

**REPORT OF THE  
INTERNATIONAL DAY FOR BIOLOGICAL DIVERSITY SYMPOSIUM  
'BIODIVERSITY AND CLIMATE CHANGE'  
UNITED NATIONS CENTRE, TOKYO JAPAN  
22 MAY 2007**

**ORGANIZED BY  
UNITED NATIONS UNIVERSITY INSTITUTE OF ADVANCED STUDIES (UNU-IAS)  
GLOBAL ENVIRONMENT INFORMATION CENTRE (GEIC)  
MINISTRY OF THE ENVIRONMENT, JAPAN (MOEJ)**

**IN PARTNERSHIP WITH  
UNITED NATIONS INFORMATION CENTRE (UNIC)  
ASIA/PACIFIC CULTURAL CENTRE FOR UNESCO  
UNEP INTERNATIONAL ENVIRONMENTAL TECHNOLOGY CENTRE (IETC)  
UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION INVESTMENT AND  
TECHNOLOGY PROMOTION OFFICE (UNIDO ITPO) TOKYO  
STATISTICAL INSTITUTE FOR ASIA AND THE PACIFIC (SIAP)  
WORLD HEALTH ORGANIZATION (WHO) CENTRE FOR HEALTH DEVELOPMENT**

The United Nations University Institute of Advanced Studies (UNU-IAS), the Global Environmental Information Center (GEIC) and the Ministry of the Environment, Japan held a symposium on 22nd May 2007 to commemorate the International Day for Biological Diversity (IDB) on the theme "Biodiversity and Climate Change". As the Millennium Ecosystem Assessment has noted, climate change is likely to become the dominant direct driver of biodiversity loss by the end of the century. On the other hand a reduction in the unsustainable use of Biodiversity and natural resources is seen as one possible factor that could contribute to reducing the adverse impacts of climate change as well as contribute to human security through provision of mitigation and adaptation options.

Participants at the Symposium discussed the links between the conservation of biological diversity and the challenges posed by global climate change. Discussions focused, in particular, on Japan's role and responsibilities in dealing with issues of conservation of biological diversity in a manner that mitigates climate change and provides adaptation options for both Japan and the world at large. The symposium also aimed to contribute to planning and agenda-setting for the 10<sup>th</sup> Meeting of the Conference of Parties to the Convention on Biological Diversity (COP 10), which will be held in 2010 in Nagoya Japan. Additionally, it aimed to showcase conservation and climate change and future planning activities in Japan.

The proceedings commenced with a short welcome by *Dr. Balakrishna Pisupati* from UNU-IAS who noted that the symposium was the first official event to mark the IDB. The formal part of proceedings then commenced with a welcome address from *Mr. Toshiro Kojima* Vice-Minister for Global Environment Affairs, Ministry of the Environment, Japan. This address noted that both the Convention on Biological Diversity and the United Nations Framework Convention on Climate Change foresee important

challenges in the future and both conventions remain important today. While developments on both the issues of climate change and biodiversity loss have taken their own path over time, recently it is becoming increasingly clear that there is a very close connection between the two issues. The 4<sup>th</sup> report of the Intergovernmental Panel on Climate Change (IPCC) has recognized climate change impacts on biodiversity and loss of biodiversity affects climate change. *Mr Kojima* noted that this linkage of the two issues has now been formally recognized by world leaders. In this regard he noted that both issues have been incorporated in the agenda of the G8 Ministers meeting in Germany. Japan will host the G8 meeting in Hokkaido next year and, the environment, (including climate change and biodiversity loss) will be one of the most important issues of this meeting. *Mr. Kojima* also noted that the Japanese cabinet has agreed to offer to host COP 10 of the CBD in 2010 in Nagoya and that it is likely that this offer will be accepted by the international community at COP 9. In the lead up to this meeting, Japan revising its biodiversity strategy concentrating on campaigns to bring these issues to the attention of the public, business and the academic community. These activities include supporting this symposium and a parallel symposium in Nagoya.

This address was then followed by a short address by *Professor Itaru Yasui*, United Nations University Vice-Rector for Environment and Sustainable Development. *Professor Yasui* mentioned it is well known that climate change has caused loss of biodiversity. As highlighted by the latest IPCC reports, climate change is impacting on biodiversity. One example he referred to was its impact on coral reefs. He highlighted that the global ecosystem is a seamless continuous system. Therefore we will be affected by changes happening in all ecosystems. We are still not sure how much conservation action needs to be taken but we do know so far it is insufficient. *Professor Yasui* gave a number of examples of interactions between species and ecosystems including the giant kelp and sea otters case. *Professor Yasui* then concluded his talk by referring to the UN Millennium Ecosystem Assessment as well as the important ecosystem services provided by biodiversity, including its spiritual and cultural values.

Following these short addresses, a video message from *Dr. Ahmed Djoghlaif*, Executive Secretary, of the Convention on Biological Diversity was presented. In his message *Dr. Djoghlaif* emphasized that climate change is real and noted that the recently released report of the IPCC prepared by 2,500 experts from 130 countries has demonstrated that the present concentration of CO<sub>2</sub> emission in the atmosphere has not been seen for the last 150,000 years. Similarly he emphasized that biodiversity loss is also real. The report of the Millennium Ecosystem Assessment has made it crystal clear that the loss of biodiversity on our planet is unprecedented and that up to 2/3rds of our ecosystems are being damaged and the loss of biodiversity is increasing. Every hour 3 species, the result of a long period of evolution, disappears. Every day 150 species disappear and every year up to 50,000 species disappear because of human activities.

*Dr. Djoghlaif* also noted that the relationship between climate change and biodiversity is real. It is for this reason that the international community has decided to celebrate the IDB this year under the theme of climate change and biodiversity. *Dr. Djoghlaif* stressed that biodiversity loss is not only an environmental issue, it is also an economic, financial and an energy issue but it is also a security issue. In April 2007, for the first time in its history, the United Nations Security Council has examined the issue of climate change as

part of Chapter VII of the United Nations Charter and has considered climate change as an issue of relevance to peace and security. He noted that we therefore need to make the linkages between climate change and biodiversity. It is for this reason that for the first time in the history of the G8 a meeting was held between the 8 richest countries in the world and the 5 mega diverse countries. At this meeting the Potsdam Initiative of the G8 plus 5 was agreed which commits to making the link between the loss of biodiversity and climate change. These issues will also be on the agenda of the next meeting of the G8 in Germany in June 2007.

*Dr. Djoghla*f also noted that Japan will chair the G8 next year and expressed his hope that Japan will continue to lead efforts in making the relationship between climate change and biodiversity loss clear. Japan's offer to host COP 10 of the CBD in Nagoya in 2010 was also applauded. This will be a historic meeting because it will coincide with the 2010 biodiversity targets aimed at stopping the loss of biodiversity endorsed at the World Summit on Sustainable Development in Johannesburg 2002. The United Nations General Assembly has also decided to declare 2010 as the International Year on Biodiversity. By 2010 it is hoped negotiations on an international regime on access and benefit sharing will be finalized and that progress may be made on an international agreement linking climate change and biodiversity. *Dr. Djoghla*f paid tribute to the leadership of Japan on the issue of climate change and biodiversity loss and looked forward to working together with the people of Japan and its government, as well as other partners such as the United Nations University and in particular *Prof. Zakri* in the lead up to COP 10.

*Mr. Yvo de Boer*, Executive Secretary, United Nations Framework Convention on Climate Change then presented a live address to the symposium from Montreal, Canada. In his message, *Mr. de Boer* highlighted the close link between threats to biodiversity and climate change. In addition he highlighted that these issues are very closely linked to food security, especially as increased desertification associated with climate change and biodiversity loss will reduce the amount of arable land that is available for cultivation of food crops. *Mr. de Boer* also noted that this year is a critical year for advancing international negotiations on a climate change regime post Kyoto because by 2012 current climate change policies will have expired and countries must reach agreement on new measures soon. In this regard the Executive Secretary noted the importance of upcoming Bali negotiations later this year for a regime beyond 2012. New scientific evidence on climate change has recently been provided by the IPCC and when negotiators meet they will have to provide the political answer to what scientists are telling us are the dangers climate change and loss of biodiversity.

Following a short break *Dr. Balakrishna Pisupati*, UNU-IAS' Coordinator of the Biodiplomacy Programme spoke on the importance of biodiversity as a tool to deal with climate change and variability. *Dr. Pisupati* highlighted that although we have already made some attempts to deal with these issues we still need to do much more. As a starting point this means that we must recognize significant contributions that healthy functioning ecosystems and biodiversity play in our well being. That means understanding the real value of ecosystem services, including providing food, medicines, clean air, clean water and their role in the cycling of gases and nutrients, not to mention their spiritual and cultural value. Re-enforcing comments made by previous speakers *Dr. Pisupati* noted that climate change and biodiversity loss are both economic, environmental issue and

security issues. He noted that the recently released *Stern Report* on climate change demonstrated that if these issues were not acted on, climate change could cost between 5 to 12 % of countries' GDP. *Dr. Pisupati* then presented some of the alarming statistics and evidence of the impact of climate change so far. For example if we look at historical data since 1860, 20 out of 21 of the hottest years occurred in last 25 years. Similarly there has been a 40% reduction in the thickness of ice in the Arctic. These and other statistics presented by *Dr. Pisupati* highlight the urgent need for action including reducing our use of fossil fuels and land clearing. *Dr. Pisupati* concluded his presentation by highlighting the role that conservation of biodiversity and ecosystems can play in adapting to these changes and suggested a range of actions that could be taken.

*Dr. Shuzo Nishioka*, Senior Advisor to the Japanese National Institute for Environmental Studies then gave a scientific overview of the invisible role of climate and biodiversity. In reinforcing several points made by *Dr. Pisupati*, *Dr. Nishioka* outlined in some detail the role played by biodiversity. Often this role is quite invisible or intangible but at the same time these ecosystem services are of immense benefit. Drawing on his work on the Millennium Ecosystem Assessment as well as the recent IPCC Report *Dr. Nishioka* outlined the interaction between soil, ecosystem(s) and climate systems. The presentation also highlighted the impact of activities such as deforestation on these interactions and the global consequences of such activities.

The discussion session at the end of the morning session canvassed a wide range of issues including the sufficiency of monitoring of climate change in Japan. This discussion highlighted that more still needs to be done not only in Japan, but also in developing countries. The links between climate change, biodiversity loss and unsustainable levels of economic growth and over consumption, as well as the link with population growth were noted.

Questions were raised on the role of biofuels in addressing climate change and its impact on food security, as well as the potential impact of genetically modified food crops. Questions were also raised as to the roles of information disclosure and eco-labeling in raising consumer awareness of the consequences for climate change and biodiversity loss. The Marine Stewardship Council eco-label which is now available in Japan was one example that was highlighted. It was also mentioned that involving local communities in decisions effecting the environment is important.

### **Afternoon Session**

The afternoon session of the IDB was organized as a Roundtable, where the participants from different sectors, including NGO, government and private sector, media, and academia, actively deliberated on effective ways of communicating and enhancing public comprehension on issues related to biodiversity and climate change. The session was chaired by *Prof. Shigeyuki Okajima* of Otsuma Women's University.

Before plenary sessions, *Mr. Reiji Kamezawa*, Director of Global Biodiversity Strategy Office of the Ministry of the Environment, Japan made a presentation on the National Biodiversity Strategy of Japan. He underlined the importance of biodiversity as it provides a wide range of ecosystem services required for humankind. In addition, he

added that biodiversity provides “hints” for technology development, such that technology mimics components of nature for design efficiency referred to as ‘Biomimicry’. The National Biodiversity Strategy of Japan is a proactive step taken to mitigate and address three perceived ‘crises’ in Japan’s biodiversity - the first being the negative impact from excessive human activities that have resulted in species extinction, destruction of forests and ecosystems; the ‘second crisis’ pertains to the deterioration of biodiversity due to lack of proper management activities and the ‘third crisis’ is caused by introduction of alien and invasive species and chemicals to ecosystems. The Japanese government has established seven major projects to cope with these issues, including “Monitoring Sites 1000” by the National Biodiversity Center of the Ministry which monitors biodiversity status and trends. He identified the need for better communication of biodiversity related information, which also should include citizen participation. He also emphasized the need to evaluate Japan’s biodiversity by adopting the methods used in the millennium ecosystem assessment. Towards achieving the mandate of ensuring survival of ‘Life’ and ‘Livelihoods’, *Mr. Kamezawa* suggested that the Japanese consumers should assess their lifestyle patterns as it was largely dependent on global biodiversity resources accessed through international trade. He pointed out that almost 25% of the tuna in the world is consumed by Japan building a case for Japan to reconsider its ‘eating’ habits.

The roundtable was then divided into two plenary sessions, the first dealing with encouraging public participation in biodiversity related activities, the second on promotion of public understanding of biodiversity and climate change, and finally a wrap up session.

In the first plenary on ‘*How to encourage public participation in Biodiversity related activities*’, *Ms. Tomoko Shimura* of the Nature Conservancy Society, Japan (NACS-J) spoke on their approach to conducting research on biodiversity in her talk on ‘*From Experience of National Nature Survey*’. This is an attempt to undertake nation-wide information collection on biodiversity and educate children and people of different ages by involving them in research activities through appropriately designed nature camps and similar activities. For instance, this summer, children will be involved in collecting cast-off skins of a certain type of *cicada* to determine the distribution of the species. This information could possibly be used as evidence of the influence of climate change on Japan’s biodiversity, through a comparative analysis with similar distribution maps for the species prepared ten years ago by the Ministry of the Environment. Such participatory research methods provide a good opportunity for citizens to understand the impact of climate change as well as the importance of biodiversity.

*Ms. Shimura* also highlighted how NGOs and the private sector could collaborate effectively by narrating the NACS-J experience of developing a methodology for the cicada survey. As an example of partnership with the private sector *Ms. Shimura* outlined that NACS-J has experienced some difficulty in sourcing sufficient ‘photo film cases’, which are best suited to store the cast off skins of cicadas for verification. A popular toymaker then offered to provide small plastic cases used for small toys. In addition, the vendors also offered to support the campaigns by selling survey kits in these cases for use by children. In addition, the survey will be promoted by a private website.

Ms. Yukie Ohno of the “Candle Night Committee for the Million People” in her presentation on *‘Candle Night for the Million Campaign: Knack of enhancing civil participation’* narrated their experience with the campaign to switch off lights between 8pm-10pm in the evening and use candle-light instead. The organizers remain neutral on ideological or social aspects and encourage participants to do it to serve whatever purpose appeals to them. These motivations may range from spending time with family to saving energy. The event is held on June 22 (summer solstice) and December 22 (winter solstice) in order to coincide with the ‘rhythms of nature’ and their relevance across borders. Campaign materials are appropriately designed with emphasis on soft advertising.

The floor discussed both these strategies and the opinion was expressed that it is necessary for the campaigns to be easy to comprehend and use visual imagery with good explanations to effectively include the public in biodiversity related activities. The view was also expressed that the links between food and biodiversity should be highlighted and any such activity should be designed such that it is easy to understand and simple for people to participate. Some of the participants were outspoken in their criticism of the patterns of the consumption of Japanese society stating that Japanese consumers and importers have knowingly or unknowingly contributed to the destruction of biodiversity in several regions of the world, and that there is a need to ensure that ‘green procurement’ policies are maintained.

In the second session on *‘How to promote public understanding of Biodiversity and Climate Change’*, Prof. Hiromi Kobori of the Musashi Institute of Technology spoke on *‘The Challenge of Understanding Links between Biodiversity and Climate Change’*. Prof. Kibori highlighted through various examples and that the scientific community can provide the empirical evidence on the complexities involved in climate change and biodiversity issues. She underscored the importance of education to encourage a paradigm shift towards a sustainable society and identified programs such as the Education and Sustainable Development program as relevant toward this end. In addition, she mentioned that multi-stakeholder approaches such as the Regional Centers of Expertise programme of the UNU are unique and can broaden comprehension regarding these issues among the public.

Ms. Charmaine Koda of the United Nations Information Center (UNIC) in her talk on *‘Public dissemination activities for promoting the understanding of biodiversity’* underlined that while climate change and global warming issues have been taken up by the UN General Assembly and Security Council, biodiversity issues have not been easily taken up, even by the media. This is primarily due to the fact that visual representation of biodiversity issues is difficult. She also underscored that media will prefer personal narratives related to biodiversity than clinical research reports, as it will add the “required passion” to a story. Following this, Mr. Kazumi Oguro, Chief Editor of *SOTOKOTO* magazine gave a brief talk - *‘How the media convey biodiversity versus climate change issues’*, on the need for media and communicators to enjoy the process of communication. He urged everyone, including the organizers of the conference, to try alternate ways of highlighting the issues, such as having a mix of a symposium or series of activities relating to the issue being highlighted or even gastronomic delights that focus attention on the issue - learning through the various human senses.

During the discussions, participants reiterated the need to convey information on ‘green procurement’, ‘responsible fishing’, and ‘citizen participation’ in clear, simple and novel ways. It was also mentioned that Fuji TV has a regular program on environmental issues, although the development of such programs is considered a challenge for privately owned TV stations. Concerns were raised on political support to focus on domestic issues of global import. Other issues that were identified as requiring attention include involving all concerned stakeholders in discussions to enable appropriate development of environmental education tools; working with local people; include traditional activities and experience-based education systems; need for greater collaboration between scientists and media to develop and present stories in an engaging and interesting fashion without losing the veracity of the claims; and greater coordination and cooperation between the different stakeholders such as the government, industry, media, NGOs.

The participants concluded that the roundtable was successful facilitating dialogue on a common platform and the fostering of meaningful partnerships for sustainable resource use.

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