The goal of WWF's 'Living Waters' Programme is to conserve and restore freshwater ecosystems and their processes for the benefit of people and wildlife. To achieve this requires a holistic approach to freshwater management through integrating ecological concerns with basic human needs and cultures; promotion of the conservation of freshwater ecosystems and their processes by emphasizing management of entire water catchments; and maximizing beneficial impacts and minimizing detrimental impacts on freshwater resources and ecosystems.

Three global targets have been set:

- **Freshwater biodiversity:** By 2010, 250 million ha of high-priority freshwater ecosystems worldwide are protected and/or sustainably managed
- **Water infrastructure development:** By 2010, ecological processes are maintained or restored in at least 50 large catchment areas of high biodiversity importance
- **Resource use in water intensive products:** By 2010, private sector practices and related government policies concerning key water-using sectors are established and/or changed in order to sustain the integrity of the freshwater ecosystems on which they depend and/or impact.

Oceans and Coasts

The oceans cover 70 per cent of the Earth's surface. Acting as both the source of primordial life and the sink of material washed off the land, the sea is the life support system for the world. It contains a huge biodiversity, from the shallow coral

reefs of the tropics to cold, dark ocean trenches up to 11km deep. It is a transport route, playground, source of resources, means of livelihood, and a huge store of biodiversity – as well as being incomparably beautiful. Driving climate, supplying food and recycling some of our wastes, we damage it at our peril.

WWF believes that governments, communities, environmentalists, industries and other interest groups around the world must work closely together to keep and restore the treasures of the sea. We have to use oceans and coasts wisely for the benefit of current and future generations. Through a common understanding and admiration of natural richness and beauty, we must respect the idea that all marine life has a right to be and the space to survive.

WWF's 'Endangered Seas' Programme approaches the conservation of oceans and coasts by promoting globally the establishment of a system of marine protected areas, and by the introduction of measures to ensure that fishing is carried out in a sustainable manner.

Two global targets have been set:

- **Protected areas:** By 2020, the establishment and implementation of a network of effectively managed, ecologically representative marine protected areas covering at least 10 per cent of the world's seas
- **Sustainable fisheries:** Maintain the status of all fish stocks that are currently exploited sustainably and, by 2020, halve the number of fish stocks that are overexploited or depleted, as currently categorized by FAO.

Species

The world's fauna and flora lie at the heart of WWF's Mission to conserve biodiversity and the prime reason for the organization's establishment in 1961. WWF's vision is a world in which the intrinsic, aesthetic, economic and ecological values of species

are recognized and respected worldwide and that, as a result, environmental degradation and unsustainable use no longer threaten the survival of wild plants and animals and their crucial habitats.

WWF's Species Conservation Programme seeks to conserve viable populations of selected species that are of particular conservation concern. Whilst important in their own right, species are also critical for the maintenance of fundamental ecological processes, and as indicators of the health of natural places. As flagships, they also provide unique opportunities for promoting and communicating important conservation and environmental issues.

Two global targets have been set:

- **Flagship species:** By 2010, populations of key species of global concern are stabilized or increased and their critical habitats safeguarded
- **Wildlife trade:** By 2010, at least ten species of global concern are no longer endangered by overexploitation.

The species and species groups which form the focus for target one are giant panda,

African elephants, Amboseli National Park, Kenya.
WWF-Canon/Martin Harvey



tiger, rhinoceroses (black, white, Javan, Sumatran, greater one horned), elephants (African and Asian), marine turtles (leatherback, hawksbill, green, loggerhead, olive ridley, Kemp's ridley), great apes (gorilla, chimpanzee, bonobo, orang-utan), and whales. Amongst the species included under target two are snow leopard, sturgeon, and Tibetan antelope.

WWF articulates its species conservation work through Species Action Plans and influencing the decisions made by the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) and the International Whaling Commission (IWC). At the heart of this work lies the concept of species viability and the corresponding need to conserve wildlife in managed landscapes large enough and varied enough to ensure their long-term well-being within contexts increasingly dominated by social and economic concerns.

An issue of wide concern in species conservation is the international commercial trade in endangered species. Jointly with IUCN–The World Conservation Union, WWF runs the TRAFFIC (Trade Records Analysis of Flora and Fauna in Commerce)

Winds of change – clean energy in the Waddensee, Germany.

WWF-Canon/Hartmut Jungius



programme whose mission is to ensure that trade in wild plants and animals is not a threat to the conservation of nature.

Climate Change

WWF's task is to protect nature from global climate change. By focusing on achieving a deep reduction in global carbon dioxide (CO₂) emissions, WWF expects to have triggered by 2030 a series of changes in society that will have transformed the supply and use of energy and raw materials compared to the beginning of the 21st century. Driven by pressure from civil society and the decisions of policy-makers, businesses and investors to decarbonize society, dangerous climate change such as dramatic damage to ecosystems will be on the right track to be avoided.

The Intergovernmental Panel of Climate Change's most recent report documents more strongly than ever before the extreme and daunting impacts that climate change will have on wildlife, spelling extinction and vast changes for species such as polar bear, Bengal tiger, and amphibians. With temperature ranges of 1.4 to 5.8 degrees Centigrade, it is clear that climate change poses an enormous threat to biodiversity and WWF's mission worldwide.

WWF's Climate Change Programme aims to ensure that industrialized nations achieve a permanent downward trend in their domestic emissions of carbon dioxide as a first step towards substantial reductions in emissions.

Three global targets have been set:

- **Emissions reductions:** By 2010, a 10 per cent reduction below 1990 emissions in industrialized country carbon dioxide emissions
- **Solutions:** By 2010, initiatives should be underway in thirty developing countries to implement solutions leading to a significant reduction in carbon intensity, in particular from the combustion of fossil fuels

- **National plans and strategies:** By 2010, fifty countries are implementing adaptation strategies in key ecoregions/biomes and sectors of their economies on the basis of national plans for the reduction of vulnerability to climate change.

Toxic Chemicals

Wildlife, people, and ecosystems are threatened by pervasive and global chemical contamination. WWF is working to reduce and eliminate the world's most dangerous industrial chemicals and pesticides while simultaneously promoting increased understanding, regulation of, and alternatives to toxic chemicals.

Within one generation, by 2020, WWF would like to see an end to threats to the Earth's biological diversity from toxic industrial chemicals and pesticides, especially endocrine disrupting, bioaccumulative, or persistent chemicals. In pursuit of this vision, WWF's Toxic Chemicals Programme investigates toxic chemicals and their relationship to biodiversity and human health; works to phase out and ban chemicals that threaten life; and seeks to identify and promote safe, effective, and affordable alternatives.

Two global targets have been set:

- **Elimination:** By 2007, eliminate or reduce at least 30 of the most hazardous industrial chemicals and pesticides, with special emphasis on persistent organic pollutants (POPs) and endocrine disrupting chemicals (EDCs)
- **Informed decision-making:** By 2007, scientific, educational and regulatory initiatives will be firmly in place, enabling decision-makers (governments, industry, consumers) to make informed choices about toxic chemicals and their alternatives.

These targets will be integrated into WWF's work on the other global issues, as well as

the Global 200 Ecoregions. In all cases the 'precautionary principle' will be used as the basic approach.

Campaigns

The target driven – campaigning – approach has proven itself to be a successful conservation delivery mechanism for WWF. The concept has enabled WWF to make greater conservation achievements by building upon traditional programme activities. To help the TDPs achieve their goals, short-term campaigns (of up to 18 months' duration) will be carried out by the TDPs.

A WWF campaign is “an integrated set of innovative and high-profile international activities carried out to achieve a specific conservation target within a defined timeframe”.

A maximum of three such campaigns will be run at any one time. These will relate directly to the global targets, and will seek to mobilize the public and the media in a substantial way, and draw heavily on, and promote, the WWF brand. High-profile, high-energy activities in the public arena, these campaigns will not preclude high-profile work being undertaken by the TDPs on other targets.

In addition, short-term campaigning initiatives of three to six months' duration will be employed, addressing for example a particular convention meeting or an ecoregion issue, or unexpected opportunities or emergencies that arise, for instance an escalation in whaling.

The TDP approach

Seven important features for TDPs have been developed in the light of lessons learned over six years from WWF's first international campaigns and underscored by the early experiences of the Ecoregion Action Programmes.

1. Focused targets – *targets focus effort and bring results*

Targets have proved to be extremely effective tools in achieving conservation goals. The campaigning approach has demonstrated that setting targets builds momentum and helps us focus our effort.

2. Flexible strategy – *flexibility in strategy and tactics allows timely action*

TDPs need to be flexible in their strategy and tactics in order to respond effectively to political and media opportunities and threats in a fast changing world. This means they should not be over-planned.

3. Effective communications – *policy advocacy needs potent communications strategies*

Effective internal and external communications need to accompany the policy goals. Communications is a tool for achieving targets, not just for highlighting successes.

4. Regular reporting and accountability – *reporting and accountability measures and a steering group with high-level composition*

The 'project' approach is central to the TDP management process. This approach uses results-orientated monitoring with timetables and check points and has proven extremely useful to ensure delivery. Full accountability, to one Steering Group, mandated by the network, is also vital.

5. Strong leadership and entrepreneurship – *strong staff leadership with entrepreneurial skill, rather than management by committee*

TDPs are effective only when led by a capable director who has credibility with the WWF Network. The director should be a good spokesperson and have the ability to carry things through without too much friction. He/she should also have a good eye for campaigning opportunities.

6. Firm funding and financial accountability – *established funding commitments for a set term accompanied by fiscal responsibility and oversight*

TDPs need a multiple-year funding guarantee and budgeting flexibility in order to use opportunities to their maximum.

7. Monitoring and lesson learning – *innovation needs constant learning and adaptation*

Monitoring progress against the overall goal is essential. Targets have been selected to help move towards one overarching goal. The TDP must ensure it remains outward looking and monitors not only the progress towards the chosen targets, but also the continuing relevance and priority of those targets in a fast-moving world.

Underpinning the TDP approach is the need for institutional support and capacity building both to enable the TDPs to act effectively, and also to empower staff in key areas of the WWF Network to play an effective part in their delivery.

Ecoregion Action Programmes

In addition to the six Target Driven Programmes outlined above, WWF has identified and chosen to work in a subset of individual or combined ecoregions, for each of which an Ecoregion Action Programme (EAP) will be formulated. An EAP is an ambitious, broad-scale, integrated approach that aims to conserve and, where necessary, restore the biological diversity of an entire ecoregion. This does not mean that every individual of every species must be protected, rather that our strategies and actions work toward achieving the broad goals of biodiversity conservation:

- **representation** of all native habitat types and plant and animal communities across their natural range of variation
- **resilience** of ecosystems and species to short- and long-term environmental change
- **viable populations** of all native species in natural patterns of abundance and distribution
- **healthy ecological and evolutionary processes** such as disturbance regimes, hydrological processes, nutrient cycles, and biotic interactions, including predation.

Using current information, and in conjunction with partners, each EAP establishes a vision for the long-term conservation of the ecoregion's biodiversity, and a set of targets which need to be achieved to reach that vision. These targets address the full range of socio-economic change necessary within the ecoregion and also in some cases contribute to the achievement of the global TDP targets. This latter feature – creating synergy between ecoregion and TDP work – is where WWF will maximize its impact, institutional efficiency and make most progress. Examples of how it can be done are found in the case studies (see pages 17-22).

The principles which outline the rationale of ecoregion conservation (see page 15) are

those which guide and direct WWF's ecoregion action plans. EAPs employ the tried and tested methods that WWF has used over the years – e.g. protected area establishment, environmental education, capacity building, advocacy for policy change – but on a geographically larger scale and engaging a broader range of issues and partners than ever before. In addition, as we analyse the pressures bearing upon ecoregions, certain 'common' problems will emerge, such as adverse trade rules, perverse subsidies which drive agricultural expansion or resource depletion, and other socio-economic issues. It is in these 'common' areas that the EAPs and the TDPs will interrelate most, working together, as well as with external partners, to achieve common goals.

Ecoregions as a unit for conservation action

Ecoregions are defined in biological terms and, as such, are logical units for conserving biodiversity. By moving from sites defined geographically or politically to biologically defined ecoregions, WWF can better assess what is necessary to maintain the full array of biodiversity – species, communities, ecosystems, and ecological processes. An ecoregional approach helps ensure that we do not overlook areas that are particularly unique or threatened, allowing for smarter trade-offs and greater positive impacts that are more likely to endure over time.

Because ecoregions often transcend political boundaries, managers, decision-makers, and other constituents, including in particular civil society (e.g. community groups, non-governmental organizations, labour unions), must enlarge their thinking and planning to act beyond their own borders. Whether an ecoregion is made up of forests, grasslands, rivers and streams, or marine and coastal zones, the people who live in an ecoregion often share a common relationship with the land, water, and their other natural resources. By encouraging ecoregional thinking, there is a greater chance that large-scale ecological processes will be recognized and maintained.

Ecoregion conservation requires a careful balance of analysis, planning, and action, thinking differently, and exploring and understanding the linkages between social and biological factors. This interplay between understanding and action will better enable WWF and all parties in an EAP to secure conservation gains and complementary economic and social development successes over the short and long term.

Based on the need to think and act differently, with broader visions, larger scales, longer time horizons, and greater impact, WWF has defined a set of simple features of ecoregion conservation, developed and refined by ecoregion conservation practitioners, based on their experience in the field.

- **The fundamental goal of ecoregion conservation is to conserve and, where necessary, restore the full range of an ecoregion's biodiversity:** genes, species, communities, ecosystems, and ecological phenomena must be conserved on a scale that ensures their integrity and long-term survival

- **Human development needs must be reconciled with conservation actions:** ecoregional scales of planning and action require a thorough understanding of the interactions between social, economic, and ecological factors
- **Emphasis must be given to collaboration and developing partnerships:** partnerships among institutions and individuals are vital for getting the best input and broadest commitment to programme design and implementation, and to ensure that scarce resources are efficiently applied
- **Adapting through learning:** putting experience into practice: continuous reshaping of actions and strategies based on previous lessons and experience and on emerging information and new tools for conservation management.

A 12-year-old boy finishing a fence around a school tree to protect it from goats in Mount Kilum, Cameroon.

WWF-Canon/Sandra Mbanefo Obiango



Principles of Ecoregion Conservation

1. WWF's primary purpose is the conservation of biodiversity, which is the foundation for a future where humans live in harmony with nature.
2. Ecoregions are the appropriate geographical unit for setting conservation goals; they represent an ambitious and visionary scale necessary for biodiversity conservation.
3. Sharing ideas, promoting learning processes at different scales, and practising adaptive management are critical to rapid success.
4. WWF must be flexible in its outlook and be willing to adapt its own structures and operations to the needs of conservation in the ecoregion.
5. Ecoregion conservation programmes should develop a vision for an ecoregion, which is bold, engaging and ambitious to set directions and arouse support. This vision should contain an inspirational message to motivate and engage stakeholders and partners.
6. Ecoregion conservation plans must be flexible and allow for sound judgement when a change of course or tactic is necessary.
7. Operationally, implementation may take place at levels below the ecoregional scale, or outside the ecoregion, depending on the issue under attention. Threats analysis is an essential filter for figuring out the scale at which we should act.
8. Personal initiative and effective, empowered leadership are vital. Appropriate emphasis must be placed on training and capacity building.
9. Knowing who and when to engage in strategic partnerships throughout the entire ecoregion process is crucial to realize the vision. This may include partnerships with stakeholders who represent a critical constituency but who may not normally be seen as conservation allies.
10. An inspiring vision must be combined with up-to-date reporting and transparency of goals, actions and achievements in order to build the commitment and ownership of partners to stay actively engaged.
11. Clear objectives and precise conservation targets are needed to guide, focus and monitor progress.
12. Long-term flexible financing must be focused at an ecoregional level (rather than site level) to give the programme a confident start and to maintain it. Novel and ambitious financial mechanisms that go beyond traditional WWF support must be actively pursued.
13. All conservation activities must be conceived and implemented in relation to the social and political realities in which they take place.
14. Appropriate institutional development is necessary to strengthen advocacy at several scales. This includes the harnessing of the full power of the WWF Network and key partners to make the most of political and high publicity opportunities.

Cross-cutting issues

There are a number of policy areas that cut across the work being carried out by WWF's Target Driven Programmes and Ecoregion Action Programmes. These include issues such as trade and investment (e.g. World Trade Organization rules), indigenous and traditional peoples (e.g. intellectual property rights), national implementation of treaties such as the Convention on Biological Diversity, as well as the impacts of tourism. WWF will focus on those cross-cutting issues, including newly emerging topics, that directly affect the work of the TDPs and EAPs. Particular attention will be paid to the root causes of biodiversity loss, such as poverty, migration, macroeconomic policies, and poor enforcement of environmental legislation.

Six areas in which WWF will concentrate its activity are:

- **International relationships, organizations and treaties**
- **International trade**
- **Investment, economics and markets**
- **People, conservation and livelihoods**
- **Business and industry**
- **Education and awareness-raising.**

Supporting livelihoods – a WWF-funded tree nursery in the Udzungwa Mountains, Tanzania.

WWF-Canon/John Newby



FROM THEORY TO PRACTICE – CONSERVATION IN ACTION

EUROPE: The Carpathians

The Carpathian Mountains stretch over seven countries of Central and Eastern Europe, binding together diverse nationalities and forming the link between the forests of northern, southern and western Europe. The region is exceptionally rich in species diversity and is the last remaining European stronghold of large mammals such as the brown bear, wolf and lynx. The region also harbours one of the continent's most extensive tracts of montane forest, including Europe's largest remaining area of virgin forest.

The uniqueness of the Carpathians is also tied to its strong cultural heritage. Scattered throughout the region are age-old traditions, shaped by the highland way of life: shepherding, beliefs and rituals, music and dance, architecture. Sharing the same climate, hardships and sense of isolation, the distinct traditions of people of the Carpathians unite the people across the different national and ethnic divides.

Biodiversity and socio-economic assessments of the Carpathians indicate that the ecoregion is facing serious threats as a result of the rapid transition of the former centralized Communist system to a market economy, unsustainable natural resource use (e.g. in the agriculture and forestry sectors), land restitution, major road programmes, increasing tourism, a decline in rural economies, and moves towards integration with the EU.

In the two years since the Carpathian Ecoregion Action Programme started in 1999, a vision for the region has been developed and the basic directions of the conservation plan have been established.

The plan has three overarching components and long-term objectives:

- Strengthening institutional development – by promoting flexible cooperation, enhancing community participation and capacity building, and strengthening legislation
- Developing a Carpathians ecological network – by establishing new protected areas, ensuring efficient management, and implementing the Pan-Carpathian carnivore strategy
- Generating sustainable economic benefits for people in the region – by establishing market mechanisms for sustainable production, developing and implementing a nature- and culture-based tourism strategy, and using pilot projects to demonstrate economic benefits.

Grey wolf – a feature of the Carpathian mountains.
WWF-Canon/Chris Martin Bahr



This comprehensive strategy will be implemented by WWF together with more than 50 partner organizations. Detailed five- and ten-year objectives and milestones are under discussion and will be finalized during 2002. Activities to be taken at different levels include: influencing EU policies, work towards a 'Carpathians Convention' in close cooperation with UNEP, strengthening legislation at national level, and, at a local level, working with communities and pilot projects.

Optimizing conservation

In May 2001, the Heads of State from 14 countries of the Danube-Carpathians region gathered in the Romanian capital of Bucharest to confirm and strengthen their commitment to sustainable development. The summit included a commitment to a process of formalizing ecoregion conservation in the Carpathian mountains.

More than half of the Carpathian mountain range is covered by forests. The biodiversity assessment indicates that the area of forested land needs to be doubled, focusing mainly on Romania and Ukraine. An analysis of clear felling in the Carpathian forests and its possible impact on extreme

flooding in the Danube basin (in particular on the Tisza River) will be undertaken. From this, appropriate forest management techniques will be developed. In the Western Carpathians (Slovakia, Poland, and Czech Republic) investments need to be made in improving the management of protected areas. In terms of sustainable forest management and certification, a whole range of activities need to be carried out. In parts of the region there is also a need for forest landscape restoration.

The Carpathians harbour one of Europe's major underground freshwater reservoirs for drinking water, as well as being the source of the Tisza and the Vistula rivers, major tributaries of the Danube. These river systems have been chosen by WWF as two of three model river basins for freshwater activities in Europe. Since the Carpathians are densely forested, the impact of forest management practices on surface- and ground-water is significant. However, the link between clear felling in the high mountain regions and severe flooding in the lowlands is still under discussion. Given these issues, all three of the Freshwater TDP targets – protection, maintenance of ecological processes, and the promotion of water saving practices – are relevant for the Carpathians ecoregion as the conservation approach is based on integrated land and water management.

The Vistula River, Poland, has its source in the Carpathian Mountains.

Ireneusz Chojnacki



ASIA: Greater Annamites

The chain of mountains that extends along the border between Laos and Vietnam marks the eastern boundary of the final stages of the Mekong River and characterizes the Greater Annamites ecoregion. The forests and rivers support a rich diversity of animals and plants, such as tiger, Asian elephant, gibbons, the highly endangered Javan rhinoceros, and several species discovered only in recent years, like douc langur, one of the world's most beautiful and endangered primates.

For people, the region's tropical forests are an important natural resource for two countries recovering from years of social

turmoil and economic collapse. Areas are converted for agriculture, forests are felled for timber, and dams are constructed to provide energy. Such activities are putting increasing pressure on the region's natural wealth. However, the governments of both Laos and Vietnam are committed to sustainable development and are making efforts to ensure economic growth does not take place at the expense of the natural resource base.

The chief threats to biodiversity in the Greater Annamites are illegal hunting and wildlife trade, habitat loss and degradation, and fragmentation of wildlife populations. Four root causes have been identified as the drivers behind these threats: population and population migration pressures; macroeconomic policies and transition to a market economy; weak land-use and natural resource planning; infrastructure development.

WWF's Greater Annamites Ecoregion Action Programme, begun in 1998, is exploring the mitigation of these impacts at the landscape level. Its conservation strategy is presently based on:

- Mobilizing conservation efforts for the entire ecoregion through advocacy, strategic partnerships and strong communications
- Developing comprehensive landscape-scale conservation initiatives to protect key species and sites. A major conservation initiative has been launched for one of the priority landscapes – the Central Annamites
- Promoting a supportive policy environment for sustainable natural resource management through sustainable forest management, community participation in conservation and natural resource management, and eliminating unsustainable and illegal wildlife exploitation
- Laying the foundations for long-term conservation through environmental education, sustainable finance and

capacity building and institutional strengthening.

Optimizing conservation

The EAP approach to the conservation of the Greater Annamites is based on the development of a set of functional landscapes comprising a mosaic of complementary land uses including sustainable forest management, areas assigned for forest restoration, and the need for effective protected area systems – all of which contribute directly to the global TDP targets. Substantial support is being provided to develop the Central Annamites (the focal priority landscape) as one of the global restoration landscapes; this will be a dual TDP/EAP initiative. Sustainable forest management has been identified as a key focal topic for the EAP and support has already been provided to establish the first certified forest in Vietnam. As the current portfolio of forest-based projects are renewed and the EAP moves from its initial planning phase to implementation, new projects are being jointly identified and developed. One example of this integration is the GEF 'Green Corridor' project in Vietnam which will contain elements of protected area management and forest restoration.

A WWF survey team in Vu Quang Reserve, Vietnam. Such surveys form the basis of conservation plans in ecoregions.

WWF-Canon/John Mackinnon



Three of the WWF's focal species are found in the Greater Annamites: Asian elephant, tiger and lesser one-horned (Javan) rhinoceros. The global importance of the populations of these species in the Greater Annamites ensured that the biodiversity vision for the ecoregion was developed partly with these key species, especially tiger, in mind. TDP activity will depend on where the programme focuses its effort since both Asian elephants and tigers are found in other ecoregions. While the Greater Annamites may not necessarily be the focus for global efforts, regional efforts through the EAP will contribute to the global picture.

Management of tigers, rhinos and elephants in the Greater Annamites will require landscapes designed and managed to support viable populations of these large mammals. The Greater Annamites EAP has assisted this work by identifying those landscapes that could support viable populations; supporting management of protected areas; and developing locally appropriate measures to support the long-term conservation of elephants and tigers.

Dried yellow mullet loaded for transport to the Nouakchott market in the Banc d'Arguin National Park, Mauritania.

WWF-Canon/John Newby



AFRICA: Sahelian Upwelling

The Sahelian Upwelling ecoregion includes the marine and coastal waters of four countries: Guinea Bissau, Mauritania, Senegal, and The Gambia. Some 13 million people live within the boundaries of the ecoregion, mostly in, and dependent on, coastal areas. The Sahelian upwelling is renowned for its high productivity – especially its extensive deep sea fisheries. Among a number of threatened species are five types of marine turtle and the critically endangered monk seal. Vast concentrations of overwintering and breeding waterbirds occur, with areas such as the Banc d'Arguin in Mauritania among the most important wintering places for birds migrating between southern Africa and northern Europe.

WWF opened a marine coordination office in Dakar, Senegal in April 2001 and commenced in-depth analyses of the ecoregion in July. At the same time, work has continued on objectives related to marine protected areas, fisheries, and species. Ongoing work has been important in establishing partnerships with other key players in the region; e.g. with IUCN–The World Conservation Union and FIBA ('Fondation Internationale de la Banc d'Arguin'), and with the 'Commission Sous Régionale des Pêches' – a subregional body charged with advising governments on fisheries issues. WWF is working with the Commission on artisanal fisheries as well as on the issue of equitable access agreements.

Human pressure on the marine and coastal environment is increasing, especially artisanal fishing which in recent times has seen motorization of 'pirogues' (fishing boats) and the introduction of damaging new techniques (dynamite fishing) and fishing gear (fine-meshed beach seines, turning seines). However, the greater threat comes from commercial fishing – both by national fleets and distant-water fleets. Heavily subsidized European fleets are guaranteed access to West African waters through fishing agreements negotiated with the EU with little regard for sustainability concerns. Destruction of the fisheries will inevitably

impact on the livelihoods of local people who rely on these resources in some of the world's least developed countries.

The recent discovery of commercially viable reserves of oil off Mauritania presents a new concern for the region. Exploration is planned in and around marine protected areas (MPAs) in Mauritania and Guinea Bissau, and blocks have recently been let for exploration within the 'Parc National de la Banc d'Arguin' which WWF has supported together with its partner FIBA since the park's creation in 1976.

Optimizing conservation

At a time when EU fisheries agreements were coming up for renewal in all four countries of the ecoregion, WWF – in the shape of the forerunners of the EAP and the TDP, together with WWF's European Policy Office (EPO) – highlighted issues associated with damaging fisheries subsidies and agreements through the publication of WWF's Handbook for Negotiating Fishing Access Agreements. In addition, the EPO highlighted the lack of transparency in current agreements for the four countries at a November 2000 symposium in Brussels, and has pointed to the failure of the European Commission to regulate fisheries in its own waters.

The Endangered Seas Programme collaborated in the promotion of a regional network of marine protected areas (MPAs) through the celebration in March 2001 of two 'Gifts to the Earth' at a series of events involving the President of Mauritania and the Prime Minister of Guinea Bissau.

The TDP will contribute further to work in the ecoregion through the provision of conservation tools (e.g. effectiveness guidelines) and policy work aimed at by removing threats which originate from outside the ecoregion (e.g. EU subsidies for its fishing fleets). Access agreements between the ecoregion countries and the European Union will be highlighted in the TDP's new European Fisheries Campaign. The Campaign will highlight access agreements as a type of fisheries subsidy,

while oil exploration issues will be used as a means to engage the oil industry and investors, as well as regional governments, in a debate on operations in protected areas. The EAP will contribute to the TDP's targets by concentrating on the establishment and effective management of MPAs, illegal activity, fisheries management, access agreements, and on strengthening regional fisheries bodies.

The Species TDP is expected to contribute to EAP work on marine turtles, which in turn will help the TDP objective of stabilizing or increasing threatened populations and safeguarding their habitats. Work on trade issues (turtles, sharks) should also facilitate species conservation work in the region.

With regard to climate change, the Banc d'Arguin offers a potential site for vulnerability assessments of coastal MPAs as it hosts the northernmost mangroves and southernmost saltmarsh in the Eastern Atlantic.

LATIN AMERICA/CARIBBEAN: Mesoamerican Caribbean Reef

The Mesoamerican Caribbean Reef extends some 700km from the northern tip

The Lagoon of Seven Colors in the Mesoamerican Caribbean Reef coastal zone at Quintana Roo, Mexico.

WWF-Canon/Robert de Jongh



of the Yucatan peninsula in Mexico to the Bay Islands off the coast of Honduras. It contains the largest coral reef system in the Atlantic. Associated with the ecoregion are extensive areas of coastal wetlands, lagoons, sea-grass beds, and mangrove forests that provide critical habitat for threatened and endangered species. Marine turtles, crocodiles, dolphins, more than 500 species of fish, the elusive whale shark, and the largest population of manatees are all found in different parts of the reef.

Commercial fisheries include spiny lobster, queen conch, shrimp, grouper, and snapper. Other important industries along the coastline of Mexico, Belize, Guatemala, and Honduras are tourism; extensive agricultural activities such as oil palm, banana, and citrus plantations; and commerce (through major ports in Guatemala and Honduras). All these important economic activities have an impact on the reef system since they often lead to the destruction of coastal habitat, sedimentation, water pollution, and overexploitation of marine resources. Ironically both tourism and fisheries, the major income generators for the national economies of these countries, depend directly on the health of the reef and associated coastal and marine ecosystems.

Amongst the threats to the Mesoamerican Caribbean Reef are overfishing by semi-industrial fleets that often do not respect political boundaries; unregulated tourism development that is destroying coastal habitats and near-shore marine areas and spreading quickly throughout the region, particularly in Mexico; and pollution from runoff in the Honduras, port facilities and shipping in the Gulf of Honduras, and poorly planned coastal development in Belize and Mexico.

To address these threats and conserve the ecoregion, the conservation strategy for the Mesoamerican Caribbean Reef concentrates on four key actions:

- Mobilizing conservation on an ecoregional scale, including assurances that other major players apply the biodiversity vision to their investment decisions

- Protecting key sites and wildlife populations, focusing on the design, establishment and effective management of the most important marine protected areas as part of an ecoregional network, strengthening fisheries policies and management, and supporting the conservation of marine turtles
- Shaping regional development to support conservation, especially tourism as well as both land-based and ship-based sources of marine pollution
- Establishing long-term conditions and capacities needed to sustain conservation, including a major push to develop an ecoregional financing mechanism.

Optimizing conservation

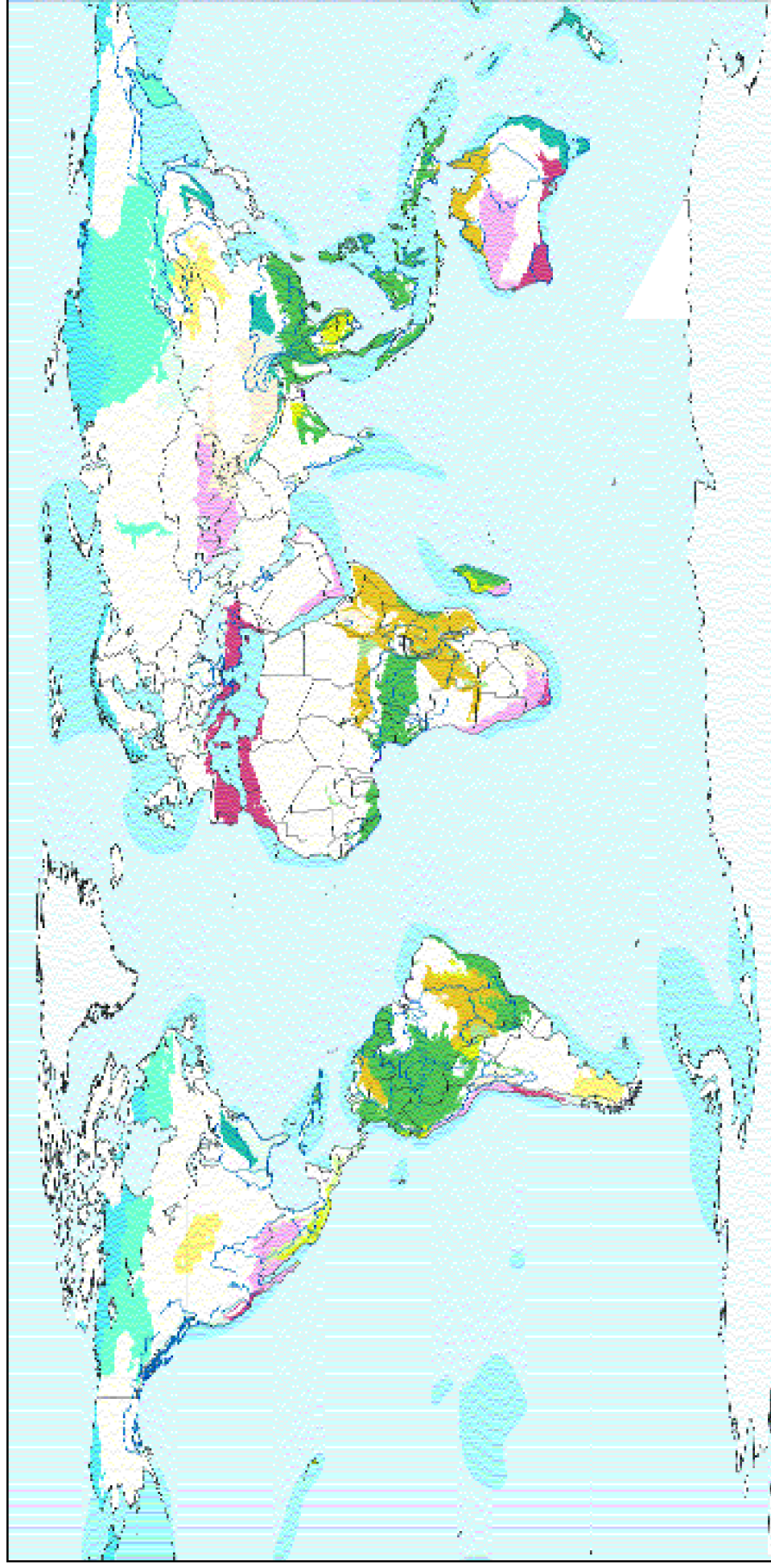
Effective management will be achieved in at least three of the most important MPAs in the ecoregion, contributing to both EAP and TDP targets. A tourism officer will work on securing commitments from industry and governments to apply sustainable tourism guidelines and best practices. Fisheries certification assessments under the Marine Stewardship Certification scheme are being carried out in Banco Chinchorro. Broader market analyses are planned to determine what other fisheries make good candidates for MSC certification.

Climate impacts on coral reefs over the next 50 years could be devastating. In response, the Climate Change Programme is looking to support coral reef biodiversity adaptation strategies that would influence the design and thus effectiveness of marine protected areas.

Critical nesting sites for depleted Caribbean hawksbill and green turtle populations – both WWF flagship species – will be protected within the ecoregion.

The EAP is looking to set up a 'ridge to reef' project – a catchment management proposal focused on preventing land-based pollution that is detrimental to the marine environment in the southern part of the ecoregion.

The Global 200 Ecoregions



Terrestrial Major Habitat Types

- Tropical & Subtropical Moist Broadleaf Forests
- Tropical & Subtropical Dry Broadleaf Forests
- Tropical & Subtropical Coniferous Forests
- Temperate Broadleaf & Mixed Forests
- Temperate Coniferous Forests
- Boreal Forests/Taiga
- Tropical & Subtropical Grasslands, Savannas & Shrublands

- Temperate Grasslands, Savannas & Shrublands
- Flooded Grasslands & Savannas
- Montane Grasslands & Shrublands
- Tundra
- Mediterranean Forests, Woodlands & Scrub
- Deserts & Xeric Shrublands
- Mangroves

- Marine Ecoregions
- Freshwater Ecoregions
- No Data
- International Boundaries
- - - Disputed Boundaries. Lines of control or alignment unconfirmed

(Boundaries based on UN sources)



WWF is one of the world's largest and most experienced independent conservation organizations, with almost 5 million supporters and a global network active in over 96 countries.

WWF's mission is to stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature, by:

- conserving the world's biological diversity
- ensuring that the use of renewable natural resources is sustainable
- promoting the reduction of pollution and wasteful consumption.

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