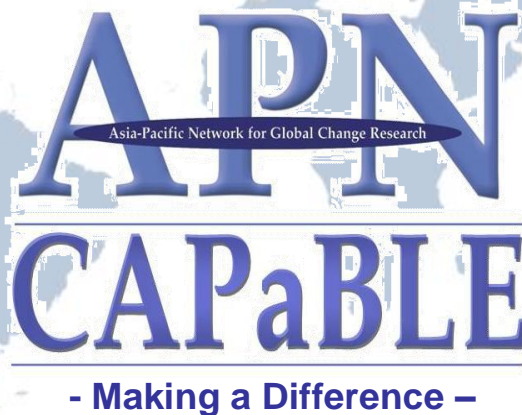


# Exploring Effective Architecture for Emerging Agencies in International Sustainable Development Governance



Scientific Capacity Building & Enhancement for Sustainable Development in Developing Countries

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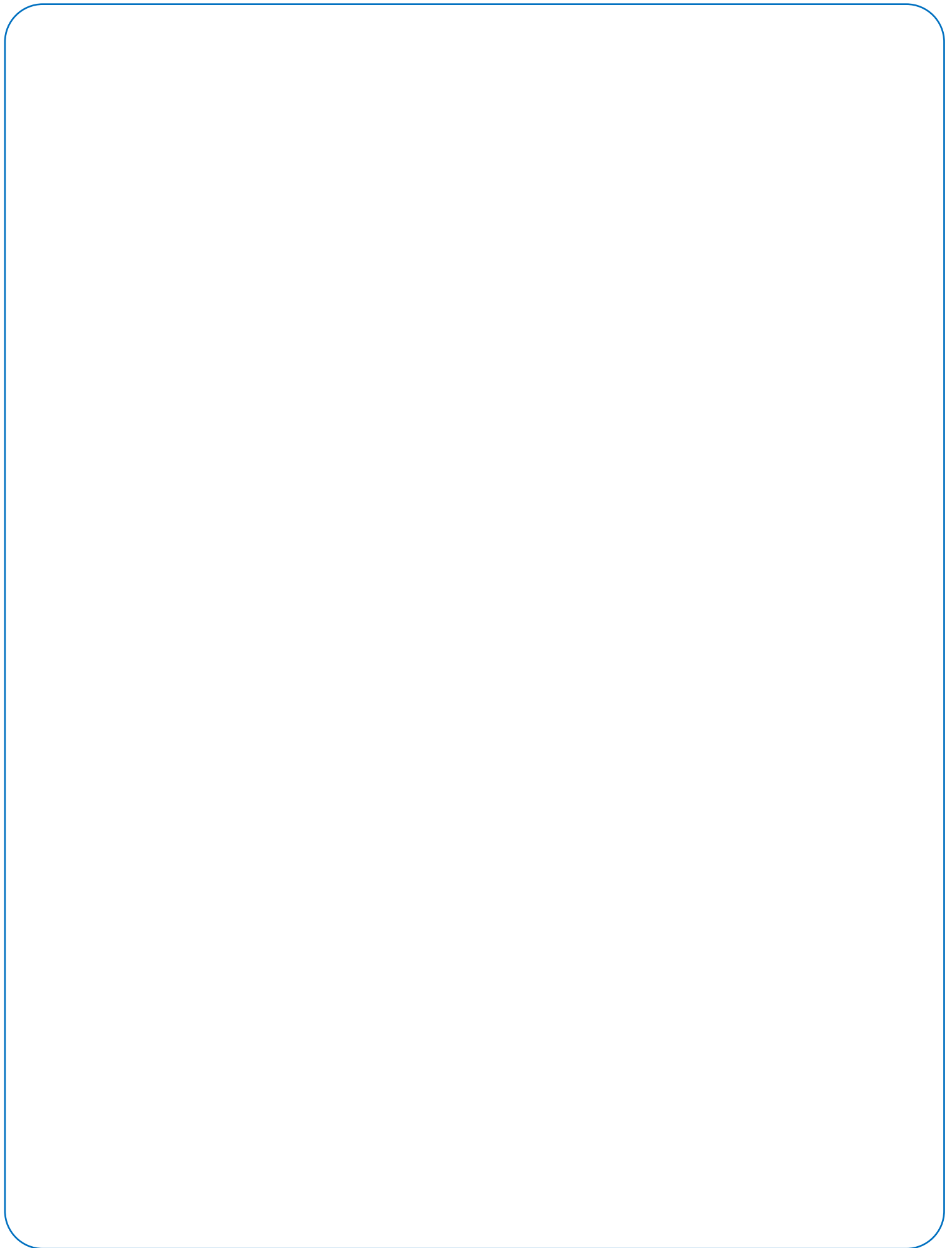
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# **Exploring Effective Architecture for Emerging Agencies in International Sustainable Development Governance**

**Project Reference Number: CBA2012-04NSY-Kanie  
Final Report submitted to APN**



## OVERVIEW OF PROJECT WORK AND OUTCOMES

### Non-technical summary

The purpose of this project was to facilitate young and developing country participation from Asia-pacific countries (APCs) in the Earth System Governance Tokyo conference held in January 2013 (hosted by the United Nations University Institute of Advanced Studies (UNU-IAS), the International Environmental Governance Architecture Research Group and the Tokyo Institute of Technology on behalf of the Earth System Governance Project) and thereby increase interaction between APC early career researchers and leading scholars and policy makers in the field. The conference focused on sustainable development governance (SDG), and brought together scientist and policy-makers from the north and the south. APCs are of global importance for the realization of sustainable development, due partly to the fact that the region includes key emerging economies such as China, India and Indonesia. As the vies on effective governance from local to global levels are diverse both in academic and practical terms, social science-based interaction needs to be the basis for future cooperation in the area.

### Keywords

Asia-pacific countries, sustainability, governance, architecture, agencies, network, local, global, policy

### Objectives

The main objectives of the project were:

1. To strengthen networks of groups that have an intellectual interest in International Environmental Governance (IEG) particularly in Japan and the APCs, and to further establish the network and interaction with the counterparts in the North and South America and Europe.
2. To promote a frank dialogue among stakeholders, based on scientific insights, by hosting the Earth System Governance Tokyo conference, to analyze the content of the dialogue and outcomes, and to publish and the findings.
3. To identify the level of consensus among stakeholders on governance architecture on sustainable development in the post Rio+20 period.

### Amount received and number years supported

The Grant awarded to this project was:  
US\$ 50,000 for Year 1

### Activity undertaken

This project, through the Earth System Governance Tokyo conference, sought to identify and converge the latest views and perspectives on Institutional Framework for Sustainable Development (IFSD) and International Environmental Governance (IEG) in the face of diverse, sometimes opposing, interests. As it stands, western scholars dominate this research field, with only a handful of scholars from APCs able to participate in discussions. As the first Earth System Governance conference held outside of Europe and the United States, an important objective of the Earth System Governance Tokyo conference 2013 was to strengthen the Earth System Governance network with APC members and to provide opportunities for long-term regional collaborations among scientists and policymakers to form. By providing a grant opportunity to selected participants, early career scholars from developing countries were able to participate in the conference and cooperate with other global change practitioners.

## Results

The Tokyo conference was the fourth in a global conference series organized by the Earth System Governance Project and it was the first conference to be held in Asia. The conference took place 28-31 January 2013 at the United Nations University Headquarters, Tokyo, Japan.

The conference theme was “Complex Architectures, Multiple Agents”. This complex architecture with multiple agents was the core research problem discussed at the Earth System Governance Tokyo Conference.

A total of 269 colleagues attended the Earth System Governance Tokyo Conference 2013. The participants came from 31 different countries. A total of 80 Japanese affiliated participants attended the conference and represented 23 different Japanese institutions.

Through working with and generous financial support by the Asia Pacific Network for Global Change Research (APN) we were able to financially support 17 early career researchers from countries within the APN region, with the majority of these participants coming from less developed countries.

The Earth System Governance Tokyo conference proceedings and papers were internally published and distributed to co-hosts, sponsors and be available for internal use within the Earth System Governance Programme. Additional materials from the conference include a series of graphic recordings from the plenaries and semi-plenaries.

## Relevance to the APN Goals, Science Agenda and to Policy Processes

At the onset of this project one of the main goals was to strengthen networks of groups that have an intellectual interest in IEG - particularly in Japan and the APCs, and to further establish the network and interaction with the counterparts in North America and Europe. Participants from APCs were asked to provide feedback on the outcomes of the Earth System Governance Tokyo conference in reference to the goal of strengthening networks; the following are statements from APN recipients:

*I personally feel that China has been underrepresented in the ESG community, both in terms of research (on China) and in terms of people (researchers from China), even though people are very interested in China and everyone seems to talk about the role of China. But there is an importance between ‘talking about’ and actually hearing from people who have studied aspects of the ESG research agenda in China. I hope my presence and my outreach at the ESG Tokyo Conference will help in ‘putting China on the map’, or at least drawing attention to the need for more ESG oriented research on and in China. (Sander Chan, China)*

*The ESG conference is a great platform that gave chance to network with senior researchers, peers, civil society groups from different parts of the world. This networking has created a chance for me to further understand the need for working with other researchers with similar research interests. (Aliyu Salisu Barau, Malaysia)*

*I have had the opportunity of meeting and interacting some of the top international experts, and had discussions with them on various aspects of trans-boundary river basin management through regional cooperation....I have been successful in sensitizing the global scientific community on the emerging need of regional co-operation in trans-boundary water governance in South Asia. (Dr. Prakash C. Tiwari, India)*

*I organized a meeting of like-minded researchers from UNU (Japan) and Brazil in developing proposals on issues related to REDD+ and CDM....we will have some collaborative research projects, as we (Australian, Brazilian and Japanese researchers) have decided to develop joint research proposal/s for ITTO, APN and several other funding agencies....we will have many joint papers in high quality international journal. (Tek Maraseni, Australia)*

### **Self evaluation**

This project was successful in creating an environment that was conducive to dialogue that focused on the most current views and perspectives on IFSD and IEG. There was a depth of diversity among the participants that allowed for high-level quality discussions, which surrounded the conference themes. Discussions were inclusive of participants from multiple sectors including research institutions, NGOs, local and international government representatives, students as well as participants from the private sector. Attendance attracted the attention of His Imperial Highness Crown Prince Naruhito and Her Imperial Highness Crown Princess Masako who attended the Conference on 31 January 2013. The Royal guests attended the presentations at the semi-plenary session on *Goal Setting and Implementation for the Post-Development Agenda: Asian perspectives on linking Sustainable Development and the Post MDGs* as well as part of the Closing Plenary.

A total of 31 countries were represented by participants at the conference, with approximately one third of the represented countries coming from within the APC region. As the first Earth System Governance conference held outside of Europe and the United States, an important objective of the Earth System Governance Tokyo conference 2013 was to strengthen the Earth System Governance network with APC members and to provide opportunities for long-term regional collaborations among scientists and policymakers to form. By providing a grant opportunity to selected participants early career scholars from less developed countries were able to participate in the conference and cooperate with other global change practitioners. A total of 17 participants were supported by the APN. This is a significant increase when compared to previous Earth System Governance conferences, however, as pointed out by academics that represent institutions within the APN region, this is simply not enough. It was agreed upon by members of the Earth System Governance Scientific Steering Committee that in future conferences further efforts need to be put in place to ensure that a larger number of early career and less developed country participants have the opportunity to actively participate in discussions regarding IFSD and IEG.

### **Potential for further work**

Project collaborations and networks developed within the Earth System Governance Tokyo Conference have the opportunity to be further explored within the next Earth System Governance Conference to be held in Norwich, United Kingdom, in July 2014.

## Publications

The Earth System Governance Tokyo conference proceedings and papers were internally published and distributed to co-hosts, sponsors and be available for internal use within the Earth System Governance Programme. Additional materials from the conference include a series of graphic recordings from the plenaries and semi-plenaries. These recordings are available on the conference website (<http://tokyo2013.earthsystemgovernance.org/>).

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## Acknowledgments

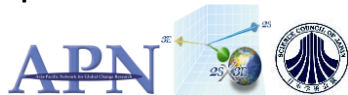
On behalf of the Earth System Governance Project and the conference chair Norichika Kanie, we would like to thank all of the UNU-IAS and UNU Headquarters staff for their support and assistance throughout the planning process and during the actual conference. We would like to thank the UNU for generously allowing us to use the UNU Headquarters facility. We are grateful for the support of all the co-hosting and sponsoring organizations and of their directors and leaders, many of whom also gave us the pleasure of attending the conference. Finally, we would like to thank the volunteers for their assistance during the Earth System Governance Tokyo Conference. This conference would not have been possible without their support.

## Co-hosts



- Earth System Governance Project
- International Environmental Governance Architecture Research Group
- United Nations University Institute of Advanced Studies
- Tokyo Institute of Technology
- The Japan Foundation Center for Global Partnership (CGP)
- Institute for Global Environmental Strategies (IGES)
- Institut du Développement Durable et des Relations Internationales (IDDRI)
- Japan Science and Technology Agency (JST)
- Ministry of the Environment

## Sponsors



- Asia-Pacific Network for Global Change Research (APN)
- Academy for Co-creative Education of Environment and Energy Science (ACEEES)
- Science Council of Japan



## TECHNICAL REPORT

### **Preface**

The purpose of this project was to facilitate young and developing country participation from Asia-pacific countries (APCs) in the Earth System Governance Tokyo conference held in January 2013 (hosted by the United Nations University Institute of Advanced Studies (UNU-IAS), the International Environmental Governance Architecture Research Group and the Tokyo Institute of Technology on behalf of the Earth System Governance Project) and thereby increase interaction between APC early career researchers and leading scholars and policy makers in the field. The conference focused on sustainable development governance (SDG), and brought together scientist and policy-makers from the north and the south.

### **1.0 Introduction**

#### **Background Information**

Today, a multitude of agents plays a significant role in earth system governance, ranging from traditional state actors to international organizations, civil society organizations, science networks, city coalitions, or business associations. At the same time, the overall governance architecture, from local to global levels, is becoming more complex as a consequence of ever increasing needs for governance and policy-development.

This complex architecture with multiple agents was the core research problem discussed at the Earth System Governance Tokyo Conference. The conference brought together scholars from a wide range of disciplines as well as practitioners from diverse backgrounds to address the nexus between the analytical problems of agency and architecture in earth system governance, as well as other analytical problems identified in the Earth System Governance Science and Implementation Plan. The timing of the Tokyo Conference, half a year after the United Nations Conference on Sustainable Development (“Rio+20”), made these discussions especially pertinent and timely. The conference opened up new and fruitful areas of science-policy interaction and strengthened the interface between science and policy in earth system governance.

The challenge of establishing effective strategies for mediating the relationship between humans and the natural world represents one of the most daunting tasks in the quest for environmental sustainability at all levels, from the local to the global. Environmental problems, such as climate change, biodiversity loss, water quality and access problems, soil erosion and others, call into question the fundamental viability of how humans have organized the relationship between society and nature. There is an urgent need to identify and develop new strategies for steering societies towards a more sustainable relationship with the natural world. The Earth System Governance Project was launched in 2009 to address these problems of environmental governance. In this project, “earth system governance” is defined as the interrelated system of formal and informal rules, rule-making mechanisms and actor-networks

at all levels of human society (from local to global) that are set up to steer societies towards preventing, mitigating, and adapting to global and local environmental change and earth system transformation, within the normative context of sustainable development. The Earth System Governance Project's Science Plan (available at <http://www.earthsystemgovernance.org>) is organized around five analytical problems. Architecture relates to the emergence, design and effectiveness of governance arrangements. Agency addresses questions of who governs the earth system and how. Adaptiveness research explores the ability of governance systems to change in the face of new knowledge and challenges as well as to enhance adaptiveness of social-ecological systems in the face of major disturbances. Accountability refers to the democratic quality of environmental governance arrangements. Finally, allocation and access deal with justice, equity, and fairness. These analytical problems are united by the crosscutting themes of power, knowledge, norms and scale. The Earth System Governance Project is a core project of the International Human Dimensions Programme on Global Environmental Change (IHDP) under the auspices of the International Social Science Council (ISSC), the International Council for Science (ICSU), and the United Nations University (UNU).

### **Scientific Significance**

This project, through the Earth System Governance Tokyo conference, sought to identify and converge the latest views and perspectives on Institutional Framework for Sustainable Development (IFSD) and International Environmental Governance (IEG) in the face of diverse, sometimes opposing, interests. As it stands, western scholars dominate this research field, with only a handful of scholars from Asia-pacific countries (APC) able to participate in discussions. As the first Earth System Governance conference held outside of Europe and the United States, an important objective of the Earth System Governance Tokyo conference 2013 was to strengthen the Earth System Governance network with APC members and to provide opportunities for long-term regional collaborations among scientists and policymakers to form. Early career researchers are often actively involved in policy debates about global environmental change and governance for sustainability in their home countries. Increasing their capacity will have knock-on effects for public awareness and indirectly on local policy making. As Earth System Governance is a network of scholars, the Earth System Governance network further supports the development of activities by the participants from developing countries in the follow-up process. Developing further research projects out of the Writing Workshop during the Tokyo Conference helped further the integration of the participants in the Earth System Governance network, so that their capacity will continue to be developed through interaction with leading scientists. We believed that enhancing scientific rigor would enhance arguments and logics of returning participants in their home countries.

## Objectives

The primary objectives of this project include the following:

1. To strengthen networks of groups that have an intellectual interest in IEG -particularly in Japan and the APCs, and to further establish the network and interaction with the counterparts in the North America and Europe.
2. To promote frank dialogue among stakeholders, based on scientific insights, by hosting the Earth System Governance Tokyo conference, to analyze the content of the dialogue and outcomes, and to disseminate the findings.
3. To identify the level of consensus among stakeholders on governance architecture on sustainable development in the post Rio+20 period.

## 2.0 Methodology

In order to ensure diversity and regional representation within the Earth System Governance Tokyo Conference, multiple lines of communication were used to disseminate conference information to countries within the APN Region. Forms of communication included using the conference website, newsletters, social media, and other communication channels of the Earth System Governance Project, the Tokyo Institute of Technology, the United Nations University, the International Human Dimensions Programme on Global Environmental Change (IHDP), the Institute for Global Environmental Strategies (IGES) and all other collaborating organisations. As countries from the APN Region were given preference in the selection process, it was our intention to create a filled out platform of participants who represented the APN region.

Participation in the Tokyo Conference on Earth System Governance was open to researchers, policy makers and other stakeholders from around the world. The requested financial support was for participants with an accepted abstract for presentation from all countries within the APN Region. The selection of participants to benefit from the support requested began with a global launch of the Call for Papers for the Earth System Governance Tokyo Conference.

Preference in the selection process was given to those from developing countries within the APN Region in order of their ranking in the review process. A full description of this process follows.

All interested persons submitted an abstract to the conference by 1 July 2012. All submitted abstracts were evaluated in the comprehensive, well established, double-blind review process (managed by the Earth System Governance International Project Office) that can be summarized as follows:

1. All abstracts were evaluated independently and anonymously by at least 4 members of the international review panel, allotted on a random basis.
2. Abstracts were graded on a scale from 5 points (excellent/highly appropriate for the conference) to 1 point (not appropriate/rejection).
3. Based on the grades received for each abstract, an average grade for every abstract was calculated and abstracts were ranked accordingly.
4. The best-ranked  $n$ -abstracts were accepted for presentation (whereby  $n$  was determined by the total capacity of the conference).

This process applied to all participants for the Earth System Governance Tokyo Conference. From the total list of accepted participants, we took all participants based in the APN Region and from this sub-set selected the recipients for the financial support. This selection was primarily based on the ranking (average grade of review) whereby participants from developing countries in the APN region were considered first.

The first step of the selection process – the review process as outlined above – can by definition due to its double blind character, not take into account the “return on investment” potential mentioned by the reviewer. The second stage – the selection of participants to be funded participants from the total set of accepted participants – however can take the potential of a participant to make a difference upon return into account.

We received 396 abstracts from colleagues in 62 countries, with a generally very high quality. In order to keep the conference at a reasonable size to allow for meaningful discussions, we decided to accept the best 250 abstracts, thus ensuring an acceptance rate of 63%.

With this two step process, we could ensure scientific quality and potential, and at the same time support early career scientists from developing countries in the APN region – all while maintaining good standards of transparency and objectivity. The extensive and long-standing networks of all involved organizations ensured that a maximal number of researchers would be reached while the rigorous review process ensured quality and fit of the applicants’ research to the conference theme.

The International Project Office of the Earth System Governance Project managed this process and drew on experience from more than 10 identical reviews and selection processes for Earth System Governance Conferences and prior Human Dimensions of Global Environmental Change conference series.

### 3.0 Results & Discussion

The Tokyo conference was the fourth in a global conference series organized by the Earth System Governance Project and it was the first conference to be held in Asia. The conference took place 28-31 January 2013 at the United Nations University Headquarters, Tokyo, Japan.

The conference theme was “Complex Architectures, Multiple Agents”. It refers to the multitude of agents that play a significant role in earth system governance today—ranging from traditional state actors to international organizations, civil society organizations, science networks, city coalitions, or business associations. At the same time, the overall governance architecture, from local to global levels, is becoming more complex as a consequence of ever increasing needs for governance and policy-development. This complex architecture with multiple agents was the core research problem discussed at the Earth System Governance Tokyo Conference. The focus remained on the nexus between the analytical problems of agency and architecture in earth system governance, and considered the other analytical problems identified in the Earth System Governance Science and Implementation Plan.

A total of 269 colleagues attended the Earth System Governance Tokyo Conference 2013. The participants came from 31 different countries including:

Australia	Ghana	Spain
Bangladesh	Indonesia	Sweden
Barbados	Japan	Switzerland
Belgium	Malaysia	Taiwan
Brazil	Nepal	Thailand
Canada	New Zealand	The Netherlands Trinidad and Tobago
China	Norway	UK
Denmark	Philippines	USA
Finland	Poland	Vietnam
Germany	South Africa	

A total of 80 Japanese affiliated participants represented a total of 23 Japanese institutions at the conference. The following Japanese institutions were represented at the conference:

Doshisha University

Tokai University

Economic Research Institute for Northeast Asia (ERINA)

Tokyo Institute of Technology

Institute for Global Environmental Strategies

Tokyo Metropolitan University

Japan International Cooperation Agency (JICA)

Tokyo University

Tsukuba University

Kansai University

Ryukoku University

Kumamoto Gakuen University

University of Shiga Prefecture

Kyoto University

University of Yamanashi

Mie University

Waseda University

Ministry of the Environment (Japan)

Yokohama National University

National Institute for Environmental Studies

United Nations University

Research Institute for Humanity and Nature

United Nations University Institute of Advanced Studies

A total of 31 countries were represented by participants at the conference, with approximately one third of the represented countries coming from within the APC region. As the first Earth System Governance conference held outside of Europe and the United States, an important objective of the Earth System Governance Tokyo conference 2013 was to strengthen the Earth System Governance network with APC members and to provide opportunities for long-term regional collaborations among scientists and policymakers to form. By providing a grant opportunity to selected participants early career scholars from less developed countries were able to participate in the conference and cooperate with other global change practitioners. A total of 17 participants were supported by the APN. This is a significant increase when compared to previous Earth System Governance conferences, however, as pointed out by academics that represent institutions within the APN region, this is simply not enough. It was agreed upon by members of the Earth System Governance Scientific Steering Committee that in future conferences further efforts need to be put in place to ensure that a larger number of early career and less developed country participants have the opportunity to actively participate in discussions regarding IFSD and IEG.

At the onset of this project one of the main goals was to strengthen networks of groups that have an intellectual interest in IEG - particularly in Japan and the APCs, and to further establish the network and interaction with the counterparts in North America and Europe. Participants from APCs were asked to provide feedback on the outcomes of the Earth System Governance Tokyo conference in reference to the goal of strengthening networks; the following are statements from APN recipients:

*I personally feel that China has been underrepresented in the ESG community, both in terms of research (on China) and in terms of people (researchers from China), even though people are very interested in China and everyone seems to talk about the role of China. But there is an importance between 'talking about' and actually hearing from people who have studied aspects of the ESG research agenda in China. I hope my presence and my outreach at the ESG Tokyo Conference will help in 'putting China on the map', or at least drawing attention to the need for more ESG oriented research on and in China. (Sander Chan, China)*

*The ESG conference is a great platform that gave chance to network with senior researchers, peers, civil society groups from different parts of the world. This networking has created a chance for me to further understand the need for working with other researchers with similar research interests. (Aliyu Salisu Barau, Malaysia)*

*I have had the opportunity of meeting and interacting some of the top international experts, and had discussions with them on various aspects of trans-boundary river basin management through regional cooperation....I have been successful in sensitizing the global scientific community on the emerging need of regional co-operation in trans-boundary water governance in South Asia. (Dr. Prakash C. Tiwari, India)*

*I organized a meeting of like-minded researchers from UNU (Japan) and Brazil in developing proposals on issues related to REDD+ and CDM....we will have some collaborative research projects, as we (Australian, Brazilian and Japanese researchers) have decided to develop joint research proposal/s for ITTO, APN and several other funding agencies....we will have many joint papers in high quality international journal. (Tek Maraseni, Australia)*

The Earth System Governance Tokyo conference proceedings and papers were internally published and distributed to co-hosts, sponsors and be available for internal use within the Earth System Governance Programme. Additional materials from the conference include a series of graphic

recordings from the plenaries and semi-plenaries. These recordings are available on the conference website (<http://tokyo2013.earthsystemgovernance.org/>).

#### 4.0 Conclusions

The purpose of this project was to facilitate young and developing country participation from APCs in the Earth System Governance and thereby increase interaction between them and leading scholars and policy makers in the field. Providing early career and developing country participants with the opportunity to interact with policy makers and scientists allowed for long-term relationships to develop for future cooperation in the area of effective governance at the local and global levels. Increasing the capacity of early career researchers has a positive feedback effect for public awareness and indirectly on local policy making within the participants home country. It is believed that by enhancing scientific rigor the enhancement of arguments and logics of returning participants in their home countries was also improved.

#### 5.0 Future Directions

Project collaborations and networks developed within the Earth System Governance Tokyo Conference have the opportunity to be further explored within the next Earth System Governance Conference to be held in Norwich, United Kingdom, in July 2014.

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## **Appendix**

Including the following materials of the Earth System Governance Tokyo conference (January 2013);

1. Conference programme
2. List of invited young scholars from APCs to ESG Tokyo conference
3. Presentation abstracts of invited young scholars from APCs to ESG Tokyo conference