

Twelfth World Summit on Biodiversity
Special Issue:



BIODIV'2050

Resource mobilization for biodiversity and
the private sector's contribution

MISSION ÉCONOMIE DE LA BIODIVERSITÉ

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EDITORIAL



The Twelfth Meeting of the Conference of the Parties to the Convention on Biological Diversity (COP12), held in October 2014 in Pyeongchang, Republic of Korea, expressed worldwide concern about biodiversity, in ways that differed according to the national position on biodiversity conservation and the society's outlook on the relations between man and nature. This further confirms the idea that biodiversity is specific to territories and to societies and hence, biodiversity conservation must take account of differences in socio-economic and institutional realities.

The current international situation offers us a robust, potentially promising framework that is well adapted to a variety of approaches. But due to insufficient investments and financial resources it cannot be well implemented and the Aichi biodiversity targets, that aim to put an end to biodiversity degradation by the year 2020, are still far away. The challenges

and stakes of biodiversity need to be made better known and integrated at all levels.

Because of this situation, business entities are in the front line. They have the technical and financial ability to contribute to this collective momentum, and their contributions may often be a source of opportunity. Furthermore, strong social demand is driving businesses – provided that a coherent framework be put in place – toward biodiversity-enhancing development. Although institutional actors have a decisive role to play in defining and formulating the framework that governs the private sector, it is important to remember that the market has its own stimulus and can never serve as an allocable forecast budget.

The *Mission Economie de la Biodiversité* of the *Caisse des Dépôts* group participated in these international discussions and activities by organising a side-event to COP12 focused on the frameworks needed for biodiversity offsets⁽¹⁾, and made presentations at the Business and Biodiversity Forum⁽²⁾ on resource mobilization and innovative financing mechanisms for biodiversity conservation.

This special BIODIV'2050 issue on COP12 examines the problem of the private sector's contribution within

an international framework, i.e. the Convention on Biological Diversity (CBD) and gives the floor to high-level actors in this field, such as Dr Naoko Ishii (CEO of the Global Environment Facility), Pavan Sukhdev (TEEB Study Leader) and Carlos Manuel Rodriguez (Chairman of the CBD High-Level Panel on Resource Mobilization).

As the date of the Climate Change Conference in Paris grows closer, a distinction needs to be made between the challenges of biodiversity conservation and the challenges of climate change because the climate is certainly not the only cause in biodiversity degradation. And yet, the two are deeply intertwined due to the impacts of climate on the ecosystems and the responses of biodiversity to climate change, which are largely unforeseeable and are linked to the spontaneity of living organisms.

LAURENT PIERMONT
Director,
Mission Economie de la Biodiversité

A handwritten signature in black ink, appearing to read 'Laurent Piermont'.

(1) Entitled "Meeting Sustainable Development Objectives: the Strategic Significance of Safeguards to Biodiversity Offsets"

(2) The forum was held alongside the negotiations.

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Thinking out the appropriate frameworks: biodiversity offsets and safeguards

EXECUTIVE EDITOR: **LAURENT PIERMONT**

EDITOR IN CHIEF: **PHILIPPE THIEVENT**

DESIGN-EDITING-PRODUCTION: **LÔRA ROUVIÈRE, EMMANUELLE GONZALEZ ET VINCENT HULIN**

WRITING & CONTRIBUTIONS FROM: **LÔRA ROUVIÈRE, VINCENT HULIN, AURELIEN GUINGAND**

WITH HELP FROM: **ANNA DUPONT**

EDITING: **MISSION ECONOMIE DE LA BIODIVERSITÉ**

TRANSLATION: **TILLY GAILLARD**

GRAPHIC DESIGN: **JOSEPH ISIRDI** – www.lisajoseph.fr

LAYOUT: **PLANET 7 PRODUCTION**

CONTACT: meb@cdc-biodiversite.fr

BIODIV'2050 PRESENTS CURRENT DEVELOPMENTS AND REPORTS ON THE PROGRESS BEING MADE BY MISSION ECONOMIE DE LA BIODIVERSITÉ (MEB). THE OPINION SECTION ALLOWS CERTAIN KEY PLAYERS TO GIVE THEIR VIEWPOINTS ON CERTAIN SUBJECTS. THE VIEWS EXPRESSED ARE THEIRS AND THEIRS ALONE

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KEY CONCEPTS

The Convention on Biological Diversity (CBD)

The United Nations Convention on Biological Diversity (CBD) entered into force on 29 December 1993. It has three goals: conservation of biological diversity, sustainable use of its components, and fair and equitable sharing of the benefits arising out of the utilization of genetic resources.

The Parties

The Parties to the convention are all the signatories who have ratified it. This includes states, governments, principalities and other entities with legal status (the European Union for instance). The Convention on Biodiversity at present has 195 Parties.

The COP

The Conference of the Parties (called COP) is composed of all the Parties to the Convention. It is the governing body and meets every two years to examine progress made, establish priorities and draw up action plans and strategies to be adopted.

The Aichi biodiversity targets

The 20 Aichi biodiversity targets together form the 2011-2020 Strategic Plan for Biodiversity adopted by the Parties in 2010 at the Nagoya COP. It sets out common targets for biodiversity conservation to be achieved by the year 2020. These targets involve the Parties to the Convention and the whole United Nations system.

The NBSAPs

National Biodiversity Strategies and Action Plans (NBSAP) implement the CBD objectives at the national level in order to mainstream them into the public policies and planning processes of each of the Parties, e.g. France's National Biodiversity Strategy.

CHALLENGES THE CONVENTION ON BIOLOGICAL DIVERSITY: STAKES, CHALLENGES AND PROSPECTS STEMMING FROM THE COP12

The fact that the 12th Meeting of the Conference of the Parties to the Convention on Biological Diversity (COP12, Pyeongchang, Republic of Korea, October 2014), was attended by over 3000 representatives of governments, international organisations, NGOs and the private sector proves strong international interest in the stakes and challenges of biodiversity conservation.

The international community focuses on biodiversity by creating a robust yet complex mechanism

International community awareness dates back to 1992 and the Rio Earth Summit where countries signed the Convention on Biological Diversity (CBD), which officializes for the first time biodiversity conservation as a principle and promoted it to the rank of a target for the development of mankind.

Biodiversity received another boost at COP10 (Nagoya, Japan, 2010) when the Parties recognised the need for urgent action and adopted two major decisions: the Strategic Plan for Biodiversity 2011-2020 and the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of the Benefits Arising from their Utilization. Further, in order to mark the importance of the challenges and stakes of biodiversity, the United Nations General Assembly declared 2011-2020 as the United Nations Decade on Biodiversity.

The 2011-2020 Strategic Plan (see Box) is composed of the 20 Aichi Targets⁽¹⁾, and stakes out the new, shared international framework for actions in support of biodiversity and for achieving the first three targets of the Convention. The Plan

is to be implemented at the national and the regional level by all the Parties, and across the United Nations system using a common framework with the ambitious goal of putting a halt to global biodiversity loss by the year 2020 and stimulating this dynamic in public policies in all the signatory countries. This marks the transition from a project-based approach

for the conservation of remarkable biodiversity, especially through protected areas, to the inclusion of the challenges of biodiversity conservation and sustainable use of its components (Fétiveau *et al.*, 2014). Furthermore, since biodiversity is by definition connected to territories and societies, it requires approaches that

Technical implementation of the CBD: the NBSAPs and the national reports

The **National Biodiversity Strategies and Action Plans (NBSAP)** are the main instruments for CBD implementation at the national level. The Convention requires the Parties to prepare these strategies so that their biodiversity conservation and sustainable use targets can be translated into public policy and reflected in the various sectors of activity. Every four years the Parties must submit reports to the Secretariat on measures taken to achieve these targets at the national level.

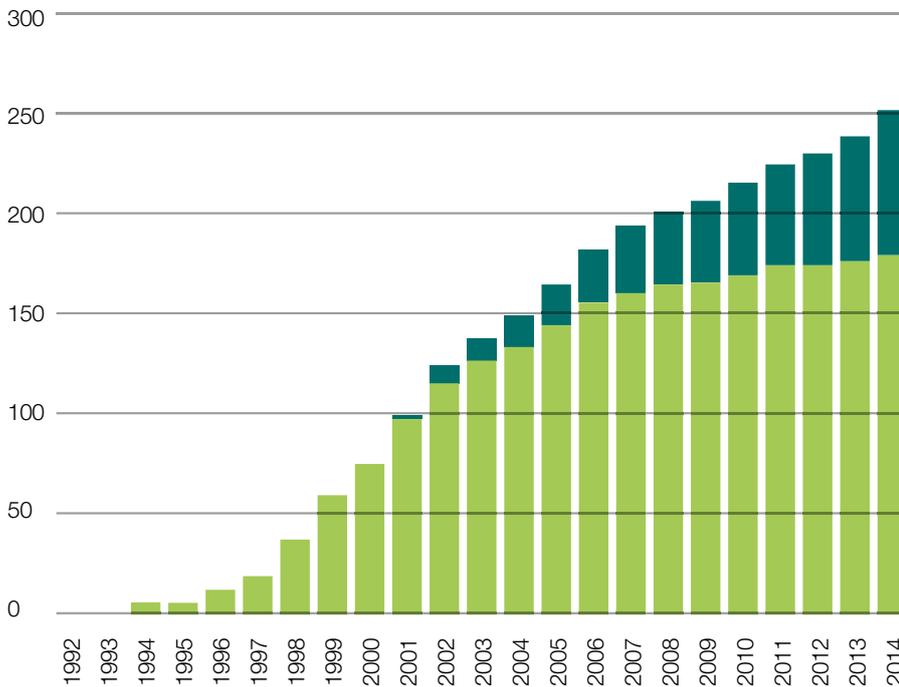
Financing for this work is earmarked according to the **Strategy for Resource Mobilization⁽¹⁾** that seeks to increase the volume of international financial flows and national funding for biodiversity conservation and sustainable use, and for the implementation of the Strategic Plan (See UNDERSTANDING). Furthermore, the Convention has a financial mechanism called the **Global Environment Facility (GEF)** that finances projects related to biodiversity in developing countries (See OPINION, Naoko Ishii, p.12).

(1) Decision IX/11: UNEP/CBD/COP/DEC/IX/11. Available at: <http://www.cbd.int/doc/decisions/cop-09/cop-09-dec-11-en.pdf>

(1) See: <http://www.cbd.int/doc/strategic-plan/2011-2020/Aichi-Targets-EN.pdf>

Figure 1 : Aggregate NBSAP figures

■ Aggregate number of NBSAPs
 ■ Revised aggregate number of NBSAPs



Source: The official CBD site - Status of development of national biodiversity strategies and action plans or equivalent instruments (NBSAPs) at 9 February 2015 [on line]. Available at: <https://www.cbd.int/nbsap/default.shtml>

→ can be adapted on the basis of shared general frameworks such as the one created by this strategic plan.

The CBD has become a complex mesh of strategies, goals, commitments, protocols, decisions and processes for involving the various stakeholders. The effects of these policies are not always felt at the national level although they have a direct impact on public policies and the regulatory frameworks on biodiversity in the States Parties. The CBD defines the general framework for each country to adopt in its National Biodiversity Strategies and Action Plans (NBSAP) (See Box). At present 93% of the Parties have prepared their NBSAP although they do not follow the most recent Strategic Plan⁽²⁾ (See Figure 1)

Although this Convention is not binding, the decisions adopted at the COPs are expected to be applied immediately following their adoption and, therefore can

(2) Source: CBD site: <http://www.cbd.int/nbsap/default.shtml>

have direct repercussions at the national level. Furthermore, the States have to report on their actions to the Convention's Secretariat. In France, the National Biodiversity Strategy 2011-2020 is fulfilling its commitments to the CBD.

Furthermore, to secure the commitment of all the stakeholders, the CBD has introduced initiatives and has connected with major actors such as the local authorities, parliamentarians, business (through the Global Partnership on Business and Biodiversity, See UNDERSTANDING), universities and the scientific community, non-governmental organisations and also with children and youth, and has launched certain initiatives with them. The synergy arising from the common framework that brings together States, actors, and stakeholders holds strong potential for actions against biodiversity loss and for the study of biodiversity problems that have not yet been included in the international system.

The Strategic Plan 2011-2020

The vision of the Strategic Plan 2011-2020 is “living in harmony with nature” by the year 2050 and its mission is to halt the loss of biodiversity by 2020 in order to maintain the resilience of ecosystems and the services that societies can derive from them. The Plan defines five strategic goals⁽¹⁾:

→ “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”.

(1) Cited in Decision X/2 : UNEP/CBD/COP/DEC/X/2. Available at: <http://www.cbd.int/doc/decisions/cop-10/cop-10-dec-02-en.pdf>

→ Resources assessment and mobilization: lessons learned from COP12

The 12th Meeting of the Conference of Parties to the CBD (COP12) led to the adoption of 35 decisions on strategic, administrative and budgetary issues. The main challenges for COP12 were the Strategy on Resource Mobilization and the mid-term assessment of progress towards the implementation of the Strategic Plan for Biodiversity 2011-2020. It also marked the entry into force on 12 October 2014 of the “Nagoya Protocol on access to genetic resources and the fair and equitable sharing of benefits arising from their utilization” and held the first meeting of Parties to this Protocol.

Assessment of the 4th Global Biodiversity Outlook (GBO-4): too little progress

At COP12, a mid-term assessment of progress towards the implementation of the Aichi Targets was presented in “Global Biodiversity Outlook 4”, a report published by the CBD Secretariat. It provides a summary of the state of biological diversity and an analysis of initiatives taken by the international community to fulfil the CBD goals.

The conclusion indicates that some progress has been made but not enough. At the present pace – although there are exceptions – the participating countries will not meet all the targets by the year 2020. Some target components, such as conserving at least 17% of terrestrial and inland water areas, are being achieved but for many others, the report shows a negative trend⁽³⁾. The disappearance of forestlands, the rise in the pollution

level due to nitrogen and phosphorus, the degradation of coral reefs and the extinction of species are unending. The causes: constant pressure and continued underlying triggers of biodiversity loss, as well as the shortage of resources for funding biodiversity conservation and implementing the Strategic Plan. The report also recognises that time is needed for new measures to produce effects but that some of them are not robust enough to counter ongoing pressure (CBD Secretariat, 2014). Reversing this trend will require a major effort, especially to obtain sufficient funding and to ensure that the stakes of biodiversity are factored into all sectoral policies.

Resource mobilization

This analysis stimulated discussion throughout COP12 that mainly bore on the question of the resources needed to reach the Aichi Biodiversity Targets and to implement the Strategic Plan. Negotiations were especially crippled by the problem of funding in relation to the determination of the final goals for the Strategy for Resource Mobilization (See Box below). Almost until the very end, challenges to the commitment taken in Hyderabad (COP11) to double financial resources for biodiversity by the year 2015 jeopardised the adoption of the final decision since some countries wanted to move the deadline to 2020. →

The Strategy for Resource Mobilization

The Strategy for Resource Mobilization was adopted at COP9 (Bonn, 2008). Its aim is to determine the means and the level of financial resources needed to implement the Strategic Plan. According to the principle of common but differentiated responsibility⁽¹⁾, the level depends on the national priorities and capacities of each country, bearing in mind the realities and needs of the developing countries (See. CBD decision IX/11). The developed countries provide additional resources to the developing countries to allow these latter to implement the measures adopted under the Convention. Resource mobilization, thus is composed of national budgets and North-South financial flows through Official Development Assistance (ODA) and technical cooperation for biodiversity. It also entails South-South cooperation and contributions from the private sectors, NGOs and other stakeholders⁽²⁾. To increase the volume of resources available, considering the present shortfall, this Strategy encourages the formulation of “new and innovative financial mechanisms” such as biodiversity offsets and payments for environmental services (PES).

(1) This principle is based on the idea that it would be unfair to impose the same environmental obligations on developing and developed countries.

(2) See UNEP/CBD/COP/DEC/X/3 decision. Available at: <http://www.cbd.int/doc/decisions/cop-10/cop-10-dec-03-en.pdf>

(3) See. Secretariat of the Convention on Biological Diversity (2014) Global Biodiversity Outlook 4. Montreal, 155 p. [on line]. Available at: <http://www.cbd.int/gbo4/publication/gbo4-en-fr.pdf>

Xavier Sticker, French Ambassador for the Environment

COP12 came to a close in October 2014. Major progress was made such as the entry into force of the Nagoya protocol. What were the stakes that France prioritised during the negotiations? For France, what were the main signs of progress at this COP?

Mobilizing resources for biodiversity in the developing countries was central to the negotiations. France championed the idea of doubling the volume of 2006-2010 aid during the 2015-2020 period and encouraged its European partners and the other developed countries to commit to this scale up. Altogether, COP12 took close to 40 decisions in a wide range of fields but I should like to give special emphasis to the very strong French effort to have COP12 leverage the contribution of the biodiverse ecosystems to the fight against climate change and support the inclusion of biodiversity in the post-2015 Agenda. The Nagoya Protocol, which has just entered into force, is a reference, an international instrument to fight biopiracy. France is preparing to ratify it and transcribe it into law, with strict respect for the obligations arising from the protocol.

Defining a final target of resource mobilization to implement the Strategic Biodiversity Plan 2011-2020 was one of the major challenges on the conference agenda. As a side-event to the negotiations, the Business and Biodiversity Forum, was held for the private sector. Its goal was to inspire businesses to make sustainable use of biodiversity. What do you think is the potential for mobilizing resources from the private sector to achieve the Aichi Targets? And what could be the role of the innovative financing mechanisms?

To put an end to biodiversity loss, each country needs adequate policies that are high enough on the national priorities list and effectively applied on the ground. As concerns financing for these policies, development aid is not a model of a fair game. All resources, both in the North and in the South, and both in the public and in the private sectors need to be enrolled. The optimisation of contributions from the private sector is still far from what it should be. The Secretariat of the Convention on Biological Diversity, together with the Global Partnership for Business and Biodiversity is preparing guidelines to evaluate the appropriate contribution of the private sector to the implementation of the Aichi Targets. We encourage



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businesses to be accountable for their actions. There are many possible ways to create innovative financing mechanisms, ranging from the elimination of harmful subsidies to the payment for ecosystem services. France is very actively promoting them through its partnership with the International Union for the Conservation of Nature (IUCN). As part of its development aid, France is financing pilot conservation projects that involve payments for environmental services and private operators in countries in the South.

Energy transition and climate challenges are often discussed, especially with an eye on COP21, which will be held in 2015 in Paris. Some people say that biodiversity could be a major solution to climate challenges. What do you think?

Let me give you two examples. 15% of the world's carbon stocks are in natural protected areas, and second, mangroves are known for their capacity to protect coastal areas against rising water levels and tsunamis. Biodiversity conservation is unquestionably part of the answer, as was shown at the environmental roundtable discussion in November 2014 where emphasis was laid on the connection between climate and biodiversity, and on nature-based solutions. France's energy transition law and the draft legislation on biodiversity both enable France to make progress on the environmental front and to give legal strength to its advocacy in support of a robust agreement at the 2015 Paris Climate COP. It is essential to generate a spill-over effect at the international level. One of the keys to the success of the December COP will be the contribution of all the actors, including business, to the Agenda of Solutions.

CHALLENGES THE CONVENTION ON BIOLOGICAL DIVERSITY: STAKES, CHALLENGES AND PROSPECTS STEMMING FROM THE COP12

➔ Despite present budgetary constraints and the situation surrounding the negotiations, the Parties finally confirmed the decision to double international financing for biodiversity for the developing countries by 2015. Their reference was the financial record between 2006 and 2010 and commitments are based targets rather than final goals, thereby leaving room for the Parties to renegotiate this decision at COP13 which will be held in Los Cabos, Mexico in 2016 (IISD, 2014).

Furthermore, the final decision⁽⁴⁾ explicitly mentions the need to mobilize domestic resources, even in developing countries, thus transferring part of the financial responsibility for biodiversity to all the Parties and not only to the developed countries (Chiarolla and Lapeyre, 2014). COP12 also encouraged the Parties to reduce the gap between identified needs and resources available at the national level by diversifying their sources of funding.

In this situation, the question of contributions from all the actors, especially from the private sector, seems essential. The private sector was represented and, for the first time a side-event was held (the Business and Biodiversity Forum), for businesses, official representatives of the Parties, associations, NGOs and other stakeholders. The Forum had two goals: to help business become aware of the importance of biodiversity and integrate biodiversity in their activities, and to discuss the contribution of businesses to the achievement of the Aichi Targets. ➔

(4) See: Decision CDB XII/3 (2014) Resource Mobilization. UNEP/CBD/COP/DEC/XII/3 [on line]. Available at: <http://www.cbd.int/doc/decisions/cop-12/cop-12-dec-03-en.pdf>



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Biodiversity and climate change: Luc Abbadie, Director, BIOEMCO Laboratory, Ecole Normale Supérieure⁽¹⁾

Considering the forthcoming Conference of Parties on climate change that will be held in Paris in December 2015, please tell us about the interrelation between climate and biodiversity.

Climate change has become a major, maybe even the number one cause of the decrease and even the extinction of species. This automatically leads to a change in the distribution, the structure and the dynamics of ecosystems. Ecosystems constantly affect the climate through various physical and biogeochemical processes. The retroactive effects of ecosystems on the climate occur at various time scales from quasi-immediate physiological processes to medium- and long-term evolving processes.

(1) Member of the Scientific Committee of CDC Biodiversité and Mission Economie de la Biodiversité

The guide to COP12 negotiations includes the question of the links between biodiversity and climate change. How do you think that the United Nations Framework Convention on Climate Change should incorporate this issue?

Climate and ecosystems interact. Throughout the history of the earth, variations in the two have always been closely linked. The climate crisis and the biodiversity crises are two representations, amongst others, of development pathways that are not compatible with the maintenance of a biosphere that is hospitable to human beings. The Convention on Climate Change give as much importance to consider the effects of climate change on biodiversity as it does to the effects of climate change on society and on the economy, or even at a higher level since biodiversity has a strong effect on the viability of human life on Earth.

Viewpoints: on the Climate Conference and the inclusion of biodiversity in the human development goals

COP12 emphasised the links between the other foremost stakes and challenges of sustainable development and biodiversity by recalling the need for greater accommodation of biodiversity in the major U.N. programmes, such as including the Aichi Targets in the definition of the post-2015 Sustainable Development Goals (SDG)⁽⁵⁾ and recognising the role

that biodiversity and ecosystems can play in adapting to and mitigating the effects of climate change, within the framework of the COP21 negotiations on climate⁽⁶⁾ (See Opinion Luc Abbadie). To ensure that the CBD Secretariat paid due heed to these provisions, it was set out in a ministerial statement called the Gangwon Declaration.

The present tendency in favour of non-binding increasingly adaptable commitments will have to prove in time that it is an effective response to the world's unrelenting biodiversity loss (Chiarolla

and Lapeyre, 2014). This Conference of Parties was not distinguished by far-reaching commitments; some people opined that the reason was because progress was already on its way. The CBD, which was adopted 22 years ago, is still highly appreciated as a platform for considering threats to the biodiversity. In the next step, the goal will be to respect earlier commitments and, in each country, to implement the resources required to do so. ■

(5) The SDGs are a United Nations development programme that builds upon the Millennium Development Goals scheduled to end in 2015. The programme is being negotiated and should be adopted at the special Sustainable Development Summit in September 2015.

(6) COP 21 is the 20th Conference of the Parties to the United Nations Framework Convention on Climate Change. It will be held in Paris from 30 November to 11 December 2015. For more information, consult: <http://www.cop21.gouv.fr/en>

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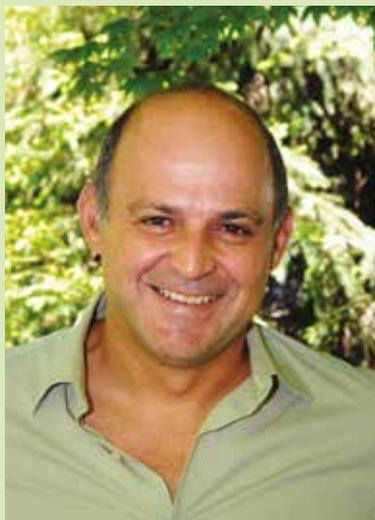
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OPINION STRATEGY FOR RESOURCE MOBILIZATION: STAKES, CHALLENGES AND THE PRIVATE SECTOR'S CONTRIBUTION



CARLOS MANUEL RODRIGUEZ – Chairman of the High-Level Panel on Global Assessment of Resources for Implementing the Strategic Plan for Biodiversity 2011-2020

How do you see the synergies between economic development and biodiversity conservation in light of COP12 and, in your view, what are the main outcomes of the COP?

The major challenge is to position nature conservation as a cost effective way to achieve growth stability and prosperity. No nation in the world can grow economically and socially in terms of human development without having strong and rich natural capital that gives it natural resources and environmental services. The need for water, food security and for climate security all depend on our biodiversity as well as the production of goods and services. At the same time, biodiversity is being threatened by consumption patterns and the sources of energy used by nations. Thus, it is critical for countries to understand

that they need to invest significantly in biodiversity conservation. They also need to understand how they can address these drivers of biodiversity loss and be able to achieve the goals of growth and stability in human development at the same time.

The Convention on Biological Diversity has a Strategic Plan (2011-2020) comprising the twenty Aichi Targets to address these issues. They all aim to preserve biodiversity and use it as a driver for growth and human development. The Global Biodiversity Outlook⁽¹⁾, which provided a mid-term assessment of progress towards the implementation of this Strategic Plan for biodiversity, and which was presented during the COP, stressed that while some progress has been made, it is not enough, because countries are not mobilising sufficient resources. There are two main sources of resource mobilization. One is the international finance resource flows for biodiversity conservation from all OECD nations that support developing countries in preventing biodiversity loss. The other biggest source is domestic resources: what every single country in the world – from the north and south, east and west – normally allocates in their national biodiversity conservation targets.

The High-Level Panel report on global assessment of resources for implementing the strategic plan⁽²⁾ submitted during the COP (which I chaired) indicated that a minimum of \$150 billion in annual investment is needed to protect nature globally. But at present, nations are only allocating around \$45 billion/year. This is less than what humans consume annually

(1) Global Biodiversity Outlook is the flagship publication of the Convention on Biological Diversity. It is a periodic report that summarizes the latest data on the status and trends in biodiversity and draws conclusions relevant to the further implementation of the Convention. The fourth edition of the Global Biodiversity Outlook was officially launched on the opening day of the COP12 in Pyeongchang, Korea. See: <http://www.cbd.int/gbo4/publication/gbo4-en-1r.pdf>

(2) <http://www.cbd.int/doc/meetings/cop/cop-12/information/cop-12-inf-04-en.pdf>

on ice cream. It means that we consume annually more ice creams globally than we invest in biodiversity conservation!

So, a threefold increase in the annual flow of resources is needed to meet the minimum investment recommended by experts and while this may be seen as a significant amount, it is still not enough if you put things in perspective. In the global context, in terms of global GDP, it represents 0.002%, and what we need to do is to increase this to 0.008%. It represents less than 1% of global GDP and the global benefits it can provide will be huge.

Concerning the main outcomes of this COP, I feel that they were all very conservative. There were no strong commitments in terms of addressing the global drivers of biodiversity loss, particularly in terms of resource mobilization, whereas there were many good examples of how many different countries are increasing biodiversity conservation resources.

While some progress is visible in different parts of the world, I do not believe that there is sufficient political willingness from most of the Parties to the Convention to commit to ambitious goals in this area. I am really concerned that we are losing precious time.

With the lack of state investment in resource mobilization, how do you see business and private sector engagement for biodiversity conservation? And in particular, how can the private sector positively contribute to resource mobilization for the preservation of biodiversity?

Most of the drivers of biodiversity loss are related to business and private sector activities – I am talking about the oil and gas industry, mining, agriculture,

→ fisheries and their environmental footprint. Consequently, the big challenge is to change consumption and production patterns in a sustainable way without killing these private initiatives, because we need the goods and services they provide to our society.

There are good private sector projects that protect nature or mitigate climate change. But it is important to understand that although these initiatives exist, they are still very small-scale or marginal because governments have not been able to step in and create the proper legal framework and incentives to make the shift. The business community needs a proper incentive framework to be able to mainstream biodiversity into their core businesses. This means that governments need to review their tax policies and begin to internalise positive and negative externalities. For example, when a company produces a good, it most probably generates carbon emissions which are not internalised in their production costs so there is no incentive to decrease their emissions and invest in better technologies or practices. If governments create the proper incentives to encourage this company to improve its practices while receiving benefits for doing so, we will probably see a major change in how companies behave in terms of climate mitigation. Biodiversity loss could be addressed in the same way to provide positive environmental impacts and services for people and for the economy.

This shows that we need to include financial and economic instruments to respond quickly and on an appropriate scale. The physical resources allocated to biodiversity conservation by governments are limited but there are very interesting innovative financial mechanisms: from payment for environmental services to tools such as biodiversity offsets, there is a whole range of different initiatives that can help finance and mobilise resources to round out the resources assigned by central government. Consequently, there is huge potential for mobilising resources towards biodiversity by implementing policies around innovative financial mechanisms at national level.



How can governments create the enabling environment for businesses to include biodiversity in their activities and contribute to its preservation? Could you highlight an example/relevant initiative?

I think there are many interesting cases all over the world, but most of them are finite projects or small-scale initiatives. Governments need to move from finite projects to international policies. This again highlights the need for governments to create legal and political frameworks. The challenge is that changing production and consumption patterns has high political costs and governments are reluctant to promote many of the changes needed, especially in the current climate of financial uncertainty. The return on investment for these kinds of policies is probably long-term – ten to twenty years – whereas in most of our democracies, elections occur every four or five years. This short-term view of politics is not conducive to a clear political vision that would indicate where we should be going.

On the other hand, I went a couple of times to the Business Forum and I only saw "biodiversity-friendly" businesses that

have a clear link between their business and biodiversity conservation or who understand the benefits in preserving biodiversity. I didn't see the big companies or representatives from the sectors which have a big environmental footprint. The businesses represented were probably the forefront of the private sector.

Ultimately, there must be a political dialogue between the business community and governments, and I haven't seen them talking seriously about this issue, even at the highest level. I also believe that in many governments, there is a lack of "environmental champions" to create the momentum to begin the transformation of the productive sector. Even though we have ministers of the environment all over the world, they are not strong enough to really influence the national planning system and budget programs. We should engage the ministers of finance and the ministers of planning to work with the ministers of the environment in order to really mainstream biodiversity conservation onto the development agenda and include natural capital as a key component in development policies. ■



DR. NAOKO ISHII - CEO and Chairperson of the Global Environment Facility (GEF)

With continuing strategic planning for biodiversity at various levels, financing for biodiversity has become a theme of ever-more central importance in advancing the three objectives of the Convention. Could you explain the main issues of the Strategy for Resource Mobilization and the role of the GEF in its implementation?

The Global Environment Facility (GEF) is dedicated to international cooperation with 183 countries working together with international institutions, civil society organizations and the private sector to address global environmental issues. The GEF serves as a financial mechanism for several international conventions such as the Convention on Biological Diversity (CBD) and provides funding to help countries implement the Strategic Plan for Biodiversity 2011-2020 and achieve the Aichi Targets.

We are very pleased that donors during the completed replenishment committed \$ 4.4 billion for the next four years, GEF-6, 2014-2018. Biodiversity became the key focal point, with \$ 1.3 billion allocated

to the biodiversity focal area to help countries achieve the Aichi targets. In addition, funding from other focal areas will make direct and indirect contributions to the achievement of the Aichi Targets and we estimate that this should reach an additional amount of \$500 million. We take this as recognition of the importance that governments attach to combating global biodiversity loss and achieving the Aichi targets.

Consistent with the CBD Strategic Plan, the goal of the GEF Biodiversity Strategy is to maintain globally significant biodiversity and the ecosystem goods and services that it provides to the society. To achieve this goal, the strategy includes four objectives: improving the sustainability of protected area systems, reducing threats to biodiversity, sustainable use of biodiversity, and mainstreaming conservation and the sustainable use of biodiversity into the production landscape/ seascapes and sectors.

How would you describe the many scales and the different kinds of actors in financial mobilization strategies at national levels? How do you see the contribution of the private sector in enhancing resources mobilization for biodiversity?

Even though it might be considered a bit narrow, the GEF deals with public sector funding. Consequently, to answer your question, the real issue is, how can we use these public funds to draw the private sector into biodiversity preservation actions?

For GEF, there are two ways to mobilise private resources for biodiversity management. First, helping government or public sector bodies to involve the private sector in biodiversity projects. For example, involving the private sector to contribute to the financial sustainability of protected areas is one focus; we have a considerable number of projects in this area. Another example is that we build

capacity of producers to meet certification standards such as those implemented by the Forest Stewardship Council and Marine Stewardship Council.

Thus, the way GEF operates is like two sides of a coin: the public sector is our main client and we engage with them and build capacity so they can regulate, create incentives and set up a policy framework and this is helping all actors – both public and private – to be more aligned with biodiversity goals and aspirations. The other “side” of our action comprises examples where we engage directly with the private sector, and try – both through incentives like certification or regulatory practices – to guide their production trajectories towards more biodiversity-friendly, neutral or less destructive production practices.

Finally, one of the new elements of the GEF Biodiversity Strategy (GEF-6) for the next four years is natural capital accounting. One problem today is that natural capital doesn't have a value. Non-recognition of the value of biodiversity and ecosystem services is a key underlying driver of biodiversity loss. Taking this into account could guide decision-making and the associated public investment choices. Indeed, when people think about a resource mobilization strategy for biodiversity, they tend to focus a lot on official development assistance, but there is an enormous potential at national level to ensure that resources that are currently being expended in ways that are damaging to biodiversity are either reallocated towards more neutral – or biodiversity-positive – practices. This new program (10), “Integration of Biodiversity and Ecosystem Services into Development and Finance Planning” builds on the conceptual framework of the Millennium Ecosystem Assessment which assessed the value of biodiversity to society through the goods and services it provides to society (cf. Aichi Target 2).

→ **Could you tell us more about the GEF's investment programs based on the Integrated Approach Pilots? Has the GEF identified any flagship initiatives of private sector mobilization of resources for biodiversity in its various projects around the world?**

The potential solutions to the loss of biodiversity are intrinsically systemic. That is why we need to adopt a more synergistic, holistic and integrated approach. Our new integrated investments aim at creating multiple environmental benefits by involving a broad range of stakeholders, organizations and sectors, including government agencies, businesses and NGOs.

The GEF-6 integrated approaches include pilot investments in programs focusing on Global Commodities, Food Security in Africa and Sustainable Cities. The most relevant program for the private sector *vis a vis* biodiversity management is the one focusing on the global commodity supply chains for beef, soy, palm oil, and pulp and paper. Production processes of these global commodities are a major contributor to deforestation and greenhouse gas emissions, especially in places where important biodiversity remains. In order to address the pressing issue of the sustainability of these production processes, we need to create a kind of platform bringing together all stakeholders, including the private sector, e.g. the plantation, the processing companies, the consumer market and the government. This program "Taking Deforestation out of Global Commodity Supply Chains" is a four year \$45 million pilot program to reduce and eliminate deforestation as part of the production process of these commodities, building upon the significant commitments made by companies, industry groups and governments. Such an integrated approach can change commodity production pathways before they cause irreversible damage to ecosystems and the natural resource base. The approach must remove the barriers to introducing sustainability measures along a single commodity supply chain and harness the potential of addressing these key agricultural commodities in a combined manner. The GEF will use this initiative to coordinate efforts and provide

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The potential of Access and Benefit-Sharing as a contributor to resource mobilization

“ The Nagoya Protocol (NP) on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization (ABS) is a supplementary agreement to the Convention on Biological Diversity (CBD) and provides another opportunity for private sector engagement. The NP provides a transparent legal framework for the effective implementation of one of the three objectives of the CBD: the fair and equitable sharing of benefits arising out of the utilization of genetic resources. It was adopted in Nagoya, Japan in 2010 and entered into force in Pyeongchang, Republic of Korea, in 2014. As of today, 57 countries have ratified the protocol

The parties to the NP have the opportunity to establish the legal and institutional framework to provide access to genetic resources and share the benefits derived from their utilization. By establishing a clear and transparent mechanism, parties to the NP are opening the doors to investors interested in research and development of genetic resources or on tapping into existing value chains of nature-based products in compliance with the provisions of the NP.

The engagement of users and providers of genetic resources under the NP has the potential to generate significant monetary benefits including access fees, up-front payments and royalties. There are also significant non-monetary benefits for provider countries including technology transfer, institutional capacity building, and product development. There are many examples of ABS between users and providers of genetic resources around the world, including some supported by the GEF. The engagement of users and providers of genetic resources in ABS agreements, has proven to bring benefits in the millions of dollars, even in cases where the ultimate goal of research and development has not been achieved, like the identification and use of an active compound of interest to the pharmaceutical industry.

The Nagoya Protocol has the potential to bring significant financial and non-monetary benefits to those who engage in ABS agreements. In essence, The NP should be seen as setting the rules for a “new business model”, a model that should greatly contribute to the mobilization of resources toward meeting the goals of the CBD.”

- Naoko Ishii

↳ a model for replication across sectors and geographies. The program seeks to shift the sustainable production of key commodities from a niche market and non-scalable specialized operations into mainstream business practices. Its success will be measured by the increase in the supply of key commodities that do cause additional deforestation.

Another program along the same lines is the Food security program in Africa involving farmers, local communities as well as the private sector (seed companies, fertilizer companies, etc.) to ensure that

we will not repeat the past mistakes of the "Asian Green Revolution". The African green revolution will have to be more friendly and compatible with environmental sustainability, so it needs to involve all stakeholders. The third pilot program focuses on "Sustainable Cities" which was chosen because the world is rapidly urbanizing with private sector activities increasingly concentrating in urban centers, so without a clear path towards urban sustainability it will be very hard to change the current worrisome trend, especially with regards to GHG emissions.

Let me also mention our international water programs, which support integrated approach to fisheries management ranging from small scale artisanal fisheries to larger operations. The strategy is to strengthen fisheries institutions, promoting market platforms, introducing or expanding the use of sustainable standards through the supply chain. Four years ago we initiated a program to promote efficient and sustainable management of fisheries resources and biodiversity conservation in the ABNJ (Areas Beyond National Jurisdiction). With a grant of US \$50 million, the GEF has leveraged over \$270 million in co-financing from public and private partners including: the International Coalition of Fisheries Associations and the International Seafood Sustainability Foundation. One of the program's objective is to support a set of business cases that offer clear potential returns on investment and value propositions to catalyze pilot investment into public private partnerships. For example, the program is supporting public private partnerships in South East Asia to develop workable management approaches for tuna fishing, and to support engagement with high value global markets for products such as sashimi. The project is supporting the development of business plans, agreements on management controls, which will make the fisheries profit more predictable and in this way allow significant investment from the private companies into infrastructure, including innovative technologies that reduce bycatch and improve fishing productivity.

These examples show how we try to achieve greater involvement of the private sector in our program. The approach is almost always the same as the GEF works with the government to both strengthen the legal and regulatory framework and - to make sure that it's a long term approach - provide support to establish financing mechanisms. ■



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UNDERSTANDING HOW CAN THE PRIVATE SECTOR CONTRIBUTE TO RESOURCE MOBILIZATION TO REACH THE AICHI TARGETS?

Despite the States' commitment to the CBD, biodiversity loss has not let up, and, if conditions do not improve, the targets set for 2020 will not be reached. COP12 and the publication of *Global Biodiversity Outlook 4*⁽¹⁾ emphasised the shortage of resources allocated to biodiversity conservation needed to achieve the Aichi Targets. The adoption of the resource mobilization goals was one of the main challenges for COP12. During COP12 the Business and Biodiversity Forum was held as a side-event on this issue for representatives of businesses and the private sector. Because of their impact and dependence on biodiversity, businesses are major actors in the fight against the degradation of biodiversity. And because of this situation, mainstreaming biodiversity into business and its contribution to obtaining resources for biodiversity conservation is becoming a growing challenge.

Mobilizing resources to achieve the Aichi Targets: what are the stakes?

The state of the resources: needs outweigh financial capacity

Global, regional and national estimates report a wide gap between investments needed to achieve the Aichi Targets and current resource allocations. According to the first report of the High-Level Panel on Global Assessment of Resources for Implementing the Strategic Plan for Biodiversity 2011-2020 (2010) an estimated annual amount of 150 to 440 billion dollars, i.e. between 0.20% and 0.53% of the world's annual GDP⁽²⁾, is needed to reverse the present biodiversity degradation trend⁽³⁾. This would defray

the annual cost of extending the world's protected areas to comprise 15% of the earth's surface (an estimated 4 to 45 billion dollars) and the cost of halting deforestation in the developing countries, which would require an estimated annual investment of between 25 and 185 billion dollars⁽⁴⁾. The present annual outlay for biodiversity is estimated at close to 50 billion dollars (CBD 2014b) which is a large amount but only represents between one-sixth and one-eighth of the total amount needed. Most financing, i.e. 25.5 billion dollars, comes from the public sector (Parker *et al.* 2012). The sum is insufficient and is poorly apportioned considering the distribution of biodiversity in the various regions of the world⁽⁵⁾. The volume of resources needed seems very high but economic valuation of the ecosystem services (see Box p.17) shows that the cost of inaction is even higher, about 10 to 100 times more than the cost of biodiversity protection actions (Parker *et al.* 2012).

(1) See CHALLENGES p.6

(2) On the basis of the world's GDP for 2013 evaluated by the World Bank at 75,621,858 billion US dollars. Source: <http://databank.worldbank.org/data/download/GDP.pdf>

(3) The range of estimates is very broad because of the variety of methods available to evaluate the costs and the potential synergy with the costs incurred to achieve various goals, such as the fight against climate change or sustainable agriculture.

(4) The data available come mainly from the *Little Biodiversity Finance Book* (cf. Parker *et al.* 2012). These figures are open to question since full data are not available for some of the countries and some financing sources are not taken into account.

(5) Global funding for biodiversity comes from countries considered to have developed economics (78%) or emerging and developing countries (22%). 41% is spent in the developing countries (Parker *et al.* 2012). There is no correlation between the volume of the resources and the abundance of the biodiversity or the country's dependence on ecosystem services.

Since biodiversity conservation may require a significant scale up in financial resources, various financing scenarios need to be studied. Firstly, everyone agrees that to reach the desired financial level requires strong political support, especially to optimise current outlay and its impact. The high-level CBD panel on resource mobilization has drawn up a series of recommendations aimed to increase the impact of the financial outlay and thereby decrease the volume of additional funding needed (CBD, 2014b). With this in mind, the question of fighting against the underlying causes of biodiversity loss is still a major issue involving, for instance, the conversion of harmful subsidies for biodiversity or the inclusion of conservation and sustainable use of biodiversity in all sectors of the economy.

Furthermore, financial needs exceed the ability to obtain national tax revenue, both in countries of the North and the South (Fétiveau *et al.* 2014). This explains the need to widen the call for resources by drawing on innovative financing mechanisms and all the actors, especially the ones in the private sector. Up to now, 20% of the reporting countries⁽⁶⁾ indicated a tendency for more funding to be obtained from the private sector, which pays between 7% and 38% of the total national biodiversity budget, depending on the country (CDB, 2014a). This gives an idea of the potential contribution from the private sector to delivering the resources needed to achieve the Aichi Targets. The High-Level Panel on Global Assessment recalled the need to produce and implement economic instruments and incentive measures together with coherent policies that attract all the actors to efforts to decelerate biodiversity loss.

(6) Countries that submitted national reports on resource mobilization monitoring

➔ **Resource mobilization: the potential for innovative financing mechanisms to preserve biodiversity**

For Parties to the CBD, innovative mechanisms are innovative if they: (i) are economic instruments for environmental management applied to biodiversity that are able to attract new sources of funding, or (ii) introduce an eco-conditionality principle into politics and projects that lessens the need for future funding (Fétiveau *et al.*, 2014). The CBD identifies six “new and innovative” financial mechanisms worth studying⁽⁷⁾: schemes for payment for ecosystem services (PES); biodiversity offset mechanisms; environmental fiscal reforms; markets for green products, business-biodiversity partnerships, and new forms of charity; integration of biodiversity in international financing for development; accommodation of biodiversity in the preparation of funding mechanisms for climate change.

Where public financing from traditional tax revenue has been insufficient, innovative financing has been recognised as a solution to try to offset the discrepancy

between financial needs and financial capacity. Alongside Official Development Aid (16.3 billion dollars) and domestic government funding mentioned above (See Part 1.a.), a major part of the funding now comes from innovative financing mechanisms such as agricultural subsidy reforms (7.8 billion dollars), greening commodities (6.6 billion dollars) and biodiversity offsets (3.2 billion dollars)⁽⁸⁾. According to the global monitoring report on resource mobilization (CBD, 2014a), 50% of the CBD memberships have established PES-type regimes, about 20% have established biodiversity compensation mechanisms and about 42% have payment mechanisms focused on green products. As concerns certification, 10% of the world’s forests, i.e. about one-third of timber production forests, are certified under “good management”⁽⁹⁾. Uganda, for instance has reported close to 2 million dollars per year of funding obtained from small, mechanism implementation projects, much like the PES⁽¹⁰⁾. These mechanisms are currently being developed, and France,

for instance, officially feels that they offer a promising solution. (See Opinion of Xavier Sticker p.7).

However, it is worth noticing that the additionality of these mechanisms as opposed to so-called «traditional» financial sources can be a problem. Additionality is difficult to measure because the increase in revenue derived from these mechanisms can sometimes conceal the decrease in the allocation of domestic resources. Similarly, the distinction between traditional and innovative financing is not clear enough to accurately estimate their revenue-raising capacity (Expert and Lemaitre-Curri, 2013).

Nonetheless innovative financing mechanisms have considerable potential for mobilizing resources. These instruments, sometimes inappropriately called «market-based instruments», can be used to finance and implement actions that bring out the values of biodiversity or cover the cost of biodiversity restoration. Moreover they are a source of ecological added value on the ground. For business, these mechanisms contain a source of risks that must be foreseen and managed, but they also provide many opportunities that must be capitalised to ensure future business.

Because of the above, the private



(8) Figures from Parker *et al.* 2012

(9) UNEP/CBD/COP/12/13/Add.1 14 April 2014 – Global Monitoring Report on resource mobilization.

(10) *Ibid*

(7) Decision IX/11, 2008. The term “new and innovative financial mechanism” was replaced, through a decision adopted at COP12, by the term “financing mechanism for biodiversity”.



→ sector is central to the planning and implementation of these financing mechanisms, which are the main lever for private sector involvement in mobilizing the resources needed to achieve the Aichi targets.

How does the private sector contribute to resource mobilization?

The impacts and dependencies of businesses on biodiversity

The private sector has long viewed the environment as a source of abundant natural resources to be exploited at a low cost or as an area subject to regulations connected to environmental impacts. The connection between the natural resources and their source, the ecosystems, was poorly, or not at all understood. Yet businesses have a strong effect on the ecosystems and, on the other hand, are dependent on them. Dependency is more obvious in certain sectors such as forestry, agriculture and fishery than in others, like the services sector, but nonetheless exists in the great majority of sectors.

The TEEB (The Economics of Ecosystems and Biodiversity) initiative and the valuation studies of ecosystem services and biodiversity (See Box opposite) clearly describe the importance of the ecosystems for business activities and the functioning of our societies. Work on the “TEEB for Business” approach to businesses (See Opinion of Pavan Sukhdev, p.24) contributed to the development of approaches that are used in decision-making up to the stage of evaluating the cost of inaction. Many initiatives have been taken to convince businesses to make room for biodiversity in their activities. These initiatives tend to highlight the added value of approaches based on biodiversity and ecosystem services compared to the traditional tools and strategies for environmental and value chain management for companies.

The role of economic valuation of ecosystem services and biodiversity

Valuing biodiversity through ecosystem services has become an innovative principle for resource mobilization. The concept of ecosystem services portraying an anthropocentric vision of ecosystems is used as a tool to reflect the social value of the ecological functions. This concept was highlighted in the Millennium Ecosystem Assessment where it is defined as the direct and indirect benefits that man draws from nature.

It includes:

- provisioning services (food, water, fibre and energy);
- cultural services (recreation, education, aesthetic and spiritual);
- regulating services (climate, flooding, water quality);
- support (or self-maintenance) services needed to produce all the above services (soil formation, primary production by photosynthesis, and nutrient cycles).

This concept is used particularly to create awareness about the social cost of inaction in biodiversity conservation and can also be used to evaluate the cost of biodiversity degradation. This approach is based on the principle that non-recognition of the value of the ecosystem services prevents their being integrated in the decision-making process and leads to a shortage of investments for their restoration and protection, a decision that will be costly for society (see OPINION Pavan Sukhdev, p.24). This approach gradually leads to advances in the conservation policies through the mobilization of economic instruments designed to absorb externalities and/or the mobilization of additional financing.

Although many businesses do not yet understand these complex issues, their dependence on ecosystem services is being integrated into their risk management strategy and can generate tangible commercial and financial effects. Similarly managing the impacts of these economic activities on biodiversity is a serious challenge for biodiversity conservation. This explains the need for businesses to become increasingly involved in international biodiversity conservation processes and the sustainable use of biodiversity.

The role of the private sector in international negotiations on biodiversity

For several years already, efforts have been made to draw strong commitment from the business world to the CBD. Hence in 2005 the first conference was organised on the private sector (*Business and the 2010 Biodiversity Challenge*) and in 2006 the first decision on the Business Engagement was adopted⁽¹¹⁾. The purpose of these

(11) Decision VIII/17 (2006) *Commitments of the Private Sector* UNEP/CBD/COP/DEC/VIII/17. Available on line: www.cbd.int/doc/decisions/cop-08/cop-08-dec-17-en.pdf

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→ decisions was to identify what the States could do to involve business in the challenge of conservation and sustainable use of biodiversity. The most recent decision was adopted at COP12 (Decision XII/IO, 2014) and invites the Parties to encourage the private sector to formulate and implement biodiversity strategies and thus create conditions that encourage companies to support biodiversity. The decision also encourages businesses to analyse the impact of their decisions and their activities on ecosystem services and biodiversity and to incorporate biodiversity issues in their tendering processes.

Further to the COP12 *Business and Biodiversity Forum* the CBD Executive Secretary appealed to the private sector to work with governments on identifying common fields of action for biodiversity conservation. At the CBD level, most private sector involvement is channelled through the Global Partnership for Business and Biodiversity (See Opinion of David Steuerman p.19) which seeks to facilitate dialogue between governments and business at various scales by bringing together “business and biodiversity” initiatives such as OREE⁽¹²⁾ and EPE⁽¹³⁾ in France at the global level together with the vested stakeholders. The increase in the number of initiatives is proof of the growing involvement of the business world on biodiversity conservation at the international level.

Decisions taken by the CBD should guide national actions and engage the Parties to apply and incorporate them in public policies. Through the introduction of new criteria, standards and certifications, for instance, they can have repercussions on regulations and on sectors. For the private sector, these decisions may be a source

of strategic positioning on certain products and services, in response to an emerging demand partly stimulated by the States as a result of their commitments to the CBD. In other words, this is a potential source of new economic opportunities. An example: the annual expenditure on the green public markets in 2011 by the OECD member states amounted to 12% of the GDP, (up to 15% in some of the countries)⁽¹⁴⁾.



The CBD Executive Secretary referred to an interview in BIODIV'2050 no. 2 (2013), on the great importance for the business world to understand the Convention's objectives and nomenclature for the purpose of incorporating them in business development models. It is all the more important for the private sector to understand and accommodate the stakes and challenges of biodiversity since possibilities for reconciling them and levers of action exist and are often sources of opportunity.

Business and biodiversity: opportunities and levers of action

The interrelations between businesses and biodiversity have generated risks and opportunities that, in the interest of all parties concerned, need to be identified, measured and managed. From the vantage point of the businesses, paying attention to biodiversity can lead to:

- better risk management (risks of activities being stopped for lack of supplies, changes in regulations);
- cost reductions thanks to optimal use of resources and inputs;
- a better image;
- the inflow of additional revenue from different sources, especially from green product and other niche markets.

Different sectors of the economy have very different relations with biodiversity. Action-levers exist and can fall into three categories, depending on the connection between the activity and the biodiversity⁽¹⁵⁾. The first category concerns activities whose core business is to exploit renewable natural resources such as agriculture, forestry, the wood industry, textiles and cosmetics. The challenge here is to maintain the ecosystem that produces these resources and to ensure sustainable offtake, bearing in mind the specific dynamics of the resource, that is connected to a living system that cannot be considered as stock with linear growth. In this situation the solution is to identify ways to have ecosystem maintenance and sustainable exploitation financed by the final consumers, using tools such as labels, certification or even regulations.

The second category concerns activities that cannot be carried out without deteriorating or destroying nature, such as territorial development and infrastructure. →

(12) OREE is an association that federates companies, territorial authorities, professional and environmental associations, and academic and institutional bodies to develop common thought on the best environmental practices and to implement practical tools for integrated environmental management at the level of a territory.

(13) The *Entreprises Pour l'Environnement* (EPE) is an association of French and international companies from all sectors of the economy that are anxious to make environmental considerations more a part of their strategic decisions and their daily management.

(14) *OECD ilibrary: 40. size of public procurement market*, cited in: Jones-Doyle, 2014

(15) See BIODIV'2050 No. 7 to be published in June 2015.

David Steuerman, Business and Biodiversity Programme Officer at the Secretariat of the Convention on Biological Diversity

What role do you believe the private sector can play in international negotiations on biodiversity and how do you see things developing in this area?

The Business Forum organised during COP12 was the first chance to holistically hear the private sector viewpoint within the COP process. Previously, initiatives focusing on business were arranged as separate side events or other types of unofficial participation, but not as fully-fledged events in themselves. Furthermore, the Business Forum representatives were able to make a statement to the High-Level Segment giving a summary of what happened at the Business Forum. It was very important to have a business voice there, but it is important to realize that businesses are not direct participants in the negotiations, and this is unlikely to change any time soon. Negotiations are conducted and decisions are taken solely by the Parties themselves. The principle of the importance of involving the private sector is being more widely recognized, and this legitimises its presence at COP. The Business Forum also gives businesses a chance to really understand what's going on in the negotiations and to express their opinion in a more constructive and unified manner. This in turn allows them to inform the Parties of where businesses feel that progress needs to be made, particularly in terms of creating an enabling environment for corporate investment and highlighting opportunities. This gives business a voice, but it will remain outside the "tent of negotiation" which is reserved for Parties.

How do you see the role of the Business Forum and Global Partnership for Business and Biodiversity and what impacts do you feel that they have on getting businesses to commit to pro-biodiversity initiatives?

For information, the Global Partnership for Business and Biodiversity was set up by a decision taken at COP10 (held in Nagoya, Japan in 2010), with the aim of fostering dialogue between business, governments and other stakeholders. We quickly realized that a lot of these dialogues were already occurring, but in a relatively limited manner, and that no holistic conversation was taking place. And this is where the Global Partnership comes in. It aims to bring together these initiatives and dialogues and to pool experiences in order to lend them more substance and avoid duplicating efforts by deploying joint initiatives. The Partnership now comprises 20 member countries. At COP12, the Parties adopted a decision on enhanced reporting for businesses, and we hope that this can be turned into a highly effective

tool through the efforts of the Global Partnership, the various member countries, other organizations, and business. It would give a snapshot at both country and worldwide level of what is being done as well as where there are gaps that need to be addressed. The COP has also asked us to help businesses to contribute to the Aichi biodiversity targets. This involves major efforts to foster awareness of these issues, especially by creating a language that is more accessible for business. It also requires liaising with governments more closely to encourage practices and help spread the message to the private sector about such things as resource mobilization. The overriding objective is to systematically get all stakeholders on board by consolidating initiatives and realizing that each stakeholder has a role to play.

What do you consider to be the main outcomes of this Business Forum?

Organising this Business Forum has helped maximize the impact of getting business stakeholders on board, and this really has helped raise awareness among participants and the Parties of how the private sector deals with these issues, what it needs, how it sees the way forward and what its expectations are. Similarly, it was important for the business community to understand what the Parties need. This dialogue enables business to understand what its responsibilities are while the Parties get an understanding of how to make it as easy as possible for businesses to do what they need to do. The conclusions of the Business Forum highlight the necessity of stepping up communication between stakeholders and building the business case for getting the private sector on board while also building trust between stakeholders to avoid private sector unease or reluctance to invest by working together with local populations, NGOs and governments. Dialogue is absolutely vital for making progress in this regard. The conclusions also emphasize the need for practical ways of helping businesses to understand how they can contribute to objectives and providing recognition for those that are actually doing good things. Highlighting best practices will both encourage and inspire businesses by showing them in a practical way exactly what can be done and how to do it. We were actually able to see this in action through the companies that attended the Forum. We need to build up momentum and to boost the numbers of businesses committing to biodiversity-related issues and to sustainable development in general.

→ In this scenario, the mitigation hierarchy (“avoid-reduce-compensate”) must be strictly applied: avoid, in so far as possible, the project’s impacts on the natural environment, and then reduce the inevitable impacts and, last, offset the residual impacts. This sequence is gradually becoming a worldwide standard.

The third category is composed of activities that do not exploit or destroy biodiversity and can coexist together with it such as tourism, the development of existing urban areas, the water and culture sector, etc. In this scenario, the activity is interrelated and interlinked with biodiversity through synergy and a development path that has a positive effect. With such a vast number of sectors involved, it will not be possible to propose preconceived solutions. There are many examples and many possibilities to develop synergy, which can avoid major costs, distinguish the activity from that of the competitors and bring about real change.

The private sector, thus, can use its capacity for action and financing to mobilize resources that can contribute to the attainment of the Aichi Targets. There are many solutions, especially using the innovative financing mechanisms. As for the market, markets have their own dynamics that are based on a supply and demand relationship with funding that cannot be allocated as a budgetary resource although in some cases market dynamics can generate a considerable funding. For the private sector to accommodate biodiversity it will first need to develop a better understanding of the stakes of the economic activities involved and their dependence on biodiversity. Only then will biodiversity be seen as a source of opportunity rather than as a constraint. The tools are available but can only be used if certain barriers are removed. The first step must be to define the terms and conditions of private sector governance and the relationship between the private sector and these mechanisms.

Private sector investment for resource mobilization: barriers and drivers

Lack of international consensus on the participation of the private sector and on the financing mechanisms

In the CBD negotiations, the Parties have not reached a consensus on the use of the financing mechanisms for biodiversity conservation nor on the involvement of the private sector. Some countries support these mechanisms, others are very reticent.

A few countries are against what they see as the introduction of “commercial” mechanisms and feel that the involvement of the private sector could be construed as means for the commodification and financialization of the environmental functions and cycles of nature and the undue transfer of responsibility from the public sector to the private sector (CDB, 2014c). They are encouraging “non-market-based” approaches (IISD, 2014). These countries defend the idea of state management, and no other, considering that such resources are, by nature, public goods (Ogwal and Schultz, 2014). They emphasise the role of collective action of indigenous and local communities as contributions to resource mobilization. Other countries recommend the opposite and claim that the private sector must participate, pointing to its responsibility for biodiversity loss and to its capacity for action and funding. They favour the creation and introduction of innovative financing mechanisms, which, they say, may greatly interest the private sector and thus contribute substantially to the achievement of the Aichi Targets (Ogwal and Schultz, 2014) but point to the need for the national authorities and the private sector to work together in designing these

mechanisms. The last group of countries fears that any decision on the involvement of the private sector with the CBD could mean imposing excessive limitations on business and thus violate national policies.

Opinions vary, depending on the countries’ position and outlook on biodiversity and the man-nature relationship. These positions lack flexibility, especially with regard to issue of “commodification of nature”, (See Box opposite) which is condemned by certain countries. The lack of consensus often slows down negotiations on these issues but not the development of the financial mechanisms, although it can impede progress in operationalising them. Considering the present-day lag in resource mobilization needed to achieve the Aichi Target, the stakes are high.

In an effort to build up confidence and open discussion on these issues, the CBD organised “the Quito Dialogues”, informal dialogues on financing for biodiversity held in Quito in 2012 and in 2014. During the first Quito Dialogue, which focused on innovative financing mechanisms, a colour code was designed to represent the degree of risk connected to each mechanism, and at the second dialogue proposals for safeguards were made to “reassure” the most sceptical Parties and, more importantly, provide guidance for actions keyed to preparing frameworks to support the creation of these mechanisms.

During the COP12 negotiations on resource mobilization, lengthy discussions were held on the selection of financing mechanisms. The final decision was the result of a compromise and made reference to a range of financing sources that integrated the “financing mechanisms for biodiversity”, all the while leaving room for collective actions by indigenous and local communities. Recognising that each country has rules and institutions that reflect its vision of the world, its ideologies and its approaches, the Parties felt that private sector investment in resource mobilization should be scaled to the

↳ national level (Ogwal and Schultz, 2014). Nonetheless, the framework for the operationalisation of these mechanisms is still essential, not only to stimulate the private sector and the various stakeholders but also to provide for safeguards during the mechanism construction phase.

Obstacles from the vantage point of the private sector

Although valuation of ecosystem services and biodiversity has contributed to the awareness of the private sector, it is difficult to apply to tangible goals in the field. Furthermore, since ecosystem services are by nature public goods, their benefits are shared by a far greater number of persons than the number of stakeholders defraying the restoration and conservation costs. This creates “free rider” behaviour and reduces incentives for financing and investment. Biodiversity conservation thus must be more than a response to the requirements of the sum of individual interests. It is a difficult notion to incorporate in business activities.

In its conclusions, the Business and Biodiversity Forum seeks to identify the main challenges from the business angle for the purpose of improving the integration of biodiversity in business operations. The first challenge is to reach out to the mainstream, especially the SMEs, and not only the frontrunner companies. The lack of human and financial resources for many business and biodiversity programmes and initiatives was also identified as a barrier to their development, as was the need to convince business people who are not aware of the role of biodiversity and ecosystem services. The main challenge however was the need to translate concepts of biodiversity conservation and sustainable use of resources into the language of the business world (See Opinion of Violaine Berger). ↳

The commodification of nature?

The economic approach to biodiversity, the mobilization of innovative financial mechanisms and the involvement of businesses in natural capital conservation are controversial issues. One argument is that these approaches may lead to the commodification of nature, the creation of biodiversity markets and/or the appropriation of nature by the private sector. In other words, species, habitats and ecosystem services would be assimilated to merchandise, like any other, and would be monetized at the daily rate to be “bought” or “sold” by companies or financial institutions speculating for profit. But this vision is far from reality on the ground.

Paying a physician does not imply commodifying health. Paying compensation in case of a life-threatening accident does not mean putting a price tag on human life. Similarly, calculating the economic value of biodiversity does not mean pricing its value.

Economic valuation of biodiversity aims at recognising that biodiversity is useful and rare, and that decisions, (public or private) concerning territorial development or production have been taken up to now without giving sufficient heed to the value of biodiversity and hence has been detrimental to the ecosystems on which the economic activities depend. The vision of nature adopted in this approach, thus, is very anthropocentric. However it doesn't not imply the “pricing” of species for sale on any market driven by supply and demand. And were such “markets” ever to exist, standard economic theory tells us that for public goods such as biodiversity or ecosystem services, markets of this type would not be effective.

With regard to economic instruments, often assimilated to so-called market-based instruments, experience, here again, is far different from prejudicial opinions, one way or the other. In the case of biodiversity offsets or payments for environmental services (PES) for instance, it is not the species or the ecosystem services, which by definition cannot be appropriated, that are bought or sold, but rather the conservation or restoration actions that bring about changes in practices on lands where people have user rights. Quite contrary to the idea of commodification, when these actions are connected to the introduction of conservation easements, privately-owned lands, in a way, could be seen as being part again of the public domain serving general interest. Furthermore, the context of implementation of those instruments is strictly regulated by public authorities, guarantors of the robustness of defined conservation and restoration actions, as defined and implemented.

Last, businesses that engage in biodiversity action are mostly encouraged to incorporate the value of ecosystem services in their decision-making process in order to recognise the impact and dependence of their activities on biodiversity. The primary goal here is to limit the cost of these activities to society and construct business models that combine development and biodiversity conservation.

OPINION

Violaine Berger, Director Ecosystems and Agriculture at the World Business Council for Sustainable Development (WBCSD)

The WBCSD is an organization that represents more than 190 global companies, many of which are on the French stock exchange, the CAC40, representing an important market. What were your key messages at COP12 and what has WBCSD done to contribute to the CBD objectives?

Business is often considered as the main cause for ecosystem degradation and is, unfortunately, too seldom involved in discussions that seek solutions, although it has a major role to play in implementing them. We have come to this COP with various messages for the Parties to the Convention and to the businesses represented here at the Pyeongchang meeting.

We strongly encourage governments to collaborate with business when developing their national biodiversity and ecosystem conservation and restoration programmes. The business community has innovative solutions to offer. For example, we are exploring with our member companies the conditions to help them systematically include natural (or green) infrastructure in all their plans for new industrial sites. We are also aiming to demonstrate how natural infrastructure reduces companies' exposure to natural risks such as floods, drought, landslides or even problems of soil erosion.

What do you feel are the main problems facing companies that try to add new environmental challenges, especially biodiversity conservation, to their business model?

Biodiversity conservation and ecosystem protection are complex issues that business often finds difficult to tackle. Most of the impacts on biodiversity in the agro-food sector, for instance, occur at the farmer's level, in other words upstream in the company's value chain. But how can a company be certain that the farmers have adopted good



practices if it does not buy agricultural raw materials directly from them? Certification can help. Governments have an important role to play here as well. They can for example develop regulations that can help reduce the impacts of human activities on biodiversity. Governments can also provide incentives that encourage business to invest in restoring degraded ecosystems.

Businesses often do not have enough information about the options that are available. This is where we try to help them by providing examples of good practices, by helping them define ambitious biodiversity targets (such as Net Positive Impact or Land Degradation Neutrality targets), good practices (investment in natural infrastructure) and biodiversity indicators.

Valuation of ecosystem services has been highlighted, in particular by the CBD, as a key tool to support integration of biodiversity considerations in companies' decision-making processes. Looking beyond awareness raising objectives, how can valuation create a real change in practices and be implemented by companies?

Ecosystem services valuation (and more broadly natural capital valuation) enables companies to quantify, and if necessary monetise environmental impacts and dependencies. This is an important decision-support tool since it allows for the uptake of environmental externalities in corporate decision-making process. Monetisation has often been criticised for contributing to the commodification of nature. The purpose, clearly, is not to sell nature but to better understand how the degradation of nature can affect business bottom line.

→ To create a more hospitable environment for private sector involvement, the participants suggested that a manual be produced for public decision-makers on the participation of the private sector in the operationalisation of National Biodiversity Strategies and Action Plans (NBSAP).

Both the Parties and the private sector focused on encouraging private sector participation by developing frameworks and creating enabling conditions that could clarify the terms and conditions for actions and, in some events, could remove barriers and meet the underlying requirements of the environment and good governance.

The need for approaches that combine private sector regulations, markets and innovations

The economic approach and more specifically valuation of ecosystem services cannot be considered as the “commodification of nature”, nor can biodiversity be governed by economic reasoning alone. Yet the utilitarian, anthropocentric view of biodiversity, wherein biodiversity is envisaged as a source of services, has its limits and only constitutes one of several possible justifications for biodiversity conservation, such as the recognition of the intrinsic value of biodiversity. The complexity of ecosystem interrelations forces the actors to adopt a simplified vision that can be too minimalistic to be valid. For instance, when private actors adopt the concept of ecosystem services using an economic approach, they risk oversimplifying

ecological dynamics and forgetting that biodiversity is more than a list of services. Even though biodiversity cannot be absorbed into the economy, recognition of the great diversity of values of biodiversity, and hence biodiversity conservation will require common approaches to governance that combine business regulations and innovations.

Moreover, biodiversity as a public good is characterised by the absence of property rights and by cost-benefit distribution that requires collective governance to trigger action, be it public or not, and subsumes a certain degree of coordination among the actors. In a more general manner, empirical results tend to show that natural resources are not more- or less-well managed when in the hands of the private sector, with its property rights that enable markets to facilitate the efficient settlement of environmental problems, or the State as the custodian of the general interest (Ostrom, 2009). The effectiveness of management predicates on rules established through institutional arrangements that individuals build up to protect and maintain the resources for which they have collective responsibility (Ostrom and Basurto, 2011). States, thus, have a role to play in ensuring the integration of biodiversity in the overall goals of their public policies and in establishing frameworks, incentives and regulations, all the while leaving ample room for business to develop its capacity for innovations.

The Twelfth Meeting of the Conference of the Parties has shown the need and the possibility for integrating biodiversity conservation in all sectors of the economy. The private sector, through its central role in economic development, its capacity for funding and innovation as well as its direct and indirect pressure on biodiversity, is a key actor. Biodiversity conservation could be seen by business as a source of new opportunities. The tools are available and have already often shown their worth, especially the innovative financing mechanisms, such as payments for environmental services (PES) and the biodiversity offsets. The tools can only be successfully used if the requirements of ecological and economic efficiency are fulfilled, frameworks are created and/or improved and the States provide enabling conditions for their utilization. It is essential to look beyond the market-state dichotomy since the effectiveness of these mechanisms depends on institutional arrangements motivated by stakeholders connected to the local situation. Although it is not possible to rely on any one model of governance alone, it is essential to formalise and establish experience-based guiding principles and safeguards at the international level. This would allow the private sector to fully contribute to international actions for biodiversity conservation, participate in investments by the whole group of stakeholders to fulfilling the goals of this millennium and become a real actor of change. ■

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OPINION THE ROLE OF ECONOMIC VALUATION OF ECOSYSTEM SERVICES AND BIODIVERSITY IN RESOURCE MOBILIZATION AND PRIVATE SECTOR INVOLVEMENT



PAVAN SUKHDEV -
Environmental economist,
Founder-CEO of GIST Advisory,
a consulting collaborative
that evaluates performance
– including externalities – for
governments, businesses, and
NGO's; Study Leader of The
Economics of Ecosystems and
Biodiversity (TEEB)

The economic valuation of ecosystem services is increasingly being recognized as a key tool for mainstreaming biodiversity-related considerations and counteracting the economic invisibility of nature. In your view, aside from making general statements, how can economic valuation be harnessed in order to have a concrete impact in decision-making?

The first thing to recognize is that the purpose of any valuation determines the valuation. The question you have to address is why value, because without purpose, there can be no valuation. This is the key point and in the case of nations and states, it dictates the policy

framework within which you are valuing. You then need to identify the stakeholder set for a particular social, economic and geographical context to define who exactly are the most relevant agents of valuation – such as a local community with traditional access rights; a local government overseeing local natural commons; a national government protecting a national park; etc.. We in TEEB have a three-tier approach to valuation. First, you can **recognize value**, and such valuation can be done within different cultural contexts. All valuations do not necessarily have to be economic valuations. For instance, more than a hundred years ago when conservation zones such as Yosemite Park (USA) or the Yorkshire Downs (England) were established, there was no question of “economic valuation” and those areas were declared national parks because they were considered to be *patrimoine* or of heritage value. Therefore, you can value without any economics, but you can sometimes value with economics. You can **demonstrate value** in economic terms to support decision making and this constitutes the second tier of valuation. You can make the case that a given area has significant ecosystem services or is very valuable for agriculture or to the community, because of custom or tourism, etc. However, you don't necessarily have to pay or to receive any money. And finally, as the third tier, you can **capture value** by introducing mechanisms that incorporate the values of ecosystems into decision making. For example, these might be payments for ecosystem services where the beneficiary or the government pays someone, or someone pays the government. Usually, the government is on one side, or even on both sides of such agreements, so it is not a “market” as such, which assumes that many participants, depth, liquidity, commodification, tradeability, etc. Capturing value must not be mis-understood as

“commodification” or “privatization”: it is just a matter of two involved parties using economic logic to arrive at fair compensation for conserving or enhancing a flow of ecosystem services controlled by one and beneficial to the other. For example in China, the Beijing municipality pays provinces that lie upstream to change their agricultural practices to reduce freshwater pollution instead of having to spend a lot of money cleaning up subsequently. There are different ways in which valuation can be used but you do not always have to capture value. You can manage quite well by simply demonstrating value, provided that the policy makers are focused on maintaining public benefits, not just private profits. Part of the valuation challenge is to create recognition of the value of public goods, i.e., this is how much it means to the community, or province, or nation or to society at large.

To analyse concrete impacts on decision making and to facilitate the use of TEEB, we have summarized all 119 examples of projects evaluated by TEEB Reports, according to the rationales and context of valuation. Most of them fit in the categories of PES implementation (a form of ‘capturing value’) and protected areas valuations (cases of ‘demonstrating value’). We have also analysed the types of strategies in TEEB reports and most of them are non-market examples: market-based strategies account for only 11 of the 119 cases (see Table 1).

TEEB has been adapted for many different groups of decision makers – ecological and economic foundations, policy makers, businesses, etc., and people can get confused. We have also prepared a TEEB country manual and a simplified version for the national level. Moreover, another area of valuation where I feel that TEEB has made a huge difference in terms of

Number of Examples	Category	Two Examples of each Category
6	▶ Legislation	▶ Enabling the legal framework for PES, Costa Rica ▶ National-level Soil Erosion Control Policies in China
7	▶ Taxes and Subsidies/ Other Grants	▶ Conserving forests through grants, Brazil ▶ Forest environmental tax, Japan
10	▶ Eco-labelling & Eco-certification	▶ Palm Oil Certification, Indonesia ▶ Participatory Guarantee Systems for organic agriculture, India
11	▶ Markets	▶ Carbon finance for conservation of native prairie, USA ▶ Biodiversity Banking and Offset Scheme of NSW, Australia
12	▶ Finance for Biodiversity	▶ Conserving wetlands through microfinance programs, India ▶ Water Funds for conservation of ecosystem services in watersheds, Colombia
15	▶ Land-Use Planning	▶ Integrating ecosystem services into land-use planning in Hawaii, USA ▶ Integrating ecosystem services into spatial planning in Sumatra, Indonesia
20	▶ Payments for Ecosystem Services	▶ Cidanau Watershed PES scheme, Indonesia ▶ Watamu Beach Turtle Watch Nest Protection Programme, Kenya
38	▶ Protected Area Valuations	▶ Cost-benefit analysis of road construction considering deforestation, Brazil ▶ TEEB Nordic case: Ecosystem services provided by the Baltic salmon – a regional perspective to the socio-economic benefits associated with a keystone species

Table 1 : TEEB examples and rationales for economic valuations

raising people's awareness is in making companies more aware of the need to value their impacts on biodiversity. The TEEB for Business coalition – now known as the Natural Capital Coalition – was basically formed to do just this and it has launched the “Natural Capital Protocol” project, which is well under way. This is a framework for valuing the impacts and dependencies of business. It tackles issues such as how to value and how any company in any industry can conduct such valuation exercises to inform management, shareholders and other stakeholders.

In light of the Business and Biodiversity Forum and initiatives such as the Global Partnership, how do you feel about private sector involvement in mainstreaming biodiversity and the role of business in this international summit for biodiversity?

In today's economy, in the United States for example, 75% of GDP and jobs come from the private sector. Globally 60% and 70%, respectively, of GDP and jobs come from the private sector. Thus it is self-evident that we cannot change resource use and economic direction towards a 'Green Economy' as a means to achieve sustainability *without* private sector involvement and commitment. Transforming the economy into a green economy for sustainable development and poverty eradication – which is ‘the

future we want'⁽¹⁾ also means changing the corporations that represent three-quarters of all economic activity.

Many businesses are still wondering why they should be involved in mainstreaming biodiversity. I believe it is necessary because there is actually no other way forward. However, I still feel that some businesses have to be convinced of the need for measuring total impacts and dependencies and of recognizing natural, social and human capital, and not just financial capital. As we have seen during the Business Forum, some businesses are already convinced and these include leaders like Puma or Unilever along with many other corporations who are moving things forward in the right direction.

As highlighted by the Millennium Ecosystem Assessment, most of the ecosystem services that are being depleted or degraded are public goods and services, meaning that the costs are generally borne by the public. The total environmental impacts of the business world – the top three thousand companies – is in the order of \$2 trillion and represents 3.5% of global GDP. This means the central problem of “private profits, public losses” on a grand global scale. However, to achieve a transformation in the wider economy,

(1) See Rio+20 conference. Available at: http://www.un.org/fr/documents/view_doc.asp?symbol=A/RES/66/288&TYPE=&referer=http://www.un.org/fr/sustainablefuture/&Lang=E

policy makers have to get involved and I am glad that we had a very strong showing here at the Biodiversity COP during the High-Level Business Panel. Panelists included the Managing Director of India's top private sector chemicals company, a leading tourism operator and educator from Peru, a minister from South Africa and a representative from one of Korea's largest pharmaceutical and cosmetics companies. This is the kind of commitment we need to see, and I am very pleased that the Executive Secretary of the CBD was there to encourage all. This shows the importance he attaches to this challenge.

It is a good thing that the Business Forum and other initiatives such as the ecosystem services pavilion actually exist. However, I feel that we currently lack a political framework that truly includes business. What we need is sector-based involvement & engagement. We can identify the key sectors to target for CBD - i.e., those that are important for biodiversity. If we look at climate change, the key sectors are fairly obvious: oil, gas, cement, etc. For biodiversity however, it is more complicated. There are a whole range of issues that need to be recognized both sectorally and globally. For instance, palm oil is extremely important and in a biodiversity COP, I would expect to see representation from the palm oil sector. Incidentally, by sector, we mean the top ten/fifteen companies getting involved in a summit meeting



Getting people to recognize the value of nature is quite a big challenge. It is important to influence peoples' opinions because these people are also decision-makers and citizens become consumers. You cannot do this through ecosystem valuation, but on the basis of recognizing value, and that recognition comes from sentiment, appreciation, the impression that there is a connection. It is also a communication issue. People in general, especially policy-makers, respond much better to a plea from the mind than to a plea from the heart. I am not saying that this is a good thing, I am just telling you how it is. I have spent a lot of time in conservation areas and I have run two NGOs in India. I have tried very hard to influence people's hearts and it doesn't work. But when I walk in wearing a suit with my banker look saying this is how much you are losing in economic terms, suddenly they wake up and they listen. Why? Not because they are bad people or good people, but simply because they are psychologically attuned to listening to numbers and economic arguments. That is all there is to it. This whole approach is about addressing the challenge of today's main currency for policy-makers, which has become economics. To solve the problems of today, we have to recognize what those problems actually are. We have become that kind of world. This is not a value judgment; we have to address the challenge as it stands. Because I have been trained in physics, I have to recognize reality."

- Pavan Sukhdev

↳ and deciding on the best way forward. This would ensure that everyone is moving in the same direction. Regional approaches will not work. You have to get the whole sector together. Today the big problem is that unfortunately, diversity is low and multinationals are enormous: typically, in any given sector, the top 80% of the volume is controlled by between ten and twenty companies. However, this "bad" thing can also be a good thing since you only need to sit down with 20 companies instead of between 200 and 2,000 companies to influence change in a sector!

Ecosystem services tools and approaches have recently augmented the large "toolbox" available to businesses for measuring and managing corporate performance in a context of expanding social and environmental responsibility. In your view, what are the advantages of using these tools? What are their limits?

Some of these toolkits, such as the Corporate Ecosystem Valuation, aim to inform companies of their impacts and dependencies in an economically-informed way so that they can rank issues by material importance. Corporate management responds more effectively to economic than to non-economic arguments. The most important project

for success with this aim is what we are working on right now: the so-called "Natural Capital Protocol". This will involve a company in a standardized way and should lead to global standards – to an overall framework for valuation. This is crucial because it incorporates feedback and learning and moves things on to the next level.

Such analysis gives us numbers which we need first to understand a company's impacts, and then to enable management to respond with appropriate strategies. And later at some point, the accountancy regulators might decide that this information needs to be published as well because it is relevant to the company's stakeholders. There was a time when directors' bonuses were not published, now they are. There was a time when contingent liabilities were not published, now they are. Today, externalities are not published, maybe tomorrow they will be. This information will become really important. The European Union Commission has already introduced a directive that will require European companies to begin the process of measuring and reporting impacts.

Integrated reporting is another important development. This focuses on all capital impacts - not just financial capital impacts - to recognize footprints and

dependencies. It is being driven internally from management's focus on management information – as well as externally from the perspective of investors and providers of financial capital. But companies also depend on human, social and natural capital, not just financial capital. Indeed, they create human capital and they can create or destroy social capital. If they engage in reforestation for example, they can also create natural capital. Obviously, not many companies are doing this right now. The point is that we have to look at things from a "many capitals" point of view. If we manage to do this, if we can appreciate how everything is linked, we can really understand how this landscape of capitals works and how sustainability is simply an interwoven fabric of value and values. Value – as in economic and social value – is what guides sustainability and agents towards higher levels of sustainability. This is the way forward and I believe it can happen over the next five to ten years as more and more companies respond to these challenges and start measuring these impacts. Eventually people will start publishing their real impacts. When they start focusing on integrated reporting, that is when they will start reporting reality. What they are publishing today is actually just limited to shareholder value added. ■

INVENTING THINKING OUT THE APPROPRIATE FRAMEWORKS: BIODIVERSITY OFFSETS AND SAFEGUARDS

For more than 40 years regulatory mechanisms and voluntary initiatives by project supervisors have been used to apply biodiversity offsets that compensate impacts on biodiversity on the basis of the polluter-pay principle. Approaches, as well as methods, governance and outcomes, differ, depending on the national or local socio-political context. This seeming diversity has not, however, prevented experiences from being shared at the international level, especially under the leadership of the *Business and Biodiversity Offset Program* (BBOP), which furthermore demonstrated the need for a common framework that would be applied to all the compensation mechanisms and would provide guarantees and safeguards. The aim is to create enabling conditions for high-quality long-term biodiversity offsets that can meet the prime target, i.e. biodiversity conservation. The Parties to the CBD have recognised the importance of drawing up guidelines and preparing the framework enabling the creation of financial mechanisms for the preservation of the biodiversity, a topic seriously considered at COP12. In 2012, the Stockholm Resilience Centre, at the request of the Parties, produced a report on “Biodiversity financing and Safeguards: lessons learned and proposed guidelines” that was revised and rescoped to include various discussions and the results of the Second Quito Dialogue (See UNDERSTANDING, p.20). It was submitted to COP12 as a contribution to discussions on the Strategy for Resource Mobilization (See Box, p.28).

The implementation of biodiversity offsets principle and the underlying research topics are part of the research led by the *Mission Economie de la Biodiversité* (MEB) of the *Caisse des Dépôts*. The MEB has created a platform for discussion on biodiversity offsets in France and is making an assessment of biodiversity offsets mechanisms throughout the world to stimulate thought and discussion on the French system. Drawing on this experience with research and consultation focused on biodiversity offsets in France and elsewhere in the world, the MEB held a side-

event at the COP12 on safeguards needed for biodiversity offsets⁽¹⁾ schemes, the goal being to contribute to issues discussed at the negotiations. Several speakers were invited to present their approaches and discuss the results of experiences from various countries. The purpose was to draw common lessons from experiences in the field.

There was a broad consensus on the importance of the “Avoid” and “Reduce” steps that preceded compensation in the mitigation hierarchy. Regulations in France and in a growing number of countries stipulate that compensation must be the final step, the step taken after efforts have been made to avoid, and then reduce the impacts of a project. The first two steps are of paramount importance for two reasons:

- some impacts on biodiversity that are especially strong and are non-compensable must be strictly avoided;
- the best biodiversity offset is the one that does not take place since compensation is awarded after biodiversity has suffered substantial impact.

Furthermore, in support of the first two steps, stress was placed on the fact that compensation is more expensive than reduction and avoidance. But, respect for the whole 3-step mitigation hierarchy is very important. An actor’s lack of respect for the conditions of biodiversity offsets has a twofold effect: first, the compensation is not awarded, which means a net loss for biodiversity and, perhaps more important, second, an actor who knows that he is not going to respect his obligations and will not be forced to do so will feel encouraged to ignore avoidance and reduction.

More generally, the participants pointed out that the effectiveness and efficiency of biodiversity offsets depends on the existence of a framework for regulations and

(1) Meeting Sustainable Development Objectives: The Strategic Significance of Safeguards to Biodiversity Offsets – 14 October 2014.

legal requirements that is clear and strict with regard to ambitions and obligations but flexible regarding the means of implementation. This framework should be consistent and complementary at various levels (local, national, European, international). In France, for instance, the implementation of biodiversity offsets illustrates the need for coherent frameworks that combine business regulations and innovations. The mitigation hierarchy can be traced to regulations on mandatory offsets for the residual effects of projects (1976 French law on the protection of nature), which generate a demand for compensation solutions by the project supervisor who, in the final analysis, is responsible for the application of these measures. The environmental and economic effectiveness of the financial mechanism stems from the role, obligations, rights and needs of each of the stakeholders (project supervisor, administration and offset providers), etc. The public authorities must guarantee appropriate dimensioning, spatial coherence and the time period for applying the compensatory measures. The project supervisors must incorporate the financial and operational effects prior to the project design phase, all the while keeping the project profitable. Last, the offset providers, who can manage the compensation process for the project supervisors, have to combine project profitability, ecological robustness, and management of commercial and operational risks linked to the great uncertainties about the long-term future. This combination of factors requires a stable, predictable, applicable set of regulations, together with tools and rules designed for long-term action, all the while prioritising adaptive strategies.

With regard to methods for scoping compensatory measures, one of the lessons learned from reports on international experiences is that certain major rules must be followed. One rule is that the equivalence between the impact and the benefits arising from biodiversity offsets must be strictly ecological, although we know that an ecosystem can never be

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→ identically reproduced. Financial equivalence or equivalence of land area or anything else would not be appropriate considering what is at stake. Furthermore, it is essential to give due heed to scientific knowledge and lack thereof. For instance, because of uncertainty regarding the effectiveness of certain ecological restoration techniques, compensatory measures could exceed the amount imposed through a strictly ecological equivalence calculation. This explains the need for scientific monitoring of the implementation and success of compensatory measures that can be evaluated on the basis of the impacts of these measures on the biodiversity. Many participants stressed the importance of scientific monitoring to assess the prime contractor's performance in fulfilling his obligations, and also as a guarantee of the long-term effectiveness of the compensatory measures on the biodiversity. The participants also spoke at length about the need to keep a register of compensatory measures. In most cases, little was done to keep such registers, although some local initiatives along these lines were taken, in particular in France. As mentioned above, the long-term effectiveness of compensatory measures is still a major challenge. In some cases, the conditions of implementation can provide guarantees about, for instance, the reliability of offset providers and land acquisitions, that are preferable to contractual agreements with the owners. But in most situations, the question of long-term safeguards and guarantees needs more attention.

The integration of compensatory measures for other public policies, whether related to geography or to dimensioning, was also seen as a major challenge. The link between biodiversity offsets and public policies in the fight against climate change seemed obvious and highly important, but the speakers also stressed the importance of studying the link between biodiversity offsets and public policies that do not directly concern the environment.

COP12 adopts optional guidelines on safeguards to introduce in designing innovative financial mechanisms

As of 2010, the Parties to the CBD said they wanted to increase their understanding of what made the innovative financing mechanisms effective and what the potential problems were. This led to a decision taken in June 2012 to request the Stockholm Resilience Centre (SRC) to prepare a report, the first on this subject, for COP11 in Hyderabad (2012). Referring to the SRC report, the Parties expressed their opinion on the text, and spoke of the need for reports on national experiences and about their wish to develop a position on the "safeguards options" at COP12. Entertaining various requests, SRC produced another document⁽¹⁾ for COP12 that helped the Parties make progress in their discussions. As a first step in the introduction of an international frame for innovative financing mechanisms, COP12 adopted the optional Voluntary Guidelines on Safeguards in Biodiversity Financing Mechanisms (Appendix III, Decision XII/3) which addresses four issues:

- the role of ecosystem and biodiversity functions and recognition of biodiversity's intrinsic values in the design and implementation of biodiversity financing mechanisms;
- the definition of the rights and responsibilities of actors and/or stakeholders in a fair and equitable manner, with their effective participation;
- the creation of safeguards based on local realities, in line with country-specific processes;
- the importance of establishing coherent, effective institutional frameworks that include enforcement and evaluation mechanisms which ensure transparency and accountability, thereby making these safeguards operational and respected.

Although these proposals are not engaging or binding, they nonetheless are a mark of considerable progress in structuring the innovative financial mechanisms and making them coherent at the international level.

(1) Ituarte-Lima, C., Schultz, M., Hahn, McDermott, C., and Cornell, S., 2014, Biodiversity financing and safeguards: lessons learned and proposed guidelines. Stockholm: SwedBio/Stockholm Resilience Centre at Stockholm University, Information Document UNEP/CBD/COP/12/INF/27 for the 12th Conference of the Parties of the Convention on Biological Diversity in Pyeongchang, Korea.

All the participants emphasised the importance of methods of governance, and the involvement of both local and non-local actors concerned with compensatory measures and the concerned land areas. Clear, joint governance, with respect for each and every stakeholder allows for better dimensioning and more effective implementation of these measures, better quality monitoring and social acceptability that is difficult to achieve under other circumstances. Since each territory and each case is different, preliminary consultations and definitions of the conditions of governance are needed for each case individually. Mention was made of the wisdom of drawing on the

experiences of other financial mechanisms that have a longer history, ergo more hindsight, such as REDD+

Besides the conclusions mentioned above, the discussion also brought out many common lessons learned from different countries that have already used biodiversity offsets mechanisms. This confirmed, – as often happens in international debates, e.g. BBOP – the importance of creating an international safeguards panel on biodiversity offsets, supported by reports on experiences that add clarification and offer guidance and examples for the implementation stage. ■