The draft IUCN Programme 2013-2016

Nature+

Draft for consultation, May 2011

Contents

Background to the draft for consultation

IUCN Statutes state that "the objective of IUCN shall be to influence, encourage and assist societies throughout the world to conserve the integrity and diversity of nature and to ensure that any use of natural resources is equitable and ecologically sustainable". In respect of the Statutes' requirements for IUCN to "pursue its objectives through an integrated programme of activities, formulated, coordinated and implemented by the members and components of IUCN", the draft Programme is submitted to Members for adoption at the World Conservation Congress.

This document contains the draft IUCN Programme 2013–16 which will form the basis for global consultations with the IUCN constituency – Members, Commissions and the Secretariat – between May and October 2011. This draft is based on extensive discussions with IUCN Council, and particularly its Programme and Policy Committee, as well as inputs from many parts of the Secretariat and from representatives of IUCN Commissions. The present draft has integrated to the extent possible the feedback received to date.

Over the next six months, consultations on the draft Programme will be enabled through the IUCN Members' Portal, the Regional Conservation Forums in 2011 and via IUCN's networks. These consultations will result in presentation of a final draft of the 2013–16 Programme for consideration at the 2012 World Conservation Congress, during which IUCN Members will debate and ultimately approve the document.

Figure 1: IUCN Programme 2013–16 Development Timeline

The document is supported by a Global Situation Analysis (see Annex, 1), assessing major trends in the state of the world's environment and their implications for the IUCN Programme. Each Programme section also has relevant excerpts from the situation analysis.

Comments and amendments on this draft Programme can be sent to programme@iucn.org no later than 10 October 2011.

Acknowledgements

The preparation of the Global Situation Analysis and the draft Programme document was the work of many across IUCN, incorporating Secretariat and Commission members. The guidance received from the Co-Chairs of the Programme and Policy Committee of the IUCN Council is also acknowledged with gratitude.

Introduction

A just world that values and conserves nature. This is IUCN's Vision. Nature is our life support system. The diversity of life and nature must be conserved for development to be sustainable. A just world requires fundamental change in all dimensions of life and society, including politics and economics. IUCN's niche is to advance nature-based solutions both to halt the destruction of biodiversity and to sustain development for all and especially for the poorest people and communities who depend on nature for their livelihoods. A just world must guarantee equitable rights of access to biodiversity and the benefits of nature, across generations, economic and social classes, gender, as well as geopolitical lines.

Valuing and conserving nature is a political and social mandate which requires the best knowledge and professionalism in interventions. Hence policy relevance and the highest professionalism in knowledge, tools and standards development and their application are the ambitions of IUCN's Programme delivery. IUCN's work goes back 60+ years. The Union has advocated sustainable development ever since its creation, and more formally so since it was defined in the *World Conservation Strategy*[1] in 1980.

Since the Rio 'Earth Summit' in 1992, a comprehensive international regime of environmental law has been developed to address major environmental problems of climate change, biodiversity loss, land degradation and desertification, among others.

The development of the IUCN Programme 2013–16 builds on the work achieved in the 2009–12 period and leverages other international processes: the agreement on the Strategic Plan for Biodiversity adopted by the Parties to the Convention on Biological Diversity (CBD); the establishment of the UN Decade for Biodiversity; ongoing negotiations under the United Nations Framework Convention on Climate Change (UNFCCC); ongoing efforts to meet the 2015 target for achieving the Millennium Development Goals; and preparations for the Rio 2012 Conference to review progress toward sustainable development.

Beyond multilateral policy negotiations, IUCN's unique membership will allow it to convene some of the world's most significant knowledge and advocacy platforms, including the IUCN's World Conservation Congress in 2012, the IUCN World Parks Congress in 2014, the IUCN Species Congress, and many other significant processes at global, regional, national and local scale.

The IUCN Programme 2013–16: Framework

Building on IUCN's Vision, *a just world that values and conserves nature*, the IUCN Programme 2013–16 sets out what IUCN intends to accomplish over the four year period. The Programme is organized around two Core Programme Areas and three Thematic Programme Areas, all of which leverage the IUCN Value Proposition as a means of delivering results.

The *value proposition of IUCN* has four elements (see Box 1):

1. bringing credible and trusted knowledge, particularly key biodiversity information and standards;

[1] 1980: IUCN (together with UNEP and WWF) collaborate with FAO and UNESCO to publish a World Conservation Strategy

2. convening and building partnerships for action, particularly as an honest broker between conflicting interests of biodiversity conservation and economic development;
3. bridging local and global policy and action, working for results on the ground that also influence international environmental governance; and
4. developing standards, leading practice and building capacity.

Using the value proposition, IUCN will deliver against its Core and Thematic Programme Areas. The differentiation between Core and Thematic Programme Areas is intended to highlight several factors. A Core Programme Area represents the heartland of IUCN's work, in terms of biodiversity conservation for both nature and people. This work persists from each four year Programme to the next. The Core Programme Areas are intended to focus the work on IUCN's globally accepted tools and standards, to serve as the basis for all other work under the Thematic Programme Areas.

In the Programme 2013–16, two Core Programme Areas are being proposed. IUCN has been dealing with valuing and conserving biodiversity since its inception. In this regard, the tools and standards under *Valuing and Conserving Biodiversity* represent IUCN at its best, and are areas where IUCN has unparalleled expertise. However, this has not resulted in halting biodiversity loss; therefore it is imperative that IUCN develop comparable tools and standards for the way its work for biodiversity conservation involves people and ensures their needs by way of rights, equity and governance. It is in this context that *Sharing nature's benefits fairly and equitably* is proposed as a new core programme area.

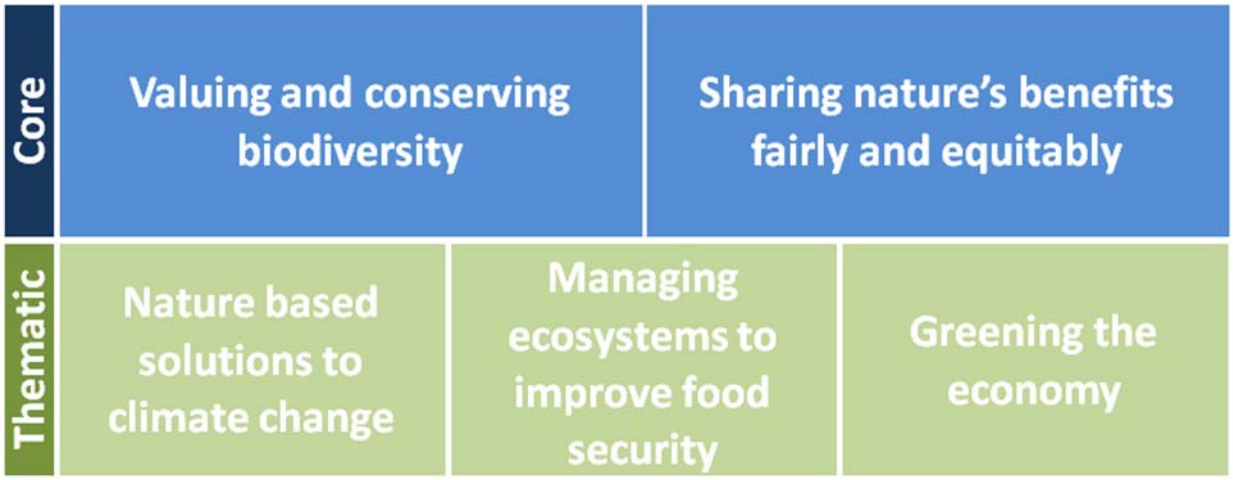

Figure 2: The IUCN Programme 2013–16

Thematic Programme Areas are significant bodies of work that are undertaken Union-wide to address the most pressing issues of the day in relation to the core programme areas and for which IUCN has expertise and convening power to leverage appropriate action. Work under the Thematic Programme Areas uses tools and standards and takes policy mandate from the Core Programme Areas, while developing specialized tools and standards and working within thematic policy to achieve biodiversity conservation and human well-being. The work under Thematic Programme Areas also takes IUCN in a new direction in terms of establishing partnerships, working with stakeholders and creating policy influence, all aimed at expanding the constituency in support of biodiversity conservation.

The Core Programme Area on **valuing and conserving biodiversity** (mirroring the element in the Union's Vision that refers to "*valuing and conserving nature*") covers IUCN's heartland work on

generating knowledge and tools, using the knowledge gained to influence policy options for the full range of policies that have influence over biodiversity, conservation planning and action. IUCN will focus on creating a comparable set of principles and tools for its work on **sharing nature's benefits fairly and equitably**, the second Core Programme Area (mirroring the element in the Union's Vision that refers to "*a just world*"). Similarly, IUCN will seek to create a more standard set of principles and tools that can be applied in a variety of settings where people are highly dependent on nature, leveraging learning from those interventions into evidence-rich policy options, influence and more action on the ground.

Each of the three Thematic Programme Areas leverages the work done through the core programme areas and seeks to influence non-traditional sectors that have a large environmental impact and dependency through the lens of climate change, food security and greening the economy. IUCN promotes **nature-based solutions to climate change**, combining policy influence with action on the ground for both climate change mitigation and adaptation. In order to **manage ecosystems to improve food security**, IUCN will extend beyond growing and catching food and take into account the wider livelihood and ecosystem considerations necessary to provide long-term resilience, security and development opportunities. In combining IUCN's current work on private sector, public policy and economics into a set of integrated solutions for bringing about the transformational change needed to **green the economy**, IUCN will seek to influence relevant policy and develop knowledge and tools to enable transformative change in this area.

Implementing the IUCN Programme 2013–16

The delivery of the IUCN Programme also requires a clear approach for implementation, based on IUCN's business model and One Programme approach, the results chain, and the assumptions underpinning the Programme. These four elements are mutually reinforcing, each building on the other.

IUCN's *business model* takes its strengths from the three strands of the Union – Members, Commissions and Secretariat – working towards a common goal and using the Programme as its framework. All Programme activities combine the four dimensions of the *value proposition* and the three structural strands. Results are achieved both locally, empowering people and communities and building capacities, and globally, influencing policies and environmental governance.

The *One Programme Approach* simply articulates how IUCN will work together through its constituent parts – the Membership, the Commissions and the distributed Secretariat – to achieve the Programme and its results. With an organization as large as IUCN, encompassing some 1100 Members, 12000 volunteer scientists in the Commissions and 1100 staff in the Secretariat distributed globally, it is important to be continually reminded that the Programme is shared by all constituents and by doing so, all have a role to play in its successful delivery. All Members, Commissions and the Secretariat have a responsibility to contribute to the implementation of the Programme: to plan within its framework and results, to monitor and report progress, and to evaluate its successes in order to share lessons learned with the wider conservation community.

Only when working within the One Programme approach can IUCN deliver on its Mission, uniting conservation action under one Union to create a strong and unified voice with which to transform society.

Box 1: The IUCN Value Proposition

IUCN's main assets are clearly its Members, its networks of experts organized through its Commissions, and its highly motivated and competent staff within its worldwide Secretariat. Since its inception, IUCN has been the world's largest democratically-run union of governments and non-government organizations (NGOs) dedicated to nature conservation. Such "two-house" membership provides a unique opportunity for deliberative democratic dialogue, policy formulation and practical implementation – setting the global conservation agenda.

The way in which an organization uses its assets to deliver added value through its products and services is called a 'value proposition' or comparative advantage. IUCN's value proposition is:

IUCN brings credible, trusted knowledge and information

Credible knowledge and information on the status of the Earth's natural resources, including species and changes in ecosystem goods and services, is essential to inform and influence policy and practice at all levels. IUCN is well known for its sound scientific base and know-how in conservation and sustainable natural resource management. In particular it has a track record on providing up-to-date knowledge on how biodiversity conservation and ecosystem management can support human well-being. IUCN derives its value as a trusted source of knowledge and know-how from its expert Commission networks, its Members, its partners and its staff.

IUCN convenes and builds partnerships for action

IUCN helps in building bridges between different actors and promoting joint actions and solutions. It uses its unique structure and credibility for establishing multi-stakeholder platforms that bring divergent views together. IUCN is recognized as an 'honest broker' and a 'provider' of independent scientific advice on natural resource management issues. This has helped the Union to link to all stakeholders, including businesses, NGOs, governments and communities of scientists and practitioners. To further strengthen this role, IUCN tailors its knowledge, know-how and tools to specific situations to find solutions for nature and people. In doing so, the Union empowers actors to make use of these so as to inform decision making and management.

IUCN bridges local and global policy and action

IUCN's extensive network of Members, Commission Members, partners and Secretariat provides it with an unequalled opportunity to bridge local and global decision making and action. IUCN's policy positions are underpinned by lessons from the field. Field interventions operate as learning centres that explore and find out what works in practice. Combining field-level experience with expertise available through its global networks provides IUCN with the level of credibility it needs to influence national, regional and international policy making. As a driving force behind major global environmental treaties, policies and laws, IUCN translates international policies and opportunities into effective national and local governance arrangements. Through this it promotes sharing of knowledge and experience across political and cultural boundaries, in all regions and ecosystems. IUCN is the only environmental organization with Permanent Observer status at the UN General Assembly, which serves as a powerful conduit for bringing the concerns and knowledge of its Members and Commissions to bear on the international debate on environment and development.

IUCN develops standards and leading practice, and builds capacity

IUCN uses its knowledge, convening power and local-to-global reach to develop and influence global, regional and national standards and practices. In some cases, IUCN has developed the standards such as with The IUCN Red List of Threatened Species™ and the IUCN Protected Areas Category system. The IUCN approach to influencing standards and practices helps to ensure that decisions are based on best available science and know-how, and have received the input from a wide set of stakeholders. The Union further assists stakeholders to scale up and adapt practices to local conditions and provides standards for quality control.

These four features of IUCN's value proposition make the Union distinct from others in the conservation and sustainable development arena. They enable the Union to demonstrate leadership and ensure it has influence at many levels.

The IUCN Results Chain

IUCN uses the principles of results-based management to determine what will be delivered as part of the IUCN Programme and how performance will be managed by managing for results. The IUCN results chain (Figure 3) represents IUCN's understanding of how results are delivered from inputs straight through to impact. Planning at IUCN always starts with the intended result – the intended change in policy, behaviour or governance that IUCN can influence as a means to achieving the impacts of biodiversity conservation and human well-being ('action on the ground') – before defining the means in terms of outputs and activities. The means by which IUCN achieves results generally includes generation and use of knowledge and tools, convening and building capacity of constituents and partners, using IUCN's reach to move between global, regional and local levels, and setting standards and best practice.

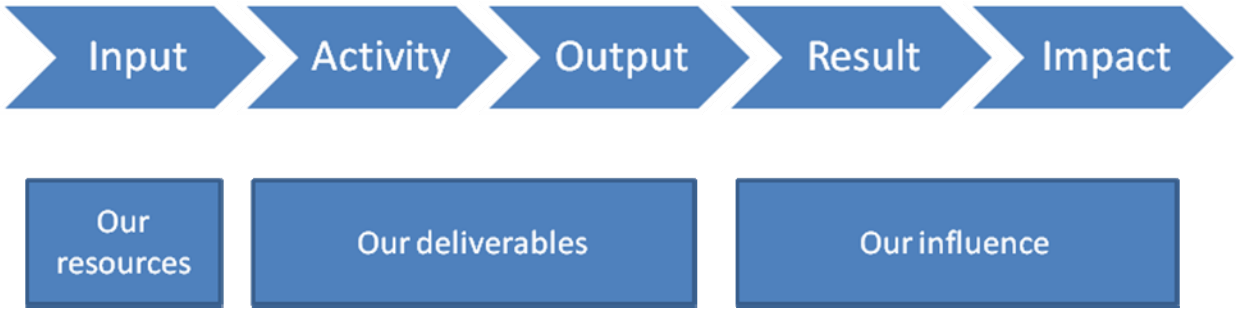

Figure 3: The IUCN Results Chain

Assumptions underpinning the Programme

The successful implementation of the IUCN Programme hinges on several factors, starting with the commitment of all constituent parts – the Members, the Commissions and the Secretariat – of IUCN to act as one. Resources, focus and political will are also key to delivering the intended influence of the IUCN Programme.

Successful influence will also depend on IUCN's ability to raise awareness, communicate strategically and learn from the multitude of actions underway, while building the capacity of institutions and individuals who will be in the best position to undertake action in support of biodiversity conservation and human well-being.

Overview of Global Results

The table below provides a summary of the global results per Programme Area and is the framework towards which each IUCN constituent will plan over the 2013–16 period.

Table 1: IUCN Programme 2013–16 Global Results

Programme Area	Global Results: Summary	Global Results: Detailed
1. Core Programme Area: Valuing and conserving biodiversity	1.1: Tools and knowledge for biodiversity conservation 1.2: Policies in support of biodiversity conservation	1.1: IUCN standards, tools and knowledge for valuing, conserving and sustainably using biodiversity are accessible, widely adopted and result in action for effective and efficient management of biodiversity. 1.2: Policies and governance systems reflect the full values of biodiversity to enable action at all levels towards the achievement of the conservation and sustainable use of biodiversity.
2. Core Programme Area: Sharing nature's benefits fairly and equitably	2.1: Tools and knowledge for better decision making for biodiversity conservation 2.2: Policies and governance for biodiversity conservation that recognize and respect rights	2.1: IUCN standards, tools and knowledge for valuing, conserving and sustainably using nature and natural resources foster fair, equitable, just and efficient decision making and are accessible and widely adopted. 2.2: Policies and governance systems recognize and respect the rights of local communities and indigenous peoples, and effectively empower vulnerable and poor stakeholders, especially women, to value, conserve, sustainably manage and benefit from biodiversity.
3. Thematic Programme Area: Nature-based solutions to climate change	3.1, 3.2: Policy and practice for mitigation and adaptation 3.3: Assessing the impact of climate change on biodiversity and promoting action	3.1: National and international climate change policies and funding optimize ecosystem-based adaptation and mitigation solutions with appropriate social and environmental safeguards that improve natural resource governance and increase the resilience of vulnerable livelihoods. 3.2: Institutional arrangements, standards and tools that enable the equitable and efficient implementation of ecosystem-based adaptation and mitigation solutions are available and widely adopted at local and national level, with particular emphasis on the participation of and benefits for natural resource dependent communities. 3.3: Knowledge, standards and tools to assess the impacts of climate change on biodiversity continue to be improved and are widely available to support conservation, adaptation and mitigation at local, national and global levels.
4. Thematic Programme Area: Managing ecosystems to improve food security	4.1, 4.2: Policy and practice linking ecosystem management and food security 4.3: Broader conservation movement working for food security	4.1: Global, regional and national food security policies and strategies benefit from biodiversity conservation and ecosystem management in strengthening the resilience and sustainability of small-scale, community-based production and wild-harvest food systems (terrestrial and fisheries/marine). 4.2: Multifunctional landscape and seascape management, incorporating the differentiated roles of men and women, is recognized and widely adopted as tools, standards and institutional arrangements that contribute to the stability and sustainability of food systems. 4.3: International, national and local conservation policies, practices and standards contribute to improved food production systems, food security and wider livelihood needs of both men and women at the local level.
5. Thematic Programme Area: greening the economy	5.1: Integrating nature into economic risk management 5.2: Building biodiversity-based economic opportunities	5.1: Green economy policies and actions are enhanced through stronger integration of biodiversity and ecosystem services in risk management at local, national and global scales. 5.2: Opportunities to benefit from biodiversity conservation and sustainable use are supported by relevant public policies and private decision making and contribute to greening the economy at local, national and global scales.

The Convention on Biological Diversity (CBD) Strategic Plan for Biodiversity 2011–2020 and its implications for IUCN

In response to the urgent need to address the issue of biodiversity loss, the CBD Strategic Plan for Biodiversity 2011–2020 (Strategic Plan) was adopted at CBD COP10, Nagoya, Japan, in October 2010. It includes a shared vision, a mission, strategic goals and 20 targets ("the Aichi Biodiversity Targets"), to inspire broad-based action by all Parties and stakeholders.

The Strategic Plan provides a flexible framework for the establishment by countries of national and regional targets to contribute to the global targets with *the sum total of this contribution being monitored for every COP*. Achieving this ambitious plan requires actions at multiple entry points, which are reflected in the goals of this Strategic Plan.

The vision of this Strategic Plan is a world of "Living in harmony with nature" where "By 2050, biodiversity is valued, conserved, restored and wisely used, maintaining ecosystem services, sustaining a healthy planet and delivering benefits essential for all people."

The mission of the Strategic Plan is to "take effective and urgent action to halt the loss of biodiversity in order to ensure that by 2020 ecosystems are resilient and continue to provide essential services, thereby securing the planet's variety of life, and contributing to human well-being, and poverty eradication. To ensure this, pressures on biodiversity are reduced, ecosystems are restored, biological resources are sustainably used and benefits arising out of utilization of genetic resources are shared in a fair and equitable manner; adequate financial resources are provided, capacities are enhanced, biodiversity issues and values mainstreamed, appropriate policies are effectively implemented, and decision making is based on sound science and the precautionary approach."

The Strategic Plan includes 20 headline targets for 2015 or 2020 (the "Aichi Biodiversity Targets"; see summary below, noting that these are descriptors, and that the full text of the targets is in Annex I), organized under five strategic goals. The narrative for the Programme results describes how these will contribute to the individual targets. This is also summarized in Table 2 of Annex 1.

IUCN's approach to the conservation of biological diversity contributes to all of these goals:

- Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society
- Reduce the direct pressures on biodiversity and promote sustainable use
- Improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity
- Enhance the benefits to all from biodiversity and ecosystem services
- Enhance implementation through participatory planning, knowledge management, and capacity building

The CBD decision on the Strategic Plan draws attention to the need for partnerships to ensure implementation. Partnerships at all levels are required for effective implementation of the Strategic Plan, to leverage actions at the scale necessary, to garner the ownership necessary to ensure mainstreaming of biodiversity across sectors of government, society and the economy, and to find synergies with national implementation of multilateral environmental agreements. Partnerships with the programmes, funds and specialized agencies of the United Nations system, as well as with other conventions and multilateral and bilateral agencies, foundations, women, indigenous and local communities, and non-governmental organizations, will be essential to support implementation of the Strategic Plan at the national level.

At the international level, this requires partnerships between the Convention and other conventions, international organizations and processes, civil society and the private sector. In particular, efforts will be needed to ensure that the Convention, through its new Strategic Plan, contributes to sustainable development and the elimination of poverty, and the other Millennium Development Goals; ensures cooperation to achieve implementation of the Plan in different sectors; promotes biodiversity-friendly practice by business; and promotes synergy and coherence in the implementation of the multilateral environmental agreements.

IUCN, including its Members, Commissions and Secretariat, given its Vision, Mission and value proposition, has a key role to play in supporting the achievement of the CBD Strategic Plan including supporting our Members (Governmental and NGO) in its implementation. To this end this Programme makes strong reference to the CBD Strategic Plan and aims to specifically articulate and monitor IUCN's contribution to it. For the 2013–16 period the Programme document will include mapping the (agreed) global results to the Aichi targets, and mapping the Aichi targets to IUCN's (agreed) global results to clearly demonstrate the linkages. In addition every component programme will be asked to develop target(s) to specifically articulate their contribution to the individual targets of the CBD Strategic Plan. Furthermore, when monitoring progress, IUCN components will be asked to report on how work done contributes to the individual targets. IUCN will also provide a detailed analysis of the cross linkages between IUCN's work and the 25 Programmes of Work of the CBD.

IUCN, on the advice of the Ad Hoc Working Group of Council further proposes that a lead 'champion' is proposed for each of the CBD targets, whose role it would be to help facilitate the implementation of the target through explanation, information, communication, promotion, advice and support. A table of these lead champions (clearly many components will be involved in target delivery but it is helpful to name just one) will be included in the Programme document.

A strategy to show IUCN's contribution to the UN Decade of Biodiversity will also be included. This will include the contribution of the three IUCN World Conservation Congresses that will take place during the Decade, which provide an admirable opportunity to showcase work on how the targets are being achieved by stakeholders around the world.

Core Programme Area 1: Valuing and conserving biodiversity

Situation analysis

The values of biodiversity are both tangible and intangible. Biological diversity underpins ecosystem functioning and the provision of ecosystem services, and is essential for human well-being. It provides for food security, human health, clean air and water; it contributes to local livelihoods and economic development and is essential for the achievement of the Millennium Development Goals, including poverty reduction.

Biodiversity is also a central component of many belief systems. In addition to material benefits, biodiversity contributes to cultural heritage, religious reverence, emotional values and aesthetic appeal. Biodiversity has existence value and bequest value. While some biodiversity values are reflected in economic decisions, notably so-called 'provisioning services' such as crops and fibre, many non-market and intangible biodiversity values remain essentially invisible from an economic perspective. Unfortunately, as long as the full or 'total economic value' of nature is not reflected in public policy and markets, decision making on development will continue to ignore the consequences for biodiversity.

Yet despite its fundamental importance, biodiversity continues to be lost. The Global Situation Analysis annexed to the Programme document highlights the major challenges for biodiversity conservation based on several assessments and other reports and tools (among others, the Millennium Ecosystem Assessment, the 2006 IUCN Red List of Threatened Species and the Global Biodiversity Outlook 3 – GBO 3). In particular it should be noted that GBO 3, an assessment of the state of the world's biodiversity in 2010, clearly showed that, despite some conservation successes, the target set by the world's governments in 2002 of reducing the rate of biodiversity loss by 2010 was not met, either internationally or nationally in any part of the world. The conservation successes have reinforced the fact that we know that conservation works – there is now a need to scale it up and to do a great deal more of what works, especially as the principal drivers of biodiversity loss are in many cases intensifying as a result of human actions.

There are multiple indications of continuing decline in biodiversity in all three of its components – ecosystems, species and genes. Ecosystems continue to be degraded and fragmented by development. Species extinction rates are up to 1,000 times greater than the average rates in pre-human times, and are increasing. Crop and livestock diversity continues to decline in most agricultural systems. Such losses of genetic diversity are contributing to increased disease outbreaks putting ecosystems, food production, and even lives at risk.

Core Programme Area 1 seeks to address the direct pressures on biodiversity and promote sustainable use. It also seeks to improve the status of biodiversity by working to safeguard ecosystems, species and genetic diversity. The biggest driver of biodiversity loss globally is habitat loss, notably from conversion of land to intensive agriculture and the loss of sustainable food production systems which tend to have high biodiversity values. IUCN aims to address these drivers through working to reduce the rate of loss of all natural habitats and working to promote the sustainable management of areas under agriculture, aquaculture and forestry, ensuring conservation of biodiversity. In the aquatic realm a particular focus is IUCN's work to ensure that all fish and invertebrate stocks and aquatic plants are managed and harvested sustainably so that overfishing eventually comes to an end. IUCN will also seek to influence fishing practices which adversely affect threatened species and vulnerable ecosystems. Given the effect of climate change on coral reefs and other vulnerable ecosystems, an important focus for IUCN is to minimize other multiple anthropogenic pressures. Likewise on land where the use of wild living resources is often far from sustainable, IUCN will work to ensure that all harvest of living resources, for trade or other

human activities, is sustainable, legal and traceable, and causes no significant, long-term harm to natural habitats. Alien invasive species threaten ecosystems, habitats and species. They have a particularly detrimental effect in island ecosystems, where they can be the leading cause of biodiversity loss. In addition, invasive alien species can pose a threat to food security, human health and economic development. The spread of alien invasive species can be addressed through improved border controls and quarantine, as well as through early warning mechanisms, rapid response measures and management plans.

Justification for prioritization as a Core Programme Area

An initial analysis over the last 50 years of IUCN policies, guidelines, standards, action plans, resolutions and recommendations has identified a strong mandate for the Programme results under Core Programme Area 1. There is a wealth of Resolutions from the last four IUCN World Conservation Congresses (1996–2008) relevant to Core Programme Area 1, covering the issues of values and valuing biodiversity; threatened species; protected areas including World Heritage Sites, connectivity and landscape/seascapes; and sustainable use. For instance, in addition to 190 Resolutions and 108 Recommendations regarding species, species-related policy guidance relevant to the work of the IUCN Core Programme Area includes five Policy Statements; seven Species-related Guidelines; 11 Standards; and 69 Action Plans.

Some of those Resolutions are recalled here for illustration purposes, especially in relation to the new element ("valuing") which has been added to Core Programme Area 1's traditional scope of "conservation of biodiversity" with a strong focus on threatened species, protected areas and on connectivity conservation.

On valuing nature, Resolution 4.099 *Recognition of the diversity of concepts and values of nature*, mandates IUCN's recognition of the need to incorporate the broad range of understanding of the human relationship with the natural world to increase intercultural efforts for nature conservation. To this end, IUCN will continue to develop appropriate guidance to fully recognize the existing diversity of concepts and values of nature, and of nature conservation founded in diverse cultures and contexts. Also, and where appropriate, IUCN will endeavour to promote and support nature conservation actions including and reflecting practices and traditions that are rooted in culture and embody the cultural values of the diversity of peoples of the world.

There is also a need for society to fully value the role that nature plays in relation to the economy and there is a strong policy mandate in this regard (e.g. Resolution 1.58). To provide a fuller picture of the value of biodiversity, environmental and ecological economists have developed approaches to measure the intangible, non-market benefits that people derive from nature. These methods have been tested and refined in a range of contexts and are increasingly reliable, so much so that governments routinely use the results to determine public policy (e.g. protected area entry fees), or as evidence for legal damages claims. More, however, is needed to ensure that governments adopt policies to incorporate biodiversity values, including by incorporating them into national accounting systems.

As a key tool in the protection of biodiversity, protected areas including the full suite of management categories and governance types in terrestrial and aquatic environments, and with a specific emphasis on the exemplary quality of World Heritage Sites, have an extremely strong policy mandate as reflected in numerous resolutions (e.g. Resolutions 3.047, 4.045, 4.062, 3.050). Optimal biodiversity conservation impact is known to result when protected area systems are supplemented and complemented by a framework of connectivity corridors in both landscape and seascape. Resolution 4.062 *Enhancing ecological networks and connectivity conservation areas* seeks wider awareness of the need for and establishment of ecological networks as a critical national and

international adaptation and mitigation response to climate change; enhanced recognition of the role played by ecosystems, the ecological services they provide and the contributions they make to development and land-use policies; and a Union-wide ('One Programme') approach to connectivity conservation areas in recognition of the interdisciplinary nature of the responses needed and the benefits of the IUCN Secretariat, Commissions, Members and partners working together. Furthermore Resolution 3.050 *Integrating protected area systems into the wider landscape* calls for IUCN to assist in mainstreaming protected areas and other areas important for biodiversity into national and international development planning and policy, particularly poverty-reduction strategies and implementation of the Millennium Development Goals.

Sustainably using the components of biological diversity is one of the CBD's three main objectives. Governments are required to find ways to ensure that the use of biological resources avoids or minimizes adverse impacts on biological diversity; to regulate or manage biological resources to ensure their conservation and sustainable use; and to ensure compatibility between present uses and the conservation of biodiversity and sustainable use of its components. IUCN Resolution 4.013 *Sustainable use and accountability* calls for IUCN to provide advice to interested IUCN Members concerning legislation affecting importation and/or sale of products from wild species; and reflect, as appropriate, the provisions of international law, the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), and the sustainable use principles and guidelines adopted by the CBD. Other resolutions (e.g. Resolution 3.074) call for the sustainable use of wild living resources to be reflected in all IUCN policies and programmes.

The totality of these resolutions provide a strong policy mandate for the urgent action needed by IUCN to address biodiversity loss – at the ecosystem level, species level, and in terms of genetic diversity. During the latter part of the last decade it was suggested in some quarters that the species level was less relevant to a modern approach to biodiversity conservation, with some sectors suggesting that the relevant agenda should only focus on ecosystem services. However, during the 10^{th} meeting of the Conference of the Parties to the Convention on Biological Diversity (CBD COP10) in Nagoya, Japan, in October 2010, the need to take significant action for all three of the components of biodiversity was not only reaffirmed but a 'wake up' call was made to radically step up conservation action to assure a future for life on this planet. It was made clear that urgent action is needed to ensure the resilience of people and nature, and to avoid catastrophic tipping points, noting that recovering from such dramatic changes in biodiversity is difficult and costly, if not impossible in many instances.

Against this backdrop, Parties to the CBD (of which 85 are IUCN State members) adopted a new Strategic Plan for Biodiversity 2011–2020 with the purpose of galvanizing action for biodiversity conservation by all countries and all stakeholders. In recognition of the urgent need for action the United Nations General Assembly has also declared 2011–2020 as the United Nations Decade for Biodiversity.

IUCN also reiterates the need for a 'step change' in ambition, urgency, investment and action to conserve biodiversity. The IUCN Programme 2013–16 directly supports the implementation of the Strategic Plan by specifically articulating and monitoring IUCN's contribution to it.

There is also a need to further develop indicators to measure progress towards the achievement of the Aichi targets. A number of indicators were developed within the framework of the CBD to measure progress towards the achievement of the 2010 target. This indicator framework has been developed utilizing, in the main, long standing data sets, developed over many years, such as the IUCN Red List and the World Database on Protected Areas. IUCN has pointed out that indicators for the 2011–2020 targets should draw and build on existing indicator work. Many require further development, most need more data to be collected. There is therefore a clear need to continue to

invest in such datasets. There are also serious gaps to be filled, for example on the relation between biodiversity and ecosystem services.

IUCN's approach

IUCN has a long history of work in this area, from the development of flagship tools and knowledge products, to policy analysis and conservation planning tools, which have led to considerable action on the ground and influence on policy and legislation. However, more must be done.

For this new Programme, IUCN will continue to provide trusted and credible knowledge. In so doing, IUCN is increasingly aware of the tendency in some policy arenas of an increasing disregard of scientific information in relation to decisions taken, with decision making often reflecting more overriding political or economic interests. This is clearly a challenge: it is expensive and time consuming to collate and synthesize the best available scientifically underpinned knowledge, and the utility of this exercise is called into question if an increasing number of decisions take little account of it. Therefore, IUCN will strive to make its policy messaging clearer, more direct and more relevant than previously. 'Business as usual' will not secure a future for life on this planet.

IUCN's approach to the conservation of biological diversity contributes to all five goals of the Strategic Plan for Biodiversity 2011–2020.

Achieving these goals entails the delivery of knowledge on the status of biodiversity and specific actions to promote the conservation and sustainable use of species, ecosystems and genetic diversity.

IUCN creates such knowledge and understanding of the processes driving biodiversity loss by providing information on the value and status of biodiversity, and developing indicators which measure trends. Knowledge can then be used to aid in conservation planning, creating clear messages on the implications of policy options to enable policy influencing and action in support of biodiversity conservation. IUCN's flagship knowledge tools generate knowledge, and the knowledge from different datasets is integrated as much as possible to form the basis for conservation planning and policy.

Action for conservation includes, for example, effective management of protected areas, the establishment of new protected areas to fill major gaps in biodiversity coverage, and working to ensure effective management of global and regional natural resources. Furthermore, IUCN translates knowledge into policy influence and decision making to tackle the direct causes of biodiversity loss. In so doing this work provides a solid foundation that links to and supports results in IUCN's other three thematic programme areas.

This Core Programme Area makes a direct contribution to most of the targets of the Strategic Plan for Biodiversity, but notably to the targets under Strategic Goal C, the foundation and heartland of IUCN's work to conserve biodiversity: Improving the status of biodiversity by safeguarding ecosystems, species and genetic diversity:

- Target 11 (Protected Areas increased): By 2020, at least 17 per cent of terrestrial and inland water areas, and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes.
- Target 12 (Extinction of known threatened species prevented): By 2020, the extinction of known threatened species has been prevented and their conservation status, particularly of those most in decline, has been improved and sustained.

- Target 13 (Genetic diversity maintained): By 2020, the genetic diversity of cultivated plants and farmed and domesticated animals and of wild relatives, including other socio-economically as well as culturally valuable species, is maintained, and strategies have been developed and implemented for minimizing genetic erosion and safeguarding their genetic diversity.

Work for the achievement of this Core Programme Area will also contribute to Strategic Goal B: Reducing the direct pressures on biodiversity and promote sustainable use, in particular Targets 5, 6 and 9:

- Target 5 (Habitat loss reduced): By 2020, the rate of loss of all natural habitats, including forests, is at least halved and where feasible brought close to zero, and degradation and fragmentation is significantly reduced.
- Target 6 (Overfishing is avoided): By 2020, all fish and invertebrate stocks and aquatic plants are managed and harvested sustainably, legally and applying ecosystem-based approaches, so that overfishing is avoided, recovery plans and measures are in place for all depleted species, fisheries have no significant adverse impacts on threatened species and vulnerable ecosystems, and the impacts of fisheries on stocks, species and ecosystems are within safe ecological limits.
- Target 9 (Invasive alien species combated): By 2020, invasive alien species and pathways are identified and prioritized, priority species are controlled or eradicated, and measures are in place to manage pathways to prevent their introduction and establishment.

More broadly, there will also be a contribution to Targets 17–20 falling under Strategic Goal E: Enhancing implementation through participatory planning, knowledge management and capacity building. It is worth highlighting targets whose cross-cutting nature profoundly impacts not only the outcome but the processes needed to give effect to the preceding targets. In Target 18, attention is given to the recognition of the knowledge and role of indigenous peoples and local communities in implementation. In Target 20, the need to effectively determine the needs and sources of resources for implementation is emphasized.

Incorporating the values of biodiversity into national accounts (the key policy challenge to meet in order to further the work of The Economics of Ecosystems and Biodiversity (TEEB) study at the national level), development strategies and planning processes will require governments and others to recognize and appropriately value biodiversity and ecosystem services, and to increase coordination among government agencies and other stakeholders. IUCN will work to support governments through the development and promotion of tools and methods to assess the economic values of biodiversity, and encourage the development of appropriate policy instruments which incorporate biodiversity values into national accounting systems, such that biodiversity conservation becomes the mandate of a wider range of ministries in national governments.

In so doing the IUCN constituency of Members, Commissions and Secretariat will be contributing directly to Target 2: *By 2020, at the latest, biodiversity values have been integrated into national and local development and poverty reduction strategies and planning processes and are being incorporated into national accounting, as appropriate, and reporting systems*. This Core Programme Area will also help to achieve the incredibly important aspiration of Target 1: *By 2020, at the latest, people are aware of the values of biodiversity and the steps they can take to conserve and use it sustainably.*

In order to gain additional clarity regarding IUCN standards and tools and engagement on policy, IUCN will also at the beginning of this new Programme period carry out a simple audit or synthesis of all IUCN-approved standards and tools and all global and regional policy instruments with which the Union engages.

Global results

Core Programme Area 1 has two global results: the first on tools and knowledge for biodiversity conservation; the second on policy change in support of biodiversity conservation.

Global result 1.1: IUCN standards, tools and knowledge for valuing, conserving and sustainably using biodiversity are accessible, widely adopted and result in action for effective and efficient management of biodiversity.

For many years IUCN has developed 'flagship knowledge products' including The IUCN Red List of Threatened Species™ and the World Database on Protected Areas (in partnership with UNEP-WCMC). A key challenge for the next four years is to take forward IUCN's work to develop a global standard for the identification of areas of importance for biodiversity – designed to be applicable on land and in the sea all over the planet. This will help ensure that areas of importance are protected through a variety of conservation measures, including protected areas of all IUCN categories and governance types.

A further challenge is to link up the integration of such data sets. The Integrated Biodiversity Assessment Tool (IBAT) links the IUCN Red List with the World Database on Protected Areas and information on areas of importance for biodiversity (key biodiversity areas – or KBAs). Work to identify ecologically and biologically significant areas (EBSAs) in the marine realm using scientific criteria to facilitate the development of representative networks of MPAs in areas beyond national jurisdiction (as called for by Resolution 4.031) will be streamlined with the work to develop a global standard for the identification of areas of importance for biodiversity.

The web-based Protected Planet provides a new public interface giving access to the World Database of Protected Areas and Protect Planet Ocean. Such tools can help decision making in both the public and private sectors. There is now a need to ensure that relevant accurate information is entered into such systems and that they are maintained and kept up to date.

There is no one simple metric to measure the status of biodiversity. Species are in many ways the best proxy, and the IUCN Red List is the most comprehensive source of information on species in the world. In recent years modules have been developed to facilitate collection of information on species, trade, use and links to livelihoods. Further work is needed to populate such modules. In addition more work is needed to support regional and national level Red Lists through the provision of training, especially given that the IUCN Red List Index is an indicator for Millennium Development Goal 7 on environmental sustainability.

The new IUCN Red List of Ecosystems will greatly enhance the information available on the status of habitats and ecosystems. Although IUCN data and information underpins several of the biodiversity indicators used to measure the status of biodiversity within the framework of the CBD, an additional priority is the development of an indicator to measure the status of ecosystems and the services they provide.

In terms of valuing biodiversity and ecosystem services IUCN will promote wider use of tools and approaches set out in the TEEB study, the UN System of Economic and Environmental Accounting (SEEA), and other relevant initiatives. Tools are also available for integrating biodiversity values into spatial planning exercises, through the mapping of biodiversity and ecosystem services and systematic conservation planning. IUCN will also continue to work on the development and implementation of innovative financial mechanisms, including payment for ecosystem services and the development of markets and private sector policies and practices that reflect the values of biodiversity.

The tools, datasets and knowledge are used to create policy influence and action. The much-awaited establishment of the Intergovernmental Platform for Biodiversity and Ecosystem Services offers

further opportunities for IUCN to make its knowledge available to policy makers. In addition to the knowledge products described above, the next four years offer multiple opportunities at international, regional and national levels, for IUCN to convene meetings, conduct learning events and disseminate guidance and best practices in all relevant fields. Premier events during this period include the IUCN World Conservation Congresses in 2012 and 2016, the IUCN World Parks Congress in 2014 and the IUCN Species Congress in 2015 (see below for influencing strategy of these IUCN platforms).

Global result 1.2: Policy and governance systems reflect the full values of biodiversity to enable action at all levels towards the achievement of the conservation and sustainable use of biodiversity.

IUCN has a long history of applying its knowledge in developing, advising and implementing biodiversity-related agreements at all levels. Such agreements include hard and soft law instruments addressing a wide range of biodiversity conservation issues from local to global.

IUCN will in particular work to ensure the strengthening of policies to support the conservation of species and management of protected areas. Priority multilateral environmental agreements are those that focus on biodiversity – CBD, CITES, World Heritage Convention, Convention on Migratory Species (CMS), International Treaty on Plant Genetic Resources for Food and Agriculture, the Ramsar Convention on Wetlands of International Importance, as well as the International Convention for the Regulation of Whaling (IWC). Of continuing concern for the conservation community is governance of natural resources both in terrestrial and marine realms. Given the poor levels of protection of the marine environment, both within and beyond national jurisdiction (e.g. the high seas), this must remain a focus for IUCN.

The World Heritage Convention provides a clear policy mandate for IUCN as its key advisor on Natural World Heritage sites. This role has recently expanded the focus on evaluation of nominations to prioritize the conservation of the sites that are already listed (Natural World Heritage Sites constitute almost 10% of the area of protected areas globally). Work will continue to focus on implementation of management effectiveness assessments, and the need for adaptive management of World Heritage sites in the face of climate change.

The Strategic Plan for Biodiversity 2011–2020 offers a good basis for cohesion in all of IUCN's policy work at global, regional and national levels. This will range from assisting governments in implementation at regional and national levels, to working to disseminate knowledge at the global level as well as taking action on the ground.

The incorporation of biodiversity values into national accounting and reporting systems (as well as national and local development and poverty reduction strategies and planning processes) is the focus of CBD Strategic Plan Target 2 and a key policy priority for IUCN's Programme. Successful case studies will be highlighted to encourage widespread adoption of appropriate polices at the national level, in support of the achievement of this target.

A further priority is to ensure that IUCN's engagement is carried out in a clear way with simple, powerful, consistent and effective messaging. In addition, there is a need to promote a cohesive approach to IUCN's engagement with all key policy instruments we engage with to avoid 'reinventing the wheel' each time a big policy event takes place.

Further cohesion will come from improved joint working of the biodiversity-related Conventions that have agreed to adopt the Strategic Plan for Biodiversity 2011–2020 as a framework for their own work. Indeed IUCN has been requested by the Chairs of the Scientific Authorities to these Conventions to assist in mapping each Convention to the Aichi targets.

Beyond the confines of multilateral environmental agreements, IUCN has a proud tradition of convening its State and NGO members in powerful global forums that address in an independent and objective way the critical problems facing the achievement of IUCN's Vision and Mission. Reaching back into its heritage, the 10-yearly IUCN World Parks Congress has stimulated paradigm shifts both within and beyond the Union in the purpose and manner in which protected area systems are established and managed. In 2014, the sixth such Congress will be convened, offering an opportunity to move beyond managing and governing protected areas, to making a case for protected area systems as one of the most powerful institutional and governance measures to secure biodiversity and ensure that the challenges facing society can be addressed. Similarly, for the first time, IUCN will host the IUCN Species Congress in 2015, that will coincide with the midpoint of the CBD Strategic Plan and the review of the Millennium Development Goals, many targets and indicators which are founded on the measures that IUCN has developed and maintained.

Core Programme Area 2: Sharing nature's benefits fairly and equitably

Situation analysis

People everywhere depend directly or indirectly on biodiversity for their well-being. From food, fuel and freshwater, to pollination, flood protection and climate regulation, biodiversity provides the ecosystem goods and services needed for people to survive and prosper. Nature has always supported the growth and progress of human societies.

Recent IUCN research indicates that forests, for example, deliver a previously unaccounted for US$130 billion of direct, tangible benefit to 1.6 billion of the world's poorest people each year[2]. 60 million indigenous people are almost wholly dependent on forests, and 1.2 billion people in developing countries use agroforestry farming systems. An estimated one billion people currently depend on fish for food, income and livelihood, at least 85% of whom rely principally on fish as their major source of protein.

Nature's benefits, however, are not equally shared. Well-off people, and richer countries, are better positioned to benefit from and accumulate benefits from nature – often by unsustainable means – while poorer people tend to bear the direct cost of any loss of biodiversity and its benefits. The well-off are more influential in shaping the key decisions that directly impact nature – often to its detriment – and determine how natural resources are used. Yet it is the poor and disadvantaged who, excluded from such decision-making processes, relying as they do more directly and to a larger degree on natural resources to sustain their livelihoods, pay the price of such decision making It has to be recognized, too, that even well-intentioned interventions to safeguard biodiversity can sometimes lead to further impoverishment of the most marginalized people.

For example, in the developing world women own less than 2% of all property and farmland and are regularly excluded from decision-making processes concerning natural resources. However research shows that women have a significantly higher reliance on natural resources to meet basic needs – from firewood to cash income for paying school fees to producing up to 90% of household food. Decisions that further exclude women from accessing and using natural resources will have a disproportionate effect on their livelihoods and well-being, as well as that of their children.

Decisions and the way in which decisions are made over the management and use of biodiversity can have major impacts upon human well-being. Changing decision making processes for biodiversity and natural resource management influences equity among peoples and generations. Sharing power, benefits and responsibility with respect to natural resource conservation and management, as well as strengthening governance arrangements to make them more transparent, inclusive and equitable, can be good for both people and biodiversity. It is the basis of a just world that is *capable* of valuing and conserving biodiversity.

The alternative (or the continuation of the status quo)– of inequity in governance of natural resources – tends to foster unsustainable practices and illegal activities that undermine the natural resource base and threaten biodiversity, increase conflict and further diminish the capacity of ecosystems to meet human needs.

Clarifying, recognizing and respecting the rights of natural resource dependent women and men are pre-requisites to better governance. The participation of citizens and multiple constituencies in transparent decision-making processes enhances the legitimacy and long-term sustainability of natural resources management and thus reinforcing biodiversity conservation. This involves

[2] IUCN – Livelihoods and Landscapes Strategy (Lucy Emerton and Gill Shepherd) – in preparation

increasing capacity of local communities, including poor people, women, indigenous peoples, and marginalized groups, to participate in decision making.

There are now several international mechanisms such as the United Nations Declaration on the Rights of Indigenous Peoples that can help stimulate government commitment to improving social equity for marginalized groups – including with respect to natural resources. The challenge now is to find practical ways to implement these types of provisions that governments have signed up to find increasingly fair and just paths to the conservation of nature.

Justification for prioritization as a Core Programme Area

Core Programme Area 1 can be characterized as the Union's heartland work on biodiversity conservation knowledge, policy and action all underpinned by sound science. Core Programme Area 2 complements this work by focusing on issues of fairness and equity in relation to how biodiversity-related decisions are made; how conservation actions implemented; and how the costs and benefits from conservation and natural resource use should be distributed, as well as and the roles and responsibilities of the different actors involved. Put another way IUCN's Core Programme Area 1 delivers Objectives 1 and 2 of the CBD (conservation and sustainable use of biodiversity) while Core Programme Area 2 delivers Objective 3 (access and equitable sharing of benefits). Delivery of objectives one and two should be according to, and consistent with the principles enshrined in objective three. Consistent with the high importance that IUCN places on the Strategic Plan for Biodiversity 2011–2020, delivering on the third objective of the CBD becomes a matter of urgency for IUCN especially now that the ABS Protocol, which constitutes Target 16 of the Strategic Plan, has been adopted and expected to enter into force within the next year or so.

In summary, the designation of a second Core Programme Area does not constitute an expansion or reinterpretation of IUCN's core business and comparative value. Like Core Programme Area 1, Core Programme Area 2 is squarely about IUCN's heartland issue of delivering biodiversity conservation focusing on the critical point that in order to be successful the science and metrics of conservation need to be complemented with robust processes that help navigate how decisions are made and how costs and benefits, as well as roles and responsibilities, are allocated. Together these two Core Programme Areas represent the Union's fundamental reason for existence – and together they ensure that IUCN maintains its leadership for biodiversity conservation – for both people and nature.

In previous IUCN Programmes issues such as governance, rights, equity and gender were considered cross-cutting themes. However, it has been widely perceived that without a formal institutional mechanism to guide the Union's work on these critical aspects of biodiversity conservation their treatment has been both inconsistent and lacking in focus and coherence across the Secretariat and Commissions. Just as the Union's work on conservation science and its application into conservation policy and action has to be a constant feature from Programme to Programme – thus qualifying it as Core Programme Area – so it is with IUCN's work on how decisions about conservation and natural resource use are made and implemented and how the costs and benefits need to be shared. Together these two Core Programme Areas will increase our cohesiveness and provide a solid foundation on which time-bound thematic areas of work – such as "climate change" or "greening world economy" – can be built and delivered.

This approach is already supported by IUCN's policy. In addition to the Union's Vision and Mission, there are over 100 resolutions that deal directly with and unambiguously link conservation science and practice with social justice and equity. IUCN policies adopted by members offer a very consistent framework where justice and equity are integral dimensions of conservation of nature and natural resources. They go beyond simply qualifying particular approaches to conservation; they provide a fundamental mandate for our approach to biodiversity conservation and the sustainable use of

natural resources and all that this should entail. There are also many other resolutions and recommendations that contain operational clauses directing how the rights and involvement of particular groups need to be addressed in implementing a specific conservation action.

During recent Congresses IUCN Members have put even greater attention on rights-related aspects of biodiversity conservation, adopting eleven resolutions in Barcelona alone that require the integration of rights-based frameworks into IUCN's work, for example such as resolution 4.056 (Rights-Based Approach to Conservation). Specific attention has been given by IUCN members to the situation of indigenous peoples, their territories (resolution 4.050) and their traditional knowledge (resolution 1.50). Since 1975, IUCN members have adopted no less than 55 resolutions and recommendations on indigenous issues, of which 16 were adopted in Barcelona. As an overarching policy, IUCN members decided to "*apply the requirements of the United Nations Declaration on the Rights of Indigenous Peoples to the whole of IUCN's Programme and operations*", and then adopted decisions to integrate indigenous rights in a range of specific programme areas of IUCN such as climate change and protected areas, globally and regionally.

Equally gender equity and equality has been a major area of preoccupation of IUCN members in relation to conservation and natural resource use, especially since 1984 when the first gender-focused Resolution was adopted; all subsequent IUCN Congresses have advanced the principle of gender equity and equality and have required growing efforts to integrate it. Resolution 4.005 requests "*to ensure that gender equity and equality are an imperative in the implementation of the IUCN Programme*".

IUCN Members have also provided substantial guidance on the need to promote good governance of the environment and natural resources to achieve conservation, justice and equity. Indeed in IUCN's policy, a growing focus on improving governance requires the IUCN Programme to recognize, integrate and promote the principles of good governance, which include among others legitimacy, respect for human rights, accountability, transparency, rule of law, access to information and justice on environmental issues, and participatory decision making. A key aspect of this governance policy framework is also subsidiarity, therefore specifically the need to empower and strengthen local governance systems as they are closer to the ecosystems and to the livelihoods of the people who depend on them.

This Core Programme Area will also position IUCN better to support the delivery of the Strategic Plan for Biodiversity 2011–2020, most directly with respect to Strategic Goal D: Enhance the benefits to all from biodiversity and ecosystem services and Strategic Goal E: Enhance implementation through participatory planning, knowledge management and capacity building. In particular delivery of Core Programme Area 2 results should make tangible contributions to:

- Target 14 through providing the knowledge and tools to document the nature and scope of key ecosystem goods and services that are valued for local livelihoods, insights how men and women rely on these services differently, standards to create space so that they can equitably negotiate how these good and services should be shared and policy frameworks through which local rights are recognized, respected and enforced.
- Target 16 by providing tools and standards to help create a broader principled framework on benefits, livelihoods, cultural diversity, and participation and supporting national processes that seek to bring the Nagoya ABS Protocol into force.
- Target 18 by incorporating mechanisms into conservation and natural resource management approaches and policy frameworks that respect, take account of and create the necessary space for the application of traditional knowledge systems in national conservation and sustainable management strategies

More broadly by working to make sure that conservation standards and tools foster fair decision making and that governance systems recognize and respect the rights of historically marginalized groups increases the prospects that the targets associated with Strategic Goals A, B and C of the Strategic Plan for Biodiversity can be effectively and sustainably achieved, for example:

- By advancing work on Community Conserved Areas and advocating for its approach as a mainstream conservation strategy Target 11 (protected areas) will be advanced and more likely to be achieved.
- By implementing tools, approaches and standards to advance rights-based approaches to conservation, generating knowledge and advocating for locally-controlled strategies to natural resource management and promoting policies and governance systems that adequately and fairly share both the costs and benefits of natural resource management, progress towards Targets 6 and 7 could be advanced.

IUCN's approach

IUCN has a range of tools and approaches designed to better link conservation and sustainable development. These incorporate the Union's strengths in supporting reforms of governance for natural resources that enhance equity and rights. However there are inconsistencies in the way these are applied. For example – while Indigenous Peoples' generally appreciate the strong stance IUCN has taken in having the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) properly reflected in various international agreements they also note that the Union has been less consistent in making sure that the same provisions are reflected in national protected area policies and programmes. More broadly, many countries need help in identifying, tailoring and implementing governance of natural resources that is effective in building benefits for people and for conservation of biodiversity.

IUCN's approach to sharing nature's benefits is knowledge and action oriented, using lessons learnt from conservation and sustainable use experience to identify principles and standards for the best approaches for advancing social equity and good natural resource governance. IUCN is well-positioned to use its convening abilities, global-to-local reach and network of members and partners to support adoption of these approaches through tailoring them to specific regional, national or local contexts. Specifically, IUCN will work to

- demonstrate how equity, rights and governance issues link biodiversity conservation with human well-being;
- convene and empower appropriate stakeholder groups – including the most vulnerable – to design knowledge and policy solutions that include their understanding of what works;
- convene and influence appropriate policy and governance bodies at local and national level;
- generate measurable evidence and lessons to influence international and national policies and the work of other organizations, including regional organizations;
- standardize the principles defining IUCN's approach and develop flexible standards and toolkits for tailoring the linking of conservation and human well-being through equity, rights and governance.
- test and promote a reliable suite of framework methodologies – that are flexible – are able to be adapted and modified to fit the conditions of specific situations – that facilitate fair, equitable and gender-sensitive negotiated outcome with respect to biodiversity conservation and the sustainable use of natural resources

The overall approach aims to test the assumption that if inequity in governance of natural resources is addressed, then resulting improvements in both biodiversity conservation and livelihoods are possible. In this respects IUCN will with aim to bring the many existing tools and approaches mentioned above together into a robust and standardized framework that would not only set a globally recognized benchmark for strengthening governance and decision-making processes on the conservation and use of biodiversity and natural resources but also enable practitioners and policy makers to design locally appropriate roadmaps to achieve this. The intention would be that such a framework would enjoy the same international credibility and recognition as the IUCN Red List has as the key starting point for scientifically underpinned conservation action.

Global results

Core Programme Area 2 has two global results: the first on tools and knowledge for better decision making for biodiversity conservation; the second on policies and governance for biodiversity conservation that recognize and respect rights.

Global result 2.1: IUCN standards, tools and knowledge for valuing, conserving and sustainably using nature and natural resources foster fair, equitable, just and efficient decision making and are accessible and widely adopted

Issues of equity and rights, particularly around natural resources, are increasingly recognized internationally and nationally. There is an emerging body of international mechanisms, such as UNDRIP, guidance such as IUCN's resolutions, and effective implementation networks such as the Conservation Initiative for Human Rights and the Global Gender and Climate Alliance. However, there are many situations still where natural resource dependent women and men are disenfranchised by provisions of national policies and institutional arrangements. Therefore, the real challenge is to move from declarations of good intent to practical application on the ground.

IUCN's Secretariat and Commissions have over the past decade been developing a series of tools and approaches to systematically foster fair, equitable and just decision making concerning the conservation and use of biodiversity. These tools need to be rationalized, simplified and standardized in order to tailor the principles of equity and good governance to specific regional and (sub) national contexts, in ways that will catalyze widespread adoption and implementation. There are wide gaps in their application, inconsistencies between tools, and incoherence in how they are applied. This constrains delivery of the desired results at the scale needed and ultimately undermines biodiversity conservation and human well-being

A flexible framework, based on agreed principles, together with an associated set of tools and approaches, will be developed though consultation with a very wide range of stakeholders from IUCN's Members, Commissions and Secretariat. It will be developed iteratively and aim to provide a flexible yet standardized framework whose application will ensure increased fairness and equity in relation to the benefits of the conservation and use of biodiversity – at all scales. The approach will be trialed and demonstrated this through field interventions in order to arrive at a robust tool that can be used to advance IUCN's Mission by strongly influencing policy and practice.

Key to demonstrating mechanisms for fair, equitable, just and efficient decision making will be participation and engagement of key stakeholders, including the most vulnerable groups, in the testing and refinement of these approaches

Global result 2.2: Policies and governance systems recognize and respect the rights of local communities and indigenous peoples, and effectively empower vulnerable and poor stakeholders, especially women, to value, conserve, sustainably manage and benefit from biodiversity.

Major decisions about land-use change and management often have harmful impacts on vulnerable, natural resource dependent people. Poorly conceived and top-down processes that further disenfranchise rural and coastal peoples from the resources they have traditionally managed tend to generate conflict and criminalize a livelihood activity which in turn has negative consequences on the long-term sustainability and environmental integrity of the resource in question. Natural resource conservation can also have similar effects if applied without consideration of the needs and roles of rural and coastal peoples.

Demonstrating the link between conservation and human well-being and the issues of equity, rights and governance will generate a tremendous amount of knowledge about what works and what doesn't while also revealing appropriate approaches to natural resource governance and policy reform in specific situations.

IUCN will use this learning to influence policy at the international, regional, national and local levels, so that the approaches IUCN has developed can be replicated to transform how biodiversity is conserved and managed both for its own inherent value and for the contribution it makes to human well-being. In particular IUCN will use its knowledge on social equity and good resource governance to support the effective implementation of the Strategic Plan for Biodiversity 2011–2020, including through support for national policy development and implementation. We will also bring this insight into other international and regional bodies concerned with natural resource management and governance such as the United Nations Convention to Combat Desertification and regional fisheries and river basin authorities. Support will be extended to national governments, to help improve the implementation of natural resource policies, and partnerships will be established with multilateral development banks and the Global Environment Facility.

Thematic Programme Area 3: Nature-based solutions to climate change

Situation analysis

Human-induced climate change is already happening at an increasing rate of change and its impacts are irreversible. Delay in reducing emissions significantly constrains opportunities to achieve greenhouse gas concentration stabilization levels and thereby increases the risk of more severe climate change impacts. The interpretation by policy makers of the Intergovernmental Panel on Climate Change (IPCC)'s 4th Assessment Report conclusions led them to agree that the global average temperature should not increase by more than 2°C above pre-industrial levels and achieving this target means stabilizing the atmospheric concentrations of greenhouse gasses at around 450ppm $CO_{2\,eq}$[3]. This in turn would require that by 2050 global emissions of CO_2 (the major greenhouse gas) need to be reduced by 50–85% over 2000 levels – still only providing a 40–60% probability of remaining below 2°C. Subsequent scientific findings show that some of the IPCC's conclusions and projections might already have been overtaken. The world's climate continues to change, with 2010 tying 2005 as the warmest year on record and 2010 as the wettest on record in terms of global average precipitation.

Many biodiversity components, e.g. coral reefs, are already showing impacts at levels well below 450 ppm, and research by IUCN and partners shows that 24–50% of birds, 25–49% of amphibians, and 17–35% of coral species are particularly susceptible to climate change. Climate change often compounds other stresses and in some cases, as with coral reefs, can be the primary cause of biodiversity loss. Increase of human induced CO_2 concentrations in the atmosphere also causes ocean acidification. The ocean absorbs around 25% of total human emissions to the atmosphere each year, leading to acidification at a rate exceeding any known to have occurred for the past 65 million years. Since the industrial revolution, the acidity of the surface ocean has increased by 30%. This rapid acidification rate further jeopardizes the ability of ocean species and ecosystems to adapt.

The impacts of climate change on ecosystems are further resulting in severe loss of ecosystem services on which livelihoods depend, such as: decreases in fresh water supplies; limits to food production; and loss of flood regulation. There is a need on the one hand to halt and reverse climate change (mitigate), and on the other hand to better deal with the inevitable impacts that are already happening (adapt). For this, comprehensive, cross-sectoral, mitigation and adaptation actions will be required. Nature can also play a key role in offering solutions to both adaptation and mitigation that are available, scalable and sustainable. IUCN is therefore promoting nature-based solutions to climate change.

Terrestrial and marine ecosystems play a vital role in helping to regulate the global carbon cycle. For example, the world's remaining primary forests (1.44 billion ha, 36% of total forest cover) contain significant stocks of carbon and therefore conserving these forests provides an effective and relatively rapid possibility to help stabilize the year on year increases of atmospheric CO_2. By some estimates, Brazil's voluntary action which reduced the rate of forest lost by 80% over the last 6 years may well be equal to the total emission reduction achieved by industrialized countries during the first commitment period (2008–2012) of the Kyoto Protocol[4]. Deforestation and forest degradation account for approximately 17% of global greenhouse gas emissions. As a consequence, REDD+ (Reducing Emissions from Deforestation and forest Degradation in developing countries) has

[3] In their Fourth Assessment Report (AR4) the IPCC experts show that to achieve a 40-60 % probability of staying below the 2°C limit, this stabilization concentration should not exceed 450ppm CO2eq

[4] IPCC 4th assessment Source needed

received attention in the international climate policy arena, the UNFCCC, as a potential cost-effective manner for reducing emissions through avoided deforestation. When developed in an equitable and sustainable manner, REDD can not only reduce emissions, but could also help conserve biodiversity and produce better managed forests that deliver ecosystem goods and services for people provided that just and equitable governance is established and environmental integrity is safeguarded. There is also significant potential in restoring the health and diversity of degraded natural areas. IUCN and WRI analysis points to more than 1 billion hectares of degraded forest lands where landscape restoration opportunities may be found and whose restoration could sequester approximately 140 GtCO2e by 2030, equivalent to three years of global cumulated emissions.

A number of other ecosystems, including peatlands, wetlands, coastal ecosystems, drylands and grasslands sequester and store carbon and offer great potential for conserving biodiversity and providing for livelihoods. These approaches can be called "ecosystem-based mitigation". The opportunities for example for coastal carbon management are only starting to be realized. Although they have a limited distribution, mangrove ecosystems contain up to 50 times more carbon than terrestrial carbon yet they are disappearing four times faster. Healthy natural and managed systems therefore have a new and more critical role to play in absorbing and maintaining carbon stocks as a key bridging mechanism over the next couple of decades offering a fundamental and urgently needed mitigation complement to the deep cuts required in greenhouse gas emissions.

Ecosystem-based adaptation[5], or conserving, managing and restoring natural resources – e.g. watersheds, forests, or mangroves– can provide a means for people to adapt to the impacts of climate change. In many cases, socio-ecological resilience can be increased, vulnerability reduced and adaptive capacity enhanced through improved management of natural resources, including adaptive management. Well-managed ecosystems have a greater potential to adapt to climate change, resist and recover more easily from extreme weather events, and provide a wide range of benefits on which people depend. In contrast, poorly managed, fragmented and degraded ecosystems can increase the vulnerability of people and nature to the impacts of climate change. This is one of the many solutions needed for adaptation, one that is available, sustainable and particularly relevant for the most vulnerable communities who depend most of natural resources for their livelihoods. The overall role of ecosystems in adaptation is not sufficiently recognized at national, regional and international levels in terms of policy, practice or research– it is an adaptation option which is often forgotten when, for example, hard technological solutions are prioritized.

All approaches to mitigation and adaptation should be done with full consideration for fulfilling the rights of local communities, indigenous peoples and other rights holders. Furthermore, recognizing the differentiated role of both women and men is vital if we are to increase the effectiveness of adaptation and mitigation efforts.

At the time of writing, the UNFCCC process has not yet been able to reach a global legally binding agreement that includes mitigation targets for developed countries and emerging major emitters from developing countries. The Cancun Agreements reached in December 2010 go some way to anchor the emissions reduction pledges made in Copenhagen in a formal decision of the UNFCCC. However, these pledges still fall far short of what is needed to limit global warming to 2°C above pre-industrial level; there is a significant "emissions gap". The UNEP Emissions Gap Report[6] highlights

[5] CONNECTING BIODIVERSITY AND CLIMATE CHANGE MITIGATION AND ADAPTATION- Report of the Second Ad Hoc Technical Expert Group on Biodiversity and Climate Change under the Convention on Biological Diversity (CBD).

[6] The Emissions Gap Report: Are the Copenhagen Accord pledges sufficient to limit global warming to 2^{o}C or 1.5^{o}C? November 2010. United Nations Environment Programme; Nairobi.

that based on the current pledges from both industrialized and developing countries there is a gap of 5–9 $GtCO_2$ equivalent which needs to be addressed by 2020 *if* the world is to have a "likely" (i.e. greater that 66%) chance of keeping global temperature increases below 2°C. Through the Cancun Agreements, the COP also agreed important elements of an adaptation framework, a REDD+[7] regime, modalities for technology transfer and laid the basis for the future financial arrangements that are crucial to the developing country Parties. Reducing greenhouse gas emissions is the only, long-term answer to restoring the global climate to stability. Ecosystem-based mitigation options, including REDD+, should complement rather than substitute or weaken delivery of deep reductions in fossil fuel emissions.

Justification for IUCN prioritization as a Thematic Programme Area

Climate change often compounds other stresses that biodiversity is facing and in some cases can be the primary cause of biodiversity loss. Therefore, IUCN needs to deal with the impacts of climate change on biodiversity. On the other hand, there are opportunities to mainstream biodiversity into climate change policy and practice, by demonstrating the importance of ecosystems in solving the world's major environmental challenge, or promoting nature-based solution to climate change. Although climate change has only been recognized as a phenomenon of global environment, social and economic concern over the past few decades, IUCN Members have been active on the issue right from the outset. As a result IUCN has been given a relatively strong and focused mandate by its members in terms of general policy. IUCN has 16 resolutions directly related to climate change, covering issues such as the impact of climate change on biodiversity, the role of biodiversity in both adaptation and mitigation, REDD+, UNFCCC (incl. Kyoto Protocol) and CBD.

Resolutions 2.16 and 3.057 promote activities for ecosystem resilience to climate change through adapted conservation and restoration approaches. Resolution 4.076 urges Parties to the UNFCCC to acknowledge the role of biodiversity, ecosystems and protected areas in adaptation and mitigation within national plans and strategies. The Resolution also urges Parties to the CBD to address the impacts of climate change on biodiversity.

Resolution 4.075 is a comprehensive resolution referring to the post-2012 UNFCCC regime and includes, amongst others, calls on Parties to: adopt mitigation targets; adopt a REDD mechanism; find innovative funding sources; urgently plan and implement mitigation and adaptation practices; and integrate ecological and social considerations. It also calls for examining the role of non-forest ecosystems as carbon stores, with a view to considering their eligibility as carbon sinks under UNFCCC. Resolution 4.068 provides comprehensive guidance on IUCN's REDD work at both international and national levels, including with regards to social and environmental safeguards and benefit sharing, which is being promoted by several component programmes within IUCN, both at programmatic and policy level.

Resolution 4.077 calls for the consideration of human rights and climate change in IUCN's Mission. The 75th Council endorsed the IUCN Policy Statement on Ocean Acidification, which clarifies the mandate and scope of IUCN's general policy in relation to ocean acidification.
The proposed nature and scope of this Thematic Programme Area also positions IUCN to support the delivery of the CBD Strategic Plan. The approach proposed below is to build on the progress made in 2009–2012 and continue to actively mainstream nature-based solutions into national and international climate policies and programmes. In this respect IUCN's proposed work on climate change will make a concrete – if indirect – contribution to Strategic Goal A by making sure that the

[7] Reducing Emissions from Deforestation and forest Degradation in developing countries, including conservation, sustainable management of forests and enhancement of forest carbon stocks

values and potential of biodiversity in combating climate change are fully realized and having nature-based solutions properly integrated into national low carbon development strategies.

More directly this Thematic Programme Area will contribute to Strategic Goal B, notably through the application of ecosystem-based mitigation to help achieve Target 5 and, as appropriate, Target 7. Furthermore, and in close coordination with activities undertaken in Core Programme Area 1, the envisioned programme of work will also help contribute to the achievement of Target 10: specifically by advocating for deep cuts in greenhouse gas emissions and continuing to raise awareness of the threats posed by ocean acidification, and Target 11 on enhancing protected areas and other area-based conservation measures. Major contributions will be made to the achievement of Strategic Goal D and in particular the achievement of Target 15: By 2020, ecosystem resilience and the contribution of biodiversity to carbon stocks has been enhanced, through conservation and restoration, including restoration of at least 15 per cent of degraded ecosystems, thereby contributing to climate change mitigation and adaptation and to combating desertification.

IUCN's approach

IUCN promotes nature-based solutions to climate change, combining policy influence with action on the ground for both climate change mitigation and adaptation. Healthy natural and managed ecosystems are critical for absorbing or maintaining carbon and helping us adapt to climate change. Managing forests, peatlands and wetlands can enhance carbon stocks or store substantial amounts of carbon as well as conserve biodiversity. In addition, people depend on ecosystem goods for food, fuel and drinking water– managing and conserving these resources can help them adapt to the impacts of climate change.

IUCN will support the recognition of nature-based solutions under national and international climate change policy processes and funding mechanisms through, for example, convening multi-stakeholder dialogues, analyzing existing policy and legal frameworks and raising awareness. IUCN will also advocate for the recognition of indigenous peoples', women's and other rights holders' rights, in particular in REDD+ policies. Institutional arrangements, standards and tools that enable the implementation of efficient and equitable ecosystem-based mitigation, such as REDD+, and ecosystem-based adaptation will be promoted. This includes capacity building, reviewing natural resource governance arrangements, implementing pilot projects and scaling up lessons learned.

While biodiversity offers mitigation and adaptation solutions it is also important to recognize the threat that climate changes poses to ecosystems, species and genetic diversity. Climate change and ocean acidification are now acknowledged as significant threats to global biodiversity and are likely to compound the impacts of long-established stressors such as habitat loss. IUCN will build on its extensive expertise in conservation science to generate new knowledge, insights and approaches to support conservation, adaptation and mitigation at local, national and global level*s*

Global results

Thematic Programme Area 3 has three global results: the first two focusing on policy and best practice, respectively, for mitigation and adaptation; the third on assessing the impact of climate change on biodiversity and promoting action.

Global result 3.1: National and international climate change policies and funding optimize ecosystem-based adaptation and mitigation solutions with appropriate social and environmental safeguards that improve natural resource governance and increase the resilience of vulnerable livelihoods

The UNFCCC Cancun agreements provided a breakthrough for nature-based solutions through the adoption of an agreement on REDD+ which includes the full scope of conservation, sustainable management of forests and restoration and acknowledges the importance of stakeholder participation, including of women and indigenous peoples. The Cancun Adaptation Framework recognizes of the role of natural resource management as an adaptation action. However, a lot of work needs to be done at international level to operationalize these agreements and secure funding for implementation. IUCN will support all efforts to urgently reduce emissions, in particular through a sustainable and equitable REDD+ mechanism, will support actions on adaptation and promote the provision of adequate funding to implement these efforts.

Whilst achieving a comprehensive global, legally-binding deal under the UNFCCC has been delayed, it is essential that countries take immediate action and put in place national adaptation and mitigation policies. At national level, adaptation can, for example, be integrated into national development plans, climate change strategies or sectoral policies such as water, agriculture, coastal zone or forest policies. National level policies will also need to be reviewed and strategies developed to support implementation of REDD.

IUCN will play a pioneering role at the international level in promoting recognition of the role of biodiversity and natural resources under the UNFCCC bringing forward evidence base and providing guidance to policy makers and funding bodies. Nature-based solutions should form part of broader adaptation strategies and be seen as one option complementing other adaptation options. Adaptation options should be sustainable and not undermine opportunities for nature-based solutions. Additional, predictable and adequate funding flows for adaptation and REDD must be ensured. Funding should allow for full support of participatory REDD Readiness processes.

IUCN will analyze existing policy, legal and governance arrangements, support policy processes and facilitate multi-stakeholder dialogues on REDD+ and the role of natural resource management in adaptation. IUCN can also contribute to understanding about best governance practice related to REDD+ and adaptation to optimize efficient solutions and avoid conflict. There is scope for feeding lessons learned from field experience to policy processes.

IUCN will raise awareness and advocate for the recognition of existing and long-denied indigenous peoples', women's and other rights holders' rights in REDD+ policies and for the inclusion of appropriate biodiversity safeguards. IUCN will also assist in monitoring the implementation of such policy provisions in practice.

Ecosystems such as mangroves, peatlands and marine ecosystems have substantial potential to sequester carbon. IUCN will raise awareness on the mitigation potential of these ecosystems. IUCN will support the inclusion of mangroves in REDD policies and identify policy venues for developing adequate management and financing strategies, including for coastal and marine ecosystems for climate change mitigation. In addition, the impacts of ocean acidification should be recognized in international and national policy. IUCN will advocate for policy coordination and coherence in addressing ocean acidification by supporting dialogue and development of necessary linkages between relevant conventions, policy processes and institutions.

Most of the climate change policies and national plans of actions do not recognize the value of mainstreaming gender. IUCN will continue to play a pivotal role in addressing this situation by providing the technical guidance and expertise at international, regional and national level to develop gender sensitive climate change strategies and action plans.

Global result 3.2: Institutional arrangements, standards and tools that enable the equitable and efficient implementation of ecosystem-based adaptation and mitigation solutions are available

and widely adopted at local and national level, with particular emphasis on the participation of and benefits for natural resource dependent communities

There is an urgency to deliver adaptation and mitigation actions on the ground. There is a need for increased knowledge, dialogue, capacity building and implementation of ecosystem-based adaptation, in which IUCN can provide global leadership. IUCN should build on its expertise in natural resource management to promote ecosystem-based adaptation at national and local level through supportive institutional arrangements, standards and tools. IUCN will build on its experience in forest conservation and community forest management to promote REDD Readiness at national and local level, through supportive institutional arrangements, standards and tools. IUCN can promote a better understanding of the role of ecosystems in the carbon cycle, and in particular how the management of these ecosystems can enhance their capacity to sequester carbon, including in: coastal systems (e.g. mangroves and sea grasses), peat lands, wetlands, soils, agricultural lands, drylands and non-tropical forests.

IUCN's engagement in ecosystem-based adaptation will include implementing projects on the ground for management, conservation and restoration of ecosystems for livelihood adaptation and risk reduction in areas such as integrated water resource management, protected area management, sustainable forest management, forest landscape restoration, coastal zone management, integrated island ecosystem management and sustainable agriculture.

Only by promoting good governance and empowering all stakeholders and integrating their views and needs in natural resource management arrangements can these resources be managed in a sustainable and equitable manner. IUCN will promote engagement through, for example, multi-stakeholder dialogues, participatory planning and implementation processes and by mainstreaming gender considerations. Adaptive governance approaches are essential to help countries plan for and respond to rapidly-changing, unpredictable climactic conditions. Supportive guidelines can be developed on REDD+ issues such as benefit and cost sharing, conflict avoidance and resolution, rights-based approaches, governance standards, gender and biodiversity safeguards in national contexts. Ecosystem-based adaptation will also require capacity building and guidelines, which IUCN can provide and develop. In order to ensure such guidelines are moulded into actual practice, IUCN will build on its law experience by developing results from multi-stakeholder dialogues into legal policies and recommendations.

IUCN is well-placed to share best practices, raise awareness and enhance communication on ecosystem-based adaptation and mitigation from local to national and international level. IUCN can also harness its global expertise on protected areas to help recognize the role of in situ conservation as an effective vehicle for ecosystem-based mitigation. Adaptation knowledge is a gradual process and one where IUCN can help such incremental learning, by testing assessment tools and adaptation approaches, provide access to information and disseminate lessons learned and best practices across countries and ecosystems.

Sustainable ecosystem management can also offer solutions to reducing community vulnerability to disasters, by providing natural buffers to hazard events, which are often more cost-effective to install and maintain than 'hard' infrastructure. Nature-based solutions can contribute significantly to both risk reduction and climate change adaptation strategies. Disaster risk management communities have a lot to offer communities dealing with climate change, which can build on the experiences gained and lessons learnt in managing disasters.

Furthermore, climate mitigation and adaptation projects and programmes have grown rapidly in isolation from each other in recent years. IUCN will explore practical options for integrating ecosystem-mitigation, adaptation and related areas of natural resource management, including planning for protected areas connectivity.

Global result 3.3: Knowledge, standards and tools to assess the impacts of climate change on biodiversity continue to be improved and are widely available to support conservation, adaptation and mitigation at local, national and global level*s*

Climate change and ocean acidification are becoming significant new threats to global biodiversity and are likely to compound the impacts of habitat loss, over-exploitation, invasive species, and other stressors that already threaten genetic diversity, species and ecosystems. While uncertainty remains about the extent and speed of climate change impacts on biodiversity, it is widely recognized that climate change will have marked negative impacts.

Although certain species and ecosystems may benefit from climate change, it is recognized that those that are sensitive, have poor adaptive capacity and are exposed to greatest climatic change will be most at risk. Coral reef, alpine and wetland ecosystems are regarded as particularly vulnerable, as are climate change susceptible species that are already listed as threatened on The IUCN Red List of Threatened Species™. Species and ecosystems may face thresholds beyond which extinctions and state changes are irreversible.

IUCN is developing tools to assess the vulnerability of species to climate change. Integrating these with The IUCN Red List of Threatened Species™ and the accumulating body of global knowledge on climate change impacts on genetic diversity, species and ecosystems, IUCN can provide much-needed information on the likely impacts of climate change on biodiversity.

Because climate change poses a new threat, current conservation approaches may need to be adapted to best mitigate its impacts. IUCN can promote sound conservation and management strategies that reduce existing threats and build resilience to climate change, for example through protected area networks. These strategies should be supported by national policy frameworks, and there is potential for synergies between the implementation of e.g. National Biodiversity Strategies and Action Plans and National Adaptation Programmes of Action at national level.

IUCN can promote the robust monitoring and evaluation systems and research that are needed to conserve and manage biodiversity adaptively. Through communication of these and raising awareness at local, national and global levels, IUCN can encourage climate change action, and promote the synergistic implementation of conservation, adaptation and mitigation in response to climate change.

Thematic Programme Area 4: Managing ecosystems to improve food security

Situation analysis

Currently, 1.4 billion people are living on less than US$1.25 a day (*1 billion being rural poor, and 70% are women*), and close to one billion people suffer from hunger[8]. About 1 billion people do not receive sufficient food on a daily basis, while 2 billion suffer from a diet insufficient in micronutrients essential for healthy growth.[9] Hunger and malnutrition are directly or indirectly implicated in 60% of all child deaths. There is still a significant degree of uncertainty as to how much food production needs to increase by 2050.[10] What is clear, however, is that policy decisions enhancing food security will stand to make significant impact on biodiversity. Equally decisions concerning biodiversity conservation and ecosystems could have a major influence on how countries address the food security needs of their growing populations. There are both economic and non-economic arguments for why ecosystems services and biodiversity should be integral part of decision making in the global food system.[11] Although the role of biodiversity in contributing to food security is still not widely recognized research shows that today off-farm resources – especially from forest, wetland and coastal ecosystems – provide 25–35% of rural household income (indirect and in-kind), and 70% of global freshwater withdrawals are used for producing food. Ensuring food security for the 9 billion people expected by mid-century is likely to increase pressures on natural resources in the coming decades.

Food production systems rely on the richness and diversity of ecosystems. More directly and practically, 1 billion people worldwide rely on fish as their primary protein source while bush meat provides 80% of the protein and fat intake of rural communities in Central Africa. In many other regions fish and bush meat also provide indigenous peoples with high quality foods while wild-harvested greens and fruits provide critical micronutrients. Pollination services are worth 153 billion US dollars. Agriculture, everywhere, relies on adequate well-managed freshwater resources. Fisheries production as well relies on the sustainable management of marine and freshwater ecosystems. To secure food, equitable and sustainable use of natural resources is required. Ecosystem services underpin productivity: food security is unlikely to be achieved if the biodiversity that underpins the supply of critical ecosystem goods and services is allowed to decline.

Food security has an important equity dimension and therefore in order to fully appreciate the challenges surrounding food security it is important to explicitly address gender considerations. Rural women not only produce between 60–80% of the food in most developing counties but often they are custodians of knowledge about ecosystem management, natural resources, and endangered species.[12] In order to effectively build linkages between food security and natural resource management and conservation it will be necessary to involve women as food producers, community leaders, educators, and natural resource managers.

Food security is not the same as, nor as simple as producing enough food. Food security exists "when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life."[13]

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[8] http://bit.ly/gXau1r , Rural Poverty Report, IFAD 2010

[9] FAO Food security summit, 2009

[10] Global Conference on Agriculture, Food Security and Climate Change, Final Roadmap The Hague, October 2010

[11] The Foresight Report: The Future of Food and Farming 2011

[12] IUCN, UNDP, and GGCA Training Manual on Gender and Climate Change 2009

[13] World Food Summit 1996 & Sofi 2001

Food security thus combines the availability of food with physical, social and economic access to food, the capacity to utilize food and the stability of the whole system over time.

Finally the recent Foresight report[14] concludes by five key challenges that future food production systems will have to meet: demand for food will have to be balanced by supply achieved through use of natural resources that is sustainable; adequate stability of food supplies and protection of the most vulnerable; achieving global access to food to end hunger; managing the contribution of food systems to mitigate climate change; and maintaining biodiversity and ecosystem services that underpin and sustain production systems. Therefore the importance of biodiversity conservation to society can be further enhanced if the importance of healthy functioning ecosystems' are mainstreamed into national and international food security policies and programmes.

Justification for IUCN prioritization as a Thematic Programme Area in 2013–16

IUCN has a long history of promoting and demonstrating the importance of biodiversity and ecosystem services to human well-being and to livelihoods of rural poor. Despite this, activities have tended to be dispersed, making coherent influencing of development policy difficult. Giving IUCN's work on human well-being a sharper focus – i.e. on food security – will enable IUCN to position itself closer to the centre of current development policy debates and therefore better placed to make the case for mainstreaming biodiversity into an issue that is rapidly emerging as a key global challenge.

IUCN has a relatively strong basis in its general policy to provide sufficient mandate and help guide this work. There are over 40 resolutions whose context explicitly references food security, food production and the importance of healthy natural habitats in underpinning many food systems. Although these cannot be used directly to guide IUCN's work it is indicative that since 1960 IUCN members have recognized and been concerned about the link between the conservation of healthy ecosystems and the role they play in underpinning human nutrition and well-being. More specifically there are 10 resolutions that contain explicit operative text that can be used to guide the institutions approach to this theme.

As early as 1975 the importance of linking restored ecosystem functionality and local sources of wild-harvested protein was highlighted in Resolution 12.7 Restoration of Semi-arid Environments and Wildlife which calls for research and demonstration activities to determine how wild fauna can be "…*protected and managed to help in restoring the productivity of these environments and utilized to yield food and other products of economic value to the people of these marginal lands*". Other resolutions call for measures to protect wild and traditional crops, increase the diversity of agro-ecosystems and landscape-level considerations for new forms of agriculture (14.3). Resolution 2.78 gives some guidance on marine fisheries issues explicitly calling for greater transparency in fishery agreements – particularly with respect to the involvement of local artisanal fishers and elimination of perverse incentives by industrialized countries that negatively impact developing countries.

Of particular relevance to this thematic programme area that will focus its work on food security of the rural and coastal poor is guidance provided with respect to the importance of local food systems and the role of food sovereignty. Resolution 3.017 requests the Director General to develop a programme initiative on "*biodiversity and an end to hunger*" with a view to "*enhance the understanding of the relationship between hunger eradication and biodiversity conservation (including agricultural biodiversity)*". In a similar vein resolution 2.64 urges that the socio-economic impact of unsustainable commercial trade in wild meat on long-term food security is recognized. Resolution 3.014 (Poverty Reduction, Food Security and Conservation) request should concentrate as a priority on ensuring tangible contributions from biodiversity conservation to equitable food

[14] The Foresight Report: The Future of Food and Farming 2011

security. While there is a reasonable general policy basis to move forward on food security it is also recognized that this issue is poised to move further up the international agendas. Therefore as and new developments emerge over the forthcoming years, it may be possible that additional guidance may have to be sought from Council once implementation begins.

Apart from IUCN's own internal mandate there are several international considerations that strengthen the justification for refocusing the current Thematic Programme Area on human well-being around the issue of food security. During next four years the world will report back on 15 years of action on progress towards MDGs. A food security focus will position IUCN to make a substantive contribution to this debate and in particular in highlighting the links between progress on MDG 7 (Ensure environmental sustainability) and MDG 1 (Eradicate extreme poverty and hunger).

The Strategic Plan for Biodiversity 2011–2020 also contains several elements to which a thematic programme area on food security can make a tangible contribution. There is clearly an immediate and direct link to Strategic Goal A and in particular to Target 2 (integration into national development policies) and Target 3 (removal of harmful subsidies – many of which tend to undermine the food systems of the rural and coastal poor). The proposed programme of work on food security will also directly address Target 11 (protected areas) – particularly but not exclusively with the projected large increase in marine and coastal protected areas, Target 13 (genetic diversity of cultivated plants, domesticated animals and their wild relatives) and Target 18 (traditional knowledge, innovations and practices). Strategic Goal D (Enhance the benefits to all from biodiversity and ecosystem services) is perhaps the goal that this work programme will address most comprehensively – notably Targets 14 and 16. Finally given that ensuring healthy, diverse and functioning ecosystems to underpin food systems is a cornerstone of this initiative it is also clear that the Thematic Programme Area on food security stands to make a concrete contribution to Strategic Goal B (Reduced direct pressures and promotion of sustainable use)

What is IUCN's niche in terms of food security and how can the Union make a difference? Ecosystem services and biodiversity (including agro-biodiversity and marine biodiversity) are critical for food production and adaptability of species used for food. Although these services may be provided by nature, they are also actively managed in many ecosystems by the people who live there. Water is stored or conducted to the right places: precious soil is protected with bunds and terraces and with retained trees and forest on ridges, around springs and along water courses. Soil fertility is maintained and enhanced by huge variety of methods from fallowing to composting to the incorporation of cattle and their manure into the farmed portions of the ecosystem. It is clear that these ecosystems services are often nourished, protected and enhanced by human action.

However, current approaches to food security policies and perspectives tend to focus on farming systems and crop breeding without a broader ecosystem approach. This risks missing opportunities of incorporating lessons on ecosystem management. For example, in fisheries a singular focus on existing individual fish stocks management without a proper understanding of marine ecosystems functioning often impacts the long-term sustainability of fisheries. Field margins, aquatic ecosystems, rangelands and forest provide critical food sources as well as the ecological services that sustain field and aquaculture production. This is an area of expertise that IUCN can bring to complement the current approach to food security.

The stability of food production over time also relies on good governance, including land tenure, water resources, ocean governance rights, social and gender equity, natural infrastructure for disaster risk reduction and resilient ecosystem services.

IUCN is distinctively positioned to bring the expertise of its global network on these issues to support all actors working to enhance food security within the framework of improved ecosystem management and biodiversity conservation.

IUCN's approach

IUCN has a unique opportunity to mainstream food security and the overall issue of human well being and ecosystems management by bringing the untapped expertise from the different Commissions as well as the regional and national members throughout the network. Several of these members are already increasing their efforts in the food security area.

IUCN will provide its knowledge and ongoing development of improved and enhanced ecosystem management and ecosystem services for food security to improve the livelihoods of rural poor and secure sustainable human food supplies.

IUCN work on food security will focus on the rural poor and in particular the 1.4 billion that directly depend to some degree on nature to sustain their livelihoods. IUCN's approach will extend beyond growing and catching food taking into account wider livelihood and ecosystem considerations necessary to provide long-term resilience, security and development opportunities.

Specifically IUCN will:

1. Promote science based knowledge and lessons in collaboration with Commissions and Members on how biodiversity conservation and ecosystem management underpins food security and contributes to long-term sustained increases in food productivity.
2. Advocate for increased equity in use of natural resources and ecosystem services between smallholder farming and fishing systems and industrial large-scale food production.
3. Promote gender equality to guarantee that women and men can have access to, participate in and benefit equally from food security initiatives.
4. Identify opportunities for and promote the incorporation of ecosystems services into national mitigation strategies especially with respect to enhancing the stability of production.
5. Advocate for the recognition of the role of biodiversity conservation and ecosystems in supporting international and national development and food security policies and nature-based approaches to complement existing food security strategies being undertaken by mainstream development organizations.
6. Build strategic partnerships with mainstream food security constituencies including the CG-system, International Fund for Agricultural Development, UN Food and Agriculture Organization etc.

Finally this Thematic Programme Area will focus on food security and conservation as it pertains to the livelihoods of the most vulnerable rural and coastal communities and, for reasons of focus and delivery, will not explicitly attempt to address broader food production issues related to modern international agri-business *per se*. Nevertheless close implementations links will be maintained with Thematic Programme Area on Greening the world economy, particularly with respect to their engagement with the agricultural sector – in order that operational and delivery synergies are optimized and policy and programmatic interventions are completely coherent.

Global results

Thematic Programme Area 4 has three global results: the first two on IUCN influencing policy and best practice respectively; the third on enabling and leading the broader conservation community and the role it can play in food security.

Global result 4.1: Global, regional and national food security policies and strategies benefit from biodiversity conservation and ecosystems management in strengthening the resilience and

sustainability of small-scale, community-based production and wild-harvest food systems (terrestrial and fisheries/marine).

Food security without sustainable ecosystem management is not possible over the long-term. The rural poor in particular, obtain a significant proportion of their food not only from agricultural land but also forest, rangelands, field margins, farm fallows, seas, rivers, wetland, and markets. Unfortunately the links between the food security and conservation communities are, at best, tenuous. The realities of how local food systems interact with and, to varying degrees, rely upon natural systems are seldom documented and reflected in national policies.

This result frames a programme of work that reaches out to the food security community. It does not pretend to have all the answers, neither will it over-exaggerate the role of biodiversity conservation in food security nor downplay the important of enhancing agricultural productivity. It will, however, fill a niche that is currently not being addressed – identifying opportunities for IUCN's ecologists and social scientists to engage and work with counterparts in agriculture and fisheries sectors.

It will seek to contribute to and shape food and nutritional security policies and strategies with nature-based options, drawing on IUCN's knowledge of how ecosystems functions, how they can be used and managed sustainably and how best they can be governed.

Global result 4.2: Multifunctional landscape and seascape management , incorporating the differentiated roles of men and women, is recognized and widely adopted as tools, standards and institutional arrangements that contribute to the stability and sustainability of food systems.

Many local food systems – especially those of the rural and coastal poor –rely directly and significantly on terrestrial and marine ecosystems to provide essential calories and nutrients. Natural and semi-natural ecosystems also provide non-food goods which can be an important source of income to purchase food while at the same time supplying critical functions that underpin the stability of local agricultural systems. However these relationships are seldom documented and hardly ever translated into practical policy and institutional arrangements.

While there are a range of tools and standards that guide practitioners and policy makers on the links between ecosystem management and livelihoods "writ large" – there is a dearth of reliable, evidence-based approaches and framework that explicitly address the issues and concerns that occupy food security specialists and policy makers.

This in turn means that the institutional arrangements that could facilitate a greater degree of complementarity between diverse and functional ecosystems and national food security policies are weak – or non-existent – in many countries. Together with it members, commissions and the Secretariat, IUCN will use its established strength in ecosystem management to develop common, locally adaptable, tools, approaches and standards that not only capture the scope and nature of food security–ecosystem relationship but help translate these into practical national and sub-national arrangements.

In developing these tools, standards and arrangements particular attention will be paid to addressing the differentiated roles that men and women often have in the production of food, as well as the differing levels of food insecurity on the basis of gender.

Global result 4.3: International, national and local conservation policies, practices and standards contribute to improved food production systems, food security and wider livelihood needs of both men and woman at the local level.

IUCN will play a leadership role in embedding food security issues, knowledge, best practice and solutions into the broader conservation community.

IUCN's general policy clearly state that it is both unacceptable and inefficient to carry out conservation activities without taking into account the needs of the people depending on the same biological resources to be conserved. Equally, given the contribution that healthy, diverse and functioning ecosystems can make to food security there are compelling reasons why food security policies that mainstream biodiversity considerations can help reinforce the delivery of the conservation agenda (the CBD strategic plan is clearly predicated on this fact).

In 2008–2012, IUCN played a leadership role with many of its members and partners in advancing the "Conservation Initiative on Human Rights". Building on this experience, IUCN will work with its members in the conservation community to agree common approaches to better and more explicitly incorporate food security into conservation practice – with a view to expanding the evidence-base as to how good conservation can help underpin the stability of many poor peoples' food production systems.

Thematic Programme Area 5: Greening the economy

Situation analysis

Beginning in the second half of 2008, the spectacular collapse of the US financial sector sent shockwaves around the world. As governments scrambled to save the banking system, the global economy was almost brought to its knees. The impacts of the financial collapse are still being felt in 2011 and the conservation community is not immune.

Among other effects, the financial crisis resulted in a massive shift in debt burden from the private to the public sector in most developed economies. This was accompanied by a drop in economic output and international trade, provoking many governments to increase public spending in an effort to avoid a prolonged depression. More recently, some developed country governments have sought to restore fiscal balance and reassure the financial markets by imposing deep cuts in public spending. One of the side effects of the economic downturn has been that private investors have shifted capital from risky financial instruments to so-called 'real' assets, which has bid up the prices of commodities (e.g. food, fuel and minerals), along with other contributing factors (e.g. drought, political instability). While there have recently been encouraging signs of recovery in the world's largest economies, many countries still face high rates of unemployment and crippling public deficits.

These are turbulent times for the global economy. And yet, there is a silver lining in the 'cloud' of the financial crisis. Some countries seized the opportunity to rebalance their development strategies and integrate sustainability concerns into their economic stimulus packages, e.g. Republic of Korea's Green Growth Strategy. More generally, increased public awareness of the fragility of modern economies may have reinforced appreciation of sustainability as an explicit policy objective. Businesses, which are the main drivers of economic development, are also becoming increasingly concerned with environmental issues. A study by AT Kearney (2009), for example, found that businesses that had established sustainability practices fared better during the crisis than companies which had not. The global economic crisis may have given new impetus to the transition to more sustainable forms of economic development, reflected for example in the growing popularity of the concept of a 'Green Economy'.

A common theme in discussions of a Green Economy is criticism of economic growth (conventionally measured in terms of value added, national income or Gross Domestic Product (GDP)) as a meaningful indicator of wealth and human well-being. The well-known economists Joseph Stiglitz, Amartya Sen, and Jean-Paul Fitoussi, in a report on the '*Measurement of Economic Performance and Social Progress*' (commissioned by the French Government in 2008), provided further support for the efforts of governments and others to develop better indicators of human welfare. Another report on achieving '*Prosperity without Growth*' (Jackson 2009), commissioned by the UK government, was also influential in strengthening the case for looking beyond GDP as a measure of national economic performance. Related work at the World Bank (2011), published under the title *Where is the Wealth of Nations?*, illustrates how valuations of changes in human and natural capital can radically alter our picture of the relative economic wealth and sustainability of societies.

Another important contribution to mainstreaming sustainability was a study of The Economics of Ecosystems and Biodiversity (TEEB) launched in 2007 by the G8, with the governments of five major emerging economies, and inspired in part by the publication in 2006 of the Stern Review on the Economics of Climate Change. The findings of the TEEB study were presented in a series of reports issued during 2009–10, targeting different audiences (scientists, policy-markets, business and local government) and highlighting the significant economic values of biodiversity and ecosystem services. Importantly, the TEEB report also illustrates the wide range of policy and market mechanisms that

are increasingly being used to 'internalize' the values of biodiversity in public and private decision making.

The TEEB reports were followed, in early 2011, by a major report from UNEP entitled *Towards a Green Economy: Pathways to Sustainable Development and Poverty Eradication*. This report challenges the myth that investing in the environment comes at the expense of economic growth. It highlights the fact that investing just 2% of global GDP per year (between now and 2050) into ten key sectors can kick-start a transition towards a low carbon, resource efficient economy. It also shows how the transition to a greener economy requires not only changing economic policies but fundamental shifts in production and consumption patterns.

While there is still a long way to go, there are some encouraging signs that the message is getting across. Governments are increasingly using economic incentives to reduce environmental damage and encourage 'green' business. Producers are becoming more aware of the environmental impacts of their activities and some companies seek competitive advantage by going beyond the minimum required by law. In many countries, consumers increasingly prefer products and services that not only do 'no harm' but also 'do good' for nature. The latter trend is reflected in expanding markets for green products around the world. For instance, the sale of certified 'sustainable' forest products quadrupled between 2005 and 2007 (TEEB, 2010), while markets for certified fish, organic food and other 'biodiversity-friendly' goods and services are growing faster than their conventional counterparts. Markets for intangible ecosystem services (e.g. watershed protection, carbon storage and sequestration) are also expected to grow rapidly in the coming years (Ecosystem Marketplace, 2008). Meanwhile, the development of green markets and increasing concerns about sustainability are leading more investors to seek out 'green' assets and opportunities.

Today, the time is ripe for IUCN to accelerate its efforts to 'green' the economy: the issue is attracting significant public attention and sits at the top of the environmental agenda. A growing number of governments are developing Green Economy strategies and 'green' market opportunities are expanding in the private sector. Through its unique value proposition, IUCN is well placed to advance knowledge, experience, and capacity to integrate biodiversity and ecosystem services in production and consumption patterns. Key priorities include the development and promotion of ambitious targets, robust indicators and credible assurance mechanisms to ensure that the 'Green Economy' is more than a passing trend but leads to concrete action and measurable changes in support of biodiversity conservation, sustainable use of natural resources, and more equitable sharing of costs and benefits.

Justification for IUCN prioritization as a Thematic Programme Area in 2013–16

Through its Green Economy Initiative, the United Nations Environment Programme (UNEP) has sought to articulate a clear vision and definition of a Green Economy. Other initiatives, such as the civil-society led Green Economy Coalition – of which IUCN is a founding member – and the OECD's Green Growth Strategy, also provided important contributions to discussions of a Green Economy, which is at the same time a major theme of the UN Conference on Sustainable Development (Rio 2012 or Rio + 20).

Early discussions of a Green Economy focused on the challenge of climate change and the need to adopt 'low carbon' development pathways. While climate change is clearly an essential component of any strategy for greening the economy, IUCN takes a wider view and must seek to ensure that biodiversity and ecosystem services more generally are reflected in Green Economy policies and strategies. With its vision of 'a just world', IUCN likewise has a deep interest in ensuring that 'Green Economy' policies help reduce poverty as well as environmental degradation.

Debates about the 'Green Economy' reveal that the fundamental role of nature in supporting human well-being is still under-appreciated. The perceived conflict between economic performance and environmental quality is an example of this knowledge gap. In the long-run, efforts to eradicate poverty and promote human development will only succeed if they reflect the dependency of human societies on healthy ecosystems or the economic risks of biodiversity loss. Ecosystem conservation and restoration is thus a key ingredient for achieving fundamental economic objectives such as greater productivity, reduced cost and risk, or increased profits. In short, the challenge for IUCN in the coming years is to demonstrate clearly how conserving nature contributes to economic development and business success.

IUCN's approach

Building on recent progress in generating knowledge and raising awareness on the economic values of biodiversity (e.g. the TEEB publications), the time has come to focus on practical solutions for mainstreaming ecosystem values in the economy. This work aims to fill the capacity and implementation gaps currently impeding the transition to a truly sustainable 'Green Economy'.

In line with the 2008–2012 IUCN Programme, efforts to ensure greater recognition of biodiversity values remain central to the Union's engagement in the transition to a Green Economy. As a member of both the TEEB Advisory Board (via the Director General) and the core TEEB research team, IUCN has a strong interest in ensuring that the findings of TEEB are used to influence economic decisions in the public and private sectors. These efforts are well aligned with the Convention on Biological Diversity's new Strategic Plan, notably those Targets relating to Strategic Goal A, which aims to address '*the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society*'. Indeed, the goals of correcting accounting systems and development policies (Target 2) and reforming market signals (Target 3) are fundamental steps towards greening the economy. At the same time, increased integration of biodiversity values in the economy will also help mobilize new and additional financial resources for conservation (Target 20)..

In 2013–16, the focus of the 'Greening the Economy' will be to identify and promote nature-based solutions to economic development, enterprise success and human livelihoods. In an effort to make biodiversity values relevant, activities under this programme area will integrate biodiversity concerns into two fundamental objectives of economic development: reducing risk and increasing opportunities.

Global results

Thematic Programme Area 5 has two results: the first on integrating nature into economic risk management; the second on building biodiversity-based economic opportunities. In both results, the common purpose is to make biodiversity increasingly 'material' and relevant in economic decisions.

Global result 5.1: Green economy policies and actions are enhanced through a stronger integration of biodiversity and ecosystem services in risk management at local, national, and global scales.

While the relationship between biodiversity and reputational risk is well recognized by many private companies, nature plays a more fundamental role in mitigating economic risks. The regulation and filtration of water flows, the mitigation of storm damage, natural pest and disease control, and recycling of nutrients are examples of how ecosystem services reduce risk. By demonstrating how ecosystem conservation, restoration and sustainable management can reduce investment risks, IUCN will address a major gap in the ongoing efforts to develop national and regional-level Green Economy strategies and plans. Such work will also complement cross-programme efforts to

demonstrate the importance of socio-ecological resilience as it relates, for instance, to climate change adaptation and food security.

Global result 5.2: Opportunities to benefit from biodiversity conservation and sustainable use are supported by relevant public policies and private decision making and contribute to greening the economy at local, national, and global scales.

The emphasis on building biodiversity-based economic opportunities is intended to complement a focus on nature-based risk management, by guiding investment and job-creation efforts towards sustainable production and consumption. The underlying rationale is that the development of new economic opportunities and biodiversity business models will help to realize more of the values of biodiversity and ecosystem services. It will also demonstrate how investments in natural capital can contribute to wealth and job creation. Activities under this Thematic Programme Area will focus on developing and promoting economic tools, reforming markets and implementing 'green' business models that conserve and restore natural capital, secure sustainable livelihoods and promote social equity. Actions will also be directed towards providing the right enabling policies and institutions to stimulate green economic opportunities (e.g. fiscal policy reform, public procurement policies, payments for ecosystem services, etc.).

Annex 1: STRATEGIC PLAN FOR BIODIVERSITY 2011–2020 AND THE AICHI BIODIVERSITY TARGETS (UNEP/CBD/COP/DEC/X/2)

Vision

The vision of this Strategic Plan is a world of "Living in harmony with nature" where "By 2050, biodiversity is valued, conserved, restored and wisely used, maintaining ecosystem services, sustaining a healthy planet and delivering benefits essential for all people."

The mission of the Strategic Plan

The mission of the Strategic Plan is to "take effective and urgent action to halt the loss of biodiversity in order to ensure that by 2020 ecosystems are resilient and continue to provide essential services, thereby securing the planet's variety of life, and contributing to human well-being, and poverty eradication. To ensure this, pressures on biodiversity are reduced, ecosystems are restored, biological resources are sustainably used and benefits arising out of utilization of genetic resources are shared in a fair and equitable manner; adequate financial resources are provided, capacities are enhanced, biodiversity issues and values mainstreamed, appropriate policies are effectively implemented, and decision making is based on sound science and the precautionary approach."

Strategic Goal A. Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society

Target 1: By 2020, at the latest, people are aware of the values of biodiversity and the steps they can take to conserve and use it sustainably.

Target 2: By 2020, at the latest, biodiversity values have been integrated into national and local development and poverty reduction strategies and planning processes and are being incorporated into national accounting, as appropriate, and reporting systems.

Target 3: By 2020, at the latest, incentives, including subsidies, harmful to biodiversity are eliminated, phased out or reformed in order to minimize or avoid negative impacts, and positive incentives for the conservation and sustainable use of biodiversity are developed and applied, consistent and in harmony with the Convention and other relevant international obligations, taking into account national socio economic conditions.

Target 4: By 2020, at the latest, Governments, business and stakeholders at all levels have taken steps to achieve or have implemented plans for sustainable production and consumption and have kept the impacts of use of natural resources well within safe ecological limits.

Strategic Goal B. Reduce the direct pressures on biodiversity and promote sustainable use

Target 5: By 2020, the rate of loss of all natural habitats, including forests, is at least halved and where feasible brought close to zero, and degradation and fragmentation is significantly reduced.

Target 6: By 2020, all fish and invertebrate stocks and aquatic plants are managed and harvested sustainably, legally and applying ecosystem based approaches, so that overfishing is avoided, recovery plans and measures are in place for all depleted species, fisheries have no significant adverse impacts on threatened species and vulnerable ecosystems and the impacts of fisheries on stocks, species and ecosystems are within safe ecological limits.

Target 7: By 2020, areas under agriculture, aquaculture and forestry are managed sustainably, ensuring conservation of biodiversity.

Target 8: By 2020, pollution, including from excess nutrients, has been brought to levels that are not detrimental to ecosystem function and biodiversity.

Target 9: By 2020, invasive alien species and pathways are identified and prioritized, priority species are controlled or eradicated, and measures are in place to manage pathways to prevent their introduction and establishment.

Target 10: By 2015, the multiple anthropogenic pressures on coral reefs, and other vulnerable ecosystems impacted by climate change or ocean acidification are minimized, so as to maintain their integrity and functioning.

Strategic Goal C: Improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity

Target 11: By 2020, at least 17 per cent of terrestrial and inland water areas, and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes.

Target 12: By 2020, the extinction of known threatened species has been prevented and their conservation status, particularly of those most in decline, has been improved and sustained.

Target 13: By 2020, the genetic diversity of cultivated plants and farmed and domesticated animals and of wild relatives, including other socio-economically as well as culturally valuable species, is maintained, and strategies have been developed and implemented for minimizing genetic erosion and safeguarding their genetic diversity.

Strategic Goal D: Enhance the benefits to all from biodiversity and ecosystem services

Target 14: By 2020, ecosystems that provide essential services, including services related to water, and contribute to health, livelihoods and well-being, are restored and safeguarded, taking into account the needs of women, indigenous and local communities, and the poor and vulnerable.

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

Target 16: By 2015, the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization is in force and operational, consistent with national legislation.

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

Target 17: By 2015, each Party has developed, adopted as a policy instrument, and has commenced implementing an effective, participatory and updated national biodiversity strategy and action plan.

Target 18: By 2020, the traditional knowledge, innovations and practices of indigenous and local communities relevant for the conservation and sustainable use of biodiversity, and their customary use of biological resources, are respected, subject to national legislation and relevant international obligations, and fully integrated and reflected in the implementation of the Convention with the full and effective participation of indigenous and local communities, at all relevant levels.

Target 19: By 2020, knowledge, the science base and technologies relating to biodiversity, its values, functioning, status and trends, and the consequences of its loss, are improved, widely shared and transferred, and applied.

Target 20: By 2020, at the latest, the mobilization of financial resources for effectively implementing the Strategic Plan for Biodiversity 2011–2020 from all sources, and in accordance with the consolidated and agreed process in the Strategy for Resource Mobilization should increase substantially from the current levels. This target will be subject to changes contingent to resource needs assessments to be developed and reported by Parties.

Table: IUCN's Contribution to the Strategic Plan for Biodiversity 2011–2020

IUCN Programme Area	**Contribution to Aichi Biodiversity Targets**
All parts of the Programme	Targets 1, 17, 19, 20
Core Programme Area: Valuing and conserving Biodiversity	Strategic Goal A, particularly Targets 1, 2 Strategic Goal B, particularly Targets 5, 6, 9 Strategic Goal C, particularly Targets 11, 12, 13 Strategic Goal E, Targets 17–20
Core Programme Area: Sharing nature's benefits fairly and equitably	Mainly Strategic Goal D, particularly Targets 14, 16, 18 and Strategic Goal E Contributes to Strategic Goal A (all), Strategic Goal B (Targets 6, 7) and Strategic Goal C (Target 11)
Thematic Programme Area: Nature-based solutions to climate change	Strategic Goal B, particularly Targets 5, 7, 10 Strategic Goal C, particularly Target 11 Strategic Goal D, particularly Target 15 Contributes indirectly to Strategic Goal A (all)
Thematic Programme Area: Managing ecosystems to improve food security	Strategic Goal A, particularly Targets 2, 3 Strategic Goal C, particularly Targets 11, 13 Strategic Goal D, particularly Targets 14, 16 Strategic Goal E, particularly Target 18 Contributes indirectly to Strategic Goal A (all)
Thematic Programme Area: Greening the economy	Strategic Goal A, particularly Targets 2, 3 Strategic Goal E, particularly Target 20