THE IUCN PROGRAMME 2005-2008

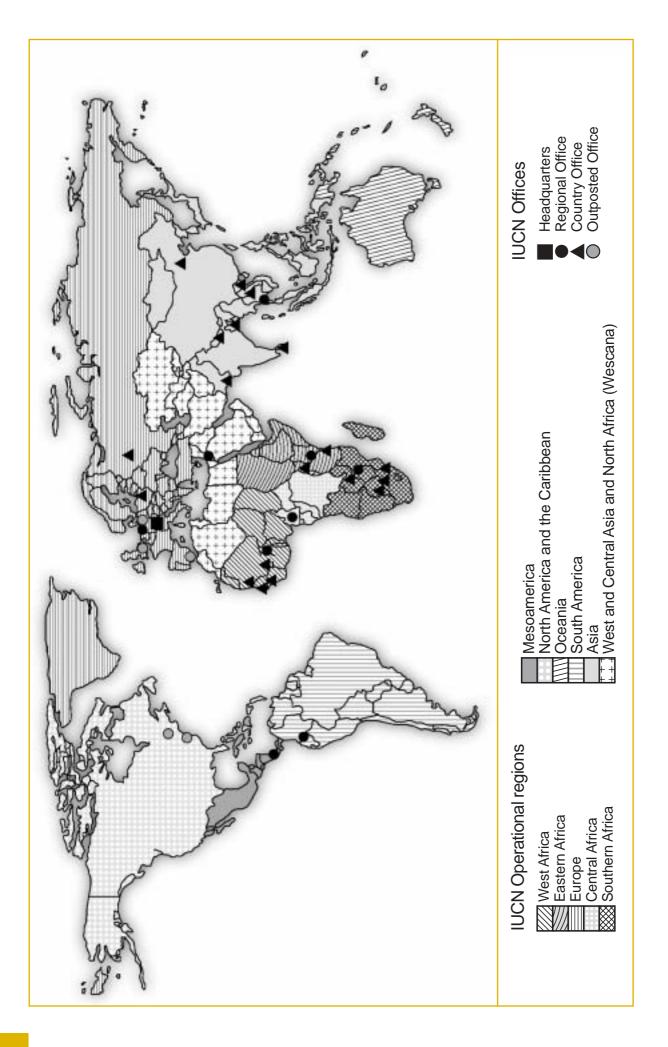
MANY VOICES, ONE EARTH

Adopted at The World Conservation Congress Bangkok, Thailand, 17–25 November 2004

IUCN – The World Conservation Union November 2004

Table of Contents

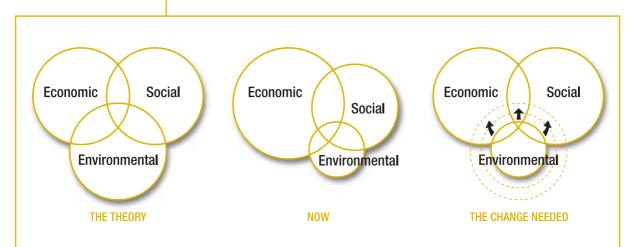
Executive Summary		
1	Introduction	
2	The IUCN Programme 2005–2008 at a Glance	
3	Environmental Health and Human Wellbeing	
4	The Causes of Unsustainability1	
	О	Human Population Dynamics17
	О	Consumption Patterns
	0	Market Failures and Policy Distortions
	0	Wealth, Poverty and Inequity19
5	Addressing the Causes of Unsustainability	
	0	The International Response
	0	Addressing Poverty and Inequity
	О	Addressing Market Failures and Policy Distortions
	О	Addressing Knowledge Gaps for Decision-Making
6	IUCN's Programme Framework 2005–2008	
	0	Knowledge
	0	Empowerment
	О	Governance
7	The IUCN Programme Results	
	О	Key Result Area 1: Understanding Biodiversity
	О	Key Result Area 2: Social Equity
	О	Key Result Area 3: Conservation Incentives and Finance
	0	Key Result Area 4: International Agreements, Processes and Institutions for Conservation
	0	Key Result Area 5: Ecosystems and Sustainable Livelihoods41
	0	Key Result Area 6: Programme Delivery45
References		
Abbreviations and acronyms		
Glossary		

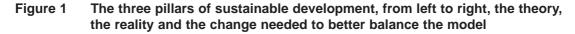


Executive Summary

UCN is first and foremost a union of members that are concerned with species loss and ecosystem integrity. However, IUCN recognises that the causes of environmental problems are largely political, economic and social. Thus, the IUCN Programme 2005–2008 recognises a need for the Union to simultaneously focus on the direct and underlying causes of biodiversity loss. The 2005–2008 Programme equally recognises the link between environmental health and human wellbeing and explicitly seeks to address the elements of the UN Millennium Development Goals and the World Summit on Sustainable Development's Johannesburg Plan of Implementation that relate to the environment-development nexus.

The Programme is described in terms of the three 'pillars' of sustainable development – economic, social and environmental – and it explicitly seeks to improve the attention of decision makers on the role of a healthy environment in sustainability by expanding the role of the environment in sustainable development. The Programme recognises that sustainable development will ultimately depend on the condition of the natural environment and it challenges whether current approaches to sustainable development actually achieve sustainability.





The Programme is presented below through a strategy of **knowledge**, **empowerment** and **governance**. IUCN will integrate, manage and disseminate conservation-related knowledge; build the capacity of people and institutions to plan, manage, conserve and use nature and natural resources in a sustainable and equitable manner (empowerment); and promote effective environmental governance at global, regional, national and local levels. The strategy is developed through 26 global 'results' clustered in six 'Key Result Areas' (KRAs):

• **KRA 1: Understanding Biodiversity** – IUCN will build on its ability to generate and disseminate knowledge about natural systems and the species that inhabit them.

• **KRA 2: Social Equity** – IUCN will promote better understanding of the role of social equity in biodiversity conservation.

• **KRA 3: Conservation Incentives and Finance** – IUCN will emphasise sharing knowledge of incentives and financing mechanisms for supporting effective biodiversity conservation.

• KRA 4: International Agreements, Processes and Institutions for Conservation – IUCN will use the knowledge generated in KRAs 1, 2, 3 and 5 to promote and support effective, efficient and equitable environmental governance at regional and global levels, including through intergovernmental fora and corporate social responsibility processes.

• **KRA 5: Ecosystems and Sustainable Livelihoods** – IUCN will apply the knowledge generated in KRAs 1, 2, 3 and 4 to promote sustainable and efficient management of ecosystems, integrating social, economic and environmental aims at local, national and transboundary levels.

• **KRA 6: Programme Delivery** – IUCN will build and maintain the systems for the Union to deliver an effective and efficient Programme through its Commissions, Secretariat and members.

The first three KRAs reflect IUCN's intention to improve its ability to generate and disseminate knowledge about natural systems and the species that inhabit them; to promote better understanding of the role of social equity in biodiversity conservation and; to share knowledge of incentives and financing mechanisms for supporting effective biodiversity conservation. The fourth KRA seeks to use this knowledge in an integrated manner to build the capacity of individuals and institutions to influence environmental governance at regional and global levels. The fifth KRA will use the knowledge from KRAs 1–4 to build capacity and influence environmental governance at local, national and transboundary levels. The sixth KRA recognises the need for IUCN to develop and maintain its own capacity to implement the Programme, particularly with respect to education and communication for the Programme.

The Programme document provides the framework on which all of IUCN's Commissions, Regional Programmes, Global Thematic Programmes and support units in the Secretariat plan, implement, monitor and evaluate their activities with and on behalf of members. The detailed work plans of all of these 'components' of the IUCN Programme can be found on the CD-ROM that accompanies this document. The Commission mandates, adopted as part of the IUCN Programme 2005–2008, are also on the CD-ROM. In addition, the CD-ROM includes all resolutions and recommendations adopted at Bangkok.

1 Introduction

he world is a very different place than it was when IUCN – The World Conservation Union was conceived in 1948. While the world's economy has grown, the biodiversity on which it depends is disappearing. Local and global conflicts over resources are increasing.

Strength in numbers and diversity

The Union's strength arises from the number and diversity of its members. In April 2004, IUCN had 1,035 members comprising 76 States, 114 Government Agencies, 735 National NGOs, 77 International NGOs and 33 Affiliates. These members are present in 143 countries. On the other hand, many international and national bodies are now devoted to environmental sustainability and the concepts and practice of conservation and sustainable development are more widely understood.¹

Throughout these changing times, IUCN remains distinct in several aspects from all other organizations working to conserve biodiversity while promoting sustainable development. IUCN's unique membership, which brings together States, government agencies and non-governmental organizations, as well as a vast network of expertise in its six Commissions, enables it – better than any other international body – to pool knowledge and resources and to develop unified approaches in

the interests of conservation. IUCN's science base, with a foundation in its expert networks, provides the means to develop standards and norms that are applied throughout the world in conservation policy and environmental work on the ground.

These distinguishing features give IUCN two particular advantages:

• our unique structure as a Union enables us to convene civil

IUCN's Commissions

- Commission on Ecosystem Management
- Commission on Education and Communication
- Commission on Environmental, Economic and Social Policy
- Commission on Environmental Law
- Species Survival Commission
- World Commission on Protected Areas

Details of the Commission work plans can be found in the CD-ROM that accompanies this document. society and governments for a democratic dialogue on conservation and sustainable development issues, and offers access to key actors in government and the NGO community; and

• IUCN's global network of experience in the fields of science, management policy and communication on biodiversity and natural resource use provides a platform for the conservation community and others to access credible and usable knowledge of environmental issues.

IUCN has built a set of core competencies to complement its convening power and practical knowledge base. Since they are derived from its structure, composition, role and

¹ See Caring for the Earth: A Strategy for Sustainable Living. IUCN 1991.

functions, these core competences are long-term features of the organization. They include our:

• ability to mobilize and provide strategic and creative leadership in thinking and acting, based on sound integrated science, at global, regional, national and local levels;

• ability to link conservation practice with intergovernmental policy, strengthened by IUCN's role as the only environmental body with Observer Status in the United Nations General Assembly; and

• capacity to leverage financial and human resources for conservation.

This document describes how these competencies are employed in practice. It outlines the IUCN Programme for the intersessional period between the 3rd and 4th IUCN World Conservation Congresses. After the introduction and a summary of the Programme, the paper examines the status of biodiversity and trends that affect the natural environment and human wellbeing, highlights the underlying causes of unsustainability, outlines the international response to the underlying causes, and presents IUCN's response in terms of its strategy and a clear set of results.

The Programme has been developed through an extensive consultation process with IUCN members, Commission members, donors and other partners. It is guided by the Mission Statement and the objectives and priorities of the Union. The 2005–2008 IUCN Programme builds on the framework of the 2001–2004 Programme approved in 2000 at the Amman World Conservation Congress. Over the past 18 months the directions set in that document have been refined and refocused, taking into account lessons learned as well as emerging issues and trends in biodiversity conservation and sustainable development. The Programme has been assembled as an integrated whole, with thematic and geographical balance.

In this way, the Programme for 2005–2008 indicates the practical ways in which IUCN pursues its Mission, that is: 'to influence, encourage and assist societies throughout the world to conserve the integrity and diversity of nature and ensure that any use of natural resources is equitable and ecologically sustainable.'

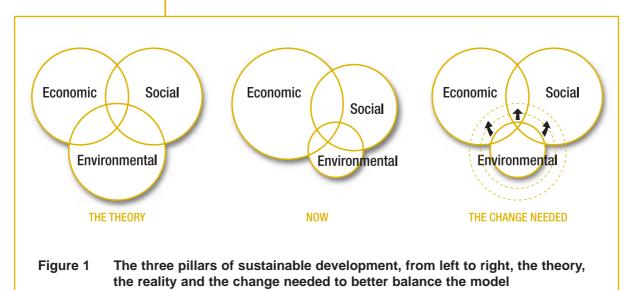
IUCN's niche is:

- A convenor of civil society and governments to develop unified approaches, partnerships and forums, including with the business community, for collective action for conservation.
- A reliable and credible knowledge-based global network that works for the conservation of nature and natural resources.

2 The IUCN Programme 2005–2008 at a Glance

abitat degradation and fragmentation, invasive alien species, unsustainable harvesting of plants and animals, pollution of the land and sea, and climate change all directly threaten environmental health and human wellbeing. Underlying these direct threats to the environment is a complex set of socio-economic factors.

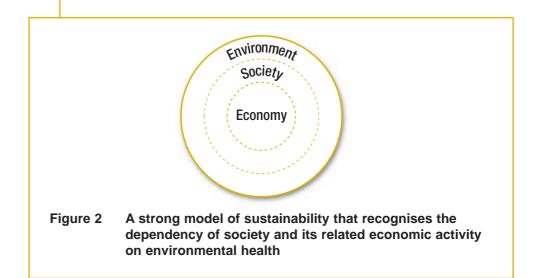
IUCN is first and foremost a conservation organization. However, to be successful, conservation efforts need to address both the direct causes of biodiversity loss and the related underlying causes of unsustainability. Likewise, sustainable development cannot be achieved in isolation from ensuring economic wellbeing, environmental health or addressing social development goals. These three pillars of sustainability



– economic, social and environmental – must be addressed together for successful conservation as well as sustainable development. However, the current reality is that international efforts to achieve sustainable development have tended to put most emphasis on economic development. IUCN would like to see these three pillars more equitably balanced so that environmental concerns are better integrated into economic and social development thinking as shown in Figure 1.

The continuing lack of progress towards sustainability and the ever-growing threat to environmental health has prompted IUCN to develop a Programme that will simultaneously **strengthen the Union's heartland work on conservation of biodiversity while developing more effective and strategic interventions linked to the global agenda for sustainable development.**

During the intersessional period, IUCN hopes to promote greater acceptance among decision-makers of the critical role of environmental health in sustainability. In the three pillar model of sustainable development this means better integration of environmental thinking into economic and social decision-making. However, the three pillar model of sustainable development has a fundamental weakness in that it implies economic wellbeing can be traded off against social and environmental wellbeing. A stronger model of sustainability requires maintaining society, the economy and the environment in good condition. Recognition of the dependence of the social and economic pillars on environmental health will be the key to achieving sustainable development.



The model presented in Figure 2 acknowledges that the economy exists in the context of society, and that society and economic activity are dependent on the natural systems of Earth.² Sustainability dictates that human activity must not exceed the capacity of the biosphere. The model should not be misinterpreted as either the economy being at the centre of decisions or society being subservient to environmental decisions, but rather, it should be interpreted as ecological thinking needs to be integrated into all economic and social development. This view is consistent with the Union's vision of 'a just world that values and conserves nature'.

The Programme brings together the work of IUCN's Commissions and Secretariat with and on behalf of members through a common strategy of:

• integrating, managing and disseminating conservation-related **knowledge**;

• building the capacity of people and institutions to take action – to plan, manage, conserve and use nature and natural resources in a sustainable and equitable manner (**empowerment**); and

• promoting effective environmental **governance** at global, regional, national and local levels.

These three elements of IUCN's strategy form the basis for six 'Key Result Areas' (KRAs) designed to achieve 26 global results during

² Adapted from *Creating our future: sustainable development for New Zealand.* Parliamentary Commissioner for the Environment 2002, Wellington, New Zealand. ISBN: 1-877274-03-8.

the intersessional Programme. Key Result Areas 1, 2 and 3 address the knowledge foundation upon which the IUCN Programme is based: biodiversity and its use. KRAs 4 and 5 are designed to use this knowledge in an integrated way to link conservation with economic and social aspects of conservation and sustainable development. KRA 6 is concerned with programme delivery. The KRAs are:

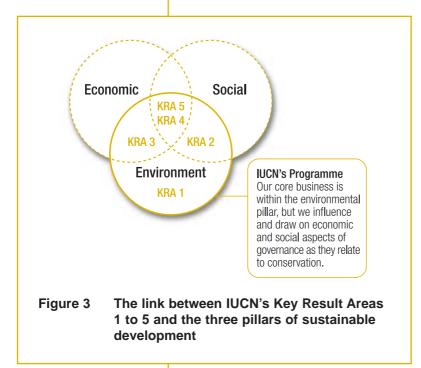
• **KRA 1: Understanding Biodiversity** – IUCN will build on its ability to generate and disseminate knowledge about natural systems and the species that inhabit them.

• **KRA 2: Social Equity** – IUCN will promote better understanding of the role of social equity in biodiversity conservation.

• **KRA 3: Conservation Incentives and Finance** – IUCN will emphasise sharing knowledge of incentives and financing mechanisms for supporting effective biodiversity conservation.

• KRA 4: International Agreements, Processes and Institutions for Conservation – IUCN will use the knowledge generated in KRAs 1, 2, 3 and 5 to promote and support effective, efficient and equitable environmental governance at regional and global levels, including through intergovernmental fora and corporate social responsibility processes.

• **KRA 5: Ecosystems and Sustainable Livelihoods** – IUCN will apply the knowledge generated in KRAs 1, 2, 3 and 4 to promote



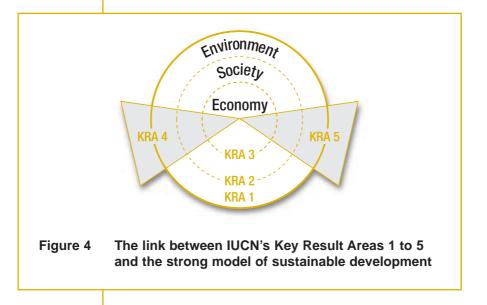
sustainable and efficient management of ecosystems, integrating social, economic and environmental aims at local, national and transboundary levels.

• KRA 6: Programme Delivery – IUCN will build and maintain the systems for the Union to deliver an effective and efficient Programme through its Commissions, Secretariat and members.

More details of the Programme framework are provided in Part 7 and on the CD-ROM that accompanies this document.

The IUCN Programme is anchored firmly within the Environment pillar of the conventional model of sustainable development (see Figure 3). This is IUCN's core area of competence, and defines IUCN's unique contribution in the field of conservation and sustainable use of natural resources. We recognise, however, that to achieve the IUCN Mission, the Programme must reach out and engage with processes anchored in the social and economic spheres which impact on biodiversity.

Figure 4 shows the link between the Key Result Areas of IUCN's Programme and the strong model of sustainable development. KRA 1 is undertaken within the environmental circle, KRA 2 at the intersection between the environment and society, KRA 3 at the intersection between the environment and the economy. KRAs 4 and 5 link IUCN's work between all three elements of sustainability.



IUCN's Regional Programmes and Representational offices

- > Asia
- Canada
- Central Africa
- Centre for Mediterranean Cooperation
- Eastern Africa
- > Europe
- Meso-America
- Oceania
- South America
- Southern Africa
- United States
- West, Central Asia and North Africa
- West Africa

Details of the intersessional work plans for individual units can be found in the CD-ROM that accompanies this document.

IUCN's Global units

- Business and Biodiversity
- Communication
- Conservation Finance and Donor Relations
- Corporate Strategies, Partnerships and Communication – Directorate
- Ecosystem Management
- Environmental Law
- Finance
- Forest Conservation
- Human Resources
- Marine
- Membership Relations and Governance
- Policy, Biodiversity and International Agreements
- Programme Planning and Evaluation Team
- Protected Areas
- Senior Advisers Economics and the Environment, Gender and Social Policy
- Species
- TRAFFIC (joint programme with WWF)
- Wetlands and Water Resources

3 Environmental Health and Human Wellbeing

For IUCN to deliver on its Mission, its Programme must be based on a clear understanding not only of the current status of biodiversity, but also of the social and environmental context within which it works. Of the many global level analyses in recent years, *The Wellbeing of Nations* (2001)³ provides the most comprehensive picture of human and ecosystem wellbeing. The conclusion from these global reports is unmistakable: while significant progress has been reported on some fronts, no country is even close to sustainability.

Biodiversity loss threatens the integrity of all ecosystems and the benefits ecosystem services provide to human wellbeing. Species extinctions are now occurring at 100 to 1000 times the background rate.



At no point in the past have the threats to biodiversity, and the impacts of biodiversity loss to human wellbeing, been so well documented. The overall picture is grim. On the negative side, key trends with respect to threats to biodiversity include the following:

• Climate change – Climate change is already affecting many ecosystems, particularly coral reefs, mountains and the polar environment. Its impact on species survival and ecosystem integrity is expected to rival habitat loss in coming decades. According to a recent study, by 2050, 15 to 37 percent of species may be committed to extinction from climate change unless we act now to adapt.

• **Over-exploitation** – Wildlife populations in West Africa and Southeast Asia are being seriously overharvested for food to meet local and (in Asia) international demand. Declining fish stocks threaten the primary source of protein for a significant proportion of the world's poor. Over half the world's

fisheries are being harvested beyond sustainable yield. Despite the increasing fishing effort required and the ever more sophisticated technology used, global fish landings have been declining since the mid-1980s. Meanwhile expanding economies in many parts of the world mean increased demand for forest products, and for forested lands. Some of the most species-rich countries are among the hardest hit.

• **Invasive alien species** – Invasive alien species (IAS) are now recognized as one of the most important threats to both the environment and the economy. The most recent release of the

³ Prescott-Allen, Robert (2001) *The Wellbeing of Nations.* Washington: Island Press. This work was supported by IUCN, the International Development Research Centre (IDRC), the International Institute for Sustainable Development (IISD) and the World Resources Institute (WRI).

IUCN Red List of Threatened Species (www.redlist.org) has documented several species now under threat due to IAS. IAS are spreading faster than ever as an inevitable by-product of growing global trade with estimated economic costs in the USA and India alone estimated at USD 130 billion per year.

• Habitat loss and degradation – High deforestation rates in the tropics threaten biodiversity, interrupt ecosystem services and release carbon into the atmosphere (contributing to global warming). Indonesia, for example, is losing an estimated 17,000 square kilometres per year (nearly the size of Belize), and Amazonia has converted 500,000 square kilometres (the size of France) from forest to other uses since 1972. Freshwater scarcity



is already affecting ecosystems and, in turn, people. For example, the Huang He (Yellow River) Basin in China, the Orange River Basin in Southern Africa, and the Murray-Darling Basin in Australia are all suffering from overabstraction of water. By 2025, things may be far worse; one projection suggests that nearly half the world's population will be living in waterstressed regions by that time. **Coastal and marine habitat degradation** threaten biodiversity and food supply. Deep sea corals are coming under increasing pressure from destructive fishing methods that destroy the very ecosystems that provide the fish on which many human livelihoods depend.

One conclusion that can be drawn from these key trends is that in most countries, use of ecosystem goods and services exceeds the capacity of ecosystems to supply them. However, not all the news is bad. Some encouraging trends can also be cited:

• Humanity is building a solid base for species conservation and ecosystem restoration. Improved knowledge about the nature, distribution and complexity of ecosystems and their component species and processes, provides a foundation for the sound management of biodiversity.

• The amount of land managed as protected areas has more than doubled since 1993 when the Convention on Biological Diversity (CBD) entered into force. The Vth IUCN World Parks Congress, held in Durban in 2003, agreed on new principles for managing protected areas to support sustainable development. The 7th Conference of the Parties of the CBD, held in Kuala Lumpur in February 2004, welcomed the Durban outputs and adopted a programme of work that seeks to establish, by 2010, a comprehensive, effectively managed, and ecologically representative system of terrestrial protected areas. A similar target for marine protected areas was set for 2012.

• A growing consensus worldwide sees a significant improvement in equity and justice with regard to living and natural resources as a basic condition for a viable future for humankind.

The Millennium Development Goals

- 1. Eradicate extreme poverty and hunger
- 2. Achieve universal primary education
- 3. Promote gender equality and empower women
- Reduce child mortality
- 5. Improve maternal health
- 6. Combat HIV/AIDS, malaria and other diseases
- 7. Ensure environmental sustainability
- 8. Develop a global partnership for development

(Source: UNDP web site: ww.undp.org/mdg/)

• International cooperation is maturing as the major multilateral environmental agreements agreed at the 1992 Rio Earth Summit move increasingly into the implementation phase. The fact that biodiversity was designated as one of the five main themes of the 2002 World Summit on Sustainable Development has helped to keep the issue on the international agenda. In addition, the UN Millennium Development Goals (see box), were endorsed at WSSD and can

be read as reaffirming the environment as deserving political support, donor financing and organizational action on a par with more conventional and ambitious development goals, in much the same way as Rio did with Agenda 21 ten years earlier.

• The private sector's interest in making a positive contribution to biodiversity is expanding. Initiatives linking industry and commerce such as the World Business Council for Sustainable Development, the International Chamber of Commerce, the UN Global Compact, the World Environment Council, and the World Economic Forum provide useful vehicles for dialogue.



IUCN recognises that the globalizing world is generating increasingly complex problems that cross-cut traditional disciplinary boundaries and go beyond the capacities of conventional hierarchical institutions to solve. Key social, technological and economic trends have both positive and negative aspects for biodiversity.

• Modern biotechnology carries risks for biodiversity, but can also

be mobilized to improve management of natural resources (for example, for bioremediation or reducing the use of chemicals).

• As the human population continues to expand, enhanced agricultural production is required to supply the people who need it. This can lead to new land being cultivated at the expense of maintaining natural habitats, or more chemical fertilizers and pesticides being applied to crops. Both have negative impacts on biodiversity but new approaches (organic agriculture and 'ecoagriculture') are seeking ways to conserve biodiversity while expanding production.

• Energy is likely to become a more important issue in the coming years. While the impact of energy production on climate will remain a major preoccupation for many biodiversity organizations, broader issues of the impact of energy generation and use on sustainable development need more attention from the conservation



community. The use of renewable sources of energy, such as biomass, can have profound effects on biodiversity but these effects have received inadequate attention to date.

• While the number of international armed conflicts has declined in recent years, internal conflict within nations remains widespread and has major consequences for humans and the environment. Environmental conflict as such remains a serious challenge to society. The ways in which unsustainable management of natural resources can lead to armed conflicts, human rights

violations, and human and environmental disasters are now reasonably well known. But a major concern in coming years will be that environmental degradation could contribute to international hostilities.

• Environmental health issues are having an increasing impact on both people and biodiversity. The SARS epidemic, HIV/AIDS, Ebola, West Nile Virus, and Avian Influenza all affect both humans and wildlife, underlining once more the essential ties between people and nature. Pollution-related problems are having an impact



on human health through allergies and asthma. In addition, the increasing demand for herbal medicines is threatening the extermination of up to one-fifth of the plant species on which the global pharmaceutical business and local medicine depend.

The effectiveness of our future work in dealing with these trends will depend not only on rich disciplinary knowledge, but also on the capacity to integrate different knowledge fields. It will depend not only on working with

environmental agencies and ministries responsible for natural resources, but also upon our capacity to create partnerships and dialogues with all those whose activities have an impact on the environment, including ministries of finance, health, agriculture, energy and trade, and all parts of the private sector.

4 The Causes of Unsustainability

Biodiversity loss, as noted earlier, has many direct causes. However, most of these direct causes are themselves a result of complex underlying socio-economic factors, often linked to globalization. Biodiversity conservation, therefore, has to address both the direct and indirect causes of biodiversity loss.

Drawing on the work of IUCN members and Commissions, the Millennium Ecosystem Assessment, and UNEP's GEO 3 (Global Environment Outlook) Report, we have identified four major underlying threats to sustainability, namely:

- Human population dynamics
- Consumption patterns
- Market failures and policy distortions
- Wealth, poverty and inequity

Human Population Dynamics

According to the median projection of the United Nations,⁴ the population of the less developed countries is projected to increase from 4.9 billion in



2000 to 7.7 billion by 2050. Most of the increase will occur in developing countries, while populations in more developed countries, currently at 1.2 billion, are expected to change little. On some estimates, the world's population is likely to stabilize in about 2050 at approximately 8.9 billion. However, total population cannot be used as the sole predictor of human impact on the natural environment. Other elements play a large role: variables that cause population change – births, deaths and migration – and characteristics such as age structure, household size and location, gender, income and education.

Rapid population growth is a feature of many of the least developed countries, where a significant proportion of people depend heavily on subsistence agriculture and the use of natural resources for their livelihoods. Population pressure can lead to rapid migration such as the mass movement of refugees from human conflict or sustained migration for economic reasons, which in turn can increase pressures on the environment and lead to permanent changes in land use.

About one-third of the population in developing countries is under the age of 15 while there will be more than 1 billion people aged 60 and older by 2025, and nearly 2 billion by 2050.⁵ Meeting the needs of these growing segments of the population may mean increasing public sector spending on sectors relating to healthcare and family support while reducing investments in other public goods such as environmental management.

- ⁴ United Nations (2003). World Population Prospects: The 2002 Revision.
- ⁵ Population Reference Bureau (2003). *Population Bulletin* 58, no. 3 (September 2003).

In many countries there is a strong link between population, gender equity, the roles and rights of women and the state of the environment. Changes in gender balance as a result of selective migration, war or disease may put additional pressure on women to meet household responsibilities. This can aggravate conditions of poverty, with further impact on natural resources.

Consumption Patterns

Population and population growth cannot be considered in isolation from consumption. Today's industrial economies consume unsustainable quantities of energy and raw materials, and produce high volumes of wastes and polluting emissions. As UNEP points out, the resulting pollution and disruption of ecosystems often occurs in countries far removed from the site of consumption.⁶ Consumption patterns, development choices, wealth distribution, government policies and technology can mitigate or exacerbate the environmental effects of demographic change.



Consumer attitudes and preferences have a profound effect on the environment, due to differences in the environmental impacts of particular goods and services. Moreover, consumer preferences are not static. The increasing integration of international markets – generally given the name of globalization – has enabled and stimulated the spread of modern 'developed' country consumption patterns, with far-reaching implications for the environment and society.

Consumption patterns are both rooted in and contribute to changing value systems. Cultures that were formerly diverse and relatively isolated have become increasingly interconnected through market relations, fostering a new, homogenizing culture based on conspicuous consumption and possession of material goods. Traditional cultures that once practised low-intensity uses of natural resources are being rapidly displaced, or are radically transformed to acquire the comparative advantages required to survive in a world driven by economic competition. Globalization has

expanded the reach of the mass media and the advertising industry, reinforcing value systems based on ideals of consumption as synonymous with happiness and human wellbeing.

Market Failures and Policy Distortions

Another important factor to consider is that today's markets fail to include the full environmental costs and benefits of production and consumption. Such market failures are often worsened by inappropriate

⁶ UNEP (2002). Global Environment Outlook 3.

policy and institutional frameworks. Why do markets fail? Reasons include:

- lack of clear and secure property rights or access to resources leading to over-exploitation or under-investment in conservation;
- externalizing of environmental costs;
- insecurity resulting from armed conflicts, economic crises, epidemic diseases or environmental disaster, leading to short-term decision-making at the expense of long-term interests;
- missing or weak markets for sustainable products and services, which undermines incentives to adopt environmentally beneficial production methods; and
- unequal distribution of income and wealth leading to inequitable weight given to the preferences of rich consumers and unbalanced patterns of production.

Other common policy and institutional factors that can exacerbate the loss of biodiversity include a failure to appreciate the adverse environmental impacts of policy in both public and private sectors; a failure to reflect the interests of the public or future generations; a failure to design policies and institutions that encourage effective, equitable and efficient use of natural resources; and a failure to develop and use adequate indicators of social, economic and environmental performance.

One key example of economic policy with significant environmental impact relates to production subsidies. Subsidies in three sectors with direct impact on biodiversity – fisheries, forestry and agriculture – benefit an extremely small group of people (mainly in rich countries) at extremely high costs to society (particularly in poor countries). Strong political pressure to maintain these subsidies have made it nearly impossible to eliminate them while the impact in developing countries only results in increased pressure on natural resources.

The overall orientation of economic policy can help or harm the environment through its effects on the level and structure of economic activity generally. Factors here include the balance between the public and private sectors in the economy, the degree of openness to international trade and foreign investment, monetary policy (e.g. interest or exchange rates), and the policies of trade/aid partners. Such policies are rarely drawn up with the environment in mind.

Wealth, Poverty and Inequity

The relationship between wealth, poverty, inequity and the natural environment is highly complex. In many cases, economic growth for wealth creation leads to environmental degradation. In other cases, environmental degradation exacerbates poverty and inequity. In some places, economic growth makes people more aware of their distance from sustainable ways of living, leading to the current movement in some richer countries for a less energy- and resource-intensive pattern of consumption. However, the demand generated in affluent societies is often met through production of commodities in developing countries, frequently with adverse environmental impacts.

Poor people are often seen as being at the same time victims and unwilling agents in environmental degradation. However, poor people often manage their environment in sophisticated and sustainable ways. Community-initiated conservation efforts have been documented in many countries. These have often contributed both to sustainable livelihoods and to conservation of biodiversity and natural resources.

Traditional exclusionary approaches to nature protection have had serious adverse effects on the poor by limiting their access to biological resources and ecosystem services necessary for their livelihoods. Conversely, poverty reduction efforts that do not consider environmental issues can have adverse effects on natural resources. Neither situation is likely to be sustainable in the long term.

Unsustainable exploitation of natural resources is more likely to occur where deep social inequities undermine good governance. In some countries politically powerful landowners have avoided land redistribution by promoting colonization programmes that have



destroyed vast areas of native forest. In others, the absence of effective democratic institutions and lack of political transparency – both hallmarks of inequitable societies – have enabled private commercial interests to reap windfall profits by exploiting valuable natural resources at the expense of the poor, the powerless and future generations.

5 Addressing the Causes of Unsustainability

The International Response

Since its launch on the public arena in the 1980 World Conservation Strategy, 'sustainable development' has become the ultimate objective of the international community and the environmental movement. But approaches from the environmental sector alone will be insufficient to meet the needs of modern society for sustainability. Instead, environmental concerns need to be combined with social and economic elements in all sectors, from trade to health, agriculture, transport and even the military, before the world can achieve any success in altering its patterns of consumption and the consequent impacts on the environment.

Considerable efforts to achieve sustainable development and biodiversity conservation are underway at a variety of levels. For example, over the past 25 years, hundreds of regional and bilateral agreements have been concluded to address environmental issues and problems including several major multilateral environmental agreements (MEAs) related to conservation. The international legal framework is now reasonably well in place, though various protocols are still being agreed or negotiated. While many of the MEAs are being reasonably well implemented there is increasing pressure to implement decisions among MEAs more actively and in a more synergistic way.

At the same time that nations co-operate to implement the MEAs, numerous other multilateral instruments, not dedicated to the environment, are having a major impact on biodiversity and sustainable development. The outstanding example is the World Trade Organization, whose negotiations often seem to neglect the environmental agenda. A key challenge is to integrate environmental concerns into such agreements, in order to reduce negative impacts and accentuate positive impacts.

So-called 'soft law'- non-binding agreements and declarations – has often had a greater impact than MEAs, at least at the implementation level. Two of these, namely the Millennium Development Goals (MDGs) and the WSSD Johannesburg Plan of Implementation, are paramount. The eight MDGs agreed by the United Nations General Assembly aim to "significantly improve the human condition by 2015".⁷ One goal – 'Ensure environmental sustainability' – directly addresses environmental issues. Clear targets have been set, and indicators have been developed to assess progress. The Johannesburg Plan of Implementation calls for 'coherent implementation of the three goals of the Convention [on Biological Diversity] and the achievement by 2010 of a significant reduction in the current rate of loss of biological diversity.'

In overall terms the IUCN Programme supports integrated biodiversity conservation, and thereby the Johannesburg Plan of

⁷ http://www.unmillenniumproject.org/html/dev_goals.shtm

Implementation and the Millennium Development Goals. It has done this by:

• supporting the Johannesburg Plan of Implementation call for a significant reduction by 2010 in the rate at which biodiversity is being lost;

• strengthening the links between the conservation and poverty focus and the human wellbeing focus in the IUCN Programme; and

• working to improve the targets and indicators used in these plans, and in the institutional machinery established to achieve those targets.

As well as support for the 'soft law' initiatives, IUCN plays a key role as technical adviser to the MEAs and convener of stakeholders in meetings at global, regional, national and local levels. As a membership organization IUCN provides an institutional structure which facilitates greater participation, transparency and accountability in environmental decision-making. In addition, IUCN is seeking to engage with broader geo-political agendas and wider audiences. As the world moves into a new era of globalization, governance and institutional structures are



predicted to change as the balance of economic and political powers alters. To this end IUCN's Observer Status at the UN will help it serve its members more effectively.

Standing at the nexus of biodiversity conservation and sustainable development, IUCN will continue this role as conservation's ambassador in the development debate.

Addressing Poverty and Inequity

Poverty reduction is a key element of today's global agenda. The relationship between economic growth, poverty, inequities and environmental degradation is highly complex. In

some cases economic growth, poverty and inequities can cause environmental degradation. In other cases, environmental degradation can exacerbate poverty and inequity. One factor to consider is scale. At a global scale affluent societies cause greater environmental impact than less affluent societies. The environmental footprint of affluent societies is much larger not only in terms of the amount of resources they consume, but also in the way that their consumption patterns stimulate demand that causes negative environmental impacts, often in less affluent locations.

Conversely, the environmental impacts of the poor are mostly local, resulting from their dependence on locally available resources. While the impact of poor societies on the environment can be locally significant, it is far less important as a determinant of environmental degradation at a global scale then the impact of affluent societies. Development assistance aimed at reducing poverty can significantly affect the environment in the countries targeted yet environmental concerns have not been integrated effectively so far into the way national poverty reduction strategies have been implemented.

While IUCN supports the new focus of international cooperation on poverty, it stresses that a healthy environment is essential to securing longterm improvement in livelihoods. So it welcomes in particular the growing recognition that poverty reduction efforts need to address the multidimensional character of human wellbeing, including environmental quality. This new approach is reflected in the IUCN framework on environmental management for poverty reduction (Figure 5).

IUCN supports improved environmental management for poverty reduction by:

Enhancing knowledge on

- Biodiversity (KRA 1)
 Social Equity in biodiversity conservation (KRA 2)
- Conservation Incentives and Finance in biodiversity conservation (KRA 3)

Promoting and supporting effective, efficient and equitable biodiversity conservation internationally (KRA 4)

Building consensus to ensure that ecosystems are managed in a sustainable manner, reconciling social, economic and conservation objectives (KRA 5)

IUCN's 2005-2008 Programme will seek to: Promote equitable access to and sharing of benefits

Enhance opportunity and innovation for livelihoods based on sustainable use Reduce risk and vulnerability

Improve environmental governance

Addressing poverty-conservation links should assist with delivery of the Millennium Development Goals

- 1 Eradicate extreme poverty and hunger
- 2 Achieve universal primary education
- **3** Promote gender equality and empower women
- 4 Reduce child mortality
- 5 Improve maternal health
- 6 Combat HIV/AIDS, malaria and other diseases
- 7 Ensure environmental sustainability
- 8 Develop a global partnership for development

Figure 5 Relation between the IUCN Programme, Poverty and the Millennium Development Goals (adapted from a graphic presented by DFID/EC/UNDP/World Bank 2002 to WSSD)

The new poverty agenda challenges IUCN and its members to demonstrate the importance of ecosystem services for reducing poverty and promoting sustainable development. To take up this challenge means fine-tuning rather than radically changing IUCN's work. IUCN must be able to demonstrate how biodiversity and ecosystem services are crucial, not just to society at large, but to the world's poorest groups. IUCN must be able to demonstrate how ecological management and restoration make important contributions, not just to society at large, but to reducing the vulnerability and poverty of the poorest groups. Over the coming years IUCN will be working on many new economic, social and ecological elements of the poverty/environment nexus, with a range of partners, promoting these issues in policy forums, and producing a number of guidelines and case studies on poverty and the environment.

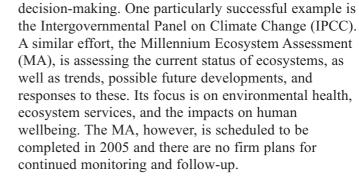
Addressing Market Failures and Policy Distortions

International flows of private capital to developing countries (commercial bank loans, direct foreign investment, remittances and portfolio finance) now substantially exceed official aid flows. Global corporations, no longer governed by national rules or policies, are achieving much greater influence over the political economy of both developing countries and the industrialized countries. There are concerns that the corporate world has gained too much power over many aspects of everyday life, that biodiversity and natural resources suffer as a result of their activities and that private investment generally by-passes the poorest.

To extend its influence, IUCN and its membership urgently need to build capacity to engage with the private sector in ways that will encourage investors and companies to see themselves as responsible actors for sustainable development. In addition, through its efforts to understand the way in which market failures interact with governance failures at different levels, IUCN will identify priorities and opportunities to promote more sustainable patterns of production and consumption. This will include work on valuing natural resources as well as creating economic incentives and mobilizing finance for conservation as well as promoting the internalization of environmental values in the market place.

Addressing Knowledge Gaps for Decision-Making

Lack of data and information has hindered attempts at understanding the state of the environment as well as the impact of international responses. Many international initiatives – from the Global Biodiversity Information Facility at the intergovernmental level to the newly evolving 'Conservation Commons' (an IUCN NGO members' initiative) – are trying to fill information gaps and support informed



As IUCN moves forward with its conservation efforts, improved data management and analysis will be vital to assess the impact of our work and to allow rapid

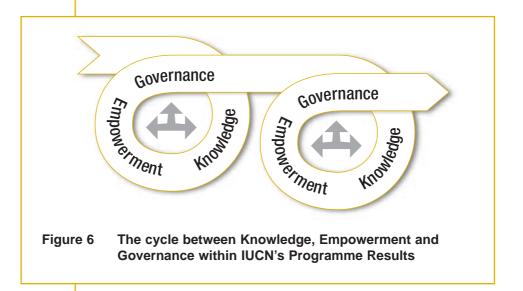
and effective adaptive management in the future. To that end, IUCN's Species Information Service (SIS), Protected Areas Learning Network (PALNet) and ECOLEX are three information management initiatives that will be key to supporting decision-makers at all levels. As a package, they consolidate the knowledge generated by the Union (in particular from within the Commissions) and represent a significant contribution to knowledge management for both conservation and development worldwide.

One aspect of knowledge networking that IUCN will explore during the 2005–2008 intersessional period is the facilitation of an open and accessible global mechanism to share biodiversity knowledge and information among a wide range of organizations and governments.



6 IUCN's Programme Framework 2005–2008

UCN's Programme strategy is based on the assumption that when knowledge is available and people and institutions are empowered to use it, they can often participate more effectively in decision-making to improve laws, policies, instruments and institutions. However, IUCN also recognises that the flow from knowledge to empowerment to governance is not always linear. The exercise of power, for example through governance, also generates particular types of knowledge. A graphical representation of how knowledge, empowerment and governance interact is shown in Figure 6 and details of the strategy are given below.



With this in mind, IUCN aims to be a knowledge-based organization, but one that facilitates decision-making and ensures effective links between knowledge, practice and policy, and thus enables its constituency to make better informed decisions.

Knowledge

IUCN has built much of its reputation on having a strong foundation in science. However, we also realize that science can be used in different ways by different groups and that scientific investigation is not the only way of knowing. Traditional and local knowledge, the knowledge held by resource managers and users who are interacting with biodiversity on a daily basis, play a key part in conservation. And for IUCN, knowledge also includes the development and use of the methods and tools to acquire it.

IUCN's 'core business', it can be argued, is managing knowledge for biodiversity conservation and the sustainable use of natural resources. In doing so IUCN pledges itself to:

• Recognise, respect and promote dialogue between different knowledge systems;

• Promote the integration of traditional, local and scientific knowledge in the management and conservation of natural resources;

• Promote and facilitate the exchange of knowledge across the world and from site to site and country to country.

IUCN takes a broad-based approach to generating and disseminating knowledge. It draws on research, field testing and validation of new ideas; analysis of lessons and case studies; direct observation; lessons learned by monitoring, evaluation and reflection on the impacts of its past actions; and participatory processes, including dialogues, debates and workshops with different interest groups. This approach is in tune with calls from new scientific communities and wider social movements in support of more pluralistic approaches to defining environmental problems and solutions – sometimes known as the democratization of science.

Empowerment

For IUCN, knowledge must lead to empowerment. By empowerment we mean the process of **building capacities** as well as instilling a sense of responsibility and motivation that enables people and institutions to plan, manage, conserve and use natural resources in a sustainable and equitable manner to achieve their objectives.

IUCN realizes that true empowerment can only be achieved by individuals themselves but there is a critical role to create an enabling environment for empowerment by:

- Education, training and skill development;
- Raising awareness and building capacity;



• Facilitating exchange of experiences; and

• Providing opportunities for all stakeholders to participate in decision-making.

Empowerment frequently implies the democratization of decision-making and greater community involvement in resource management. Many of IUCN's projects have demonstrated real gains for both communities and biodiversity through the devolution of power.

However, IUCN recognises that social groups are simply not equal in power and influence. Environmental conservation may require positive measures in favour of marginalized groups (poor rural women, indigenous peoples) who lack access to decision-making processes which affect their lives, or who have difficulty in making their voices heard in resource dialogues and negotiations.

With respect to empowerment through education and awareness raising, IUCN will support the United Nations Decade on Education for Sustainable Development, to be celebrated from 2005 to 2014. One particular example includes the World Conservation Learning Network. Working with key learning institutions, IUCN will develop conservation educational opportunities that will be delivered by a worldwide network of learning institutions to a wide variety of students.

Governance

Governance is not the province of governments alone, it includes informal institutional arrangements such as voluntary codes of conduct for private businesses, professional procedures and partnerships among all sectors. These include numerous and varied arrangements, but an essential element is that they mobilize diverse constituencies to agree on common goals and help achieve them. The Johannesburg Plan of Implementation described good governance as being 'essential for sustainable development'.

To be most effective, at all levels – local, national, regional, and global – governance should be mutually reinforcing. If the capacity for governance is weak at any level, this will undermine results. At the global level, this means that all states, large and small, should be able to take part effectively. It is also essential to bring civil society and business into intergovernmental decision-making and create new opportunities for innovative partnerships while recognizing the rights of nation-states.

As a result of globalization, national governance (and government) may – perhaps surprisingly – be even *more* important now than it has been at any time in the past, as it is the only context for negotiating issues of sovereignty. The investment likely to promote *sustainable* development flourishes in a predictable commercial environment, where rights and obligations are clear, and where they are fairly and uniformly applied. Such an environment encourages more long term, less predatory, investment, based on the value that can be added through human labour and ingenuity rather than raw resource extraction.

For all these reasons, IUCN believes that governance should be based on the principles of:

- Transparency openness in decision-making
- Access to information and justice *accurate, effective and open communication*
- Public participation genuine involvement in decision-making
- Coherence *a consistent approach*
- Subsidiarity *decisions taken at the lowest level appropriate*

• Respect for human rights – *interwoven with 'good' environmental governance*

• Accountability – *for economic, social and environmental performance*

• Rule of Law – *fair, transparent and consistent enforcement of legal provisions at all levels.*

IUCN strives to follow these standards in its conservation activities. It seeks to establish a dialogue among stakeholders at all levels. It supports decision-making being put into the hands of local



people wherever possible. It works to spread knowledge and understanding of environmental processes throughout local and global society.

7 The IUCN Programme Results

UCN's Programme strategy of Knowledge, Empowerment and Governance provide the basis for its long-term response to conservation challenges. However, this strategy does not provide a concrete basis for organizing and focusing a complex international conservation programme that seeks to add value to the extensive conservation efforts of its members and expert networks. Nor do they identify the specific changes we seek in the work of IUCN's Commissions and Secretariat.

In formulating the IUCN Programme, we have identified 26 specific results – directly linked to our strategy – which IUCN will aim to achieve between 2005 and 2008. These results are described in detail in the following sections. To indicate their link to IUCN's Programme strategy – Knowledge, Empowerment and Governance – the letters K, E and G appear beside the result number in the text below.

As the results of the 2005–2008 Programme cover a wide variety of issues, they have been organized in the six clusters or 'Key Result Areas' (KRAs) described earlier. This helps us to:

- Focus our diverse global conservation programme.
- Provide a vehicle for communicating important conservation messages.
- Illustrate the contribution of the IUCN Programme to conservation and sustainable development.
- Explore and understand the complex interface between the environmental, economic and social pillars of sustainable development.

• Demonstrate how the elements of IUCN's strategy of Knowledge, Empowerment and Governance are joined – and how we use these elements to influence effective biodiversity conservation at all levels while at the same time applying policy lessons to inform practice.

The results planned for individual Commissions, Regional and Global Thematic Programmes and Corporate Strategy Units can be found on the accompanying CD-ROM. It should be noted that all of the activities, initiatives, and projects managed by the Secretariat and the Commissions, for which they are accountable in terms of delivery and financial management, flow directly from these global results.⁸

- The activities, initiatives and projects of the Secretariat and the Commissions for which IUCN is directly accountable in terms of delivery, effectiveness and financial management.
- 2. The activities, processes and/or initiatives that may be catalysed or influenced by the Union, but for which the Secretariat and Commissions do not have any direct responsibility.

The Programme described in this document refers only to the first level.

⁸ During the intersessional period (2005–2008), IUCN's work will be defined at two levels:

At the World Conservation Congress in Amman, Jordan, members of IUCN approved the following long-term goals:

Extinction crisis alleviated

The extinction crisis and massive loss in biodiversity are universally adopted as a shared responsibility, resulting in action to reduce this loss of diversity within species, between species and of ecosystems.

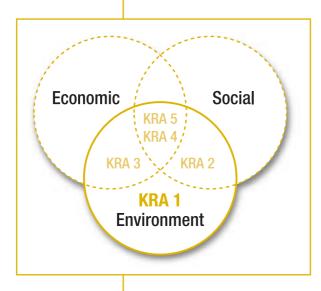
Ecosystem integrity

Ecosystems are maintained and where necessary restored and any use of natural resources is sustainable and equitable.

Key Result Area 1: Understanding Biodiversity

Enhancing our knowledge about natural systems and the species that inhabit them

IUCN's heartland lies in its established networks of expertise related to biodiversity. The primary focus of IUCN's Species Survival Commission and Commission on Ecosystem Management is on providing information about the status of nature and natural systems – taking account of both



living and non-living aspects and the complex of interactions among and between them. In addition, IUCN has increasingly sought to understand and promote local and traditional knowledge of biodiversity.

While IUCN has long emphasised the importance of knowledge about natural systems for sound conservation planning, it also recognises that there is a lack of relevant data both to understand biodiversity as well as to provide inputs for integrated analysis. With the explosion of information technology, demands for user-friendly data are expanding. New intergovernmental initiatives (e.g. The Millennium

Ecosystem Assessment and Johannesburg Plan of Implementation) provide an opportunity for IUCN to influence important processes as a major provider of biodiversity knowledge. By answering key questions on the status and trends of biodiversity, and by offering tools and methods for others to use in carrying out assessments at a scale suitable for their situation, IUCN is helping create the knowledge to understand the relationship between biodiversity and key processes, both direct and indirect, which cause biodiversity loss.

IUCN Red List of Threatened Species

The IUCN Red List of Threatened Species is more than a database of threatened species. It makes essential contributions to knowledge about how people can work within ecosystems for sustainable livelihoods. The extinction crisis undermines the livelihoods of the poorest groups in many regions. Biodiversity assessments, made possible through the IUCN Red List, give invaluable data to planners concerned with sustainable development and the equitable use of natural resources. An updated IUCN Red List of Threatened Species was released in 2004 which details 15,503 species threatened with extinction.

Through activities conducted under KRA1, IUCN will aim to improve knowledge of species and ecosystems, ecological processes and ecosystem functions, and to develop new tools for assessment.

1.1K Improved understanding of species and ecosystems as well as of ecological processes and ecosystem functions

Improved access to species and ecosystem data is crucial if biodiversity is to be conserved and development guided along more sustainable patterns. Historically, efforts to build comprehensive biodiversity information resources have been hampered by a variety of factors, including:

- the challenges of monitoring change in complex natural systems;
- inadequate data and documentation as well as poor access to existing data; and
- an overemphasis on information rather than answering the need to generate and disseminate knowledge.

One example of work to be undertaken as part of the 2005–2008 Programme is:

• Improve our understanding of impacts from global threats (commercial fisheries, alien species and climate change) on marine species and ecosystems.

1.2K Tools and methods are available to assess status and trends of species and ecosystems at all levels

There is a need to develop tools and new methods for assessing the status of biodiversity and ecosystems at various levels and measuring trends over time – especially to enable action to manage natural resources and restore ecosystem services and landscapes.

Species Information Service (SIS)

The SIS will enable conservation scientists, natural resource managers, educators and policymakers to integrate species population and distribution data into decisions. It will make it possible for users to determine levels of threat to species; the conservation measures that have been implemented to reverse species' decline; the conservation actions needed; and sources of supporting information. Specific examples of work to be undertaken in 2005–2008 include:

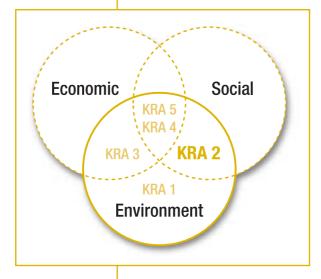
• Development of an indicator system for monitoring progress towards the 2010 biodiversity goal, drawing on information provided by IUCN's Commissions and members.

• Development of tools for monitoring and evaluation of selected species and ecosystems at regional level.

Key Result Area 2: Social Equity

Seeking a better understanding of the role of society and social equity in biodiversity conservation

Social equity refers to the right of everyone to enjoy a rewarding quality of life⁹ and the need for fair and equitable distribution of the benefits and costs of conserving and using natural systems among different social groups and individuals.¹⁰ Social equity is a fundamental condition for achieving conservation and enhancing sustainability of use of natural resources.



IUCN has pioneered the inclusion of social equity considerations within conservation policies, programmes and projects at the local, national, regional and global levels. IUCN continues to work with members and partners on a range of social equity issues in the context of conservation, such as the needs and interests of indigenous and traditional peoples, gender equity, poverty, tenure and natural resource rights, environmental security and ecological vulnerability.

IUCN has dedicated increasing attention to exploring how to make effective contributions to the reduction

of poverty through socially responsible conservation. It is committed to supporting the Millennium Development Goals by promoting and practising a poverty-focused approach to conservation. This seeks to ensure that the sustainable use of biological resources is employed positively to help the poor obtain a sustainable and desirable livelihood.

Delivering effectively on this commitment represents a significant challenge, not least because many questions about linkages between poverty and conservation or social equity and conservation remain unanswered. In KRA 2, IUCN will seek to improve knowledge on how social equity and biodiversity management are interdependent, and enhance understanding of the underlying social-equity causes of biodiversity loss.

⁹ See the International Bill on Human Rights (International Covenant on Economic, Social and Cultural Rights, Article 11, 2; Universal Declaration of Human Rights, Art. 25) and other instruments such as the Declaration on Social Progress and Development, which call for the elimination of inequalities.

¹⁰ See IUCN's Policy on Social Equity in Conservation and Sustainable Use of Natural Resources.

Biological diversity is the basis of human welfare

IUCN is exploring strategies for linking livelihoods with biodiversity conservation – for example, through investing in the sustainable use of natural resources such as the harvesting of non-timber forest products (NTFPs), or by supporting community enterprises, such as ecotourism, in the vicinity of protected areas. However, we also acknowledge that improved livelihoods and conservation do not necessarily coincide in the short term. In many cases tradeoffs must be made. One of the main challenges for IUCN is to find means to ensure the equitable sharing, from local to global levels of costs and benefits arising from the conservation of species and ecosystems.

2.1K Improved understanding of the interdependent nature of social equity and biodiversity conservation

Addressing poverty issues in an effective way and with lasting effect requires a sound understanding of the environmental dimensions of issues such as wealth and consumer attitudes, human wellbeing, and the tradeoffs and costs of conservation and development actions in povertystricken areas.

One example of a Programme initiative within this area of work is:

• Persuade national governments to recognise the role of indigenous peoples and local communities in establishing and managing protected areas, including Community Conservation Areas.



2.2K Tools and methods are available to mainstream social equity in biodiversity conservation and sustainable use policies and practice

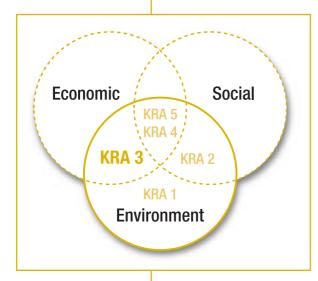
Addressing poverty reduction through conservation requires creative and innovative approaches in the conservation community to deliver effective poverty-focused conservation actions. Tools and methods to support this process need to be developed and constantly improved, based on the knowledge gained in Result 2.1 above.

An example of work within this area is:

• Developing and making available methods and tools to measure the livelihood impacts of sustainable use policies and practices.

Key Result Area 3: Conservation Incentives and Finance

Improving knowledge of incentives and financing mechanisms for effective biodiversity conservation



Attempts to conserve nature without understanding the economic and social incentives that drive biodiversity loss are bound to fail. Through the following three results, IUCN will improve knowledge of market failures and policy distortions that underpin unsustainable resource use, emphasise the value of healthy ecosystems, and find alternative means to correct perverse market incentives and increase financial flows for biodiversity conservation. Conservation managers need such information as much as policy-makers and entrepreneurs seeking to balance environmental against economic trade-offs.

3.1K Improved understanding of how markets, institutions and socio-economic forces create incentives or disincentives for the conservation and sustainable use of biodiversity

Recent growth in economic output, consumption and trade has added enormous pressures on natural resources. Two areas of special concern are the rapid growth of international trade in goods and services, and increasing integration of global capital markets. Many people believe that economic globalization is outstripping the capacity of local and national governments, and of multilateral institutions, to monitor and regulate markets in the public interest. IUCN can help by providing information and analytical tools for assessing the impacts of economic change on natural resource use. It can suggest approaches to ensure that markets, trade and finance support rather than undermine biodiversity conservation and sustainable use. Improved understanding of the underlying processes

Private Sector Engagement

Conservation organizations are increasingly approached by businesses seeking to collaborate on a range of environment and development issues. This reflects a shift in the values and practices of many leading companies, which increasingly see that good environmental management is a core requirement of business success. Scepticism remains, however, as to the commitment of private enterprise to sustainable development and the conservation of biodiversity. IUCN seeks to engage with the private sector in conservation efforts that are transparent, consistent, and based on clear principles and priorities, while at the same time ensuring the independence of the conservation organizations involved.



of economic change and their implications for ecosystems can help conservation managers to identify priority threats and opportunities. At the same time it can provide policy-makers and businesses with the information they need to minimize environmental damage.

One example of IUCN's work under this heading in the 2005–2008 Programme is:

• *Exploring the relationship between globalization, trade, and market forces on biodiversity conservation and natural resource management.*

3.2K Tools and methods are available to assess tradeoffs between economic, social and environmental values

IUCN will promote the development and application of methods to assess environmental values in economic terms, and analyse the tradeoffs between social equity, economic efficiency and environmental quality. This is an important first step on the path to internalizing the costs and benefits of biodiversity conservation in public and private investment and policy decisions.

Examples include:

• Tools and methods developed to integrate natural resource values into decision-making and management practice.

• Development of methodologies to measure costs and benefits between economic, social, and environmental perspectives.

3.3K Improved approaches to integrate environmental and economic values in decision-making, including methods for mobilizing new and additional finance for biodiversity conservation

Sustainable Financing for Protected Areas

One of the key findings of the Vth IUCN World Parks Congress in 2003 was the need to diversify and stabilize financial flows to protected areas. This will require the appropriate incentives and support to implement various financing mechanisms and costeffective management approaches. The World **Commission on Protected Areas** has begun providing assistance with guidelines for sustainable finance for protected areas in East Asia and will continue to work in other regions in the coming years.

Financial markets can create incentives or disincentives for biodiversity conservation. IUCN is seeking to engage a range of business sectors to ensure that private investors view biodiversity conservation as part of good business practice, and ultimately transform themselves into agents of sustainable development. IUCN likewise aims to assist governments in creating the enabling frameworks and incentives needed to stimulate sustainable investment.

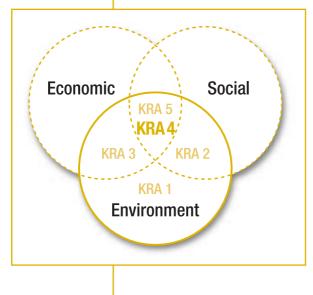
One example of this work in the 2005–2008 Programme is:

• *Identify and develop alternative mechanisms for financing sustainability in protected areas.*

Key Result Area 4: International Agreements, Processes and Institutions for Conservation

Promoting and supporting effective, efficient and equitable biodiversity conservation internationally

International agreements and the institutional arrangements that support them (including secretariats and advisory bodies) are important elements of environmental governance. They include the full suite of hard and



soft law instruments, together with voluntary initiatives, such as those undertaken by multinational businesses and public-private partnerships such as the World Bank Prototype Carbon Fund.

IUCN has been a key player in developing, providing advice to and implementing the main biodiversityrelated conventions, particularly through the expertise of its Commission on Environmental Law.

IUCN also provides a platform to bring governmental and nongovernmental actors together in negotiations and to find solutions to

contentious issues such as dams and the impact of extractive industries on biodiversity.

IUCN and the Convention on Biological Diversity

The Convention on Biological Diversity (CBD) was signed at the Rio Earth Summit, entered into force at the end of 1993, and now has 188 State Parties. Its 22 substantive articles cover most of IUCN's agenda, ranging from planning and inventory to protected areas, communication and incentives. It has established the intergovernmental policy on issues such as plant conservation, indigenous peoples, forest biodiversity, sustainable use, the ecosystem approach and invasive alien species. Its Cartagena Protocol on Biosafety (with 87 Parties) regulates the safe transfer, handling and use of living modified organisms. IUCN has been deeply involved with the CBD from its very origins and works actively with its State Parties and others to ensure that decisions taken under the CBD are translated into reality on the ground. IUCN is improving its ability to influence a broader range of international processes and institutions, including corporate social and environmental responsibility and trade.

This key result area essentially defines action that IUCN will take to address strengthen multilateral policy processes and corporate social responsibility of multinational business where they affect biodiversity.

4.1K Improved understanding of how international arrangements can support more efficient, effective and equitable biodiversity conservation and sustainable development

While much of the technical advice on biodiversity conservation that IUCN brings to these arrangements is provided under the umbrella of KRAs 1-3, there is a need for specific integrated information and



analysis at the international level. This integrated analysis will provide the explicit link between conservation and successful sustainable development, and will assist society in monitoring progress towards the Millennium Development Goals.

One example of this work is:

• Identify and address gaps in multilateral environmental agreements with regard to species, habitats and landscape protection and management at regional level.

4.2E Enhanced capacities of decisionmakers to understand and promote the relevance and effectiveness of international arrangements that impact on biodiversity conservation

The large number and complexity of international arrangements that impact on biodiversity conservation, whether intergovernmental or related to the business community, can be bewildering. IUCN aims to support and encourage decisionmakers from all relevant sectors of society to

understand and promote international arrangements that impact on biodiversity conservation, whether it be at local, national, regional or global level.

A Programme initiative illustrating our work in this area is:

• Supporting decision-makers at key international and regional forest dialogues and processes in the identification of synergies among different international agreements, including those in nonforest sectors, particularly with respect to issues such as forest protected areas, forest landscape restoration, community involvement in forest management, forest fires and forest law enforcement and governance. 4.3E Enhanced participation of all relevant actors in the development, implementation, review and adaptation of international arrangements that impact on biodiversity conservation

The Durban Accord

The **Durban Accord** is the primary outreach product of the Vth IUCN World Parks Congress and presents a new paradigm for protected areas. The Accord celebrates the role of protected areas in achieving both conservation and development aims. It also welcomes new participatory management strategies emphasizing the role of local communities to share in protected area benefits and decision-making. Participating in international processes requires an understanding of the issues to be discussed as well as the 'codes of conduct' unique to each situation. By supporting decision-makers within governments as well as all other relevant actors involved in conservation and sustainable development, IUCN aims to encourage all relevant sectors of society to participate effectively in decision-making for conservation – including development, planning, implementation and monitoring.

Under this Result, one example of our work is:

• Support to national and regional committees of IUCN and Commissions in their efforts to promote participation in multilateral environmental agreements and processes.

4.4G Improved relevance and effectiveness of international environmental arrangements

There is a need for improved effectiveness and efficiency within and between the numerous international arrangements, including multilateral environmental agreements (MEAs), related to biodiversity conservation. In addition, these agreements must address the emerging international focus on poverty eradication and sustainable livelihoods. IUCN will work with governments at the regional and global levels to highlight opportunities for synergies and links between these biodiversity conservation instruments and between the instruments and sustainable development.

For example:

• National governments and civil society equipped to comprehensively demonstrate how the implementation of international wetland conservation commitments contribute to the countries' priorities, including (where relevant) poverty reduction.

4.5G Non-environmental international arrangements promote biodiversity conservation as a key element of successful sustainable development

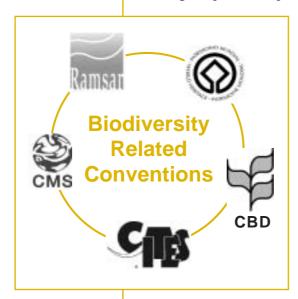
The impact of decisions made in a wide range of international forums, outside the traditional conservation ground (e.g. trade), has consequences for biodiversity conservation. IUCN will strategically engage with these arrangements to promote biodiversity conservation and linkages to sustainable development.

One example under this Result is:

• Biodiversity and sustainable development criteria are incorporated into three regional trade agreements.

4.6G Multi-national businesses support biodiversity conservation

As a significant actor in sustainable development work globally, the private sector has an increasing role to play in biodiversity conservation. Through improved corporate social and environmental responsibility and



supportive governance arrangements, international business can become an important partner for conservation and development.

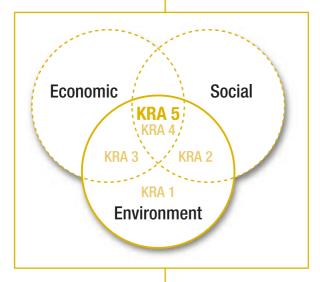
For instance:

• *Key private sector companies integrate biodiversity into their corporate social responsibility policies and actions.*

Key Result Area 5: Ecosystems and Sustainable Livelihoods

Ensuring sustainable and efficient management of ecosystems, integrating social, economic and environmental aims at local, national and transboundary levels

Well-managed landscapes and seascapes are the basis of sustainable development and human security. Although all people depend on



ecosystem goods and services, disadvantaged groups such as poor people, women and ethnic minorities are especially vulnerable to changes in environmental conditions. The sound management of ecosystems is, therefore, critical to addressing underlying causes of biodiversity loss, and an essential requirement for meeting the Millennium Development Goals.

IUCN's work on ecosystem management at the transboundary, national and local levels builds on its evolving understanding of the ecological, social and economic processes, institutional arrangements and legal regimes that affect natural systems and in turn, helps to set the agenda for further research and activities.

IUCN promotes integrated ecosystem management that reconciles social equity, economic efficiency and ecological sustainability by:

• developing and disseminating tools, methods and decisionsupport systems that enable people to make informed choices balancing biodiversity conservation and human development objectives;

• facilitating the development of skills and capacities of marginalized sectors to participate meaningfully in local and national governance systems;

• promoting efficient use and equitable distribution of goods and services from well-managed ecosystems by integrating social needs into management plans and strategies;

• improving the effectiveness of transboundary, national and sub-national political processes by enabling the involvement of stakeholder groups in decisions on ecosystem management and restoration.

In recent decades, national authorities have increasingly devolved responsibility for the management of natural resources to local governments, the private sector and local communities and user groups. IUCN works with all these stakeholders to share knowledge, build capacity, empower marginalized stakeholders and improve environmental governance.

The Ecosystem Approach

The Ecosystem Approach is a strategy for integrated management of land, water and living resources that promotes conservation and sustainable use in an equitable fashion. The specific aims are to:

- Maintain ecosystem functions and services.
- Support livelihoods.
- Ensure equitable sharing of benefits among stakeholders.
- Promote adaptive management to enable people to make informed choices.
- Decentralize management to empower people to manage their own resources.
- Foster intersectoral cooperation to achieve greater effectiveness through partnerships.

5.1K Improved understanding of how social, economic and environmental objectives can be reconciled in the management and restoration of ecosystems

This Result represents the integration of knowledge generated under KRAs 1, 2 and 3. An effective ecosystem management approach requires integrated knowledge to ensure that social needs and economic realities are taken into account when conserving and using natural systems.

For instance:

• IUCN works to ensure that key business sectors have a better understanding of their dependence on, and potential contribution to, equitable biodiversity conservation and sustainable use.

5.2K Tools and methods for integrated management and restoration of ecosystems

The ability to make sound decisions and choices is largely dependent on the knowledge available and the capacity to use and apply this knowledge. A range of tools and methods is needed at the local and national levels to manage ecosystems while ensuring ecological sustainability and benefits for people.

Examples of Programme elements that contribute to this work include:

• Cost-effective ecosystem restoration methods are made available that enhance biodiversity while reducing poverty.

• Management tools are being developed to reconcile social, economic and environmental concerns in small-scale fisheries.

5.3E Stakeholders make informed choices and negotiate outcomes that balance biodiversity conservation and human development needs

Forest Landscape Restoration

IUCN is promoting the Forest Landscape Restoration initiative which shifts emphasis from simply re-establishing tree cover to ensuring that forest landscapes provide the necessary mix of forest goods and services to fulfil both conservation and development needs. It operates at a scale where the consequences of tradeoffs between land users can be negotiated, understood and agreed upon by the people most directly affected.

IUCN facilitates empowerment of stakeholders by building capacity to ensure that their decisions contribute to the maintenance of ecosystem goods and services and promote human wellbeing. The costs and benefits of conservation and development decisions are often shared unequally by different segments of society. Disadvantaged groups such as poor people, many of whom are women, are particularly dependent on natural resources and therefore vulnerable in this respect. IUCN works to build the capacity of a wide range of stakeholders and improve the enabling conditions for them to negotiate better outcomes for themselves and the natural systems upon which they rely.

Examples of this approach are:

• The capacity of conservation NGOs and the ministry of environment to assess the status of biodiversity improved.

• The participation of key actors in watershed management to ensure improved decisionmaking in integrated natural resource management.

• Through initiatives such as the World Conservation Learning Network, IUCN will provide professionals in diverse disciplines and sectors worldwide with ongoing, multi-disciplinary e-learning modules in natural resource management and sustainable development.

5.4G National and sub-national policies, laws and institutional arrangements better integrate human wellbeing with biodiversity conservation

Meeting human development needs, especially in rural settings, is dependent on the sustainable use of natural resources. IUCN assists national and local governments in developing and implementing policies, laws and institutional arrangements that promote conservation and enhance sustainability of natural resource use.

For example:

• *IUCN country-level policy work fully reflects social policy concerns, with a primary focus on social equity, poverty, and rights.*

5.5G Governance structures take into account the rights, responsibilities and interests of stakeholders and allow for their equitable participation in decision-making regarding biodiversity conservation and human development

IUCN has long recognised the importance of relevant stakeholders' participating in environmental decision-making and management of natural resources. Often the rural poor, indigenous groups, women and children are the key to achieving conservation and sustainability. The interests and needs of these groups, however, are often not considered when governance structures are established. IUCN assists government agencies, user groups and other grassroots civil society organizations, as well as the private sector, to develop and implement effective and equitable governance structures for natural resource management.



An example is:

• Taking into account the rights and interests of women in local governance structures and allowing for equitable participation in these processes.

Key Result Area 6: Programme Delivery

Building and maintaining the systems we need for effective and efficient delivery of the IUCN Programme

In order to effectively manage the delivery of the Programme, IUCN must respond successfully to changing conditions, continually improve organizational capacity and efficiency, and ensure clear institutional policies and values. Moreover, IUCN requires an approach which ensures it learns from experience, manages knowledge, and incorporates lessons learned into the Programme, while making certain that the best possible results are produced from available resources. In short, Key Result Area 6 is designed to ensure that IUCN is effective, efficient, adaptive and accountable.

KRA 6 comprises all of the organizational support systems, procedures and processes that are vital for the implementation of the IUCN Programme. The results contained within KRA 6 are divided into the eight results outlined below. Unlike KRAs 1 to 5, the results contained within KRA 6 are not aligned around IUCN's strategy elements of Knowledge, Empowerment, and Governance. KRA 6 refers uniquely to the operation of the Programme, rather than its impact on nature and people.

6.1 Governing the Union – The governing bodies of IUCN structured and supported to optimize organizational performance and impact

For IUCN's governance system to work, the Secretariat must carry out a range of functions that support all levels of governance in the Union, including the World Conservation Congress, the Council and its Bureau, committees, task forces and working groups of Council, National and Regional structures, and the role of the Director General in managing the Secretariat.

IUCN's Membership Strategy

The IUCN Membership Strategy aims to provide the basis for a common understanding and collective vision concerning the role and impact of IUCN's membership in the development and implementation of the Programme. The Membership Strategy calls for increased efforts on the part of the Secretariat to engage more strategically with members in achieving the Mission of the Union. In addition, IUCN's six Commissions also have their own governance structures and interaction with members, the IUCN Council and World Conservation Congress and the Secretariat. The functions of Commission governance are supported by their own organizational structures as well as by their secretariat focal points.

Examples of action included within this Result are:

• Support to the World Conservation Congress.

• Support to the IUCN Council, and its committees, along with task teams or other groups established by Council, Regional Committees, Regional Forums, National Committees and similar bodies that play a role in governance of the Union.

• Support to Commission governance including steering committees and executive bodies.

6.2 Programme Development – IUCN's Programme is developed in response to contemporary needs for conservation action and lessons learned

The IUCN Programme is regularly updated in response to current and changing conditions around the world as well as through consultation and its own lesson-learning (monitoring and evaluation) processes – both for conservation impact and programme implementation – at global, regional, national and local levels. This result includes all activities related to strategic planning processes, programme planning, and business and financial planning of the Secretariat and Commissions. It also includes efforts to ensure ongoing relevance and innovation within the Programme as well as all activities undertaken to co-ordinate this work.

Highlights from the IUCN Evaluation System

- Annual Meta evaluations provide a review and synthesis of IUCN evaluations at all levels.
- Results on the incorporation of findings from evaluations in the IUCN Programme are reported annually.
- An evaluation database is in place, containing information on all IUCN evaluations since 1994.
- Support materials and capacitybuilding are provided to improve the evaluation skills of IUCN staff.

In 2002 IUCN improved substantially its capacity to address innovative and emerging issues, through its innovation fund (3I-C¹¹). The ability of IUCN to identify and respond to emerging issues will be further enhanced through the 3I-C Fund and by developing a series of time-bound, cross-cutting initiatives that integrate the work of the Commissions, Secretariat, members and partners on new and emerging thematic and geographic issues, for example enhancing the linkages between poverty reduction and conservation and between business and conservation.

Activities included within this Result are:

- Intersessional and annual programme planning and preparation of Commission mandates.
- Business and financial planning.

6.3 Learning and Knowledge Management – Lessons learned incorporated into ongoing Programme development and delivery of the IUCN Mission

Knowledge management implies information and data collection, analysis, storage, access, learning, and communication. Target groups for this knowledge include Secretariat staff, members, Commission members, partners, and other organizations and constituents.

¹¹ 3I-C Fund provides a positive incentive system to help IUCN adapt to a changing world and guide the course of future programmatic work. The Fund is designed to catalyse Innovation, promote Integration, generate Information and stimulate Communication.



For instance:

- Management of databases and data management systems such as the IUCN Knowledge Network, the SIS and PALNet.
- Operation of the IUCN Bookstore.
- Programme and project monitoring and evaluation.

6.4 Funding – Financial resources generated to ensure the effective delivery of the IUCN Mission and Programme

While IUCN enjoys strong donor confidence, it is heavily dependent on project funding to support programme implementation. IUCN's funding strategy focuses on increasing the organization's financial resources and, perhaps more importantly, on diversifying the funding base and increasing its flexibility in the use of those funds. IUCN's approach to funding aims to retain and improve donor confidence and improve financial security. This approach should allow IUCN to focus more strategically on delivering conservation results and reduce dependency on the project model. Finally, IUCN will explore opportunities to develop a long-term sustainable funding base.

Activities included within this Result:

- *Expanding the level of core and restricted funding by negotiating framework and programme agreements at global and regional levels.*
- Generating funds from European and US-based foundations.
- 6.5 The Capacity to Deliver Capacity and means of the Secretariat, Commissions, members and partners supported, adapted and enhanced to effectively deliver the IUCN Programme

In addition to the generation of financial resources, described in Result 6.4 above, a key determinant in the ability of IUCN to deliver its Programme is the capacity of the Union to engage with its constituency (members, Commissions, Secretariat, partners and target groups) to fulfil its Mission.

Activities promoted include:

• The active participation of members, Commission members and partners in the design, implementation and review of the *Programme*.

• Skills and capacity of staff, Commission members and others developed to implement the Programme.

6.6 Operational Policies and systems – Internal policies and structures adapted to the needs of the Union and Programme, and implemented at all levels

Management and coordination of the IUCN Programme requires a series of policies and management structures that are comprehensive yet

adaptable. This Result includes the operations of the Secretariat's Executive Management Group, Programme and Policy Group, the Budget Team and other organizational structures, and includes their regional and Commission equivalents. This Result also includes the setting of management policy in areas such as human resources and finance. It is through effective management policies and structures that overall performance enhancement, quality control, and maintenance of standards are achieved.

Examples of work in this area are:

- The functions of Committees, Management Teams and Task Forces, etc.
- Policy development (programme and administration).

6.7 Management – Internal procedures in place which reflect standards of best practice, accountability, and incentives, and support the delivery of the IUCN Programme

Internal procedures must be in place to ensure that institutional policies and systems within IUCN are implemented effectively. The IUCN Secretariat is committed to continual improvement of internal management procedures, and as a result improving support to members, Commissions and partners. This Result includes periodic and routine internal procedures for programme, financial and human resources management.

Activities included in this Result are:

- Programme and financial reporting and accountability.
- Human resources and performance management.

6.8 Institutional Outreach – IUCN's members, partners, and other institutions catalysed and supported in working towards the IUCN Vision and Mission

To be effective, IUCN's Secretariat and Commission members need to engage with the Union's members, a variety of organizations and individuals involved in conservation, and a wide range of actors who can enable or hold back progress towards sustainability. This requires investment in activities in support of the membership, Commissions, communications and publications, representation at international, national and local forums, as well as partnering with a variety of multilateral institutions, research and technical organizations, professional associations and businesses.

Our work in this area includes:

• *Member relations and outreach to potential new members and partners.*

• *External communications – our website, bulletins, World Conservation, and media contacts.*

References

- A full list of references is available from IUCN.
- IUCN (1995). The Strategy of IUCN The World Conservation Union. As adopted following the 19th Session of the IUCN General Assembly.
- IUCN (2000). Policy on Social Equity in Conservation and Sustainable Use of Natural Resources. Adopted by IUCN Council, February 2000. Akbar and Lvovsky (2000).
- IUCN (2001). Biodiversity in Development. Strategic Approach for Integrating Biodiversity in Development Cooperation. European Commission, Belgium; IUCN, Gland, Cambridge; DFiD, London.
- IUCN/UNEP/WWF (1991). *Caring for the Earth: A Strategy for Sustainable Living*. Gland, Switzerland.
- Prescott-Allen, Robert (2001). *The Wellbeing of Nations*. Washington: Island Press.

Abbreviations and acronyms

3I-C Fund	An IUCN fund to promote innovation, integration, information and communication in tackling emerging issues
CBD	Convention on Biological Diversity
DFID	Department for International Development, United Kingdom
EC	European Commission
ECOLEX	Database on environmental law
KRA	Key Result Area
MA	Millennium Ecosystem Assessment
MDG	UN Millennium Development Goals
MEA	Multilateral Environmental Agreement
NGO	non-governmental organization (private voluntary organization/non-profit organization)
NTFPs	non-timber forest products
PALNet	Protected Areas Learning Network
SIS	Species Information Service
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
WSSD	World Summit on Sustainable Development

Glossary

The following definitions are provided to explain how certain terms are used in the IUCN Programme. The list is limited to those terms that are most crucial to ensure clear communication about the programme Key Result Areas and results. To the extent practicable, the definitions are taken from recognised authorities such as the Convention on Biological Diversity (CBD).

Biodiversity – Variability among living organisms from all sources including, inter alia, terrestrial marine and other aquatic ecosystems and the ecological complexes of which they are a part; this includes diversity within species, between species and ecosystems (Article 2, CBD).

Ecological processes – The processes undertaken by living components of ecosystems that are essential to the delivery of ecosystem goods and services. Examples would be fixation of nitrogen by micro-rhizomes, pollination of plants, and nutrient cycling in a community.

Ecological restoration – The process of assisting the recovery of an ecosystem that has been degraded, damaged or destroyed. It has as its goal an ecosystem that is resilient and self-sustaining with respect to structure, species composition and function, as well as being integrated into the larger landscape and supporting sustainable livelihoods.¹²

Ecosystem – A dynamic complex of plant, animal and micro-organism communities and their non-living environment interacting as a functional unit (Article 2, CBD). The word 'ecosystem' does not imply a particular spatial unit. Therefore it is the scale of analysis or action that determines the dimension of an ecosystem.

Ecosystem functions – The interplay between and among living and non-living components of ecosystems that deliver goods and services that are essential to support the life of the planet.

Ecosystem goods and services – Four categories of ecosystem goods and services are recognised:¹³

• Provisioning services – The products and services that are harvested from or passively provided by ecosystems (e.g. forest products, crops, fresh water, minerals, genetic resources, tourism, research).

• Cultural services – The 'non-material' benefits from ecosystems, including spiritual and cultural benefits, diversity of cultures, languages and understandings that are promoted by the physical partitioning of people across landscapes.

¹² Ecological restoration: Conserving biodiversity and sustainable livelihoods. Joint statement of the IUCN Commission on Ecosystem Management and the Society for Ecological Restoration International (March 2003).

¹³ As defined by the *Millennium Ecosystem Assessment* (Carpenter *et al.,* 2002).

• Regulating services – Regulation of the overall conditions on Earth, which include maintenance of air and water quality, erosion control, storm protection.

• Supporting services – The services that maintain the conditions of life on Earth, such as pollination, soil retention, production of oxygen, capture of carbon and nutrient cycling.

Empowerment – The process of building capacities as well as a sense of responsibility and motivation in order to enable people and institutions to plan, manage, conserve and use natural resources in a sustainable and equitable manner.

Governance – The means by which society defines goals and priorities and advances cooperation. It includes policies, laws, decrees, norms, instruments and institutions.

Knowledge – The understanding and familiarity gained by experience or association. It applies to facts or ideas acquired by study, investigation, observation, evaluation, and/or experience. Knowledge also includes the development and use of the methods and tools to acquire it.

Sustainable use – The use of components of biological diversity in a way and at a rate that does not lead to the long-term decline of biological diversity, thereby maintaining its potential to meet the needs and aspirations of present and future generations (Article 2, CBD). In practice, an array of ecological, social and economic factors need to be addressed, which vary over time according to the species being used, the use objectives and the location of the use. It is therefore not likely that any use is guaranteed to be sustainable. It is more reasonable to refer to managed uses as 'enhancing the sustainability of use'.

Stakeholder – A person or group that has direct interest in a negotiation or decision-making process.