

# Asia Europe Environment Forum



## Rapporteur's Report

**Asia-Europe Environment Forum (ENVforum)  
7<sup>th</sup> Roundtable**

***"The Accounting of Nature: Biodiversity and  
Ecosystem Services in Asia and Europe"***

**29-30 June 2009 / Hayama, Japan**



**IGES**

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Seidel  
Stiftung**

**Sida**





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## INTRODUCTION TO THE RAPORTEURS' REPORT

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The Asia-Europe Environment Forum (ENVforum) 7th Roundtable "The Accounting of Nature: Biodiversity and Ecosystem Services in Asia and Europe" was held at the Shonan Village Center in Hayama, Japan from June 29 to June 30, 2009. It was preceded by the scenario workshop "Developing Biodiversity and Ecosystem Services Scenarios", held at the Shonan Village Center in Hayama, Japan from June 27 to June 28, 2009.

The roundtable was part of the Asia-Europe Environment Forum series; co-organised by the ASEF, the Hanns Seidel Foundation (HSF), the Swedish Environmental Secretariat for Asia (SENSA), the Institute for Global Environmental Strategies (IGES), and the United Nations Environment Programme (UNEP). This roundtable was hosted by IGES.

The Asia-Europe Environment Forum (ENVforum) 7th Roundtable was intended to facilitate multi-stakeholder dialogue from both Asia and Europe and provided a platform to experts to identify opportunities for bi-regional cooperation in the area of biodiversity and ecosystem services. Around 60 participants and observers from governments, NGOs, research institutes, academia, and the private sector attended the roundtable.

During the first part of the roundtable, participants discussed key policy issues in the areas of biodiversity and ecosystem services, taking into account the urgent need to curtail the drivers that undermine environmental integrity and human well-being. Further, ideas to facilitate effective policy measures and actions to overcome policy challenges were presented. Roundtable participants identified policy and institutional gaps and discussed policy options to overcome the challenges in order to prompt required policy and institutional transformation. The participants also looked at the Green New Deal and strategies on how to better value biodiversity and ecosystem services. Case studies with a focus on key ecosystems (forests, freshwater/ wetlands, secondary ecosystems) and the impact of climate change and human activity on those systems were also presented. Participants further discussed various economic valuation and payment schemes in connection with biodiversity and ecosystem services that involve different stakeholders and sectors in Asia and Europe. Another session focused on business opportunities for the private sector with a view to nurturing and capitalizing upon ecosystem services.

By and large, the Roundtable discussions delineated numerous issues and recommendations. Policy and technology were considered as imbedded drivers for promoting biodiversity and ecosystem service conservation and their sustainable use. The importance of multi-faceted approaches was repeatedly emphasised. Moreover, it was said that further empirical studies are required to propagate good practice including valuation and payment for ecosystem services.

A scenario approach has proven to be an effective tool for capacity building. International innovative funding scheme concepts require further elaboration and discussions for better embodiment and pragmatic application.

The Asia-Europe Environment forum (ENVforum) continues to be a key policy dialogue platform and a number of future activities were suggested including a plan to explore a joint position paper in the process that will lead to the next UNCBD/COP10 in Japan in October 2010 .

### **Rapporteurs:**

**Mr. Masanori Kobayashi**, Coordinator, Programme Management Office, Institute for Global Environmental Strategy (IGES), JAPAN

**Ms. Jade-Yasmin Taenzler**, Environmentalist and Journalist, Konrad Adenauer Foundation Journalism Academy, GERMANY



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## CONCEPT

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Asia and Europe present two of the richest regions in terms of biodiversity (species, genes as well as ecosystems). In Asia, a significant number of people, especially from developing countries, depend heavily on the goods and services provided by ecosystems for their daily survival. While the link in the more developed parts of Asia and Europe might not seem that obvious at first sight, in fact even highly urbanised and over-developed communities are dependent from the functioning provision of ecosystem services to maintain their living standard. Traditional lifestyles in Asia and Europe have been very much in harmony with nature and the surrounding systems. Mega-capitalism and unsustainable lifestyle developed in the last decades have led to an increasing loss of biodiversity and global degradation of ecosystems.

The Millennium Ecosystem Assessment (MEA) report released in 2005 warned the international community that human kind has caused unprecedented losses in biodiversity and declines in ecosystem services. Efforts to achieve the 2010 biodiversity target of achieving a substantial reduction in biodiversity loss and initiatives to halt the degradation of ecosystem have yet to prove successful and will be reviewed at the 10<sup>th</sup> session of the Conference of the Parties to the UN Convention on Biological Diversity (CBD) to be held in Nagoya, Aichi in Japan in October 2010. Thus it is a vital task for the two regions to bolster actions to reverse the trend of biodiversity loss, rehabilitate ecosystem services and promote sustainable use of biological resources in order to tackle global challenges such as biodiversity loss, ecosystem degradation and climate change with a view to achieving sustainable development at the global level.

Stakeholders from both Asia and Europe have a vital role to play in sharing knowledge and promoting good practice for effective biodiversity conservation and successful ecosystem services management. As it operates under the umbrella of the Asia – Europe Meeting (ASEM), ENVForum provides a unique and valuable platform for inter-regional multi-stakeholder policy dialogue on global sustainability issues with a close linkage to priority policy and decision-making processes.

The ENVforum 7<sup>th</sup> Roundtable was opportune as increasing attention has been given to the issue of biodiversity and ecosystem services over the recent years and there is a need for policy inputs

from various stakeholder groups and geographical regions. While the international community advances work to prepare for the CBD/COP 10 in 2010, parallel processes are also under way such as the work for establishing the Inter-government Platform on Biodiversity and Ecosystem Services (IPBES) under the auspices of the UNEP, and for finalising the report on the Economics of Ecosystem Services and Biodiversity (TEEB).



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## KEY FINDINGS AND RECOMMENDATIONS FOR DECISION-MAKERS

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The following key findings, recommendations and ideas emerged from presentations and discussions:

### **Key Findings and Recommendations**

#### **I) Overall Policy Challenges**

- The decoupling of biodiversity loss and ecosystem degradation from economic growth is essential for the implementation of effective overall policies.
- The mainstreaming of biodiversity and ecosystem management in policy processes should be achieved.
- An appropriate policy framework and targets to be assessed and agreed upon for the CBD/COP10 and beyond need to be put in place.
- People's perception and sense of value should be increasingly influenced in order to prompt behavioural and priority changes.
- The furthering of capacity-building should be addressed and multi-stakeholder collaboration and partnerships should be promoted.

#### **II) Scenario Approaches**

- The scenario approach is a useful tool for stimulating imagination and building planning capacity. Furthermore, scenarios provide a set of several divergent stories about the future to sketch the realm of the possible and to better prepare for the future.
- The axis of "Implementation of policies" (responsible vs. irresponsible) and the "Impact of Technology" (appropriate vs. inappropriate) provided a useful assessment framework and led to different approaches to possible futures.
- Land use and the use of natural resources are important factors in the scenario building process.
- Scenarios are an effective tool for capacity building.

### **III) Overcoming Policy and Institutional Gaps**

- In order to overcome policy and institutional gaps in international policy frameworks, it has to be realised that the value of ecosystems and biodiversity is still under-estimated. Moreover, the lack of data, market failure and wrong subsidies need to be addressed.
- A goal should be to achieve 10 percent targets for sanctuary and protected areas, to establish a robust financing scheme, to create a system to make the user or beneficiary pay, to further green accounting and to establish a payment method for ecosystem services.
- Furthermore, the need to synchronise the national and international level in order to improve policy performance should be addressed.
- GIS and participatory monitoring, qualitative and quantitative indicators and non-economic values need to be reassessed.
- The Envy Impact/Strategic Impact Assessment should cover biodiversity and ecosystem services.
- Information measures such as certificates and effective labelling should be introduced.

### **IV) Green New Deal**

- The valuation of biodiversity, meaning paying or being paid for biodiversity gain or loss, needs to be set as a principle.
- Future costs need to be integrated in the current valuation.
- Mitigation cost and proxy prices (substitution cost) should be considered.
- Over-sighted ecosystem values need to be re-evaluated.
- Subsidies need to be removed, pricing needs to be appropriate and policies need to be rectified to transform markets and cover the environmental premium.
- The question if the Green New Deal can do well for biodiversity and ecosystem services remains.

### **V) Impact of Climate Change and Human Activity on Key Ecosystems**

- The presented case studies showed that conservation and poverty policies should be integrated.
- The local knowledge of the people should be combined with the national, international and global knowledge in order to effectively find the best solutions that can address as many facets of a problem as possible from various perspectives.
- Education, capacity building and ownership are key aspects for long-term continuity and need to be addressed.

- Incentive schemes must be expanded for conservation practitioners and environmental farmers.

#### **VI) Valuation and Payment for Biodiversity and Ecosystem Services**

- A proper cost-benefit analysis, considering financial, socio-cultural and ecological factors, needs to be emphasised.
- Future benefits need to be stressed in a reasonable length and the long-term goals need to be taken into account.
- The payment for ecosystem services is a useful negotiation tool, but can not be a panacea.
- The need to advocate valuation and PES (the national and international need to be informed) should be addressed.

#### **VII) Process of Capitalizing on Ecosystem Services: Business Opportunities for the Private Sector**

- It was agreed that it is important to identify common interests for long-term options.
- Thus, multi-stakeholder partnerships and community-driven initiatives are needed.
- Moreover, the need for specific support dedicated to pro-biodiversity SMEs is crucial.
- Funding sources for innovative tools need to be expanded.
- The Ecosystem Service Review and EVI spearheaded by the WBCSD Ecosystem Focus Area core team provides a useful framework and should be promoted.

#### **VIII) Prospects for Asia-Europe Cooperation and Concerted Actions to Tackle the Challenges**

- For successful cooperation, biodiversity needs to be prioritised and mainstreamed in both Asia and Europe.
- The Asian approach for a more comprehensive evaluation versus the right of development was identified as crucial for further discussions.
- Long-term continuities need to be build and biodiversity should be validated.
- Priority should be given to improving investment environments.
- Moreover, it is crucial to develop data, policies and technology packages for optional decision making.
- The scenario approach to promote capacity building was identified as useful.
- Developing schemes and platforms for knowledge sharing need to be developed.

- The ideas of a green national product and green accounting were discussed in order to develop a better understanding of interrelations between economics and ongoing processes concerning biodiversity and ecosystem services.

#### **IX) Future Challenges**

- One of the future challenges is finding a stronger link between biodiversity, ecosystems, climate change and global change.
- The question of what can be done to forge cross cutting concerted actions needs to be addressed.
- Will the payment for ecosystem services (PES) change practice for sustainability?
- How should PES be designed and operated to reallocate financial resources?
- What can be an effective strategy for mainstreaming?
- What other activities can be initiated for capacity building?
- A common position paper on biodiversity and ecosystem services should be developed for the 10<sup>th</sup> Session of the Conference of the Parties to the Convention on Biological Diversity (CBD/COP 10) to be held in Nagoya, Aichi, Japan in October 2010.





9-30 June 2009 / Hayama, Japan

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**SUMMARY OF PRESENTATIONS AND DISCUSSIONS**

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***Roundtable Day 1 (June 29<sup>th</sup>, 2009) - Opening Session***

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Prof. Akio Morishima, Special Academic Advisor, IGES, opened the conference and welcomed the participants of this Asia Europe Environment Forum 7<sup>th</sup> Roundtable meeting in Hayama, Japan. He introduced the topic of the roundtable “*The Accounting of Nature: Biodiversity and Ecosystem Services in Asia and Europe*” and highlighted the importance of discussing biodiversity and ecosystem services as well as furthering Asian-European cooperation in these fields. He stressed that if business-as-usual scenarios continue severe consequences for biodiversity and ecosystem services soon will follow. Furthermore, he emphasised that the costs of reducing the effects of climate change comprise approximately one percent of the global GDP; while the costs of continuing as usual comprise about five percent. Hence, in order to effectively address climate change and the loss of biodiversity, many uncertainties still have to be overcome. These uncertainties lie particularly in the area of policy making. Therefore, Prof. Morishima welcomed the ENVforum 7<sup>th</sup> Roundtable not only to further the preparations for the next UNCBD COP 2010, but also to promote biodiversity in Asia, the Pacific and Europe beyond the 2010 targets. He affirmed that this effort could be especially promising as a multi-stakeholder approach.

Mr. Peter Ryan, Director for Intellectual Exchange, ASEE, welcomed participants and underlined that the interaction between Asian and European leaders, from the 27 EU Member States and 16 Asian countries, significantly contributes to finding key solutions and long-term goals for biodiversity and ecosystem services challenges. He then re-introduced the participants to ASEM and ASEF and its purpose to encourage and facilitate intellectual exchange and people-to-people programs. He emphasised ASEM's and ASEF's purpose of building platforms for dialogue between civil societies and governments in Asia and Europe. Moreover, Mr. Ryan stated that the success in building alliances is based on the strength of the partnerships that are being built. Therefore, under mandate from the Asian and European leaders, the task of the ENVforum was

to facilitate these partnerships especially between experts of the two regions. This expert exchange was not necessarily directed at finding concrete solutions, but it intended to develop a set of recommendations and scenarios for the future use of policy makers. Taking the challenges as well as the will to tackle the challenges into account, Mr. Ryan expressed confidence about a fruitful outcome of the 7<sup>th</sup> roundtable.

### *Opening Remarks*

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Mr. Kuroda Daizaburo, Director General, Nature Conservation Bureau, Ministry of the Environment of Japan, welcomed the participants and reinforced the importance of achieving an agreement on the post-2010 target. He pointed out that it is most likely that the internationally agreed target to significantly reduce biodiversity loss by 2010 will not be achieved. Therefore, he stressed the value of the ENVforum 7<sup>th</sup> Roundtable for the COP10: In order to countervail continued biodiversity loss, it is important to set a post-2010 biodiversity target, to revise the Strategic Plan, and to establish an international regime for Access and Benefit-Sharing (ABS). In particular, the formulation of a clear target - based on the status of achievement of the 2010 target - is essential. Moreover, Mr. Daizaburo reaffirmed Japan's commitment to the COP10 negotiations. Through proposing the Satoyama Initiative to the COP10 as a means of conservation, Japan is dedicated to continuously further the discussion on the preservation of biodiversity and ecosystem services. In concluding, Mr. Daizaburo stated that the gathering of the multi-stakeholders at the ENVforum 7<sup>th</sup> roundtable is an important step in order to facilitate and further the conservation of biodiversity and the development of sustainable ecosystem management.

### *Panel discussion: Asia and Europe – Policy Challenges for conserving ecosystem services for promoting environmental integrity and human well-being?*

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Mr. Andrej Kranjc, Ministry of the Environment and Spatial Planning, opened the session by stating that in order to ensure environmental integrity and human well-being, a vast majority of policy challenges lies ahead. With having COP 10 in Nagoya and COP15 in Copenhagen in mind, he stated that expectations to reach set targets are high, and that increased awareness among the general public and policy makers needs to be raised.

Dr. Ahmed Djoghlaif, Executive Director, Convention on Biological Diversity (CBD) stated that biodiversity continues to be lost at unprecedented rate and it is unlikely that the international community will deliver its commitment to substantially reduce the rate of loss of biodiversity by 2010. In addition, he emphasised that as a result of climate change Asia's biodiversity might be

reduced by 50 percent, certain species might go extinct and more forest cover will be lost. Dr. Djoghlaif then addressed the need for enhanced implementation of the three objectives of the Convention and COP10, which will be held during the celebration of the international year on biodiversity, offers a unique opportunity to redouble efforts to meet biodiversity challenges and adopt a post 2010 biodiversity strategy. He stated that Japan would have a chance to provide leadership, and Nagoya will enter history for biodiversity as Tokyo did for climate change.

Prof. Masahiro Kawai, Dean, ADB Institute, emphasised that continuing economic growth and improving the quality of life should be achieved without compromising on limited ecological capacities. Prof. Kawai stated that a new development paradigm is needed in Asia, namely that carbon emissions need to be decoupled from economic growth while at the same ensuring the quality of life. To illustrate that decoupling is possible, he mentioned that the Japanese GDP has been growing, but CO<sub>2</sub> emissions have declined. He also addressed the use of the co-benefit approach, which support projects that are of direct importance to Asian development needs and at the same time focus on low-emission as a co-product. Prof. Kawai then pointed out the importance of mitigation and adaptation processes. Finally, he addressed policy challenges for Asia to maximise ecosystem benefits. Among them are sustainable production and consumption through structural changes, the development of a green infrastructure (energy, transport, agriculture, water, etc.), the intervention through fiscal incentives as direct tool to close gaps between ecological cost and market prices, incentives for consumer choices for less polluting products or green services, and strategic international partnerships and capacity building for strong effective governments.

Dr. A. Hamid Zakri, Director, Centre for Global Sustainability Studies, University Sains Malaysia, stated that even though diversity constitutes the building blocks for the production of ecosystem services, Asia and Europe are losing diversity. While many segments of society have benefited from the mining of ecosystem services, the sustainability of these services has been put at risk. Dr. Zakri stated that since the problem is known and that the means of science are provided, something needs to be done, as scenarios have pointed out. He referred to the Millennium Ecosystem Assessment (MEA), which developed a set of global scenarios to address the effects of different development paths on ecosystem services and human well-being. Looking ahead, Dr. Zakri warned that revising the biodiversity target post 2010 will be a complex task that will need to build upon existing scientific data and be relevant to other international targets such as the Millennium Development Goals (MDGs) and the UNFCCC framework. He proposed a target that is long-term and sufficiently ambitious, but also pointed out that the political process for the adoption of any binding target will be influenced by numerous factors. In order to achieve any

progress on halting the loss of biodiversity and ecosystem degradation, ecosystem services need to be valued and cost-benefit approaches need to be incorporated. Only through attaching a value to biodiversity and ecosystem services the reckless handling of biodiversity and ecosystem services can be reduced and the possibility of measurement in economical terms can be ensured. Therefore, the aim should be to internalise external effects on ecosystem services. Furthermore, production subsidies need to be removed while strengthening developing country's environmental regulation. Consequently, Mr. Zakri stated that investment in public goods - like education - and poverty reduction are needed to increase public and local engagement. Trade barriers and distorting subsidies need to be eliminated. Moreover, an adaptive management is needed to find appropriate responses to changing parameters in biodiversity and ecosystem services. Dr. Zakri also emphasised that investments in education and new technologies are significant, and the restructuring of institutions is required.

Dr. Janos Zlinsky, Senior Advisor for Environmental Policy to the President, pointed out that there are positive examples of policy implementations, as experiences in Central and Eastern Europe show. To illustrate positive policy outcomes, Dr. Zlinsky referred to the Hungarian experience: It started from a financial crisis and from the crumbling of the Soviet Empire. Consequently, change was needed and the possibility was given for a quantum leap instead of a step-wise improvement. Thus, fundamental values were re-thought and policies supporting the environment were transformed into more fundamental values and rights, standing on the same level as the right to live. Concluding, Dr. Zlinsky stated three challenges: First of all, solid foundations need to be established, meaning a solid set of values protecting biodiversity and ecosystem services. If people learn to acknowledge biodiversity and ecosystem services in the same way as they value their human rights, a new level of public identification with the importance of preserving biodiversity and ecosystem services might be reached. Secondly, proper institutions need to be implemented, which can operate under a checks and balances system. Preserving biodiversity and ecosystem services should be performed by institutions that have the proper means and rights to act, meaning that they should be able to sanction as well as to support. Furthermore, they should control as well as support each other. Finally, an ecosystem approach to legislation has to be found. Legislation should take moral issues, religion and individual values into account and should cover the broader picture as well as singular issues. Legislation is often very particular – therefore, it is important to cover all ecosystem services in policies, or the possibility of balancing them will not be given. Dr. Zlinsky emphasised the need to involve everyone concerned to prevent unnecessary conflicts. He stated that as a general rule,

the nature of the ecosystem itself will determine whether a national or an international agreement is needed.

In the discussion, it was stated that the public still has very little awareness about ecosystem services. Moreover, the concern arose that many governments support biodiversity in biodiversity conservation areas, but proceed with business-as-usual approaches elsewhere. Hence, the need to link biodiversity with economics was mentioned. Participants also mentioned that they were not surprised that the COP 10 target would not be met. Reasons for non-achieving this goal were identified as the continued lack of public awareness, the remaining need to implement changes, and the attempt to convey the problems and complexity of biodiversity. Moreover, it was stated that while the pictures of climate change are very graphic, biodiversity loss is more difficult to visualise. The promotion of biodiversity should try to celebrate the living wonder, be optimistic about biodiversity, amplify the spiritual value of biodiversity and put local knowledge on the upfront.

#### ***Presentation of previously developed scenarios on biodiversity and ecosystem services***

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Dr. Marc Gramberger, Managing Director, Prospex, introduced the participants of the ENVforum 7<sup>th</sup> Roundtable to the outcome of the scenario workshop “Developing Biodiversity and Ecosystem Services Scenarios”, which had preceded the roundtable meeting on June 27 – 28, 2009. The objective of this 1 ½ day-workshop was to develop a set of first generation qualitative scenarios on the future of biodiversity and ecosystem services. Taking the scenario criteria into consideration, Dr. Gramberger described the basic outcome of the scenario building workshops on the future of ecosystem services from now to 2050. The appropriate or inappropriate impact of technology on ecosystem services was identified as one key uncertainty, while the responsible or irresponsible implementation of policies was identified as another key uncertainty. During the workshop, a set of four different, first-range scenarios had been developed:

Susanne Wallenoefffer, Asia Europe Environment Forum, ASEF, presented the first imagined scenario called “Changing Priorities”, in which the impact of technology is inappropriate and the implementation of policies is irresponsible: The scenario begins with a continuing financial crisis and a consequential focus on energy as a motor of growth. The investment in biofuels continues and even increases. Even though international agreements are concluded in Copenhagen 2009 and in Nagoya 2010, they are not implemented sufficiently. By 2025, climate change is said to be less severe than previously predicted and people have to deal with a major food crisis due to the one-sided focus on bio fuels. While public support of climate change policies decreases,

public support of the fight against hunger increases. Finally, around 2050, GMO is identified as a solution to the food crisis, exacerbating the loss of biodiversity. Economies of scale develop due to mass food production, and for the majority of people only a very limited diet is available. Land is used predominantly for food and energy production, thus more and more monocultures develop. Towards the end of the scenario, the impacts of climate change prove to be worse than assumed in 2025 and contributes to the loss of biodiversity additionally.

Dewi Suyenti Tio, Asia Europe Environment Forum, ASEF, introduced the second scenario developed, named the 'Law of the Jungle', in which appropriate technology is used, but in which the implementation of policies is irresponsible: As a result of the economic crisis and continued low GDP growth in developed countries, the international negotiations in Copenhagen and Nagoya collapse. No binding international agreement can be reached. Therefore, the main focus increasingly lies on national interests, which leads to short-sighted policies. Even though information is available, business-as-usual continues because it is seen as a cheaper solution to all the short time problems. Ecosystem services and biodiversity increasingly deteriorate. Ecosystem ownership passes from the public to the private. Finally, the scenario assumes that ecosystem services can only be afforded by the rich - a situation which then might result in an economic, social and biodiversity crisis.

Mr. Christer Holtsberg, Swedish Environmental Secretariat for Asia, outlined the "Harmony Scenario", in which both the impact of technology and the implementation of policies are effective: Important conditions for this harmony scenario are not only a civil society which is empowered to advocate change, but also a research community, which is empowered to provide new knowledge. Furthermore, governments recognise the value of the contributions of the civil society and the research community. Economic growth has undoubtedly contributed to rapid poverty reduction and enhanced welfare. However, the quest for economic growth has also created complications: The scenario projects increasing inequalities within and between countries, a widespread environmental degradation, and increasing incidences of environment linked diseases. Moreover, climate change can be considered a complication as well. Hence, the challenge in this scenario is to de-couple economic growth from environmental degradation. A possible way to face this challenge would have to be based on technological and scientific innovations, as well as on a decreased consumption of goods and an increased consumption of services. Other starting points of this scenario could also be an appropriate education system, an appropriate and accessible information system and an effective monitoring system, which includes inclusive and participatory decision-making. Towards the end of the scenario

environmental services are being recognised as an instrument for sustainable development. A broad understanding of the importance of environmental services as a condition for continued development is developed. Furthermore, the willingness of the people and businesses to pay for environmental services increases. As a result, the business community supports the development and use of green technologies, ecosystem health improves, wealth is redistributed, sound relations between men and nature are established, and GHG sequestration reaches higher levels.

The fourth and final scenario, named “Continuing Disappointment: Two Steps Forward, One Step Back”, was introduced by Cathy Maguire, Policy Analyst, Comhar – Sustainable Development Council. This scenario assumes responsible policy formation and implementation accompanied by continued inappropriate technologies. The scenario can be characterised by a cycle of policy formulations and good intentions, which will have intended and unintended impacts, which then again might lead to reactive policy responses. At the beginning of this scenario stands the economic crisis. The COP agrees on a target of reduction of 90 percent of the GHG, and new increased targets for the use of bio fuels. Governments prioritise the development of technologies and R&D to contribute to an economic recovery. However, the rush to technological solutions gets out of hand, and early warnings are ignored. Information does not effectively influence decision making. Subsequently, food prices double, land degradation continues. As a result, Environmental Impact Assessments increasingly highlight the problems. As a response, policy makers recognise the unintended outcome of policies and the urgent need to trigger change. A new phase of policy development begins, but the new and effective policies are developed without sufficient evaluation of evidence. A new global agreement on biodiversity and climate change is reached – and a new phase of optimism begins. However, the experience of the last decades has led to distrust in science and policy makers. As a result, technological solutions sell well, functioning as silver bullets, and other solutions such as behaviour change and addressing demand are ignored. Especially in the sector of food production, R&D delivers new technologies which are rolled out without comprehensive and sustainability impact assessments. However, things get better – for now. Towards the end of this scenario, policies are agreed on and implemented, but not quickly enough. The food supply cannot meet the demand due to population growth, green energy demand outstrips the supply, climate change leads to increased biodiversity loss and ecosystem degradation, and indigenous people lose their sovereignty. The erosion of cultures continues and widespread problems lead to civil unrest. Finally, there is the realisation that technological solutions are not delivering the necessary change and reduction in impact.

Ms. Anita Pirc-Velkavrh, European Environment Agency, wrapped up the presentation on the scenario workshop by introducing possible consequences for each of the individual scenarios. She highlighted the economic dimension, the governance and policy dimension as well as the climate change dimension of the various scenarios. It was suggested that without balanced valuation of ecosystem services discrepancies in well-being cannot be reduced and their future long-term sustainable development is not possible. Valuing only market ecosystem services would lead to the 'Law of the Jungle' or the 'Escalating Disappointment' scenario. Further, emphasis was placed on the mutual impact of technology and policy implementation. Ms. Pirc-Velkavrh stated that people are ready to pay only when they see that decoupling brings improved wellbeing, therefore, "harmony" is only achieved through the help of technologies, the right mix of policies, reduced consumption and regional cooperation. Regarding governance and policies, Ms. Pirc-Velkavrh emphasised that well designed long term policies need to support balanced ecosystem services management. Moreover, they also need to face possible future challenges through scenarios. Technologies can have a strong impact on the policies outcome and therefore need to be taken into account. However, sole trust in technologies can paralyse policy implementation and lead to a lack of integration. She then stated that for the management of ecosystem services all scales of governance are required and need to be interconnected geographically. Concerning climate change impacts, Ms. Pirc-Velkavrh stressed that those impacts should not be *ad hoc* drivers of developments. They can only be managed with pro-active long term sustainable development policies, which take into account the utilisation of appropriate technologies. Even with policies in place, climate change impacts on ecosystem services can be exacerbated if the policies are not based on the most up-to-date information. In sum, Ms. Pirc-Velkavrh pointed towards a need for proactive management and well-informed climate change policies.

In the following discussion, attention was brought to the various levels of governance. Mr. Herry Purnomo, Scientist, CIFOR, stressed that one should not only keep in mind the need for national governance structures, but also for a global governance structure. The previous participants in the scenario workshop acknowledged the importance of the global level, highlighting the different types of interaction between the national and global level envisioned by the four scenarios. Moreover, it was re-stated that the four developed scenarios are rough drafts, which do not make the claim to be complete, but can give significant insights into possible futures.

### ***Session 1: Evaluating the Status Quo – Ideas to Overcome Policy and Institutional Gaps in International Policy Frameworks***

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Mr. Ismid Hadad, KEHATI – The Indonesian Biodiversity Foundation, opened the session on evaluating the status quo and developing ideas on how to overcome policy and institutional gaps in international policy frameworks.

Dr. Rudolf de Groot, Associate Professor on Integrated Ecosystem Assessment and management, Wageningen University, began his presentation by quoting Pavan Sukhdev, TEEB Study Leader, COP9: "Society must urgently replace its defective economic compass so that it does not jeopardize human well-being and planetary health through the under-valuation and consequent loss of ecosystems and biodiversity." Dr. de Groot then mentioned four problems that need to be addressed in order to overcome policy and institutional gaps. Firstly, the value of benefits of ecosystem functions is mostly under-estimated, since they are not captured in conventional market economics and rather considered "free" services. Secondly, a constant lack of data remains and trade-off decisions are based on incomplete information. Furthermore, market failures are a problem, since externalities are not taken into account. Finally, wrong taxes and subsidies stimulate ecosystem loss. Dr. de Groot then mentioned possible ways to overcome institutional gaps. The 10% target of all ecosystems in a given region should be reached as soon as possible and make space for nature, both through conservation and restoration. Appropriate and robust management and financing schemes should be developed, covering both management and opportunity costs. Finally, the user or beneficiary should be forced to pay. Hence, all services and their value in a given area or ecosystem should be determined, and beneficiaries should be identified. Value then could be turned into real money. Dr. de Groot concluded that it might be better to speak of investing or benefit sharing instead of paying, and stated that even though nature might be priceless to many, the practice of assigning a value to ecosystems and their services becomes increasingly significant.

Mr. Masanori Kobayashi, Coordinator at Programme Management Office, IGES, presented various case studies of biodiversity conservation, ecosystem management and community development in developing countries in Asia and the Pacific highlighting institutional gaps and measures for overcoming such challenges. One of the case studies dealt with protecting endangered bird species in Cambodia. After the birds' habitat had been severely endangered due to forest clearance for farm land reclamation, an agreement with local farmers was reached to halt bird habitat conversion to paddy. Farmers now refrain from converting forests to farms, and more value added crops were introduced. Moreover, restaurants were effectively linked to conservationist farmers and showed the willingness to pay an extra environmental premium to procure rice that is grown in an environmentally friendly manner. Mr. Kobayashi then identified

opportunities and challenges, which especially lie in utilising innovative and international schemes such as Clean Development Mechanism under the Kyoto Protocol or carbon trade markets. He underlined a need for studies, research, and good practice information and exchange and policy experimentation. Governments, NGOs, research institutes, the private sector and international agencies need to organise, motivate and institutionalise local communities with external facilitators. Mr. Kobayashi stressed that in order to achieve this interaction, participatory dialogues are significant, incentives need to be given, international mechanisms need to be utilised, technology needs to be developed and the increase of health risks should be known as linked to biodiversity loss.

Provocateur Dr. Cathy Maguire, Comhar – Sustainable Development Council, stressed that no matter which policy is considered, gaps can be identified. She addressed the insufficient technological capacity and the resulting challenges, but also stated that these challenges were nothing new. Moreover, she pointed out that the community needs to learn from what is accessible, and that businesses should have incentives to invest into climate change in order to reduce risks for themselves. However, she criticised that commitments usually defer from actual actions and activities, and that proper investments and engagements are needed. Dr. Maguire then mentioned that due to incomplete data policies gaps are still common and need to be eliminated, as well as new policies need to be developed based on new realisations.

Mr. Ismid Hadad ended the session by stating that the participants of the roundtable - as representatives of different organizations - should function as diplomats and advertise, further and strengthen biodiversity awareness. He also stressed that quantitative benchmark targets are either not clear or not enough, economic incentives are not given sufficiently, governments are not involved enough, and the linking of environment and welfare has not been achieved yet. Mr. Hadad called for more green mechanisms, and for enhanced cooperation between Asia and Europe in order to solve problems and close institutional gaps in international policy frameworks.

### ***Special Panel on the Green New Deal and Strategies for Valuing Biodiversity and Ecosystem services***

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Mr. Tetsuji Ida, Kyodo News Agency, opened the special panel on the Green New Deal and Strategies for valuing biodiversity and ecosystem services.

Dr. Cielito Habito, Director, Ateneo Center for Economic Research and Development, Philippines, laid explained the current context of the Green New Deal proposal and stated that measures taken towards short-run economic stabilisation may be detrimental to human and environmental

welfare and long-run sustainability. He stressed the contrast between financial/ economic stability and sustainable human development. Dr. Habito then pointed out that the current global financial crisis and economic downturn led to calls for massive fiscal stimuli, meaning that governments currently spend large sums to fill gaps left by falling consumption, investment and export demands. However, the outcome of the crisis could be a possible win-win: Both short term economic stabilisation and long term sustainability ends could be served. The Green New Deal intends to create policies, investments and subsidies for clean energy and cleaner technologies as well as rural energy (including renewables and sustainable biomass, sustainable agriculture, ecosystem infrastructure, reduced emissions from deforestation and degradation and sustainable cities). Moreover, Dr. Habito addressed the valuation of biodiversity and ecosystem services. Approaches to valuation practices might be seen in creating new "green collar" jobs, in the price discovery through the market, in the marginal revenue product, in the willingness to pay and sell, in opportunity cost, in the value of foregone future consumption, in the cost of mitigation and in hedonic pricing (proxies).

Dr. Henrik Egelyng, Project Senior Researcher, Danish Institute for International Studies, stressed that in order to counteract the current lack of specific instructions and effective institutions, new ideas and creative thinking are needed to preserve biodiversity and ecosystem services. Dr. Egelyng underlined the importance of the UN documents on the Green New Deal in this respect. He stated that among proposed actions such as green investments, suggestions for new standards and certifications and the suggestions for developing an ecological infrastructure, institutional mechanisms to protect ecosystem services and biodiversity are highly important. Dr. Egelyng also addressed the question of the evaluation of biodiversity and ecosystem services and questioned whether, in the absence of institutional change, valuation per se would be enough to decrease biodiversity loss. Underlining the complexity of ecosystem services, he warned that valuation is no magic key. Finally, Dr. Egelyng suggested that international harmonisation of institutions such as green national accounting and ecological tax reforms are needed to protect natural resources from over-use and pollution.

Dr. Young-Woo Park, Regional Director, UNEP, stated that the Green New Deal is a subset of a green economy. Moreover, he emphasised that the Green New Deal was a result of the financial crisis. Since new technologies and services had to be implemented as a part of the stimulus package anyway, environmentally friendly technologies and services were preferred. Dr. Park also underlined the importance of valuation due to the fact that the business sector might only manage what can be measured. Hence, Dr. Park stressed that in order to protect biodiversity and

ecosystem services, monetary values need to be attached. The most benefiting and most negatively affected sectors should be identified and then be priced accordingly. Furthermore, the need for compensation mechanisms was emphasised. Dr. Park stated that compensation could only be achieved from a global welfare maximation point of view. In addition, behavioural psychology has to be taken into account, since people might not be as active to prevent biodiversity loss as they are for encountering climate change. Dr. Park concluded by suggesting to think of other countries as one's own, and as a result develop understanding and new perspectives on problems and solutions.

### *Roundtable Day 1 (June 29<sup>th</sup>, 2009) - Wrap up of the day*

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Mr. Masanori Kobayashi, Coordinator, Programme Management Office (PMO), IGES, concluded the first day of the ENVforum 7<sup>th</sup> Roundtable by summarising the results of the presentations and discussions. He stated to have strived to synthesise enriched discussions, and the work to summarise such discussions turned to be a difficult yet important task. He outlined some the major points discussed, such as the need to decouple biodiversity loss and ecosystem degradation from economic growth, to put in place an appropriate policy framework for the COP10, and to synchronise various policies at national and international levels. Further, he highlighted the usefulness of the scenario building exercise for stimulating further thoughts on the future of biodiversity and ecosystem services. Moreover, Mr. Kobayashi reminded the participants of the discussion on how to value biodiversity and ecosystem services in better terms. Attention was also given to the New Green Deal and its possible effects on biodiversity and ecosystem services. At last, he stated further points of discussion: Methodologies for regions and international communities to deal with the loss of biodiversity and ecosystem services, the visualization and communication of biodiversity loss, valuation of 'unmarketables', the development of guiding principles for pricing and cost sharing, and the need to develop international cooperation mechanisms.

*Roundtable Day 2 (June 30<sup>th</sup>, 2009) - Session 2: Case Studies – Impact of Climate Change and Human Activity on Key Ecosystems in Asia and Europe*

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Mrs. Ella Antonio, Earth Council, introduced the session on case studies by stressing that the purpose of this session is to bring the discussion to the human level. Consideration of case studies is essential to identify areas of intervention and to develop and encourage good practices. She also re-emphasised the main objective of the roundtable, namely finding ways to link Europe and Asia.

The first case study presented dealt with climate change impacting forest ecosystems. In his presentation, Dr. Herry Purnomo, Scientist, CIFOR, addressed two case studies in Indonesia covering adaptation and mitigation options. Initially, he briefly outlined the impact of climate change and its social and economic consequences for forest dependent people. Furthermore, the interdependence of the ecosystem and the society was re-emphasised and general adaptation and mitigation options introduced. The first case study presented dealt with a project directed at increasing awareness about and subsequently reducing the vulnerability of the Javanese rhino in the Ujung Kulon National Park in Indonesia. Emphasis was placed on the crucial role of involving local stakeholders and developing a list of localised indicators and action plans in a participative and integrated way. Simultaneously, the need to learn from other cases and countries where climate change impacted biodiversity and ecosystem services was underlined. The second case study focused on attempts to reduce emission from deforestation and degradation in Indonesia (REDD). Studying national, provincial and local initiatives, Dr. Purnomo outlined that state facilitation of REDD is important for achieving the goals of REDD. First of all, the recognition of property rights for local people is significant, then rewards and incentives for local people to reduce emissions from deforestation and degradation has to be taken into account, and finally social organisation to strengthen the position of local people needs to be developed. Dr. Purnomo stated that the project intends to reach a point where 70% of the REDD will go to the local community.

The second case study dealt with the impact of climate change on freshwater and wetland ecosystems. Mr. Mark Dubois, Research Fellow, WorldFish, talked about the work of the Wetlands Alliance in the lower Mekong area. At first, he introduced the Alliance. It is comprised of four regional partners that came together to find innovative ways to work on the local level, using the wetlands as entry points for poverty alleviation in Southeast Asia. The Wetland Alliance

places emphasis on the linkage between environmental concerns and economic development. In his case study, Mr. Dubois especially focused on the use of the lower Mekong area for hydropower generation and its use for providing a basis for local communities, which are dependent on its vast fish productivity. Mr. Dubois emphasised that climate change and human involvement result increasingly in rapid changes in the area, therefore requiring more and more adaptation. Hence, the Wetland Alliance hopes to achieve adaptation through strongly involving local communities and their knowledge, as well as their capacity of knowledge production. Crucial for this approach is that the Wetlands Alliance does not create new systems, but instead works with existing ones. Local people and local authorities are considered as the driving forces of local development. Nevertheless, co-management approaches that bring state service providers together with local communities are taken into account as well. In addition, the linking of local and international researchers is significant for the success of this project. In conclusion, Mr. Dubois stressed the importance of partnerships and dialogues, especially but not only between Asia and Europe. He stated that dialogue is crucial for analyzing and utilising global policies on biodiversity and climate change for the purpose of local development.

The third and final case study focused on the impact of climate change on a secondary ecosystem. Dr. Toshiya Okuro, Associate Professor, University of Tokyo, introduced the participants of the roundtable to the Satoyama Initiative: *Satoyama* is a traditional rural landscape of Japan, a mosaic of mixed coppice forests, rice paddy fields, dry rice and crop fields, grasslands, streams, ponds, reservoirs for irrigation, and settlements. Quoting Takeuchi's definition of land degradation, namely that the "process of landscape change is caused by a mismatch between land conditions and land use", Dr. Okuro underlined that land degradation is not necessarily caused by excessive land use only, but can also be the consequence of climate change, extensification (under-use) or mismanagement of land, as was the case in Satoyama. Land abandonment alters biodiversity, affects land conservation functioning and causes spreads of pests and weeds. But since ecosystem services from Satoyama are important for provisioning, regulating, supporting, and cultural services, the revival of Satoyama was considered through landscape conservation, recreation, environmental education and the transformation into biotopes. The biodiversity-friendly farming practice named "Fuyumizu Tanbo" (winter flooding) has been introduced to recover paddy biodiversity. Products of environmentally friendly farming – especially friendly to the Koonotori, the Oriental White Stork – received a certification label of the Koonotori brand in Toyooka City. According to Dr. Okuro, the restoration of Satoyama and changes in consumers' value judgment and behaviour are fruitful. The essence of *Satoyama* is that coexistence of human society and the natural environment is achieved through sustainable

management of local natural resources and energy needs. Finally, Dr. Okuro stressed that there are several futures in terms of managing Satoyama; yet, in any case, it is essential to question the current situation of land degradation across Japan.

Provocateur, Mr. Yasushio Hibi, Conservation International Japan, brought out some commonalities between the three previous presentations. He stressed that in each case environmental concerns were rightly interlinked with poverty and economic issues. Moreover, he highlighted the importance of multi-stakeholder partnerships for the individual case studies and the role of education for capacity building among local communities. Emphasis was also placed on the importance of sustainability for each case study. Mr. Hibi noted that in most cases it is the local community that has to sustain the impact of development and conservation efforts. Finally, Mr. Hibi had two suggestions: First of all, that it is crucial not only to look at climate change as it is affecting the ecosystem, but also at other aspects such as human activities. Secondly, he suggested that discussions need to be shifted from a focus on fund generation to capacity building.

The following discussion centred around two major aspects: Firstly, the role of local knowledge and its interrelationship with international conservation and development efforts, and secondly, the role of protected areas in ecosystem management. Many participants underlined the essential role of local knowledge for combining economic and environmental interests. However, concerns were raised about the diverging impacts of influence, with international agencies and scientific research on the one hand and the dominance of local knowledge on the other hand. Further, the influence but simultaneous ignorance of religious believes on ecosystem management efforts, as well as possible capacity shortage on the local level were pointed out. Mr. Dubois stressed that local communities require support as well as an organising agency. Moreover, Mr. Dubois stated that local communities need to develop confidence regarding their knowledge. During that development process, this local knowledge has to be linked with other knowledge, such as national, international or global knowledge, in order to develop methods to validate and share different insights and all aspects of knowledge ever acquired. A utilitarian approach to local knowledge should be avoided. Prof. Jiang Gaoming, Chinese Academy of Sciences, additionally underscored that international and national initiatives can learn from local people and their knowledge.

In regard to the role of protected areas in ecosystem management, interest was expressed about possibly adding value to a protected area by following the Satoyama Initiative. This was questioned in two ways. Firstly, it was pointed out that most Satoyama areas in Japan are not

designated as protected areas. Secondly, the suitability of protected areas for ecosystem management was doubted. Mr. Hibi stressed that it is crucial to find a way to protect and use ecosystems outside of protected areas with the Satoyama Initiative possibly being able to serve as an example.

Various related issues were discussed as well. In regard to ecosystem service valuation, the centrality of a cost-benefit analysis was identified. At the same time, however, emphasis was placed on the crucial role of fairness and justice. Moreover, the difficult position of donors and international agencies in development and conservation programmes was discussed. It was highlighted that only by seeking support from various sources, continuation of long term programmes can be achieved. Finally, Dr. Park called for shared projects between Asia and Europe both to improve environmental conditions and to solve poverty issues.

### ***Session 3: Economic Valuation and Payment for Biodiversity and Ecosystem Services***

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Mr. Christer Holtsberg, Swedish Environment Secretariat for Asia, opened the session on economic valuation and payment for biodiversity and ecosystem services.

Dr. Raphael Bille, Biodiversity Programme Director, IDDRI, raised the question of how effective it would be to assign a monetary value to biodiversity and ecosystem services so that they can be integrated in mainstream economy and sectoral policies. He stated that despite all knowledge, policies, tools, efforts and projects, biodiversity still seems to be bound to erode on a global scale. Thus, Dr. Bille argued that assigning a value to ecosystem services and biodiversity might be worth a try, since all other efforts to preserve it have been tried already and proved as partly or totally ineffective. He furthermore pointed out that two types of economic value can be assigned: One is based on court cases, the other one is based on economic analysis. Even though methodological and ethical limits have to be considered, the key idea remains clear: Biodiversity and ecosystem services have to be mainstreamed in “strong” ministries’ policies, as opposed to furthering them only in environmental ministries’ policies. Since policy makers of “strong” ministries make decisions according to cost-benefit analyses, biodiversity and ecosystem services valuation might be a way to trigger rational choices by super decision-makers who optimise their decisions based on those analyses. Dr. Bille also stated that value can be considered as the missing piece in the “decision puzzle”. However, Dr. Bille also pointed out that integrating biodiversity and ecosystem services does not mean integrating them into the economy, namely the way we do business. Simply assigning a value does not mean it is captured in a price. The economic value of ecosystem services is first of all a negotiation tool. While it



might be an upper price limit for the beneficiaries, it does not always make sense for resources users. Concluding, Dr. Bille pointed out the positive and negative aspects of assigning value to ecosystem services. Positive aspects are the assignment of value as a new method. Further, it will be easy to sell and to communicate. It might also provide common ground for debates, legitimate conservation and might be a tool to reconcile economy and ecology. While those positive aspects were recognised by the participants of the roundtable, Dr. Bille also pointed out the negative aspects of assigning value to ecosystem services. As negative aspects the following might be considered: Assigning value might be considered as a purely utilitarian approach, which allows no room for desires, feelings and values. Moreover, the approach is not as scientific and objective as it could be and might be. In addition, knowing does not necessarily mean acting and might not trigger collective action. Taking these pros and cons into consideration, Dr. Bille addressed the need to develop utilisation-focused evaluations. Firstly, the objectives need to be known (the nature and stage of the decision process). Then, robustness should be sought in usefulness as much as in economics and methodological assumptions, limits and needs should be discussed in that regard. Additionally, flaws, ethical reluctances and adverse effects would be better addressed this way. Concluding, Dr. Bille stated that assigning value has a true but limited utilisation potential. It should be seen as one tool among others and should not be considered as the conservation silver-bullet.

Dr. Zheng Yan, Assistant Research Fellow, Chinese Academy of Social Sciences, addressed the issue how PES (Payment for Environmental Services) works and contributes for eco-system and sustainable development in China. She stated that the environmental benefits and relevant economic gains have been allocated unfairly between the protectors, beneficiaries, the destructors and victims. Hence, PES is a good way to deal with the externality and market failure in eco-conservation. PES is generally defined as the generic name of a variety of arrangements through which the beneficiaries of ecosystem services pay back to the providers of those services. Moreover, PES is a good tool for improving eco-services through government-based or market-based approaches. Mrs. Yan introduced the participants of the roundtable to two cases in China where PES has been practiced already. The first case dealt with the Zhejiang Water-shed ECM. In 2003, the Water Rights Trading Agreement was reached, and guaranteed permanent access to 50 million m<sup>3</sup> water resources transferred from Dongyang and Yiwu City at a price of 200 million RMB. Case two dealt with the Beijing Miyun Reservoir ECM Project, the biggest reservoir in Asia. From 2006 to 2009, Beijing promised to compensate 20 million RMB for forestation around the Miyun Lake per year. In 2009, 5.6 million dollar ECM investment will be supplied for optimizing the planting project (changing rice to dry crops in 4700hc) in the upper

stream of Miyun Reservoir in Hebei. Since the set-up in 1960s, the Miyun Project has created 590 million USD in eco-service value. Concluding, Mrs. Yan stated that even though efforts can still only be seen as a starting point, the Chinese government's support of ECM did contribute a lot to China's eco-construction. However, research on evaluation methods has to continue.

Provocateur Dr. Julius Oszlanyi, Slovak Academy of Sciences, argued that nothing is for free in general and that therefore payment for ecosystem services must be accepted as a common practice in contemporary societies. He emphasised the increased importance of country-to-country relations and the need to address the valuation problem on a global scale. He also underlined the significance of making everyone pay who takes benefits from ecosystem services.

In the following discussion, the question arose if a universalised value or local different values should be assigned to ecosystem services. It was stated that the situation in China is changing, and that not only the government has the power to change things but also the people. Since people in china become richer, there is more willingness and capacity to pay for ecosystem services, according to Mrs. Yan. Furthermore, some participants raised the concern that a push to financial value only could result in a reduction of influence on many levels.

#### ***Session 4: Capitalising on Ecosystem Services: Business Opportunities for the Private***

##### ***Sector***

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Mr. Ireneusz Mirowski, Vice President, Polish EcoFund, introduced the experiences of Poland and the Polish EcoFund in supporting small and medium-sized enterprises (SMEs) in developing and implementing biodiversity-friendly business models. Initially, he underlined the existing obstacles for such SMEs, particularly the unavailability of necessary funds to invest and develop such business models. The Polish EcoFund as well as other national, regional and global initiatives were said to be dedicated to making such funds available. Mr. Mirowski then introduced two examples for the work of the Polish EcoFund. The first example, which dealt with Poland's plan to increase its forest coverage, improves the business prospects of SMEs as the main contractors in forest management projects. According to Mr. Mirowski, 98 projects have already been completed, including reforestation of disaster areas. The second example focused on the rewetting of peat lands, including various business projects such as tourism development and biomass generation as a source for green energy. Taking these two examples into consideration, Mr. Mirowski emphasised the need for specific support dedicated to pro-diversity SMEs as well as cooperation between SMEs, NGOs and local managers and owners. He stressed the fact that long-term solutions are crucial.

Ms. Dang Thuy Nga, Environmental Economics Officer, WWF Greater Mekong Region, outlined the case of a private hydropower plant in Vietnam. In this specific case the management of the private plant offered payment to local communities for stopping illegal logging which has negative effects on the dam and subsequently hydropower as a ecosystem service. Negotiations between the private company and local communities were crucial for identifying an appropriate payment for ecosystem services. An agreement was reached according to which the private company supports the local community at developing new livelihoods, for example, by supporting 100 households to establish bamboo plantations for bamboo shoots. Various lessons were learned from this project and are hoped to be fruitfully used for further similar projects across Vietnam. Ms. Nga stressed that private dams need to be involved in payment for ecosystem services, that more schemes for private dams are needed, and, finally, that benefit-sharing mechanisms need to be further developed.

Mr. Takeshi Takagi, Chief Advisor on Sustainability Management, CSR Office, Hitachi Chemical WBCSD, brought a business perspective to the ENVforum 7<sup>th</sup> Roundtable. He introduced Hitachi *Chemical*, which operates on the business to business market in the supply chain involved in the WBCSD effort. Hitachi Chemical focuses on business, development, energy, climate and ecosystems. The objective of the Ecosystems Focus Area is to assist members to proactively manage business risks and opportunities associated with accelerating ecosystem degradation and loss of ecosystem services. Hereby, ecosystem services are not only perceived as representing risks but also as offering business opportunities. In addition, Mr. Takagi pointed out that businesses not only have an impact on ecosystems and their services but also rely and depend on them. Mr. Takagi also introduced the ESR Tool (Corporate Ecosystem Services Review), which provides guidelines to companies on how to identify and use the risks and opportunities of ecosystem services. Further, he also pointed to the future project of developing an Ecosystem Valuation Initiative (EVI) directed at more clearly presenting the relationship between business and ecosystem services to the private sector.

As provocateur, Prof. Jiang Gaoming, Chinese Academy of Sciences, raised various questions regarding business opportunities for the private sector. He questioned how and in what form ecosystem services can be transformed into commercial products, as well as how money can be used effectively to support and promote biodiversity-friendly businesses. The work of the Polish EcoFund and the hydropower plant project in Viet Nam were described as successful examples for how these questions can be answered. The WBCSD effort concerning the conservation of biodiversity and ecosystem services was perceived as an indicator for an increasing interest of

companies in ecosystem services and their business potentials. Concluding, Prof. Gaoming introduced another example for the involvement of the private sector in the conservation of biodiversity and ecosystem services. A project in Inner Mongolia which was set up to halt sand storms is increasingly attracting businesses engaged in the production of food for major Chinese cities.

The presentations were followed by a discussion session. Wide interest in the future interrelationship between conservation of biodiversity and ecosystem services and the private sector was expressed. Questions focused primarily on the projects previously introduced. Particularly the hydropower plant project was further analysed. It was questioned to what extent paying local communities to stop illegal activities for the purpose of conservation and business improvement can be considered an appropriate response. Furthermore, landowner rights and other issues related to the project were discussed, including the possible resettlement of local communities and the identification of critical areas instead of areas with high biodiversity density. Although Ms. Nga confirmed that the government supports the payment scheme, that no resettlement had to take place and that areas with high biodiversity density had already been identified, slight concerns remained. Moreover, funding of biodiversity-friendly businesses and the future interrelationship between biodiversity and ecosystem services and the private sector were discussed. Mr. Mirowski stressed that the Polish EcoFund is not based on the principle of revolving funds. Mr. Takagi questioned to what extent the valuation of ecosystem services may change business perspectives.

### ***Concluding Panel: Prospects for Asia-Europe Cooperation – Concerted Actions to Tackle the Challenges***

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Mr. Mahesh Pradhan, UNEP, opened the concluding panel on prospects for Asia Europe cooperation and concerted actions to tackle the challenges.

Mr. Laurent Bardon, Delegation of the European Commission to Japan, stated that the major challenges for Asia Europe cooperation and concerted actions lie in defining the true value of ecosystem services on the market. He underlined the importance of developing a strong policy framework beyond the COP 10 and stated that he looked forward to working together with NGOs.

Mr. Rodrigo Fuentes, Executive Director, ASEAN Centre for Biodiversity, stressed the need for entering a policy dialogue. He also addressed the need for strengthening cooperation with regional and international institutions and for furthering closer operations. He emphasised that a huge gap between what we have done and what needs to be done still exists. Hence, a

promotion of leverage and partnerships as well as mainstreaming of biodiversity and ecosystem services in governments is required. Mr. Fuentes suggested an integrated concept of ecosystem services, which continues capacity development, ensures that effective practices are adopted, and pushes forward cohesion and collaboration. Finally, Mr. Fuentes also stressed the significance of engagement, technical cooperation, joint donor programs and direct funding.

Mr. Ruy Barretto, Senior Counsel, Template Chambers, highlighted common perceptions of Europe and Asia. Firstly, he stated what Europe expects from Asia: Mr. Barretto stressed that Asia sees the EU as highly organized and full of networks and assets. Moreover, for Asia, Europe has the capacity to invest and to participate, validate and recognise. In European terms, it is essential that payment for the ecological footprint is secured. Assets should be valued, and the valuation needs to be discussed. Even though Europe sees that Asia has the governance, institutions and funding to increase actual access to justice and fair assessments, Europe still sees gaps between good intentions and actual actions. Mr. Barretto then presented the Asian perspective on Europe: Human values (religious, spiritual) have to be considered, and it is not just the accountant one is addressing, one is addressing the politician who looks at cultural values. Mr. Barretto further underlined the importance of the cross-sectoral appeal, meaning that delivering a package with security, health, economic and environmental benefits would have greater chances of success.

Dr. David Stanners, Head of International Cooperation, European Environment Agency, underlined the importance of scenarios to expand general thinking. He then addressed ways to tackle the challenges that lie ahead for Asia and Europe. First of all, he stated that getting things in order and avoiding false comparisons is crucial. He said that it is a moral failure that false comparisons are drawn, and called for a consistent progress through moral values. Secondly, Dr. Stanners emphasised that collecting information accounts itself. He suggested to develop global ecosystem land accounts as a basis of statistical knowledge, and stressed that physical accounts have to be taken into account as well as collaborate funding. Furthermore, he valued scenarios as planning and thinking tools and stated that lessons could be learned from them. He stressed that people in Asia need to be able to build their own scenarios and said that scenarios should be applied at different levels, also effectively at the local level. Moreover, he proposed the need for information knowledge sharing and a standardised terminology. Dr. Stanners' final point was to produce atlases of change. Those atlases of change are composed of satellite pictures from past and current states of ecosystems. They depict what is happening on the ground and provide the possibility of comparing the developments seen with the efforts of local capacity action, actual

adaptation work and climate change developments. Through these pictures, developments can be identified and causes and results can be analyzed. Dr. Stanners also emphasised that those atlases of change give insights on how local action can influence global action, linking local action to the global framework.

The moderator of the session, Mr. Mahesh Pradhan, UNEP, summarised the outcome of the concluding panel. He stated that short term challenges can be met through scenarios which might be a helpful tool to predict futures in the realm of possibilities. Moreover, he stressed that specific research areas need to be identified, that a position paper for COP 10 should be prepared, that working together on IBS and small activities is essential and that strengthening the TEEB process as well as promoting common understanding between the two regions Asia and Europe is important. As midterm challenges he identified dealing with interventions and finding a long term approach for capacity building. He also called for a platform for communication. As long-term challenges global funding, the appropriate addressing of the issue of an eco-tax and the development of detailed atlases of global change were identified.

#### ***Roundtable Day 2 (June 30<sup>th</sup>, 2009) - Closing Session and Closing Remarks***

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Closing remarks were given by IGES as host organisation through Mr. Hideyuki Mori, Vice President, IGES, and by SENSEA on behalf of the Asia Europe Environment Forum through Mr. Christer Holtsberg. Mr. Hideyuki Mori, Vice President, IGES, praised the constructive discussions and the fruitful outcome of the 7<sup>th</sup> roundtable. He stated that one of the intentions had been to enrich discussions by linking ASEF to the symposiums, and said that this linkage had worked very well. Mr. Christer Holtsberg, Director, SENSEA, appreciated the sufficient cooperation between the participants of the roundtable. Even though there is no resolution or commitment, Mr. Holtsberg stressed that everybody brought experience into the meeting and therefore many good new ideas and perspectives could be developed. He also underlined that ASEF activities enable solutions to certain problems which would not emerge from government or civil society meetings alone.



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