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AD HOC OPEN-ENDED WORKING GROUP ON
REVIEW OF IMPLEMENTATION OF THE
CONVENTION
Fifth meeting
Montreal, 16-20 June 2014
Item 6.6 of the provisional agenda

# HIGH LEVEL PANEL ON GLOBAL ASSESSMENT OF RESOURCES FOR IMPLEMENTING THE STRATEGIC PLAN FOR BIODIVERSITY 2011-2020

## *Draft Executive Summary*

*Note by the Executive Secretary*

1. In accordance with paragraph 24 of decision XI/4, the Executive Secretary constituted an expanded High-level Panel on Global Assessment of Resources for Implementing the Strategic Plan for Biodiversity 2011-2020, based on nominations received from Parties. The broadened regionally-balanced membership of 15 experts is providing a more bottom-up approach to its assessment in collaboration with other relevant initiatives.

2. This document provides the current Executive Summary of the High-level Panel, containing the draft key findings, which are based on six regional supporting assessments and global analyses, for consideration by the Ad Hoc Open-ended Group on Review of Implementation of the Convention at its fifth meeting. The full report of the Panel will be made available for the twelfth meeting of the Conference of the Parties reflecting discussions at the fifth meeting of the Working Group.

3. The document is being circulated in the form and language in which it was provided to the Secretariat by the High-level Panel.

# Resourcing the Aichi Biodiversity Targets

## An Assessment of Benefits, Investments and Resource needs for Implementing the Strategic Plan for Biodiversity 2011-2020

Second Report of the High Level Panel on Global Assessment of Resources for Implementing the Strategic Plan for Biodiversity 2011-2020

# Executive Summary

**Draft – 30 May 2014**

# PANEL MEMBERS

| HIGH-LEVEL PANEL MEMBERS | | |
|---|---|---|
| **Chair** | | |
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| | Mr. Wang Xin[1] | Director<br>Foreign Economic Cooperation Office, Ministry of Environmental Protection |
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| Germany | Dr. Heidi Wittmer | Deputy Head of Department<br>Department of Environmental Politics, Helmholtz Centre for Environmental Research (UFZ) |
| United Kingdom | Prof. Sir Robert Watson | Co-Chair<br>UK National Ecosystem Assessment |
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[1] Replaced Mr. Zhu Liucai in March 2014
[2] JUSSCANNZ: Acronym for Japan, United States, Switzerland, Canada, Australia, Norway, New Zealand

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# INTRODUCTION

The continued work of the High-Level Panel on Global Assessment of Resources for implementing the Strategic Plan for Biodiversity 2011-2020 is intended to support discussions and decisions on resource mobilisation and innovative financing in the lead up to and at the twelfth meeting of the Conference of the Parties (COP 12). This report builds on the global assessment of resources presented in the first High Level Panel report and its contribution to the understanding of the global resources required for the Strategic Plan and the Aichi Biodiversity Targets. It identifies and analyses the benefits of delivering the Aichi Targets, their investment and resource requirements, how these social, economic and environmental benefits and investments align with existing policy, and how they can be delivered in the most cost-effective manner. As such the report provides advice for improving the implementation of the Strategic Plan for all Parties.

It is understood that in order to achieve the mission of the Strategic Plan[3] and to meet the Aichi Biodiversity Targets, a significant increase in resources (financial, institutional, human and technical) will be required. These resources will need to be mobilised at different scales and from a variety of sources, including existing as well as new and innovative sources. The Strategy for Resource Mobilisation, adopted at COP9, recognises that funding for biodiversity has been insufficient to address the rate of biodiversity loss and that the lack of sufficient financial resources continues to be one of the main obstacles to achieving the Convention's objectives, and a number of preliminary targets were subsequently agreed at COP11 to provide an overall substantial increase in total biodiversity-related funding for the implementation of the Strategic Plan for Biodiversity 2011–2020 from a variety of sources (decision XI/4, para. 7)[4].

[3] 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."

[4] The following are the preliminary resource mobilisation targets, which are to be considered mutually supportive but independent:

a) Double total biodiversity-related international financial resource flows to developing countries, in particular least developed countries and small island developing states, as well as countries with economies in transition, by 2015 and at least maintaining this level until 2020, in accordance with Article 20 of the Convention, to contribute to the achievement of the Convention's three objectives, including through a country-driven prioritization of biodiversity within development plans in recipient countries, using the preliminary baseline referred to in decision XI/4, para. 6;

b) Endeavour for 100 per cent, but at least 75 per cent, of Parties to have included biodiversity in their national priorities or development plans by 2015 and have therefore made appropriate domestic financial provisions;

c) Endeavour for 100 per cent, but at least 75 per cent, of Parties provided with adequate financial resources to have reported domestic biodiversity expenditures, as well as funding needs, gaps and priorities, by 2015, in order to improve the robustness of the baseline and to refine the preliminary targets, as appropriate;

d) Endeavour for 100 per cent, but at least 75 per cent, of Parties provided with adequate financial resources to have prepared national financial plans for biodiversity by 2015, and that 30 per cent of those Parties have assessed and/or evaluated the intrinsic, ecological, genetic, socioeconomic, scientific, educational, cultural, recreational and aesthetic values of biological diversity and its components.

This Executive Summary is not a comprehensive overview of the regional studies and wider research carried out in support of the High-Level Panel report, but represents the key findings that the High-Level Panel felt would be most useful to Parties when considering the mobilisation of resources for biodiversity. All the Key Findings are supported by evidence found through the bottom-up research which will be presented in full to COP12.

**COP decisions and mandate of the High Level Panel**

The initial establishment of the High-Level Panel on Global Assessment of Resources for Implementing the Strategic Plan for Biodiversity 2011-2020 was welcomed by the fourth meeting of the Ad Hoc Open-Ended Working Group on Review and Implementation of the Convention (WGRI 4) (WGRI recommendation 4/2), which invited the Panel to report to COP 11. Following discussion of the High-Level Panel report at COP 11, the COP invited the panel, in collaboration with other relevant initiatives that could provide a more bottom-up approach, to continue its work with a broadened composition (of new Panel members with a regional balance) and to report back on the results of its work to COP 12 (decision XI/4).

The main objectives of the High-Level Panel are to:

1. Develop an assessment of the benefits of meeting the Aichi Biodiversity Targets, examining both direct biodiversity benefits and wider benefits to society that result from the investments and policy developments required;
2. Assess the range of the costs of implementing the activities needed to achieve the targets, taking into account the further work proposed in the High-Level Panel report to COP-11;
3. Identify opportunities to secure the benefits most cost effectively through actions in both the biodiversity sector and across economies as a whole that can mobilize / make better use of resources, to deliver greatest progress towards meeting the Aichi targets.

In its second phase of work the Panel has built upon the findings of the first report by initiating a more bottom-up approach that takes greater account of regional evidence and places more emphasis on the costs and benefits of meeting the targets, cost-effective means of reaching objectives, and synergies with other policy agendas.

## Summary of the findings of the first High-Level Panel

The first High-Level Panel report presented a global assessment of the costs of meeting the Aichi Biodiversity Targets by 2020, estimating that between US$ 150 billion and US$ 440 billion per year would be required to implement the twenty Targets. The Panel acknowledged the range of uncertainties that accompanies this estimate, and recognised that further research is vital to help develop and refine these estimates. It also highlighted that the resource needs were not a bill for the biodiversity convention, but called for a change in the way resources are allocated in our economies to get the best outcomes for biodiversity and sustainable development. The report added that a variety

of factors exist that would affect the magnitude of the funding requirements. In particular, inter-linkages and synergies between Targets and other goals mean that the approach, resourcing and effectiveness of the delivery of any one Target may influence the investment needs of another. The High-Level Panel highlighted some of the significant benefits of delivering the targets, as well as co-benefits to other sectors, and concluded that benefits secured through implementing the Aichi Targets are likely to significantly outweigh costs. However, the High-Level Panel also recognised that there is a need for the development of an appropriate and coherent political and institutional framework, including strong political will, in all nations in order to secure these benefits and synergies.

### Box 1 – Key messages from the first phase of the High-Level Panel

1. Implementation and delivery of the Targets requires the development of an appropriate and coherent political and institutional framework and strong political will, particularly at the national and regional level;
2. Investment in natural capital will deliver significant co-benefits for sustainable development;
3. Existing evidence suggests that benefits are likely to significantly outweigh costs;
4. There are clear differences in the relative scale of investment required to deliver the various Targets. In addition, the investment needed to deliver a Target is not necessarily correlated to its importance;
5. Many factors affect the magnitude of the estimates of the investments needed to achieve each of the Targets. These include the scope of the activities to be costed and associated investment opportunities and the potential synergies among Targets as well as uncertainties arising from limitations in data and methodologies;
6. There are many inter-linkages and co-dependencies to consider both between the Targets themselves, and between the Targets and other national policy goals;
7. Funding from a diverse range of international and national sources, and across different policy areas is required to secure the full range of economic and social benefits to be gained from meeting the Aichi Targets;
8. Further research is vital to help further develop and refine these estimates.

## Organisation of work

The High-Level Panel and its underpinning research and activities are co-sponsored by the governments of the UK, India, Norway, Japan and Brazil. Representatives from these governments, along with UNEP, UNDP, OECD, the World Bank and the CBD Secretariat, have thus been closely engaged in facilitating the work of the Panel.

The High-Level Panel have met three times on 30-31 May 2013 (Trondheim, Norway), 2-4 December 2013 (Chennai, India) and on 14-15 April 2014 (Brasilia, Brazil). Meetings reviewed progress on the preparation of the report and its findings, and feedback received during its review.

## Organisation of research

The CBD Secretariat commissioned a project for research to support the second phase of the work of the High Level Panel. This work was contracted to United Nations Environment Programme World Conservation Monitoring Centre (UNEP-WCMC) and ICF GHK.

The research was organised so as to collect bottom-up evidence from different countries, regions and initiatives at different geographical scales, through six regional research consultancies. This evidence supported analysis of the inter-linkages between targets and with broader policy agendas, as well as the costs and benefits of meeting individual targets at these different levels. The report will draw on the regional reports, supplemented by global analyses. It will present synthesised evidence and case studies from the regional assessments. In addition, in order to deliver a long term, stable and predictable increase in resources for meeting the Aichi Targets and the associated Vision for 2050, the High-Level Panel will make a series of recommendations which will be aimed at highlighting the actions required to ensure the values of biodiversity are reflected in plans and decisions throughout our economies and societies.

# KEY FINDINGS

## Key Finding 1:

### Meeting the Aichi Targets will deliver substantial benefits to peoples and the economies across the world

A major part of the underlying rationale for the Strategic Plan for Biodiversity and the Aichi Biodiversity Targets is that "*biological diversity underpins ecosystem functioning and the provision of ecosystem services essential for human well-being. It provides for food security, human health, the provision of 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."*

Assessments at the global, regional, national and local levels all highlight the substantial values of the essential provisioning, regulating, cultural and supporting services that ecosystems provide, and the benefits of actions for the conservation and sustainable use of biodiversity, and for restoration of degraded ecosystems.

**There is strong evidence of the benefits of biodiversity action for society across a wide range of Aichi targets, for all types of ecosystems and for all regions of the world.**

## Key Finding 2:

### Biodiversity contributes to sustainable development

**Biodiversity, and in particular functioning ecosystems, are powerful engines for delivering on the future sustainable development objectives at varying scales, particularly goals linked to food security, water security, livelihoods, climate change and disaster risk reduction, among other development goals.**

**Investments in biodiversity and in the implementation of the Aichi Targets will deliver significant co-benefits for sustainable development.** The Targets are inextricably linked to all aspects of sustainable development including poverty alleviation, the rights of indigenous and local communities, long-term food security, human health, climate change mitigation, and resilience and adaptation to climate change; as well as to ecological infrastructure[5], local livelihoods, job creation, and supporting national and global economies. Hence, biodiversity conservation and sustainable use constitute not only the environmental aspect of sustainable development, but are broadly linked to development benefits as a whole, including its economic and social dimensions.

[5] Also known as green infrastructure

**Expenditure and actions to meet the Aichi Biodiversity Targets should be recognised as part of wider investment needs for achieving sustainable development in the context of the post-2015 sustainable development agenda**

As well as being central to goals relating to the conservation of ecosystems and natural resources as global life support systems, biodiversity together with specific biodiversity-related targets and indicators should be integrated into all other relevant Sustainable Development Goal (SDG) focal areas; as being our global life support system. The SDGs should also create the enabling conditions necessary for biodiversity conservation and sustainable use, including improved institutions, policy development, and increasing human capability to make informed decisions with respect to the natural world. The Means of Implementation discussion and the biodiversity resource mobilisation agenda should also be mutually supportive. Adequate integration of biodiversity in the post-2015 framework will help reduce biodiversity financing needs.

**Achieving the Aichi targets will help to create jobs and revenue flows and support new economic and business opportunities.**

Natural capital represents, on average, 36% of the total wealth of low-income countries and more than half of the "GDP of the poor". Nature-based investments will be an essential component of the movement towards inclusive green economies. Sustainable agriculture, alongside technological development, is likely to improve incomes; establishing protected areas will create new opportunities for tourism business; and the control of invasive alien species and restoration are labour-intensive and would create jobs for skilled and unskilled labour. For instance, in South Africa's Greater Addo Elephant National Park, a US$5.5 million investment spurred US$14.5 million in private sector investment and the creation of 614 jobs.

## Key Finding 3:

## Biodiversity contributes to climate mitigation, adaptation and resilience

**Investing in biodiversity can effectively reduce national and community vulnerability, increase resilience and adaptation to climate-related impacts on all scales, and contribute significantly to climate mitigation, including helping to meet mitigation targets.**

Maintaining healthy oceans and conserving forests, and restoring and conserving peatlands are key strategies for climate change mitigation. Halving deforestation rates by 2030 would reduce global greenhouse gas emissions by 1.5 to 2.7 GT $CO_2$ per year, thereby avoiding damages from climate change estimated at more than US$ 3.7 trillion (net present value) globally. It is well established that carbon stocks in intact forests are more resilient than those in degraded fragmented forests. Other mitigation options include protection of soil carbon, and reducing emissions from wetland, marine and agricultural systems.

**Ecosystem-based adaptation can be cost-effective and generate multiple benefits for society**

Vulnerability of the people to the impacts of climate change, particularly the poor, is inextricably linked to impacts on ecosystem services. Investments in coastal protection (e.g. restoration of mangroves and coral reefs), watershed protection (e.g. forest and upland conservation) and maintaining and enhancing agro-biodiversity will be increasingly important in helping communities and the natural process on which they rely adapt to climate change and in minimising damage and loss. Biodiversity provides resilience against climate-induced shocks. In addition investment in peoples and ecosystems-based adaptation, particularly for the poor, will harness their contributions (including with indigenous and local knowledge), address vulnerabilities and build resilience for climate change.

**There is a need to further understand impacts of climate change on biodiversity, and their implications for ecosystem-based mitigation and adaptation and to enhance the climate resilience of such interventions.** At the same time, there is a need to improve understanding and address potential adverse impacts on biodiversity from other climate change mitigation and adaptation policies and approaches, and the role of local communities in assisting with ecosystem-based adaptation should also be recognised.

**The potential for enhancing synergies between the Aichi Targets and policies to address climate change is still not fully utilised and there is significant scope for improvements in this regard**

There are significant alignments and inter-dependencies between the Aichi Targets and policies to address climate change; including climate change mitigation policies designed to reduce greenhouse gas emissions from land use change and degradation. Investments in REDD+ for carbon mitigation are highly important for biodiversity conservation as well as for securing livelihoods provided that the adequate safeguards are in place and the potential trade-offs are addressed.[6] Nature-based solutions for climate adaptation can be cost-effective and contribute to the objectives of both the UNFCCC and the CBD.

## Key Finding 4:

**Investments in biodiversity can strengthen the provision of ecosystem services on which vulnerable communities depend for food security, economic opportunities and human well-being/quality of life**

[6] See Appendix 1 to the UNFCCC Decision 1/CP.16 Appendix 1 to the UNFCCC Decision 1/CP.16, "Guidance and safeguards for policy approaches and positive incentives on issues relating to reducing emissions from deforestation and forest degradation in developing countries; and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries" available at UNFCCC/CP/2010/7/Add.1, 15 March 2011, pages 26-27, http://unfccc.int/resource/docs/2010/cop16/eng/07a01.pdf, accessed 17 August 2012. The CBD Secretariat has provided advice on the application of relevant safeguards for biodiversity with regard to REDD+ UNEP/CBD/COP/11/24, Note by the Executive Secretary, 24 August 2012, http://www.cbd.int/cop11/doc/ accessed 1 October 2012.

**As biodiversity loss disproportionately affects vulnerable populations, investments in biodiversity can help to reduce the widening gap between the haves and the have-nots, by ensuring the long term provisioning of key services, and access to critical biodiversity resources.**

Regional evidence demonstrates that vulnerable communities within developing countries are particularly dependent on ecosystems and their services. About 70% of the world's poor – some 870 million people – live in rural areas and many are directly dependent on biodiversity for their survival and wellbeing, including for the direct provision of food, clean water, medicinal plants and other necessary goods.

**For many of the world's poor and vulnerable communities, lands and natural resources and associated traditional knowledge, are their primary capital assets, providing options to those that may otherwise have none.**

The land-based sectors account for a large proportion of economies and employment in rural parts of developing countries. Biodiversity provides diverse livelihood options, including a vehicle for starting small businesses. This can be a lifeline for poor households during times of crisis. Biodiversity provides a 'social safety net' for the rural and coastal poor, providing wild protein to supplement agriculture and nature based livelihoods to diversify on-farm income and offset the boom and bust of small holder farming. As a result, the sustainable use of natural resources is essential to allow for sustained and equitable sharing of the benefits that nature provides in creating such socio-economic opportunities.

**Biodiversity action needs to take account of distributional impacts, to ensure that benefits for poor and vulnerable communities are secured**

Action for biodiversity needs to take careful account of the needs of local communities, to ensure that potential negative impacts are identified and addressed. Schemes that help indigenous peoples and local communities and other land managers to capture a larger proportion of the value of ecosystem services will increase incentives for conservation and help to deliver the Aichi Targets. All such schemes will require an appropriate recognition, allocation and security of property or access rights. Taking into account and addressing the distribution of monetary and non-monetary benefits to and within local communities, including for women, is likely to increase the cost effectiveness of activities towards conservation and sustainable use of biodiversity.

## Key Finding 5:

## Biodiversity provides insurance value

**Investments in biodiversity can provide insurance against uncertain and accelerating future environmental change, and maintain and enhance future development options. Investments made now will reduce future costs and preserve opportunities for current and future generations.**

**Conservation and sustainable use of biodiversity is important not just for the range of values of the services that they currently provide, but also because of their**

**insurance value,** for mitigating risks, and for development opportunities. 'Insurance' is closely related to resilience, and biodiversity plays a crucial role in sustaining the resilience of ecosystems to cope with disturbance and change. By safeguarding critical ecological resources and functions, the ability to 'ride through' shocks – such as extreme events – increases. By safeguarding species and populations, the genetic variety of life is also protected, as well as the potential current and future values that may be associated with them. Thus healthy, functional and resilient ecosystems are increasingly being seen as a 'life insurance' policy for many communities, providing benefits across sectors including disaster risk reduction; food security; sustainable water management and livelihood diversification. This is particularly important in agricultural production and is an important concern for both large- and small-scale producers.

**Failing to halt the loss of biodiversity now will increase the risks and costs in the future**

The World Economic Forum Global Risks report found that five of the eight worst global risks are ecosystem-based. Taking insufficient action to address biodiversity loss will risk losing current and future benefits that could become vital in the future.

Strategies to halt ecosystem degradation now will decrease future costs of restoration, reduce the need for expensive manufactured substitutes to ecological systems, and reduce the costs of responding to humanitarian crises when flows of ecosystem services are impacted.

## Key Finding 6:

## Synergies, trade-offs and alignments across sectoral policies are prerequisites for effective implementation and efficient resourcing of the Aichi Targets

**Alignment, trade-offs and cross-sector linkages of policies, incentives and business strategies can help develop cost-effective development pathways towards a sustainable society. Improved alignments can lead to resource savings, synergies and help identify co-funding opportunities.**

**Mainstreaming of biodiversity into wider policy agendas, plans and budgets, offers significant opportunities for more efficient policy-making processes and co-funding.** At all levels, alignment between the Aichi Targets and other policy agendas, including development, growth, poverty alleviation, climate change, agriculture, forest, fisheries, water and health is increasingly taking place. Developing harmonized objectives across sectors and increased efforts to develop and implement mutually supportive policies and activities are important steps for reaching the Aichi Targets, delivering co-benefits and progress in sustainable development. This will ensure that contributions to meeting the Aichi Targets come from a wide range of sources across our economies and societies and avoid reliance on specific biodiversity budgets which are limited.

Sustainable development is contingent on an enhanced common understanding of the positive and negative interlinkages and dependencies between the conservation of biodiversity and its sustainable use in sectors such as agriculture, forestry, fisheries and aquaculture. In order to balance these two dimensions, there is a need to maintain the ecological infrastructure for regulating and cultural services on one hand and allow for the use of ecosystems for utilising provisioning services by sectors such as agriculture, forestry, fisheries and aquaculture.

**Efforts to capture the broad range of biodiversity values in accounting and reporting systems can advance the implementation of the Aichi Targets.**

Initiatives such as The Economics of Ecosystems and Biodiversity (TEEB), the Wealth Accounting and the Valuation of Ecosystem Services (WAVES) partnership, the ongoing development of statistical standards for environmental economic and ecosystem accounts from the United Nations Statistics Division and planned studies under the Intergovernmental science-policy Platform on Biodiversity and Ecosystem Services (IPBES), as well as related work at national and regional levels, are expanding the toolbox for the capturing of the range of values from biodiversity and ecosystem services in view of improved decision making. Increased use of such tools by nested nodes of decision-making in public and private sectors may significantly contribute to enhance long-term human well-being and sustainability.

**The strengthened science-policy interface for biodiversity and ecosystem services is a critical force in shaping the governance system for sustainable development.**

All sectors need scientifically-credible and policy-relevant information to help make decisions that account for the full range of values of biodiversity in their plans for resource use and investments. There is therefore a need for information of biodiversity and ecosystem services from a diverse range of knowledge systems, including indigenous and local knowledge and mainstream science. This will help to address the underlying drivers of biodiversity loss throughout our diverse economies and societies. IPBES has been established as a structured formal response to this challenge. The implementation of its work programme depends besides contributions to its fund to a large extent of in-kind contributions from institutions and individual experts. This opportunity to contribute to and benefit from such networking should be seized by both developed and developing countries.

## Key Finding 7:

## All countries need to invest in institutions and policy frameworks, direct conservation and sustainable use actions, incentives and economic instruments

**Developing and operationalising cohesive, well-designed institutions, and effective policy frameworks that are a prerequisite for effective and efficient biodiversity financing systems.**

Investing in policy frameworks and general enabling conditions is a pre-requisite for biodiversity action in many countries, and especially in less developed parts of Africa, Asia, Latin America and the Caribbean, and Eastern Europe. Actions to raise awareness, build capacity, develop the knowledge base and establish the necessary legal structures, institutions and governance frameworks are a prerequisite for effective delivery of all of the Aichi Targets, as well as contributing directly to Targets 1-4 and 16-20. In some regions, such as North America, the EU and Australasia, enabling frameworks are generally more developed, but much progress still needs to be made in raising awareness of the values of biodiversity (in quantitative, qualitative and some circumstances monetary terms), improving understanding of ecosystem services, and integrating knowledge and awareness into incentive mechanisms, sectoral policies and public and private sector decision making processes.

Barriers to meeting the Targets may have as much to do with a lack of the appropriate institutional frameworks and decision making processes as with a lack of resources. Effective action will require coherent policies, improved institutions and strengthened governance, engaging all relevant actors from global to local level.

**Countries need to invest in direct conservation and sustainable use actions, in developing incentives and economic instruments, and in technology.**

The full report, which will be made available for COP12, will present a typology of the investments needed to meet the Aichi Targets, and reviews evidence about investment needs in different countries and regions. It will show that "bottom-up" assessments of investment needs are broadly consistent with the "top-down" global assessment of investments needed to meet each Target presented in the High Level Panel's first report.

**Countries need to address the underlying drivers of biodiversity loss.**

Investment in mainstreaming biodiversity into other policy areas is a key priority for all regions. Since there is inadequate funding for biodiversity action in many countries, opportunities to integrate biodiversity with other policy agendas related to poverty alleviation, sustainable livelihoods and natural resource management are important. The role of south-south cooperation in supporting such integration is also an important element.

**There is a need to respect and learn from indigenous peoples and local communities' knowledge and customary sustainable use and their contribution to the sustainable use and conservation of biodiversity, including recognising property rights and enhancing their participation and involvement in planning and implementation processes.**

## Key Finding 8:

## Design and implementation of appropriate policy and financial instruments is essential to halt the loss of biodiversity.

**Achieving the Targets at least cost will require more efficient use of public budgets, together with the development of innovative financial instruments and incentives.**

The actions required to meet the Aichi Targets require major investments and, given the very real constraints, trade-offs and priorities will have to be made. Nevertheless, resources acquired through grants and government funding can and should be stretched using better financial strategies, providing better incentives augmented by providing incentives and supporting investments from the private sector as far as possible, recognizing the multiple benefits and beneficiaries of achieving biodiversity targets. However, there is equally a role for national governments in the establishment of the enabling conditions that would allow for further involvement of the private sector.

**Much can be gained by phasing-out perverse incentives and unsustainable practices, good land-use and marine planning and the development of green fiscal policies.**

The elimination of harmful and market-distorting subsidies, including those supporting agriculture, fisheries, forestry and the extractive industry, if well managed, would reduce negative impacts on biodiversity and free up resources that could be used for other investments in biodiversity protection and in more cost-effective development strategies. Proactive investments in sustainable production and consumption will be far less effective without either first, or at least simultaneously, eliminating subsidies to unsustainable production and consumption. At a global scale, it has been estimated that the removal of harmful fisheries subsidies, which currently amount to some US$ 19.2 billion, would result in a net gain in the returns to fisheries of US$ 124.8 billion ($77.6 – 170.6 billion) by 2020.

**Awareness raising of the many benefits that biodiversity provides is an essential undertaking. Through greater understanding and acceptance of the rationale and supporting arguments, the necessary policy decisions that support resource mobilisation can be easily justified and thereby promoting economic-efficiency, market access, income diversification, fiscal reform and private sector investment, and provide clear and consistent signals to consumers, producers, investors and decision makers.**

Environmental fiscal reform, payments for ecosystem services, biodiversity offsets, markets for green products, and the integration of biodiversity into climate change funding and international development finance all offer strong potential to achieve this if introduced wisely, under appropriate social and biodiversity safeguards and institutional frameworks.

## Key Finding 9:

## The monetary and non-monetary benefits of biodiversity conservation and its sustainable use far outweigh the costs of conservation and sustainable use

**The benefits of biodiversity conservation and sustainable use have been shown to greatly exceed the investment costs, for all regions and for a wide range of Aichi Targets. Based on HLP 1's annual aggregate figures of investment needs, the average global per capita investment needed for biodiversity conservation is estimated to be between approximately $20 and $60[7]. This translates to investment requirements ranging from 0.08 to 0.25% of global GDP.**

The first phase report of the High-Level Panel provided a first overall estimate of the level of resources required to deliver the Aichi targets globally, by aggregating global "top-down" estimates for each of the 20 targets. Through simple addition of the resource requirements identified for each Target, the resources needed to implement the twenty Aichi Biodiversity Targets were estimated at between US$ 150 billion and US$ 440 billion per year. These estimates include existing expenditures.

**Regional and country level evidence broadly supports the estimates of global resource needs made by the High-Level Panel in its first report. However, given the multiple benefits of the investments required, only a small proportion of these resources need to be found from dedicated biodiversity budgets.**

The top-down estimates of resource needs in the High-Level Panel's first report are broadly consistent with available assessments at the national, regional and global levels. Where there are differences, the evidence tends to suggest that the Panel's first phase estimates may have been rather conservative for some targets. In particular, the top-down global assessment in the first High-Level Panel report came up with lower estimates for some targets than are suggested in estimates for some high income regions, such as the EU, where land and labour costs are high. In addition, estimates for Targets 2-4 in the first HLP report are low compared to some other assessments as they are based on the costs of studies and plans, rather than the full resources required to implement policy change.

It is estimated that biodiversity-focused expenditures make up only 18% of total global resources; a further 25% of investments will support climate action and other ecosystem services; while the majority of expenditures (an estimated 57% of the total) will support wider sustainability, through control of pollution and invasive alien species, and the promotion of sustainability in key sectors. The implication is that a minority of the identified investments will need to come from dedicated biodiversity budgets, but most could be funded jointly through public budgets and the reprioritisation of private spending on agriculture, forestry, fisheries, water, pollution control and climate action.

[7] Based on a global population of approximately 7 billion people

## Key Finding 10:

### There is a need to increase investments substantially to bridge financing gaps

**Estimates at global, regional and national levels all point to a substantial gap between the investments needed to deliver biodiversity targets and the resources currently allocated. This is true for all of the Aichi Targets.**

The first High-Level Panel report found that, for most of the Aichi Targets, there is a substantial gap between the resources required and those currently being allocated nationally and internationally.

This finding is supported by assessments at global, regional and national levels. For example, a review by the Global Canopy Programme estimated current levels of global funding for biodiversity at between US$ 51 and 53 billion annually, compared to estimated needs of US$300-400 billion annually. It has been estimated that current global expenditures on species protection are less than one eighth of those required, and those for protected areas are less than one third of the levels needed in developing countries and approximately half of the levels required in developed countries. Similar conclusions have been reached by regional and national assessments in all of the world's regions, and for a wide range of biodiversity actions.

**Increases in dedicated funding for biodiversity action are needed but will not be sufficient. Closing the financial gap can only be achieved through realigning existing expenditures with biodiversity objectives, particularly those which currently lead to biodiversity loss, and improved sectoral integration. Most of the funding required to tackle the direct and indirect drivers of biodiversity loss will deliver multiple objectives and will require mainstreaming of biodiversity action into existing budgets.**

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