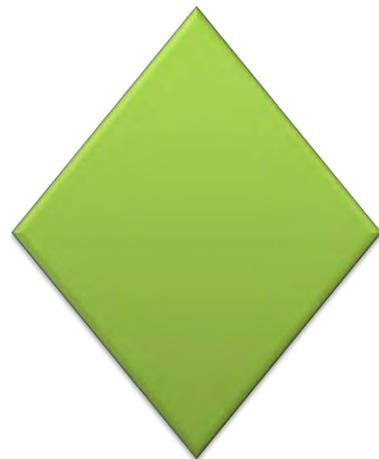


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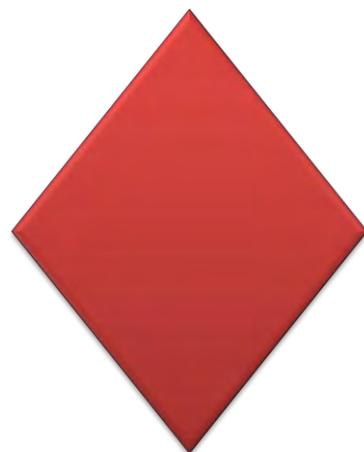
**NORTHEAST ASIA REPORTING AND
CAPACITY BUILDING WORKSHOP
ON MONITORING & EVALUATION
OF EDUCATION FOR SUSTAINABLE
DEVELOPMENT**



20th February 2012

**Yokohama Pacifico Center
UNU-IAS Office, 6th Floor**

Yokohama, Japan



Organised by UNU-IAS and IGES

IGES Conference Report-GC-2011-01

Proceedings: Northeast Asia Reporting and Capacity Building Workshop on Monitoring and Evaluation of Education for Sustainable Development

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Acknowledgements

IGES is grateful for the continued cooperation with United Nations University, Institute of Advanced Studies in the ongoing research project on Monitoring and Evaluation of Education for Sustainable Development in Asia-Pacific. This research is of high priority for IGES, and we fully believe that with the continued cooperation of UNU-IAS this project will achieve important outcomes for strengthening the ability to properly report and document the successes of the UN Decade of Education for Sustainable Development.

IGES is also highly appreciative of the continued support from UNESCO – Asia-Pacific Regional Bureau for this project. As the lead implementing agency of the DESD, UNESCO's support and advice is very beneficial to the quality of research we are able to conduct.

We would also like to express our warmest appreciation for the contributions of Mr. Kazuhiko Takemoto, Prof. Hironori Hamanaka, and Prof. Mario Tabucanon. Their expertise and experience in these topics is highly valued.

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What knowledge should M&E of ESD identify to support governments in strengthening ESD implementation?

Chaired by: Hironori Hamanaka – IGES

Panellists: Qing Tian – Beijing Normal University
Yoshiyuki Nagata – University of the Sacred Heart
Hae Jae Oh – Korean National Commission for UNESCO
Katie Vanhala – UNESCO – Asia-Pacific Regional Bureau

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Northeast Asia Reporting and Capacity Building Workshop on Monitoring & Evaluation of Education for Sustainable Development

Organised by UNU-IAS and IGES

Workshop Concept Note

The United Nations University Institute of Advanced Studies (UNU-IAS) and the Institute for Global Environmental Strategies (IGES) are undertaking a collaborative research project in close cooperation with UNESCO Asia and Pacific Regional Bureau for Education in Bangkok. This project focuses on the Monitoring and Evaluation of Education for Sustainable Development (ESD) and aims to establish regionally-relevant Indicators of ESD to assess the implementation during the United Nations Decade of Education for Sustainable Development (2005-2014) in countries across the Asia-Pacific region.

The current research phase of the project is based on a multi-country scoping process to identify the important areas for which indicators should be developed. This research will be conducted between December 2011 and April 2012 in two rounds starting first with selected countries in Northeast Asia and then following a refining process moving on to selected countries in Southeast Asia. During the scoping phase, research will be conducted in a total of nine countries based on an evaluation framework that was developed during a consultation with international ESD experts. The main purpose of this research phase is to enable the movement from a wide evaluation framework towards the identification of a core set of important targets and leverage points for ESD.

During the current scoping phase, research is being conducted in two complimentary formats. First, national ESD focal points are participating in a quantitative country survey regarding the national context of ESD implementation. Second, the Regional Centres of Expertise on Education for Sustainable Development (RCEs) are providing qualitative research through case studies of their flag-ship projects for comparative analysis. The findings from these two formats will be presented during the sub-regional workshop in order to identify opportunities to strengthen capacity for ESD monitoring and evaluation.

The workshop is the culmination of the research activities in Northeast Asia and provides an important reporting opportunity for the participants from China, Japan and Republic of Korea including both the members representing the national focal points for this study and members of the Regional Centres of Expertise on Education for Sustainable Development to share their findings on ESD implementation in their respective countries. The workshop will be supported by ESD experts from international organisations to provide further capacity building on the monitoring and evaluation of ESD. The main objectives of the workshop are threefold:

- To report on the current implementation of ESD in each country and share valuable lessons learned from each of these processes;
- To identify common leverage points in each country's ESD system for the establishment of regional ESD indicators that are relevant to each country's individual context; and,
- To strengthen capacity for effective monitoring and evaluation of ESD and to ensure that appropriate information for improving ESD policy is identified.

Participants of the NE Asia M&E of ESD Workshop 20th February 2012, Yokohama, Japan





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Northeast Asia Reporting and Capacity Building Workshop on Monitoring & Evaluation of Education for Sustainable Development

Organised by UNU-IAS and IGES

Workshop Agenda

Date: Monday, 20th February 2012

Location: Yokohama Pacifico Center

UNU-IAS Office, 6 Floor - International Organizations Center

9:00-9:30	Registration At UNU-IAS Office Reception, 6 th Floor		
Opening Session 9:30-10:15	Welcome Remarks	<i>Chair:</i> Akira Ogihara, IGES	5 min.
	Keynote Speech	Kazuhiko Takemoto, UNU-IAS	5 min.
	Keynote Speech	Katie Vanhala, UNESCO	5 min.
	Background & Agenda	Robert Didham, IGES	5 min.
	Self-Introduction of Participants		25 min.
Break 10:15-10:30	Group Photo		5 min.
	Coffee Break		10 min.
RCE Presentations 10:30-11:50	Chair: Abel Barasa Atiti, UNU-IAS		
	RCE Chubu	Reita Furusawa	10 min.
	RCE Beijing	Dongying Wei	10 min.
	RCE Kitakyushu	Yukiko Oda	10 min.
	RCE Tongyeong	Won Jung Byun	10 min.
	RCE Okayama	Masaaki Nagareo	10 min.
	Q&A and Discussion		30 min.
Lunch 12:00-13:00	Lunch Venue: Pier 21 Restaurant		1 hour
Presentation on National ESD Surveys 13:10-14:00	Chair: Hironori Ozawa, Asia-Pacific Cultural Centre for UNESCO (ACCU)		
	Findings and Comparison of ESD Implementation from China, Japan and Korea	<i>Presentation:</i> Robert Didham, IGES	15 min.
	Research on National Indicators of ESD in Republic of Korea	<i>Presentation:</i> Soon-Yong Pak, Yonsei University	15 min.
	Q&A and Discussion		20 min.



Capacity Assessment on M&E of ESD Status 14:00-15:15	Evaluation Framework for M&E of ESD	Presentation: Robert Didham, IGES	15 min.
	Group Activity		35 min.
	Presentation of Findings and Discussion		25 min.
Break 15:15-15:30	Coffee Break		15 min.
Capacity Building Activity 15:30-16:45	Addressing the Effectiveness of Learning Performance	Presentation: Paul Ofei-Manu, IGES	15 min.
	Group Activity		35 min.
	Presentation of Findings and Discussion		25 min.
Panel Discussion 16:45-17:45	Panellists' Statements: <i>What knowledge would support governments in strengthening ESD implementation?</i> <i>What should M&E of ESD identify to allow for government interventions?</i>	Chair: Hironori Hamanaka, IGES Panellists: 1) China – Qing Tian, Beijing Normal University 2) Japan – Yoshiyuki Nagata, University of the Sacred Heart 3) Korea – Hae Jae Oh, Korean National Commission for UNESCO 4) UNESCO – Katie Vanhala	35 min.
	Q&A and open discussion with workshop participants		25 min.
Closing Session 17:45-18:30	Summary of Workshop	Chair: Mario Tabucanon, Asian Institute of Technology & UNU-IAS	10 min.
	Participants Reflection		20 min.
	Future Activities	Abel Barasa Atiti, UNU-IAS	10 min.
	Closing Comments	Hironori Hamanaka, IGES	5 min.
Dinner 19:00-20:30	All workshop participants are invited to join us for a dinner after the workshop. Venue: Gohan-Ya Restaurant, 3 rd Floor Minatomirai Center Building		

Northeast Asia Reporting and Capacity Building Workshop on Monitoring & Evaluation of Education for Sustainable Development

Organised by UNU-IAS and IGES
20 February 2012

International Experts					
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2	Thailand	Prof. Mario Tabucanon	UNU-IAS & Asia Institute of Technology	Visiting Professor & Professor	mmtabucanon@ait.ac.th
3	Japan	Mr. Kazuhiko Takemoto	UNU-IAS	Senior Fellow	
4	Japan	Mr. Hironori Ozawa	Asia-Pacific Cultural Centre for UNESCO (ACCU)	Programmer Officer	ozawa.hironori@accu.or.jp
5	Japan	Prof. Hironori Hamanaka	IGES	Chairman of the Board	
6	Korea	Prof. Soon-Yong Pak	Yonsei University	Associate Professor	paks@yonsei.kr
Organising Committee					
	Country	Name	Organisation	Position	Email
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16	Korea	Ms. Hae Jae Oh	Korean National Commission for UNESCO	Assistant Programme Specialist	hjoh@unesco.or.kr
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18	Chubu	Mr. Reita Furusawa	Chubu University - Chubu Institute of Advanced Studies	Lecturer	reita@isc.chubu.ac.jp
19	Kitakyushu	Ms. Yukiko Oda	Kitakyushu Institute on Sustainability	Chief Researcher	y.oda@ksks.info
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21	Tongyeong	Ms. Won J. Byun	Tongyeong Education Foundation for Sustainable Development	Chief Programmer	rceorg@gmail.com

OPENING SESSION: Welcome and Keynote Remarks

9:30-10:15

Session Chair and Welcome Remarks: Akira Ogihara, Institute for Global Environmental Strategies

Keynote Remarks:

- 1) Kazuhiko Takemoto, United Nations University – Institute of Advanced Studies
- 2) Katie Vanhala, UNESCO – Asia-Pacific Regional Bureau

Workshop Background and Agenda: Robert Didham, IGES

Self-Introduction of Participants

Dr. Akira Ogihara of IGES welcomed the participants, our honoured guests and keynote speakers to the Northeast Asia Reporting and Capacity Building Workshop on Monitoring and Evaluation of Education for Sustainable Development. He expressed his appreciation to the participants for joining this workshop and for the valuable contributions they had already made to the research process on M&E of ESD. He also explained that this workshop is one part of an ongoing research project jointly coordinated by UNU-IAS and IGES to develop regionally-relevant Indicators of ESD for monitoring and evaluation of the implementation of ESD that has occurred during the UN Decade. Finally, Dr. Ogihara kindly introduced the two keynote speakers of the workshop: Mr. Kazuhiko Takemoto, senior fellow at UNU-IAS and director of the institute's ESD team, and Ms. Katie Vanhala, associate expert and ESD team leader at UNESCO's Asia-Pacific Regional Bureau.

Mr. Kazuhiko Takemoto began his address by welcoming everyone to UNU-IAS and thanking them for their valuable participation in the workshop. He went on to explain that this workshop and the correlating research provide an excellent opportunity for evaluating the progress of the Decade of ESD, especially in Asia. Mr. Takemoto also highlighted that monitoring and evaluation is one of the seven key strategic objectives outlined for DESD. As the seventh of the objectives, the importance of monitoring and evaluation was reiterated as a key goal for the third phase of the decade (2012-2014) at the UNESCO World Conference on ESD held in Bonn, Germany in 2009 as a mid-term meeting of the Decade. The importance of the methods used in conducting M&E of ESD was also explained with specific attention drawn to the necessity to apply participatory processes and also both quantitative and qualitative methods of assessment to the development of appropriate M&E of ESD systems.

Ms. Katie Vanhala thanked UNU-IAS and IGES for the opportunity to participate in this workshop and for the ongoing inclusion of UNESCO in this research process. She explained UNESCO's role in promoting ESD as the lead implementation agency of the DESD. She also explained that the Asia-Pacific Regional Bureau has worked extensively with promoting M&E of ESD based on their publication "Asia-Pacific Guidelines for the Development of National ESD Indicators" and their subsequent capacity building activities. However, Ms. Vanhala also clarified that UNESCO's objective has not been to create or identify a specific

set of indicators for ESD but rather to help individual countries build their capacity to develop their own monitoring and evaluation of ESD systems and to strengthen their implementation. It was further acknowledged though that these earlier efforts by UNESCO on M&E of ESD had not achieved a consistent monitoring and reporting process on the status of individual countries in the region. Due to this fact, UNESCO is eager to both follow and support the current research being undertaken by UNU-IAS and IGES to develop regionally-relevant indicators. Finally, Ms. Vanhala highlighted that both Climate Change Education and Disaster Risk Reduction have recently been identified as the key target areas for UNESCO's work on ESD, but also that this should not be understood as a new direction for ESD. Instead, it should be viewed as an approach to better elaborate and detail how to apply important thematic topics in a way that contributes effectively to the overall teaching of ESD.

Dr. Robert Didham of IGES then provided a brief overview and background to the workshop along with explaining the main points of the day's agenda. He explained that there are three main objectives of the workshop:

- To report on the current implementation of ESD in each country and share valuable lessons learned from each of these processes;
- To identify common leverage points in each country's ESD system for the establishment of regional ESD indicators that are relevant to each country's individual context; and,
- To strengthen capacity for effective monitoring and evaluation of ESD and to ensure that appropriate information for improving ESD policy is identified.

He also highlighted the dual approach the research was taking to provide both aspects of quantitative and qualitative assessment to the development of appropriate ESD indicators, as indicated by the two types of research inputs from the National Focal Points on system leverage points for ESD and from the Regional Centres of Expertise on ESD for investigating effective learning performance.

Dr. Ogihara thanked the key note speakers for their contributions, and he concluded the session by opening the floor for all participants to provide a short self-introduction.

Northeast Asia Reporting and Capacity Building Workshop on Monitoring & Evaluation of Education for Sustainable Development

Organised by UNU-IAS and IGES

Monday 20 February, 2012, UNU-IAS, Yokohama

WELCOME REMARKS

By Akira Ogihara

Senior Coordinator, IGES

Dear Takemoto-san, Ms. Vanhala, honoured guests and participants,

Good morning and welcome to the Northeast Asia Reporting and Capacity Building Workshop on Monitoring & Evaluation of Education for Sustainable Development. I am Akira Ogihara, senior coordinator at the Institute for Global Environmental Strategies and deputy director of our Governance and Capacity group which includes our education team.

This workshop is an important part of the ongoing research project to develop regionally relevant Indicators of ESD to monitor and evaluate the implementation that has occurred during the Decade of Education for Sustainable Development in the countries across Asia-Pacific. The research project and this workshop have been jointly organised by the United Nations University – Institute of Advanced Studies and the Institute for Global Environmental Strategies with the close cooperation of UNESCO Asia and Pacific Regional Bureau for Education in Bangkok.

The research for this project has progressed rapidly with the support of National Focal Points on ESD from each country and the Regional Centers of Expertise on ESD. Today's workshop offers the opportunity to share experiences on ESD activities from China, Japan and Korea among the various research partners and to strengthen overall capacities on monitoring and evaluation of ESD.

With no further a-do, I have the pleasure to introduce our two keynote speakers.

Mr. Kazuhiko Takemoto is a senior fellow here at UNU-IAS and he is the director of the institute's education projects. Prior to joining UNU, Takemoto-san served as the Vice Minister of the Ministry of the Environment for Japan. We are very honoured to have his participation in both this workshop and the research project.

Ms. Katie Vanhala is joining us from UNESCO's Asia-Pacific Regional Bureau in Bangkok where she serves as an associate expert and leader of the ESD team. UNESCO has been the driving agency for the implementation of the Decade of ESD, and the regional bureau has labored significantly to build the capacities of countries throughout region to successfully plan, initiate, evaluate, and improve their national ESD programmes.

Thank you very much!

KEY NOTE ADDRESS

Northeast Asia Reporting and Capacity Building Workshop on Monitoring and Evaluation for ESD

Monday 20 February, 2012, UNU-IAS, Yokohama

By Kazuhiko Takemoto
Director UNU-IAS ESD Programme

Distinguished Workshop participants, Ladies and Gentlemen,

I would like to first welcome you to UNU-IAS and thank you for finding time to participate in this useful Workshop. For those who are coming outside Japan I trust that you are feeling at home and keeping warm.

At the onset, I would like to extend my sincere gratitude to the Institute for Global Environmental Strategies (IGES) and UNESCO Bangkok for agreeing to work together with the United Nations University Institute of Advanced Studies (UNU-IAS) on a one-year research project to assess the implementation of the United Nations Decade of Education for Sustainable Development (DESD). This collaborative research that is funded by the Japanese Ministry of Education, Culture, Sports, Science and Technology (MEXT) presents an excellent opportunity to develop and pilot indicators for monitoring and evaluation of DESD from a sub-regional focus.

As you all know, an initiative as long and complex as the Decade of Education for Sustainable Development must benefit from adequate processes of monitoring and evaluation both at national and sub-regional levels. You may be aware that monitoring and evaluation is one of the seven inter-linked strategies that were identified by DESD International Implementation Scheme to advance the Decade.

I would like to take this opportunity to encourage you to continue applying the other six strategies both in your own institutional framework and in the networks in which you function. To jog your memory, the other six strategies are:

- Promoting advocacy and vision building
- Consultation and ownership
- Partnership and networks
- Capacity building and training
- Research and innovation
- Promoting information and communication technologies

Given the diversity and sustainable development needs of the Asia-Pacific region, it is essential to employ participatory processes in assessing the implementation of the DESD through the development of regional indicators of ESD. It is also essential to use both quantitative and qualitative methods in order to effectively monitor the Decade. I am pleased to note that this Workshop is based on participatory monitoring and evaluation processes and reports on findings from both quantitative and qualitative methods.

I would like to thank national ESD focal points from Japan, China and Republic of Korea who participated in the quantitative country survey and also representatives of Asia-Pacific Cultural Center for UNESCO and Yonsei University who are here today to share your expertise on ESD and its monitoring evaluation. Findings from this survey will be shared today to provide a comparison of ESD implementation from the three Northeast Asia countries. I would also like to thank Co-ordinators of RCE Chubu, RCE Beijing, RCE Kitakyushu, RCE Tongyeong and RCE Okayama who have kindly submitted qualitative data in form of 'good practice' case studies and will also share today. This will provide a useful comparative analysis towards strengthening capacity building for ESD monitoring and evaluation in the region.

The UNU RCE initiative needs to be viewed as an integral part of the Decade of Education for Sustainable Development. RCEs provide useful forums that bring ESD practitioners and society together in mobilising knowledge and good practice to address issues of sustainable development.

Dear participants,

I am happy that this Workshop has brought together a diverse group of experts to share ideas and perspectives on how to strengthen ESD implementation in Northeast Asia. I do hope that you are going to use the workshop sessions to catalyse new partnerships, share good ESD practices and experiences, learn about monitoring and evaluation of ESD activities in Northeast Asia and share challenges that you face to implement ESD in your countries or regions, as part of capacity building processes.

It is also my sincere hope that you are going to apply useful insights and recommendations from the workshop to develop ESD indicators for monitoring and evaluation of DESD implementation in your countries. In this way, you will play a key role in charting new efforts and initiatives on ESD beyond the Decade of Education for Sustainable Development in 2014.

Without being very ambitious, I expect that through the on-going collaborative research project UNU-IAS and IGES in collaboration with UNESCO Bangkok will make a

meaningful contribution to DESD by advancing Global Monitoring and Evaluation agenda in the context of the Asia-Pacific region. Ultimately, the research findings will contribute directly to regional policy making processes to reorient education towards sustainable development and also the implementation of the final phase of the Global Monitoring and Evaluation of DESD.

In conclusion, I would like to extend my sincere gratitude to the UNU-IAS ESD Team and the Governance and Capacity Group at IGES for organising this Workshop and implementing the collaborative research. We are very grateful for the tremendous support from UNESCO Bangkok through Ms. Katie Vanhala.

I wish to gratefully acknowledge the financial support of the Japanese Ministry of Education, Culture, Sports, Science and Technology (MEXT) towards the implementation of the on-going collaborative research and today's Workshop.

Thank you very much for your kind attention and I hope the Workshop will be a great success.

KEY NOTE ADDRESS

Northeast Asia Reporting and Capacity Building Workshop on Monitoring and Evaluation for ESD

Monday 20 February, 2012, UNU-IAS, Yokohama

By Katie Vanhala

Associate Expert, ESD Team Coordinator, UNESCO Asia Pacific Regional Bureau

Dear Participants,

It is an honour to have this opportunity to address this workshop, and I thank UNU-IAS and IGES for the ongoing inclusion of UNESCO in their research project on Monitoring and Evaluation of Education for Sustainable Development.

From the start of the Decade, there have been discussions on the value and importance of monitoring and evaluation tools for ESD. The topic of indicators is one that has eluded the international community in their quest for ESD implementation, yet finding global, regional or even national level benchmarks that can be ascribed to the vast subject areas ESD can cover in various contexts has proven to be a great challenge. UNESCO has engaged in scoping exercises, and developed policy guidance tools to support Member States in defining the scope and implementation of ESD, so as to further support its monitoring, but to date, there are still very few tangible samples of what a set of ESD indicators might entail. With that being said, UNESCO is very supportive of IGES and UNU-IAS engaging in this initial research, and will greatly welcome any advancement towards the development of contextual indicators especially in the lead up to the end of the DESD.

As an overview, much of the work being undertaken by the UNESCO Bangkok regional bureau by way of ESD involves providing technical assistance and training on a request basis, or by recommendation if there is evidence that the work will be sustained and carried forward. During member state consultations in 2010, governments highlighted that youth and climate change were the two key issues they would like UNESCO to work on, and we are currently engaging with Member States on how best to address these areas and integrate issues of ESD into their education sectors.

For the reporting process, Rio+20 is the next event for UNESCO and other organizations to reaffirm the important role education has in instilling values and principles associated with sustainable development. Case studies and other good practices have been collected to support this case, and as we enter phase III: impacts and outcomes, we are looking to further involve school networks, communities and municipal policy-makers in activities that promote ESD at the ground level, in conjunction with our policy level commitments.

Thank you for your kind attention. I would like to wish the best success for this workshop and hope that we all find it a valuable and rewarding experience.

Capacity Building Activities and Group Work at NE Asia M&E of ESD Workshop





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SESSION: Regional Centres of Expertise on Education for Sustainable Development – Case Studies on ESD good practices

10:30-11:50

Session Chair: Abel Barasa Atiti, UNU-IAS

Presentations:

- 1) *Biodiversity Cyber Dialogue Project (BCDP) conducted by RCE Chubu*
Reita Furusawa, Chubu University - Chubu Institute of Advanced Studies
- 2) *Teachers' Training on ESD in RCE Beijing*
Dongying Wei, Beijing Normal University - ESD Centre
- 3) *Vision of RCE Kitakyushu*
Yukiko Oda, Kitakyushu Institute on Sustainability
- 4) *Tongyeong Youth Global Challenge Program – Bridge to the World*
Won Jung Byun, Tongyeong Education Foundation for Sustainable Development
- 5) *Making a sustainable society through diverse networks*
Masaaki Nagareo, City of Okayama, Okayama ESD Promotion Commission

Background:

A Regional Centre of Expertise on ESD is not a physical centre but an institutional mechanism to facilitate capacity development for sustainable development through contribution to the local implementation of the UN DESD. This contribution to DESD is by creating platforms for nurturing and encouraging learning processes between local actors and stakeholders across trans-disciplinary knowledge and sectoral boundaries in a particular region to articulate a global vision of ESD in local terms.^{1&2} In addition, RCEs can facilitate the duplication and dissemination of good ESD practices.³ As a project pioneered by the United Nations University, the original conceptualisation of an RCE has changed over time by taking on functions that are broader in scope and depth. Currently, at one end of the spectrum of RCE interpretations is the image of an RCE as a linking point and a hub to promote ESD, a meeting point, a clearinghouse, a knowledge broker, and a platform for information exchange and sharing. At the other end of the spectrum is the interpretation of an RCE as a community of practice, an institutional mechanism for social learning, and a learning network.¹

RCEs in Asia Pacific have played a trailblazing role regarding the RCE initiative and ESD implementation as five of the first seven RCEs acknowledged globally in 2005 are located in the Asia-Pacific region.⁴ The principal means of promoting RCEs in the Asia-Pacific community so far has been promotion through two semi-annual meetings: one held in conjunction with the annual International RCE Conference and the other organised and hosted by an RCE in the region. In these meetings, RCEs discuss and address issues of common interest through joint projects and programmes. The RCEs are addressing issues, initiatives

and projects that vary in scope and in depth, which is understandable given its regional coverage and emphasis on local relevance. In the last third of the DESD therefore, the question of how to assess individual RCEs – both as a global process and a local/regional learning initiative – will have to be more fully explored by the RCE community. Hence, the importance of the RCEs' involvement in this research process cannot be overemphasized.

The session was chaired by Dr. Abel Barasa Atiti of UNU-IAS. There were five RCEs that presented their exemplar practices: one from the People's Republic of China, one from the Republic of Korea and the remaining three from Japan. Each presenter gave background information including their RCEs' geographic location, date of establishment, and then they went on to explain the specific aspects of the flagship project that had prepared their case study reports on.

RCE Chubu:

Mr. Reita Furusawa began his presentation by stating the objective of the cyber dialog project which was to provide a worldwide overview of the diversity of ideas about biodiversity, including opinions from the South and from different sectors of the civil society who have less access to the global discussion among the main parties to Convention on BioDiversity. The work involved the use of a social networking service (SNS): an online platform that focuses on building social relations among people who share interests and activities. The BCDP focused on non-formal and informal education which serves as a cross-boundary and multi-sectoral learning on biodiversity conservation. He said Chubu RCE was actively involved in the activities during the COP-10 in Nagoya by holding 12 forums on several issues as side events themed "Global Dialogue Forum" and later making good use of the online platform by posting the final deliberations at the site. To attract a wider audience, they created both English and Japanese sites, even though the Japanese site proved more successful in terms of utilisation/participation by various groups and stakeholders. He also mentioned the use of mailing lists in the process.

Mr. Furusawa also showed several examples of RCE Chubu's activities including several conservation activities involving regional natural and cultural resources with some activities receiving support by the local government. Regarding the outcomes, RCE Chubu tried to make a joint declaration based on civil society of Japan with JCN-CBD which was also trying to draft a position paper using the Cyber Dialogue but that endeavour was not successful. Hence, instead of the joint declaration in public, RCE Chubu went ahead and modified the draft into a document they named Appeal by the Citizens of Aichi Nagoya. The achievements made were 1) an enhancement of multi-cultural (multi-thematic) dialogue; and 2) making the Appeal by the Citizens of Aichi Nagoya. Challenges encountered include 1) limited participation by other RCEs, 2) general difficulties in using the SNS system, 3) language barrier and 4) lack of consensus building to produce a document for a joint public declaration and finally, 5) little linkage with formal education which he remarked will be the focus of next activity.

RCE Beijing:

After talking about the RCE Beijing's vision as building capacity to deliver, support and generate innovative ESD in the City of Beijing, Dr. Dongying Wei talked about the centre's objectives that included 1) training for in-service teachers, 2) environmental education research, 3) schools and sustainability programs, 3) SD-based curriculum for schools, 4) outdoor environmental education, and 5) coordination

of existing activities, partnerships and networks. She listed the constituent members of RCE Beijing are made up of several universities, secondary schools and non-formal organisations that collaborate with each other locally and sometimes internationally. The membership and types of activity hence tilts RCE Beijing towards the formal approach to ESD. She highlighted RCE Beijing's participation in environmental education (EE) policy issues, particularly, helping pass a law on EE in a province and also, its involvement in curriculum reform. Regarding learning/teaching methodologies, approaches and strategies, Dr. Wei emphasized the training of in-service and pre-service teachers through conferences, workshops, meetings and international exchanges. She mentioned that some of the students – teachers leave the training with such high motivation that certification, which is part of the program counts much less than the ESD skills they acquire for their future job as teachers. She also mentioned the use of research and subsequent writing of articles on ESD in journals to advance the concept and process. Finally, she pointed out that the goal of RCE Beijing is the integration of ESD into the formal and non-formal education in Beijing and its surroundings.

RCE Kitakyushu:

Ms. Yukiko Oda stated the vision of RCE Kitakyushu: “To integrate the perspectives of sustainability into all types of education and citizen’s activities to realise a just and sustainable society based on the full understanding and the collaboration of citizens”. She described Kitakyushu as a multi-stakeholder collaboration of 721 member organisations and individual members from the formal and non-formal sectors. She briefly described other projects they are involved in namely: Study and research, Youth, Public relations, and Networking, in addition to the “ESD Outreach Project” which was presented at the workshop. She not only pointed out the benefits of the multi-stakeholder partnership specifically involved with the project she presented, but also those other member organisations/individuals as broadening their scope and perspectives as regards their own activities. She described the methodologies, approaches and strategies used in the project. Using Edamitsu – a community located on a hilly area with a high percentage of the elderly people with difficulty in mobility – she gave a good example of how the initiative has worked through multi-actor and multi-stakeholder actions to address each of the three pillars in that community. The major outcomes/achievements included: 1) increase in the recognition of ESD, 2) improvement in capacity building, 3) expansion and intensification of networking, and 4) expansion of activities of each stakeholder. She also touched on the strengths and advantages – voluntarism, high motivation and relationship with RCE Tongyeong – and also, the success factors in implementation, namely: 1) active multi-stakeholders, 2) motivated citizens, 3) leaders who brought multi-stakeholders together, and 4) support of the local government/mayor. Among the weakness and constraints that she described, Ms. Oda stressed the need to put the local activities, objectives and goals of RCE Kitakyushu into global perspectives. Regarding several challenges and barriers pointed out, she advocated for further capacity building of the member organisations and the secretariat. She said that their top-down approaches ought to be augmented with bottom-up approaches.

RCE Tongyeong:

With its mission dubbed ‘Individual growth & sharing; capacity building of education institutions; from local to global – enriching grass root resources’, Ms. Won Jung Byun mentioned there are 26 projects currently going on in RCE Tongyeong among which one of their flagship projects is Tongyeong Youth

Global Challenge Program which was the focus of her presentation. She touched on the challenges facing Tongyeong City – economic decline, aging of population and urbanisation – common problems also faced by many cities in Asia-Pacific. Ms. Won said that RCE Tongyeong is implementing both formal, informal and non-formal education in the network and she categorised RCE Tongyeong’s activities into four ESD Factors: 1) Multi-stakeholder participation –involving the local governments, local NGOs, schools, local business and social entrepreneurs, the Global RCE network and professionals, each with their assigned function; 2) Promoting sustainable development; 3) Partnership with global network; and 4) Feedback to the local society. Ms. Won further described the Youth Global Challenge Program which is now four years old, how some young people put on hold their conventional education for a one-year study abroad and exchange program to conduct original research on sustainable development. The groups are required to develop their specific research and action plans. She talked about how this international study partnership and networking with other RCEs has contributed to the students’ action learning skills regarding ESD. She also praised the parents for their understanding as they are a potential barrier to the program. She revealed there are plans to invite those kids in other parts of the world that RCE Tongyeong youth have met to Tongyeong during the 7th RCE Global Conference in 2012.

RCE Okayama:

The presenter, Mr Masaaki Nagareo described the various activities that RCE Okayama is involved in at its various “focal points”. He said the purpose of the Okayama ESD project is to develop the community to learn, think and act for sustainable development and to achieve this purpose, there is a need to promote ESD by approaching regional issues in Okayama and widening the circles of people who work on ESD. As one of the venues for the 2014 End-of-DESD Conference and also the 9th RCE Global Conference, he briefly talked about the efforts being put in place to facilitate such important events. Contributing to promote the United Nations’ Decade of ESD through collaboration with people in and around Okayama. Mr. Nagareo introduced several educational/learning activities (experiential & action learning, collaboration, partnerships, cooperation, support, cognitive learning, etc.) taking place in various focal points within RCE Okayama. The main activities include:

1. ESD Café Organized by the ESD Promotion Committee: this is done monthly with people coming to talk face-to-face and learn from each other. The topics dealt with vary but focus around themes of sustainable development.
2. Sustainability Challenges: Involves collaborative educational programs between the stakeholders and actors from areas in 1) Okayama City’s Fujita, 2) Kyoyama, and also 3) NPO Green Partnership. These activities received support and cooperation from some local universities (Okayama and Kibi International) and by the local authority.
3. Intra-city collaboration with the local university (Okayama University).
4. Inter-regional collaboration (Greater Sendai and Okayama Areas) exchange camp of elementary school students.
5. International collaboration on waste management involving RCE Okayama and RCE Bogor with the involvement of Okayama University and the Indonesian institutions working with RCE Bogor.

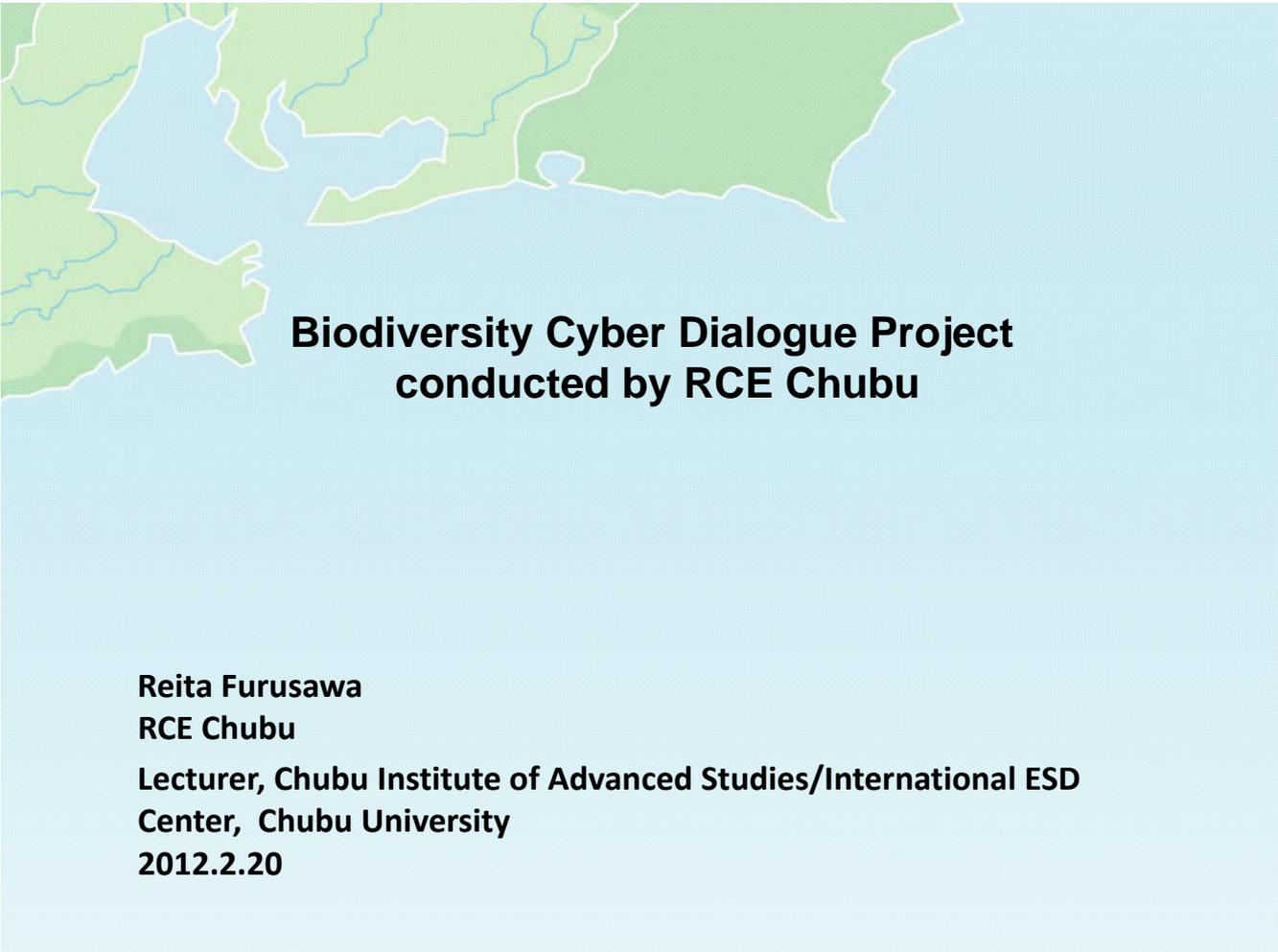
Question and Answers:

Several thought-provoking questions were asked during the Q&A Session. However, due to lack of space, only a few of the main questions that led to substantial discussions are presented here. One such question involved the problem of the youth staying committed and connected to the RCE and the ESD

cause after they have graduated from school and/or moved away from the area (by Prof. Nagata), and whether there were any systems in place to connect with and keep in touch with these youth (Ms. Yasuda). Ms. Yukiko Oda from RCE Kitakyushu responded that even though students generally “migrate” after school, in Kitakyushu there is a youth program to support the university students who leave or new ones who come in with the help of the university teachers who are engaged with ESD. Prof. Nagata said many local projects are not so successful in giving identity to the youth and hence retaining them. He further shared a few experiences regarding this point. On developing a mechanism for keeping alumni linked to the RCE, Ms Oda explained that RCE Kitakyushu has been able to retain some former students through the provision of ESD-related jobs in the locality. Prof. Tabucanon advised participants to keep in mind the barriers and challenges mentioned by the presenters in light of the capacity building activities. There was a request for RCE Tongyeong to share the “magic” surrounding the success of their activities and the strong link they have established with the local government (by Mr. Takemoto) and regarding who RCE Tongyeong turns to when they face challenges (by Ms. Vanhala). Ms. Byun responded that RCE Tongyeong keeps in touch with its old members online and also asks them to volunteer in several activities including helping to train new students for the youth exchange program annually. She also said the “magic” of RCE Tongyeong could be attributed to the dedication of around 15 key people in the region: NGOs, school teachers and university teachers who provide support and advice whenever RCE Tongyeong calls on them and who also have the ability to pull in larger numbers of people.

References:

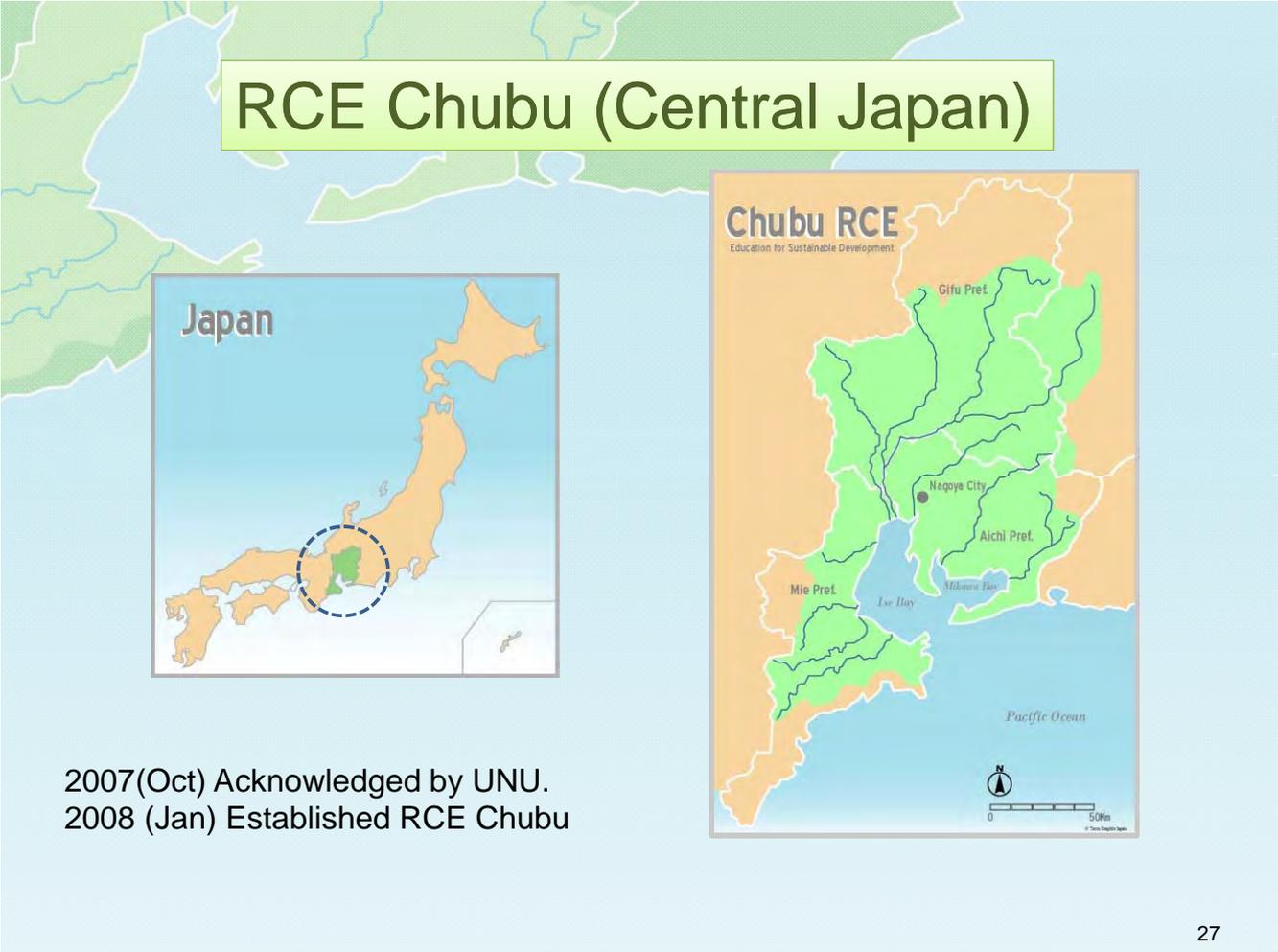
- 1) Mochizuki, Y.; Fadeeva, Z. (2008) Regional Centres of Expertise on Sustainable Development (RCEs): and overview. *Int. Journal for Sustainability in Higher Education*, Vol 9. No. 4 pp. 369-384.
- 2) Fadeeva, Z and Mochizuki, Y. (2010) The Roles of Regional Centres of Expertise on Education for Sustainable Development: Lessons learnt in the first half of the UNDESD. *Int. Journal of Education for Sustainable Development*, Vol 4. No. 1 pp. 51-59.
- 3) Ofei-Manu, P.; Shimano, S. (2010), Ramsar Wetlands-Rice Paddies and the Local Citizens of Osaki-Tajiri Area as a Social-Ecological System in the Context of ESD and Wetland CEPA. *Global Environmental Research* 15, 95-106.
- 4) UNU-IAS (United Nations University-Institute of Advanced Studies) (2010) Five years of Regional Centres of Expertise on ESD. UNU-IAS, Yokohama, Japan 124 pp.



Biodiversity Cyber Dialogue Project conducted by RCE Chubu

Reita Furusawa
RCE Chubu

Lecturer, Chubu Institute of Advanced Studies/International ESD
Center, Chubu University
2012.2.20



RCE Chubu (Central Japan)



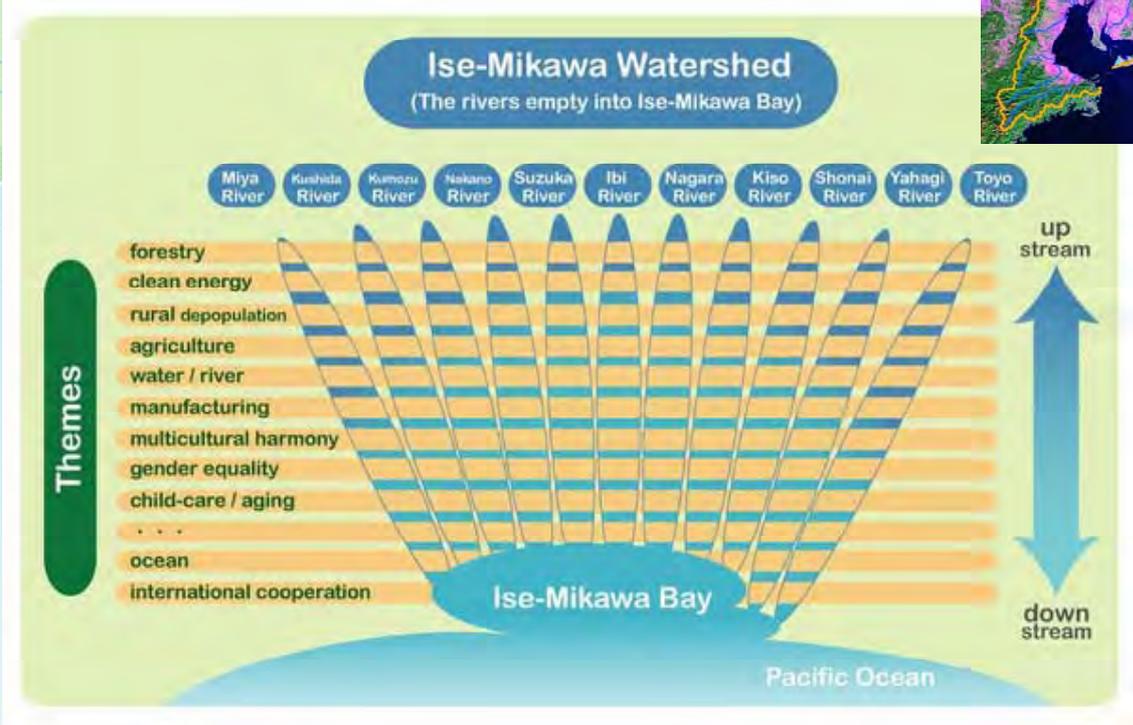
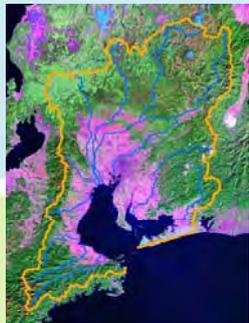
2007(Oct) Acknowledged by UNU.
2008 (Jan) Established RCE Chubu

Chubu Area and the Environment

I se Mi kawa Bay



RCE Chubu and the Region



CBD COP10 Aichi Nagoya 18~28th Oct 2010



- ◎ Nagoya Protocol on ABS
- ◎ Aichi Target (Post 2010 Target)
- ◎ UN Decade of Biodiversity (2011-2020)

5

Biodiversity Cyber Dialogue using SNS: Social Networking Service

SNS:

- A social networking service : an online platform that focuses on building social relations among people who share interests and activities.
- A social network service basically consists of a profile, social links, and a variety of additional services such as instant message function.



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Objectives of the Cyber Dialogue

The objective is to provide a worldwide overview of the diversity of ideas about biodiversity, including opinions from the South and from the different sectors of the civil societies who have less access to the global discussion among the state parties to the CBD.

Time Line of the Cyber Dialogue

Phase	Time	Event
Phase 1	2009/5~ 2009/12	<ul style="list-style-type: none">- Announcement of launching the Cyber Dialogue- Posting the comment on CBD Online Discussion Site.
Phase 2	2010/1~ 2010/9	<ul style="list-style-type: none">- Co-conducting the Cyber Dialogue with JCN-CBD.- Established the website on NING- Launching a Japanese site SNS (I-dialog).- discussing the declaration from civil society.
Phase 3	2010/10 (COP10)	<ul style="list-style-type: none">- Conducting Global Dialogue Forums.(12)- Making public An appeal of Aichi Nagoya

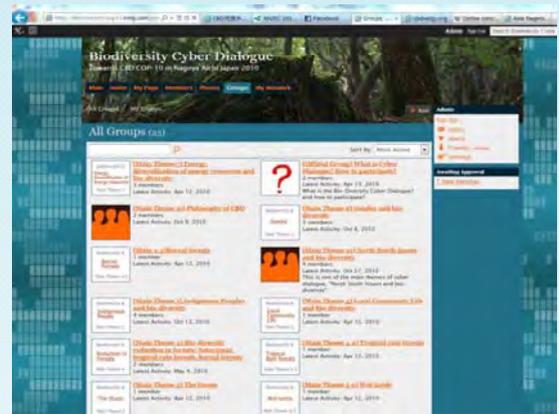
Biodiversity Cyber Dialogue (English Version)

<NING Website>

- Invited RCE Members (Closed community)
- 23 themes (10 major themes)

(Linkage with Japanese version)

- Biodiversity and philosophy
- MOP5
- Conservation of Coastal and Marine Biodiversity
- Bioregion
- Wetland Biodiversity
- TEEB
- North South relations and biodiversity
- Gender & Minority Working Group
- Using Mailing Lists and personal emails



Biodiversity Cyber Dialogue (Japanese Version)

<i-dialog (Open SNP): cooperated by JCN-CBD>

- Invited both ESD and JCN-CBD stakeholders
- 66 communities (24 major themes)
- Biodiversity and philosophy
- MOP5
- Conservation of Coastal and Marine Biodiversity
- Bioregion
- Local production/consumption of foods
- TEEB
- North South relations and biodiversity
- Gender & Minority Working Group
- Biodiversity and Indigenous knowledge

<Mailing Lists>

- *edsuishin*
- *ANICDialogue*
- *Etc..*



Biodiversity Cyber Dialogue (Japanese Version)

Thematic Discussions in JCN-CBD

Legal System Related to the Biological Diversity

MOP5

Conservation of Coastal and Marine Biodiversity

Bioregion

Wetland Biodiversity

TEEB

Outreach

UN Decade of Biodiversity

Biodiversity of Rice Paddies

Gender & Minority Working Group

People and Seeds for the Future

Local Grassroots Networks

Biodiversity and Development

**Bioregion =
Ise-Mikawa Bay
Watershed &
Biodiversity**

Shounai River Basin and biodiversity

-Forest Health Check-up:

A survey and study project on the forests at the headwaters of the **Toki-Shonaigawa river**, collaborating with local people, with the aim of grasping current forest conditions in a scientific manner.



Shounai River Basin and biodiversity

-Noda Farm Conservation:
 Noda Farm is a symbolic example of urban agriculture in Nagoya City. It is threatened its sustainability due to the reconstruction plan in Shidami area. Members of RCE Chubu is supporting a survey of regional natural/cultural resources and making an alternative plan.



Shounai River Basin and biodiversity

-Fujimae Tidal Flat Conservation:
 Fujimae-Higata is a tidal flat at river mouth of Shonai River, Shinkawa River and Nikko River that flow into the port of Nagoya.
 This site is one of the staging sites of East Asia - Australia Flyway. A lot of migratory shorebirds, ducks and herons also use this site as feeding and resting area. The number of shorebirds that visit this site is one of the largest in Japan. So, Fujimae-Higata had been registered in "Ramsar Convention" on November 18, 2002.



<http://minnanomirai.asablo.jp/blog/2009/06/06/4350394>

Related Activities during COP10

“Face to Face Dialogue”

12 Forums during COP10 as side events “Global Dialogue Forum”

- *A proposal of the 13 Grandmothers to COP10*
- *What is CEPA?*
- *UN Decade of Biodiversity and NGOs*
- *etc.*



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Outcomes of Biodiversity Cyber Dialogue (Japanese Version)

Thematic Discussions in JCN-CBD

Legal System Related to the Biological Diversity

MOP5

Conservation of Coastal and Marine Biodiversity

Bioregion

Wetland Biodiversity

TEEB(The Economics of Ecosystems and Biodiversity)

Outreach (Public Awareness)

UN Decade of Biodiversity

Biodiversity of Rice Paddies

Gender & Minority Working Group

People and Seeds for the Future

Local Grassroots Networks

Biodiversity and Development

JCN-CBD's
Position paper

A Joint Declaration
By the civil society
of host Country, Japan

The Appeal by the
Citizens of Aichi-
Nagoya

Conclusion: Achievements and Challenges of Biodiversity Cyber Dialogue

<Achievements>

- Multi-cultural (multi-thematic) dialogue
- Made public *the Appeal by the Citizens of Aichi-Nagoya* during COP10
- Platform for diverse stakeholders of biodiversity conservation

<Challenges>

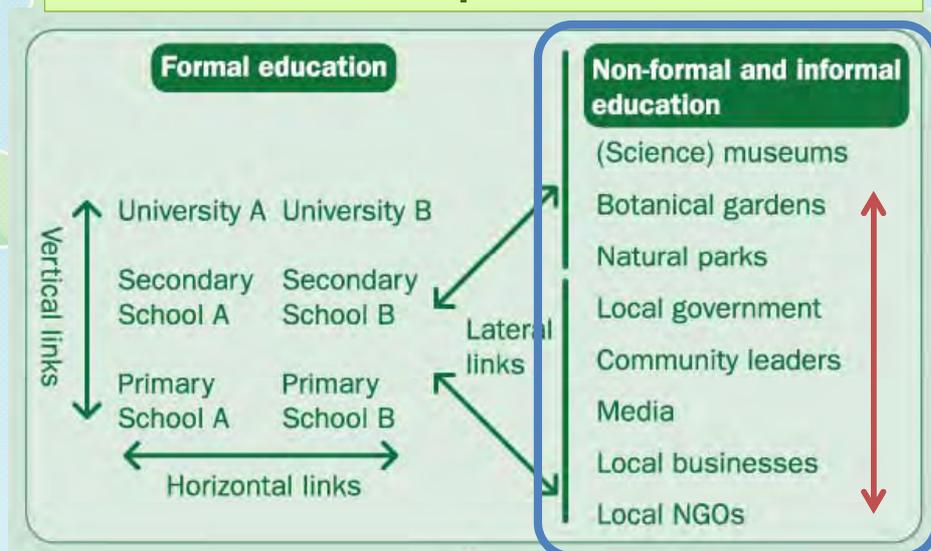
- RCE participation
- SNS system and language barrier
- Forming consensus building system



<http://eco.nikkeibp.co.jp/article/column/20101028/105116/>



RCE's Concept of Education



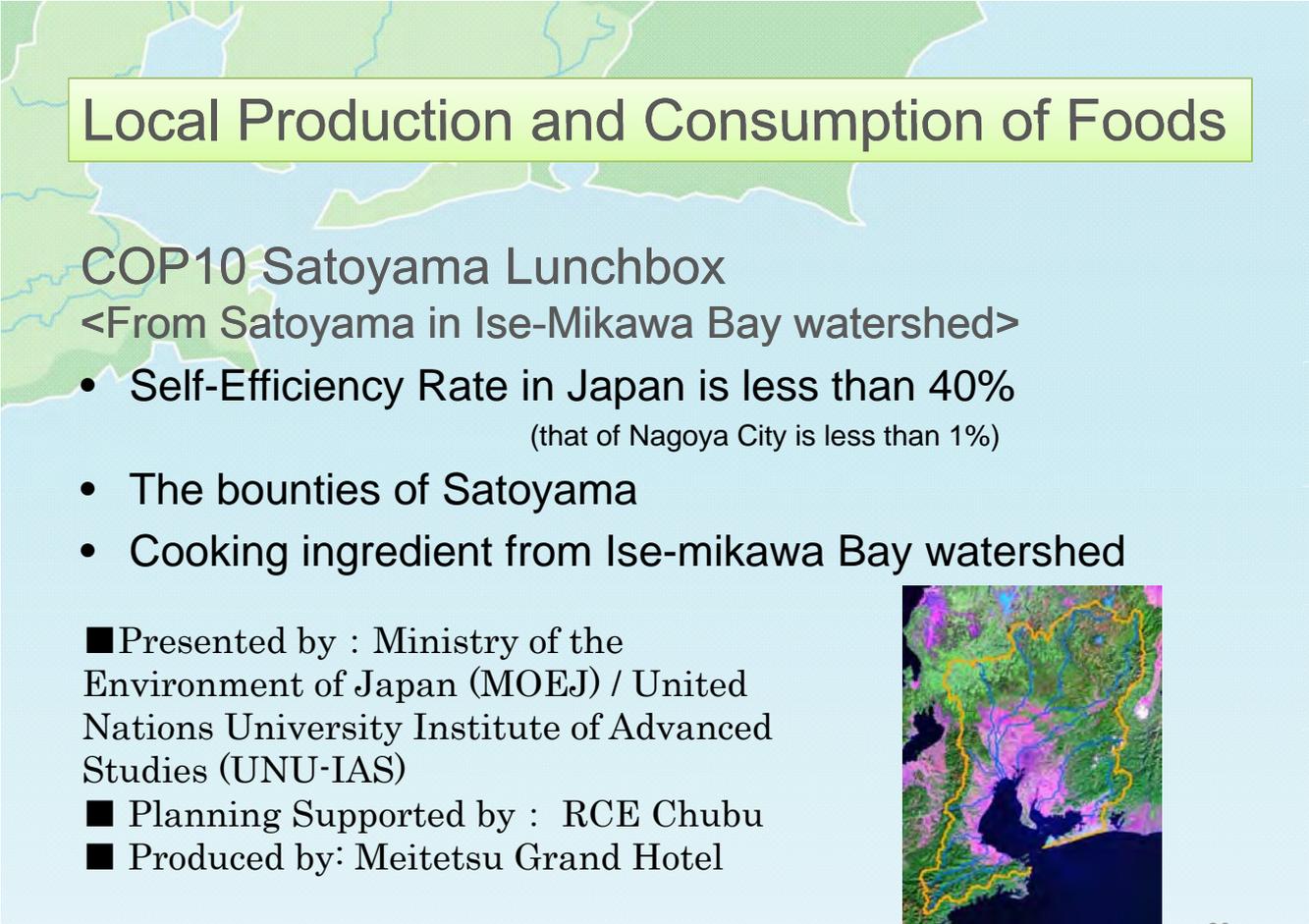
The Biodiversity Cyber Dialogue Project focuses on Non-formal and Informal education, which serves us cross boundary and multi-sectoral learning on biodiversity conservation.



reitajapan@isc.chubu.ac.jp



19



Local Production and Consumption of Foods

COP10 Satoyama Lunchbox

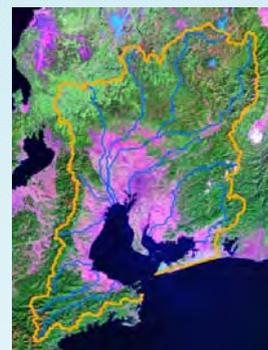
<From Satoyama in Ise-Mikawa Bay watershed>

- Self-Efficiency Rate in Japan is less than 40%
(that of Nagoya City is less than 1%)
- The bounties of Satoyama
- Cooking ingredient from Ise-mikawa Bay watershed

■ Presented by : Ministry of the Environment of Japan (MOEJ) / United Nations University Institute of Advanced Studies (UNU-IAS)

■ Planning Supported by : RCE Chubu

■ Produced by: Meitetsu Grand Hotel



COP10 Satoyama Lunchbox

~ The Gustatory Declaration of Biodiversity Conservation ~



COP10 Satoyama Lunchbox and Ise-Mikawa Bay watershed



COP10 Satoyama Lunchbox and Ise-Mikawa Bay watershed

2011 Oct. 18~31

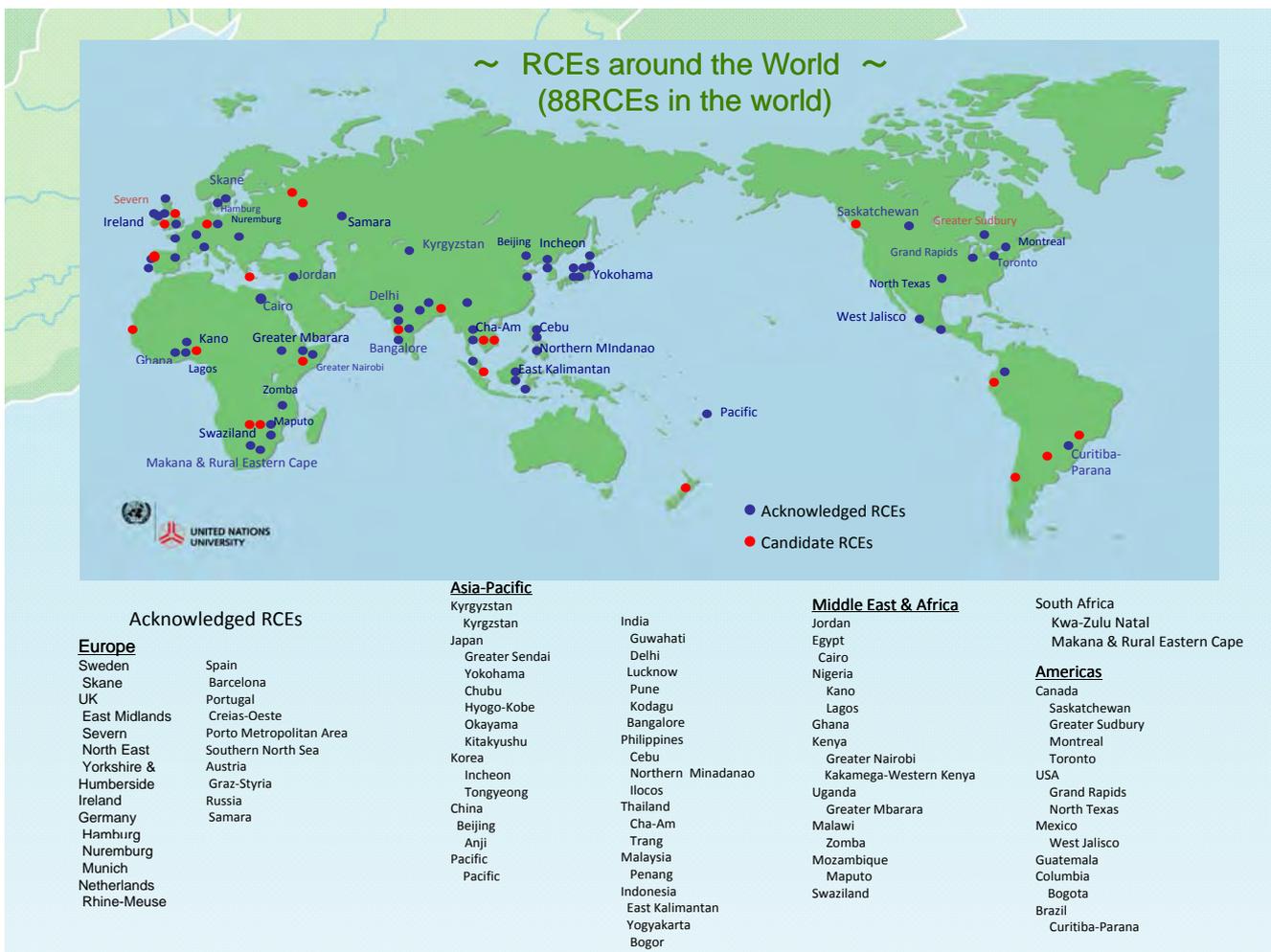
Satoyama Lunch Box was commercialize by Meitstu Grand Hotel, in memory of COP10



UN "Decade of ESD" (Education for Sustainable Development)

- Give an enhanced profile to the central role of education and learning in the common pursuit of sustainable development.
- Facilitate links and networking, exchange and interaction among stakeholders in ESD.
- Provide a space and opportunity for refining and promoting the vision of, and transition to sustainable development - through all forms of learning and public awareness.
- Foster increased quality of teaching and learning in education for sustainable development.
- Develop strategies at every level to strengthen capacity in ESD.

(UNESCO DESD Draft International Implementation Scheme (IIS), p.4)



United Nations University's RCE-ESD

An RCE is a network of existing formal, non-formal and informal education organisations, mobilised to deliver education for sustainable development (ESD) to local and regional communities.

Core elements of an RCE

An RCE should have four elements:

1. Governance - addressing issues of RCE management and leadership
2. Collaboration - addressing the engagement of actors from all levels of formal, non-formal and informal education
3. Research and development - addressing the role of research and its inclusion in RCE activities, as well as contributing to the design of strategies for collaborative activities, including those with other RCEs
4. Transformative education - contributing to the transformation of the current education and training systems to satisfy ambitions of the region regarding sustainable living and livelihood.

(UNU-IAS, Regional Centres of Expertise on Education for Sustainable Development)

Appeal by the Citizens of Aichi Nagoya Venue of the COP10/MOP5

Drafted by

Kinhide Mushakoji, Japan Civil Network for CBD Advisor.

Hiroo Komamiya, Japan Civil Network for CBD, Secretariat, Nagoya Coordinator.

Junnichi Ohnuma, Interim Chair, Working Group on Bio-Region, Japan Civil Network for CBD.

Seiko Hanochi, Chair, Gender and Minority Working Group, Japan Civil Network for CBD.

Signed by Citizens of Aichi Nagoya and by their Japanese supporters¹

Preamble:

We, citizens of Aichi Nagoya, the venue of the Tenth Meeting of the Conference of Parties to the Convention on Biological Diversity, call upon all peoples of the world, who are fighting for the preservation of life and of its diversity, to join forces to eliminate the root causes of the rapid reduction of biological diversity, which, we believe, are the present trends towards the commodification of everything, the Globalization of mass production, mass consumption, mass disposal, and Modern rationalism which is at the base of the above two trends. With a strong sense of responsibility, as citizens of the rich side of the world, we call upon the concerned citizens of different parts of the world to unite in promoting a world-wide awareness about our mistakes.

Venue: Nagoya, Aichi Prefecture, Ise-mikawawan Bioregion

The venue, Nagoya, belongs to the Ise-Mikawa Bay bioregion. This bioregion is located in the central part of Honshu, the main island of Japan. This region is blessed with one of the world's rarest natural environments. The main islands of Japan have a mountain chain from which many rivers flow into a great number of bays.

The Nagoya metropolitan area, in particular, is the economic and demographic centre of the Ise-Mikawa Bay, the river basin of Kiso River and other nine major rivers. This metropolitan area has enjoyed a variety of services from this eco-region for its development since ancient times. Quality timber that was found upstream was transported downstream by timber rafting along with delicious freshwater; conversely, salt and marine products produced in the bay were transported upstream.

2. What we are losing, and what we have snatched away.

Dam constructions have sunk under water people's lives and their history in the upstream regions; the young labor force has moved downstream and contributed to the Japanese post-war economic miracle. Under the WTO free trade regime, Japan has liberalized the trade of cheap agriculture and forestry products imported in exchange for the export of its industrial products. As a result, the upstream areas have been devastated.

The number of marginal hamlets of which 50% of the population is aged over 50 has been increasing, and some of those hamlets have already disappeared due to their aged population having passed away.

The cheap imported foreign lumber has lowered the price of lumber, making it too costly to practice periodic thinning in Japan. Without periodic thinning, dark forests are crowded with long skinny trees that are like bean sprouts, and soil erosion is caused by the disappearance of understory vegetation.

In hilly and mountainous areas, the introduction of chemical fertilizers and the shift in energy sources from charcoal and firewood to coal, oil, and natural gas have made it unnecessary to use fallen leaves in Satoyamas, endangering the very existence of the Satoyama system by which Japanese people have benefitted from sustainable ecosystem services for

¹ The signature will be made public on 24 October at the Side Event on the Aichi-Nagoya Appeal(10:00-12:00. Nagoya Gakuin University Gymnasium 2nd Floor, Large Hall.

thousands of years. This crisis is not only threatening biodiversity but also human lives as humans are a part of the local ecosystem.

Reclamation and shore protection works have made once-fertile coastal zones full of problems such as decreased water quality and sludge accumulation. There used to be a large tideland between the Kiso River mouth and the Shonai River mouth; the tideland used to serve as water purifier and a resting site for birds. However, most of the tideland has been reclaimed for industrial use. The tiny remaining part of the tideland is called Fujimae tideland, which is a wetland of importance designated by the Ramsar Convention. The seaweed ecosystem there has been devastated, and most of the coastal line has been concrete-walled. Algal blooms and hypoxia have been occurring frequently, depleting the fish life of this bioregion.

This is in fact a typical “North-South problem” which divides this region, and this structure is not unique to Japan. There are similar structural problems in Asia and Africa, where people move to live in urban areas, abandoning traditional lifestyles. In such areas, the biodiversity in “the South side” in many cases has deteriorated. With humans, the key components of the local ecosystems, having left the communities, long-standing fertile “human ecosystems” are on the verge of collapse.

As a result, unfortunately, Japan’s food self-sufficiency ratio has dropped to only 40%, and that of lumber a mere 20%. Japan has relied on foreign countries for natural resources rather than taking advantage of its farmland and forests. We feel ashamed deep down in our heart at the fact that Japan’s food and lumber self-sufficiency ratios are exceptionally low among the OECD member states. This made it necessary for us to exploit the mineral and biological resources abroad, especially in the South. Therefore, whatever fair arguments we may have, we, the people of Aichi Nagoya, must apologize first to the world for the deterioration of ecosystems and biodiversity, especially the world’s indigenous and local peoples who have maintained them. This is essential for the promotion of a just World Peace.

3. “Globalism”, “Growth Principle”, and “the North-South Problem” as a result

Globalization of the economy has divided the bioregion, which interdependence had been maintained through a variety of organic linkages until fifty years ago. Neoliberalism regards everything on the earth as commodities and tries to maximize their market values. In other words, neoliberalism has adopted a “growth principle”, which regards “economic growth” to be of top priority over anything else. This way of thinking is very much gendered, and is linked to the belief that men are superior to women. Women have been working in child rearing and other homemaking, reproductive activities unimportant for production which is at the base of economic growth. When their labour is used for production, they are given only part-time and other forms of cheap labour. In Japan and elsewhere an increasing number of aged women face insecurities associated with poverty. Among the living organisms, those having a high speculative value are mass reproduced and slaughtered, while micro-organisms seemingly useless are exterminated by the transformation of their habitat. More generally, all living beings and genetic materials are commodified and become the object of economic and financial transactions. What would you think if you were turned into a subject of trade?

We specifically note that various problems associated with the division of the bioregions caused by the “growth principle” have the same structure as the new “North-South problems” on a worldwide level. Both divisions have been created by the global-scale expansion of the wealth divide between centres and peripheries of economic growth. Women and nature have become the perennial colonies sacrificed to the growth of the global economy.

In the past history, women have always been the main workers in the traditional local communities from long before the emergence of monetary economy. These communities were reproducing themselves through a subsistence economy, where traditional small-scale agriculture, fishing and other activities were performed in close interaction with other living beings in the ecoregion. With the development of monetary economy, the industrialized North built a world dominated by industrial production. Women, especially those who played leading roles in subsistence economy, found their work over-exploited, and were marginalized and excluded from the process of economic growth.

This is the context within which the rapid reduction of biological diversity and the new North-South divide grow together. The division of the different river-basin bio-regions are at the base of this generalized North-South structure. The globalization of market economy generated the division between rich and poor countries, and rich and poor localities up-stream and down-stream of rivers in bio-regions, as well as the gendered gaps between rich and poor. Bio-diversity was also caused by the same economic process.

We must, however, take note of the fact that in this commodified global economy, two third of the women population of the world live where subsistence economy prevails over monetary economy. It is this economy which must be reevaluated and reorganized for the solution of the North-South problems, the reactivation of river basin bio-regions,

the building of gender equality, and the promotion of life and of its diversity. A local cycle of exchanges between the biological environment and the subsistence economy including in their cycles the local monetary economy must be developed, so as to enable the bio-regions to avoid becoming the object of profit-making activities of the global financial economy.

4. Who preserves biological diversity and who should do so?

The Satoyama Ecological systems in Japan have been preserved traditionally with the intervention from human communities. The Satoyama ecosystems differ from community to community, and the Satoyamas have fostered a wide variety of local cultures all over Japan. Therefore, conceptually the Satoyama ecosystems have been maintained by “humans” as biological species, but more specifically by the “local residents”.

This is not a situation which holds only in Japan, in similar settings the local residents are the most important stakeholders of ecosystems and biodiversity. No one can deny this fact, but it is nation states that discuss biodiversity at COP10. Unfortunately, it is very difficult to believe that the states are institutions which represent always the local residents many of whom are on the south side of their national communities. This is so not only in the case of industrialized countries but hold in the case of most developing states. It may not be an exaggeration to say that all of the official participants at COP10 are on the “North” side of different “north-South” divides.

We, NGOs, are the only sector that works closely with other world’s NGOs to reduce the North-South “differences”. Neither nations nor business corporations can represent the feelings of world’s local residents, who are the most important stakeholders of biodiversity.

Also, given that local residents are the most important stakeholders of biodiversity, the maintenance of biodiversity should be conducted in accordance with a “subsidiarity” principle, giving the local citizens the right to decide before larger entities intervene. Local governments, nations, and corporations are only secondary stakeholders of the maintenance of biodiversity, and they should remain as complementary agents supporting the local citizens’ activities to maintain biodiversity. In brief, the local residents should become the main agents in maintaining biodiversity, and nations and the international community should accept to become the agencies supporting them.

5. What is the “philosophy” to protect lives and their diversity?

Since ancient times, non-migratory agricultural peoples have traditionally formed communities within “human ecosystems”, and have led sustainable lives, which have utilized local natural resources (many of which are biological resources) in a sustainable manner. However, the worldwide rampage of modern rationalism, which has been rapidly developing since the last century, is threatening local communities and “commons”, a governance where local ecosystems have been shared as common wealth. The typical example of those being threatened is the lives of indigenous peoples; such collapses of “human ecosystems” have had huge effects on diverse biomes composing “human ecosystems”.

In our country, there are many endangered species such as *oryzias latipes* and crested ibises within “Satoyama ecosystems”, which used to be maintained by the constant interventions of the local peoples. When it comes to the conservation of ecosystems sustained only through human interventions, it is wrong to treat the eco-system in opposition to the humans who control nature in an exploitative way. It is necessary, rather, to renounce to this dualistic view and treat humans as part of the eco-system, so that they preserve the biodiversity of their bio-region including in it the human livelihood of themselves,

It is also important to reconsider views on nature and communities that have sustained cultural life in different local communities. The traditional Japanese views of nature encompass polytheism and animism in perceiving the reality surrounding humans. Unlike western views on communities that consist of only human individuals, the Japanese traditional communities have nature as a component undividable from humans. In fact, what we, the Japanese people, thought of as “local communities” were not the human communities but the very local ecosystems which included beside natural life forms, not only human individuals but also gods and ancestors undividable from nature in our polytheism and animism.

This sense may be difficult to accept by us, modern humans, who are governed by the cerebral-cortex-centered distorted physical sense brought by modern rationalism. However, that sense may well be taken for granted among the world’s indigenous and local communities and a few Japanese Satoyama culture practitioners (many of whom are over 80).

The lack of this kind of views on nature predominates in the industrialized countries fully devoted to modern rationalism, and its acceptance by the modernizing elites in developing countries and in Japan. This is one of the fundamental causes of the rapid loss of biodiversity. Beside being the basis of serious defects of modern rationalism and its applications, the separation of humans from nature is not sustainable and must be replaced by a new (in fact already long-existing in the East) philosophy that is incited by cultural life which combines humans with nature, and we also must establish a philosophy. We must develop a dialogue with NGOs and indigenous and local peoples of the world so as to propose a clear intellectual basis for the Convention on Biological Diversity.

Unfortunately, the discussions at the Conference of Parties to the Convention on Biological Diversity so far have focused on minor counteractive measures. Although we are sure to cooperate as much as possible to implement the counteractive measures, we call for whole reforms of the society and of the economy in the whole world, eliminating the root causes of the rapid reduction of biological diversity, guaranteeing the sustainability of life and its diversity on this earth.

This is why we, the citizens of Aichi Nagoya, the “venue” of CBD-COP10 appeal to the world governments and other stakeholders to adopt the following five point principles:

the regulation of the global economy, which threatens community-centered sustenance economies. (This includes especially the protection of genetic resources of the indigenous and local peoples against biopiracy)

the empowerment of life-centered economies that repair the divided bioregions (especially between agricultural and metropolitan areas with the trading of biological resources in an appropriate scale at the center; within each bioregion and between them, growing into a bottom-up trend counteracting the global financial forces though a mounting tide of solidarity linking agriculture, forestry, fisheries, and local commerce.)

the elimination of the widening wealth gaps within and between bioregions, which spread out from central economies including Japan’s Ise-Mikawawan bioregion to other bioregions, especially in the developing countries, forming a worldwide network of bioregions.

As a premise for the above,

(4) we call for solidarity and dialogue between those who are fighting for the reactivation of world’s bioregions.

And,

In order to fight against the “growth” ideology which pursues only economic and financial growth at the expense of life and its diversity, it is indispensable to rediscover the wisdoms to live in harmony with all other forms of life in nature, which are on the verge of destruction because of the modern thought behind the “growth principle”. Therefore, we, citizens of Aichi Nagoya, the venue of the Tenth Meeting of the Conference of the Parties to the Convention on Biological Diversity, call upon the indigenous peoples, and peoples living in traditional local communities, and all other peoples in Asia, Africa, and Latin America, to seek together, this wisdom and to achieve together our common goal, to create a new world where life and its diversity is respected by all.

【Agreement group】 14 (26/10/2010)

Japan Wetlands Action Network
Fujimae Higata wo Mamorukai
Fuyumizu Tanbo • Tita Fukyukai
Tokushima, Wild Bird Society of Japan
P.E HARIMA-NADA
NISHIN NATURE OBSERVATION CLOB
Gifu NPO Center
Future of Earth
Non-Profit Organization Regional Renaissance Agency

Yudatiyamasinnrinnjyuku
Yamasato Culture Institute
Takamatu Higata wo Mamorukai
German League for Nature and Environment
NPO/Mitake500mannin no kisogawa mizu torasuto

【Assenter】 145(26/10/2010)

Masako Takigawa Toshiyuki Murase Youiti Ishihara kazuyo Yasuda Kyu Imaeda Miyuki Konishi Takuya Konishi
Ami Konishi Masanao Ito Takako Matui Yukuko Sogabe Shigemi Oda Kouji Kamei Kazuo Ichino Masuaki Asada
Ryoko Hamamura Noriaki Ito Hideki Kurahashi Seiji Murakami Yukio Furukawa Miki Ooya Midori Yamauchi Haruyo Wataya Chiemi Asano Eiji Hirai Shigeko Aoki Tamiko Amemiya Masahisa Ando Kiyoko Izumi Yoshikazu Ito Tatuko Uemura Mariko Oka Naoyuki Takada Kyouiti Sazuka Kyoko Sazuka Keiko Shibata Kikue Sugiyama Kyouko Suzuki Michiko Suzuki Kazuko Harubara Shigemi Takagi Kazuko Tuda Narumi Tugo Keiko Nakagawa Kouei Hirota Sueko Fujii Mieko Matushita Setuko Maruyama Hideko Murakami Takao Yamagishi
Fumio Yamasaki Fumiko Yamasaki Itoko Yamada Shoko Yamamoto Hiroomi Yokota Taeko Yokomizo Yukio Yokomizo Noriomi Yoshida Hitoshi Watanabe Masayo Watanabe Toru Amano Takamiti Shimada Tamotu Matumoto Kazuhiko Takahira Kenji Murase Akihiko Moriyama Yasutoshi Ooba Nobuhiko Ntanai Heiwa Yanagawa Izumi Mizutami Hideko Matuda Mituko Kuniyasu Reiko Kaminaga Hisae Miyamoto Kimiko Nagata Masahito Yoshida Takesi Hirota Hiromi Kobori Akane Kurihara Yoshitugu Makimura Tetusi Goto
Kazuki Takahashi Kouji Kobayashi Syoko Oonuma Kayuko Konno Noriko Suzuki Miho Shinohara Yukiko Iida Osamu Kobayasu Mitio Kobayasi Tomoko Hasegawa Mititaka Kensi Mituru Nakatu Tetuhiro Kawakami Hidekazu Hayashi Yukinaga Yoshida Mitie Nagayanagi Jyouzou Nagata Makoto Ooya Fukuo Banno Takuo Hayashi
Masakatu Minami Satoshi Oosato Atuko Nakajima Masaru Tutida Koushin Shu Masayoshi Miyanaga Nobuhisa Kato
Syoko Nishibe Risa Nagao Satoshi Kuroiwa Midori Renjyo Shiho Asai Yuuji Fujiwara Nariyoshi Onimatu Thuji Furukawa Hitoshi Watanabe Rumi Noda Shigeo Noda Mihagi Yamamoto Kaori Sunagawa Miyuki kato Hiromi Minamoto Etuko Urashima Sinichi Yamaguchi Takako Okamoto Eiko Kagohashi Fusako Isami Kazuyo Kagiya Daishi Usami Hitoshi Muto Jyun Nomoto Noriko Tanaka Syun Takayasiki Takashi Yabe Akira Ooya Hitoshi Sato Megumi Ueda Satoshi Asai Toshikazu Ootani Reita Furusawa Kouzo Nakashima Yukihiro Oohara Kimiaki Mizutani

Teachers' Training on ESD in RCE Beijing

Dr. Wei, Dongying
Coordinator of RCE Beijing
Beijing Normal University

RCE Beijing



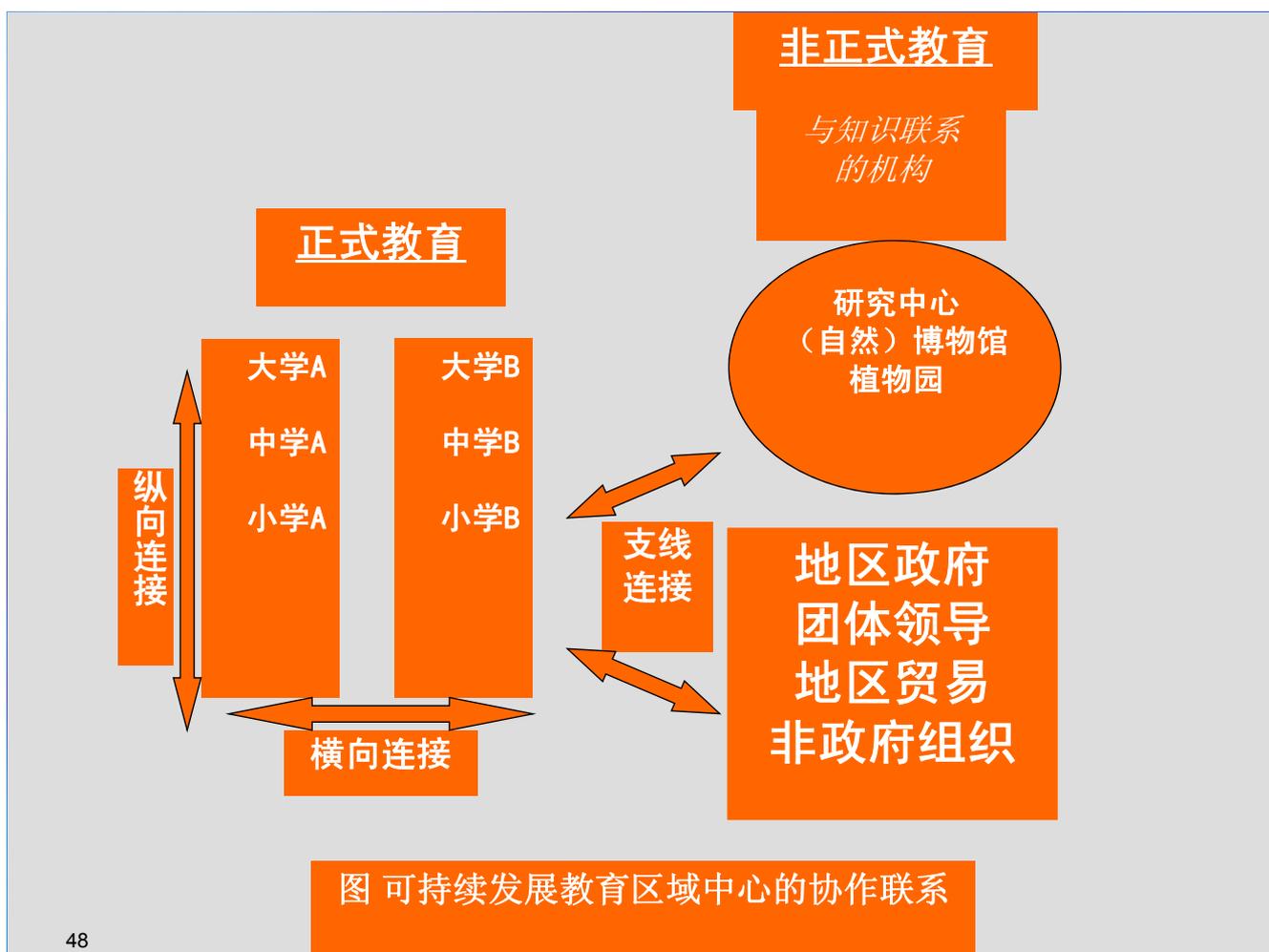
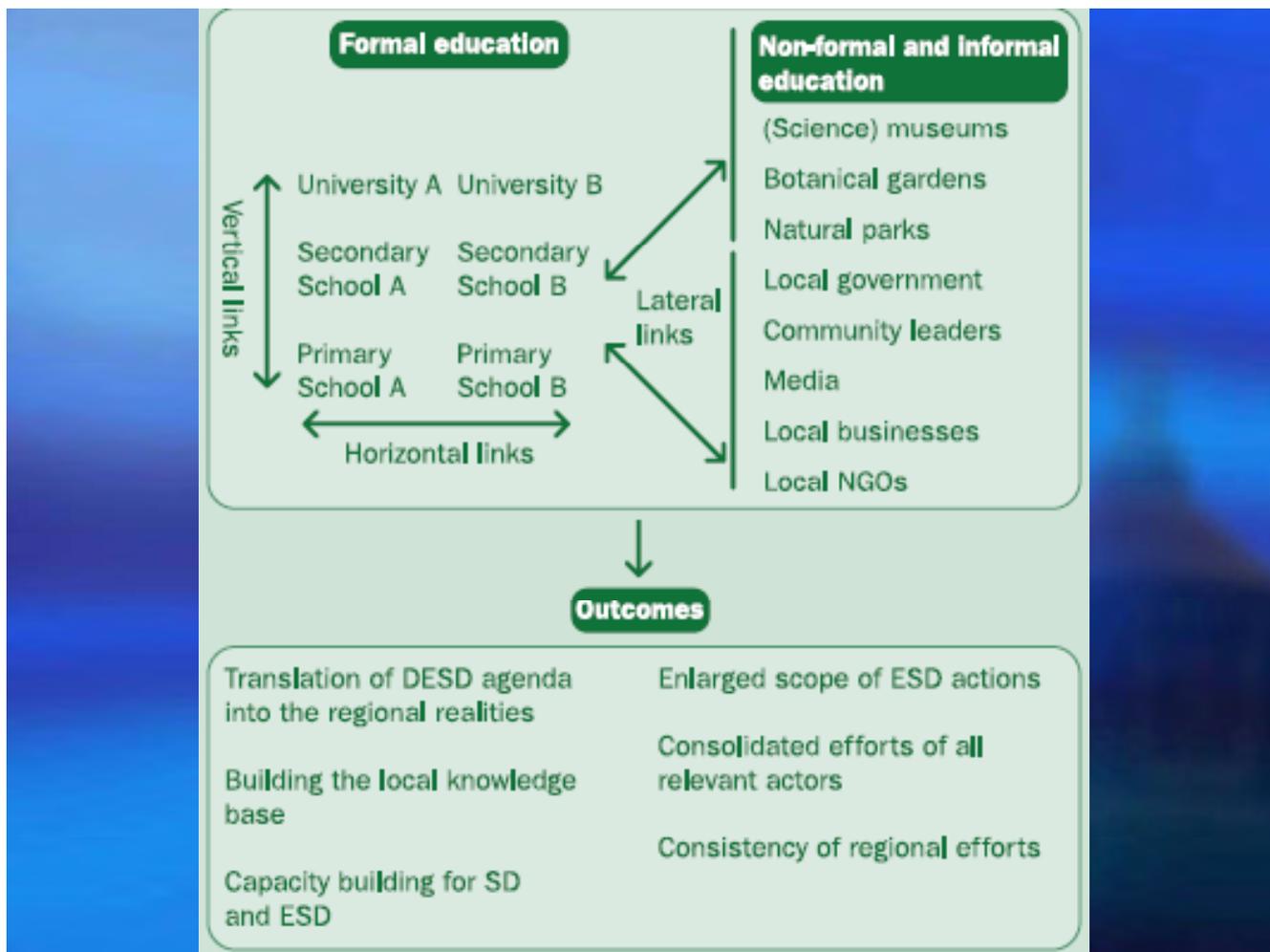


图 可持续发展教育区域中心的协作联系

Members of RCE Beijing

Formal Education :

Universities: Beijing Normal University, Tianjing Normal University, Inner Mogolia Normal University, Sichuang Normal University, China Agriculture University

Primary and Middle Schools: Beijing landianchang Middle school, Changping Experimental Primary School, Beijing Baijiazhuang Primary School, Beijing Paifang Primary School, Beijing Fengtai No.5 Primary School, Beijing Chenjinglun Middle School, Beijing Huixinli Primary School etc.

Book Publisher: China Geological Publishing House, China Map Press, China Environmental Science Press

Non-Formal Education:

NGO: China Brooks Education Institute

Parks: Yuntai Mountain World Geopark, Erlong Mountain National Park, Beijing Zoo, Beijing Botanical Park etc.

Informal Education: The Journal of Environmental Education(Chinese), Geographical Education (a journal)

Mission of RCE Beijing

To build capacity to deliver, support and generate innovative education for sustainable development (ESD) in Beijing. This will be achieved by working with stakeholders and by developing a coordinated communication and dissemination framework for regional ESD projects and programs.

北京可持续发展教育区域中心致力于和各组织合作进行可持续发展教育在北京的具体实施及国际交流合作。

Objectives of RCE Beijing

1. Training for In-service teachers

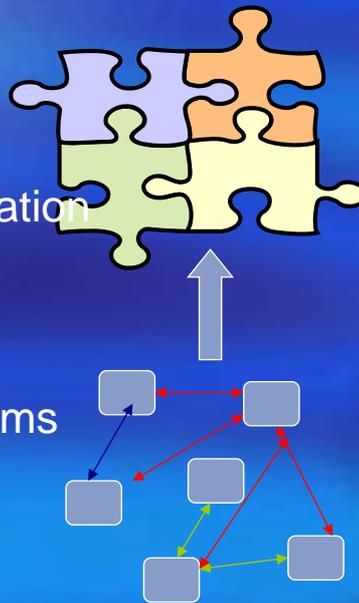
2. Environmental education research

3. Schools & their sustainable programs

4. Curriculum about SD for schools

5. Outdoor environmental education

6. Coordination of existing activities, partnerships and networks



1. Teacher Training

- . ermany-hina eachers' raining on .
- . raduate lasses on .
- onferences and ymposiums
- \egular and irregular workshops and meetings

Germany-China teachers' raining on



你能相信吗？
如果说是音乐厅
转变为什么了？
杂的厂房现在被
你能想像这么庞





The Graduate classes on ESD in China

Beijing Normal University held the first graduate class on ESD in China in 2003, and the students are 29 teachers and presidents in the primary and middle schools. They studies six courses in two years on every Saturday. From 2006-2008, 44 principals and teachers joined in the second graduate class on ESD.



Symposium ,conferences

From 3rd to 5th July,2007, Beijing Normal University organized Symposium on Teachers' Training on ESD to reflect the problems on teachers' training on ESD in China and discuss how to absorb the good experience from international colleagues, and UNESCO and UNU Chair, Prof. Charles Hopkins and director of Environmental Education, Dr. Rosalyn gave the training to Chinese teachers from six provinces and cities. Participants showed the case studies in their daily teaching.



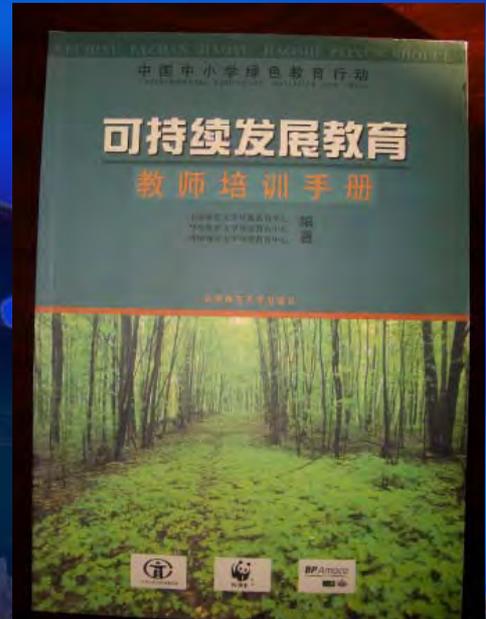
International Forum on RCE

August 15-17, 2007, Beijing
120 participants, 9 countries



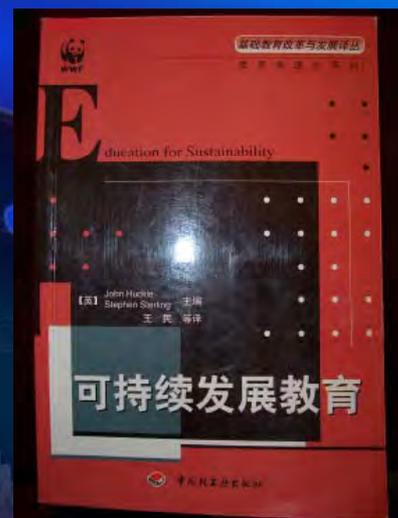
Publications

1. In 1999, Teachers' Training Handbook on ESD, published by Beijing Normal University Press.



《Education for Sustainability》 (translation works)

This book was written by John Huckle and translated by Wang Min etc. It is the first translation work to introduce ESD in China.



The series of books on ESD for the Implementation of DESD

- 1 Introduction of ESD
- 2 Green University and ESD
- 3 Practice of ESD
- 4 Research Programs and International Comparison on ESD
- 5 Evaluation of ESD
- 6 Case studies of ESD
- 7 ESD Toolkit (Translation works, written by Dr. Rosalyn with the assistance of Prof. Hopkins)

The series of books on ESD were published in 2006 by China Geology Press)



Textbooks of EE for middle schools

- The textbooks on EE used in Heilongjiang Province include 10 books, wang min as editor-in-chief.

Six of them for junior middle schools and four of them for senior middle schools.



Module one: Environment and Ecology

Module Two: Environment and Culture

Module Three: Environment and Technology

Module Four : Sustainable Production and Consumption

Module Five : Green life

Base Construction for ESD

Beijing No.2 Middle School Affiliated to China People University(Beijing Landianchang Middle School)

Beijing Changping Experimental Primary School

Beijing Shangdi Experimental Middle School

Inner-Mogolia Normal University

Beijing Paifang Primary School

Tianjin No.43 Middle School

Tianjin Tanggu Middle School

Research Fields

- Environment Education Law
- Environment and Heritage Interpretation (IGU-COG, Geoparks, Chinese national parks, Protected areas, Museums, etc.)
- Geography Olympiad (Under 16, 16-18)
- Environmental Maps Contest (5-17 years old)



The corn experts and specialist in the field of Interpretation



The presentation for the Study



Teacher training



Base construction for ESD



Environmental map



The field work of regional Geographical Olympiad



Future

- More communication ,both internally and internationally
- More cooperation, programs, conferences...
- More support for and from schools
- More opportunities for teachers ,students



Your suggestions and comments about our work
highly appreciated.

THANK YOU!

weidy@bnu.edu.cn

More info: www.wangminedu.com
www.rcebeijing.com
www.igeocn.com



Good Practice Case RCE Kitakyushu

Northeast Asia Reporting and Capacity Building Workshop on Monitoring
& Evaluation of Education for Sustainable Development

20 February 2012
@Yokohama Pacifico
Center



Yukiko ODA

RCE Kitakyushu

Chief Researcher, Kitakyushu Institute on Sustainability

<http://www.k-esd.jp> Email: k-esd@k-esd.jp/ Tel : +81-93-661-2133

2-5-7 Higashida, Yahata-higashi, Kitakyushu 805-0071 Japan

2012/2/20

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Kitakyushu City

- Kitakyushu is an industrial city located in western Japan with 1 million population.
- Kitakyushu has overcome industrial pollution in the 1960s in collaboration among citizens, academia, industrial sectors and the local government.
- Today, the city is a front runner of green economy.



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We want a blue sky

Women's environmental movement in 1960s



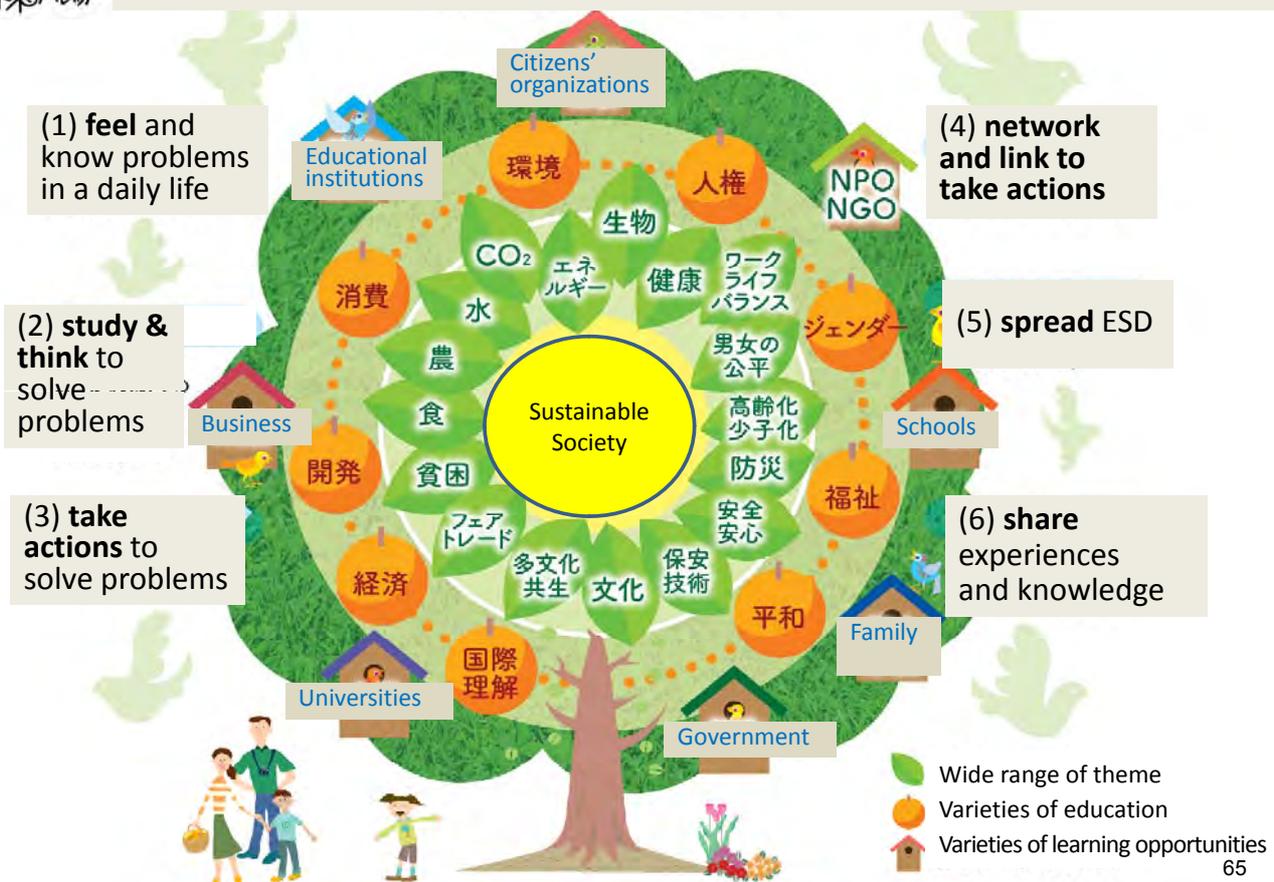
Certified in 2006



Vision of RCE Kitakyushu

To integrate the perspectives of sustainability into all types of education and citizen's activities to realize a just and sustainable society based on the full understanding and the collaboration of citizens.

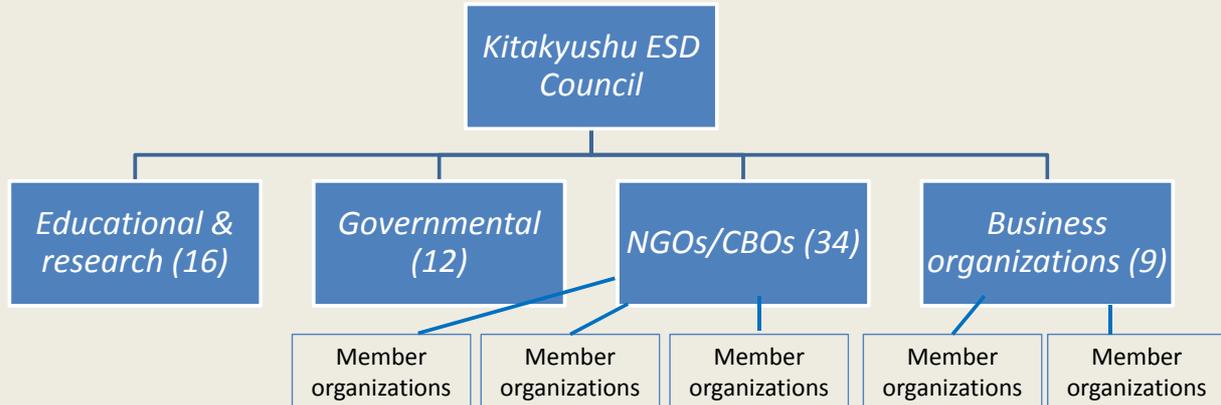
ESD that the RCE Kitakyushu aims





Characteristics

1. multi-stakeholder membership (71 local civil organizations and 37 individual members)
2. Strong out-reach to the grassroots
3. support by the local government (Kitakyushu City).



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Projects

1. ESD outreach project:

Strengthen the capacity and network of communities

2. Study & Research:

Develop educational tools for outreach, give lectures and conduct monitoring

3. Youth:

Initiatives by the youth, mainly activities in Ai Island

4. Public relations:

Issue news letters and make a leaflet

5. Networking

Strengthen network with national and international RCEs

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Background Information on the selected good practice case

Title of ESD Initiative:	ESD outreach project: Strengthen capacity and network of communities
Starting Year & Duration of Initiative:	2006
Major Partners in the Initiative:	Kitakyushu City Government
Amount of Budget and Funding Sources:	4,000 US \$ per year Subsidies by Kitakyushu City Government
Target learners:	The members of the Kitakyushu ESD Council/ RCE Kitakyushu and the general public in the community

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Major objectives, focus and activities

Objectives:

- To realize a just and sustainable society based on a tight-knit community
- To increase active citizens

Focus:

- Strengthening the capacity and network of citizens and communities

Activities:

1) Promote ESD in the community

- Promote ESD using community centres (132 centres)
- Nurture/train ESD facilitators
- Develop educational aids (teaching materials) (e.g. cloth theatre: hamburger)
- Work with formal education (e.g. at a university consortium)

2) Promote field activities (e.g. tree planting, community beautification)

3) Develop capacity through exchanges

- Exchanges within (e.g. ESD café, report meeting, field visits, study meeting)
- Exchanges with outside (e.g. Visits to and receive from RCE Tongyeong)

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Activities

1) Promote ESD in the community



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Develop educational aids Cloth theater: hamburger



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Activities

2) Promote field activities



Activities

3) Exchanges



Exchange with Tongyeong





The benefits of the multi-stakeholder partnership

2. Benefits

(1) for the project

- an extensive foundation for the community
- respond to the varieties of needs
- diversified the activities

(2) for member organizations/individuals

- Broadened the scope

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Learning methodologies, approaches, and strategies

Learning methodologies:

- Learning through exchanges (e.g. field study visits)
- Learning through participating (e.g. green map)
- Learning through teaching (e.g. lectured at a university consortium)
- Lecturing (e.g. organizing seminars and study meetings by inviting lectures)



Approaches:

- Citizen centred approach supported by academia
- Emphasizing mutuality among members (multi-stakeholders)
- Valuing each member's initiatives and collaboration of multi-stakeholders
- Thinking with a global perspectives
- From learning to actions



Strategies:

- "ESD Future Pallet", a nickname of the Kitakyushu ESD Council, to paint a colorful picture of our future

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How the ESD initiative has worked to address each of the three pillars

The three pillars of sustainable development are inseparable in a real life.
The ESD outreach project helped to address the integrity of three pillars.

Eg. Edamitsu community :

located on a hill; the percentage of elderly population is very high; elderly difficulty in mobility
Actions:

- mapping the risks and problems by the support of academia (social)
- cleaned community roads (environmental)
- planned vegetables in abandoned lands and lemon trees (environmental)
- elderly and children of nursing schools jointly painted lemon trees on the wall of community centres with a support of a school art teacher (cultural)
- mother is to publish a book on a story of lemon (cultural)
- served hot-lemon at a gathering the fruits (social)
- created job opportunities for the community people (economic).
- helped old people for their daily shopping and strengthened community tie (social)

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Painting of lemon trees @ Edamitsu



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The outcomes, achievements and impacts

Main outcome and achievements:

1. The recognition of ESD was increased.
 - The number of member organizations of RCE Kitakyushu has increased.
 - The City government expressed the promote of ESD as important.
 - The City government has increased their budget to promote ESD.
2. The capacity was developed.
 - Members launched new initiatives
 - Members conducted field visits to learn from each other
 - Members lectured on ESD at a university consortium.
3. The network was expanded and intensified.
 - Members visited Tongyeong RCE and received from Tongyeong RCE.
 - RCE Kitakyushu was connected with other national, regional and international RCEs.
4. The activities of each stakeholder were expanded.

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Strengths and advantages/ Success factors in implementation

Major strengths and advantages

- Voluntarism and high motivation
- Relationship with RCE Tongyeong

Success factors:

- Active multi-stakeholders
- Motivated citizens
- Leaders who brought multi-stakeholders together
- Support of the local government/mayor

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Weaknesses and constraints challenges and barriers

Weaknesses and constraints:

- difficult to have **youth** who can continuously commit to ESD activities.
- difficult to have Institutional linkage with **formal education**
- unstable organizational/institutional commitments by **higher educational institutions**
- insufficient **capacity** to theorize practices in the communities
- Lack of **global perspectives** and focus on immediate surroundings

Challenges and barrier:

- development of **innovative methods** to promote mutual learning and teaching avoiding top-down manner
- secured **human and financial resources**
- **capacity building** of members and secretariat

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Thank you



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Tongyeong Youth Global Challenge Program Bridge to the World

Won J. Byun
Chief Programmer, RCE Tongyeong



Tongyeong Education Foundation
for sustainable development

REGIONAL CENTRE OF EXPERTISE
ON EDUCATION FOR
SUSTAINABLE DEVELOPMENT

UNIVERSITY

RCE
REGIONAL CENTRE OF EXPERTISE
ON EDUCATION FOR SUSTAINABLE DEVELOPMENT

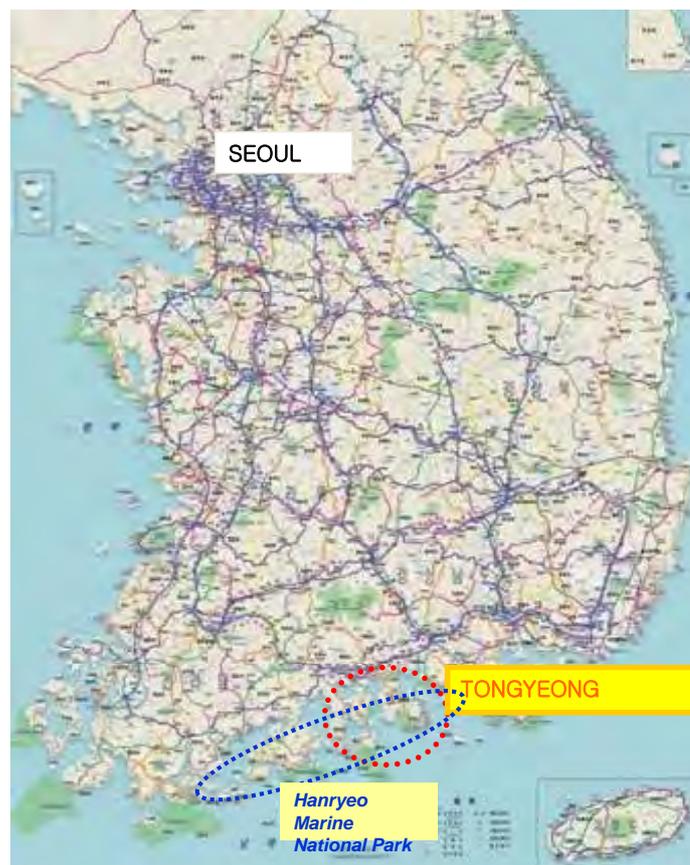


RCE
REGIONAL CENTRE OF EXPERTISE
Education for Sustainable Development
TONGYEONG, REPUBLIC OF KOREA

Location

[Tongyeong City]

- Area: 237.1 km²
- Population: 132,959



01. Tongyeong

➤ Nature

- Moderate Climate
- Scenic landscape
- 250 Islands
- Fresh Sea Food

3



01. Tongyeong

➤ History

- Battle of Hansan
- 300 Years Tongjeyoung
'Naval Headquarters'



4

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01. Tongyeong

➤ Art&Culture

- Tongyeong International Music Festival
- Birthplace of famous artists



5

Local Changes & Challenges

1	Economic Decline	<ul style="list-style-type: none"> ● Decline in Fisheries Industry due to depletion of overall fish stock and conventions with neighboring countries ● Impact of climate change in question
2	Aging Population	<ul style="list-style-type: none"> ● Population over 65 : 14,636(11%) <ul style="list-style-type: none"> ● Elderly Living alone 2,828 : 20% of elderly ● Increase in Grandparents-Grandchild families
3	Urbanization and related issues	<ul style="list-style-type: none"> ● Decline of Traditional Craft Industry and loss of heritage ● Role of Women in urbanized society ● "Education Migration" and decreasing youth population

▶ Learning in the Rapidly Changing World :

Role of Education

6

02. RCE Tongyeong



- **Regional Centre of Expertise on Education for Sustainable Development (RCE)**
UN Decade of Education for Sustainable Development

. A program of the United Nations University

- Adopted by UN General Assembly in Dec 2002
- Tongyeong : Designated as the 8th RCE in the World
- UNESCO designated as a lead agency

The Vision

- The International Implementation Scheme (IIS) for DESD was approved in September 2005
and socially sustainable city which cultivates pride in its citizens.

The Mission of RCE Tongyeong

To promote and consider the measures to implement DESD in their educational strategies and action plans development of Tongyeong through education.



RCE Tongyeong

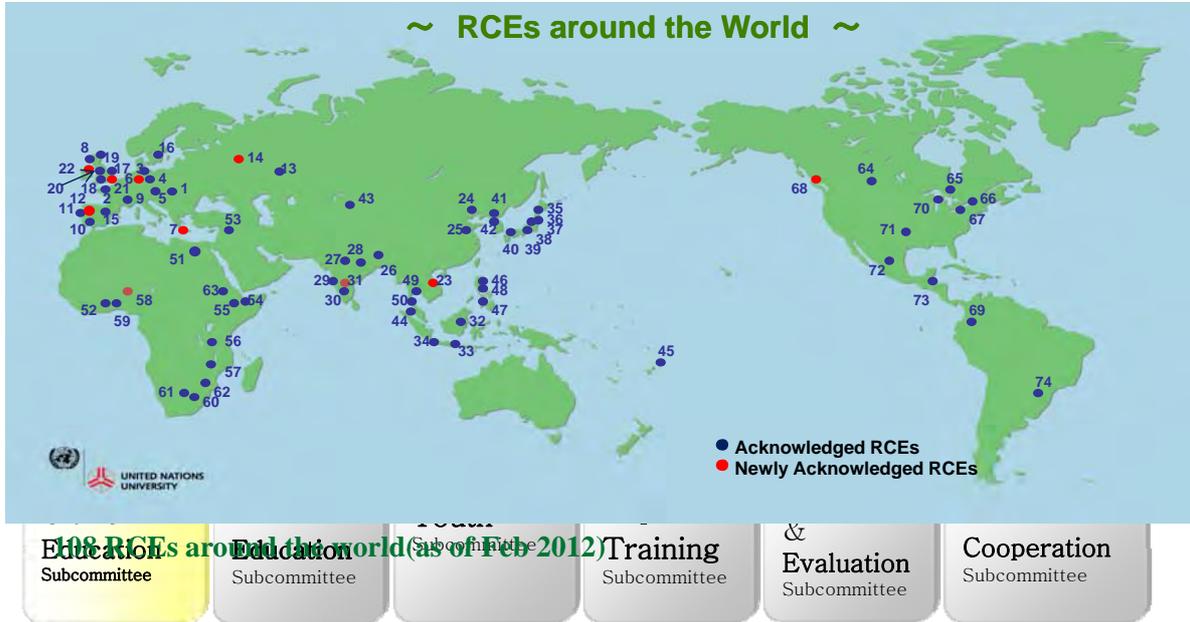
- Tongyeong designated as 8th RCE October 2005
- Launching Ceremony, March 2006
- Municipal Rule on Organizing and Supporting RCE Tongyeong
- Established Tongyeong Education Foundation for Sustainable Development in Dec 2010
 - Independent public foundation registered under Ministry of Education ROK
 - Based on appx. 10million USD Tongyeong Fund for Education

→ To ensure sustainability of RCE project!



02. RCE Tongyeong

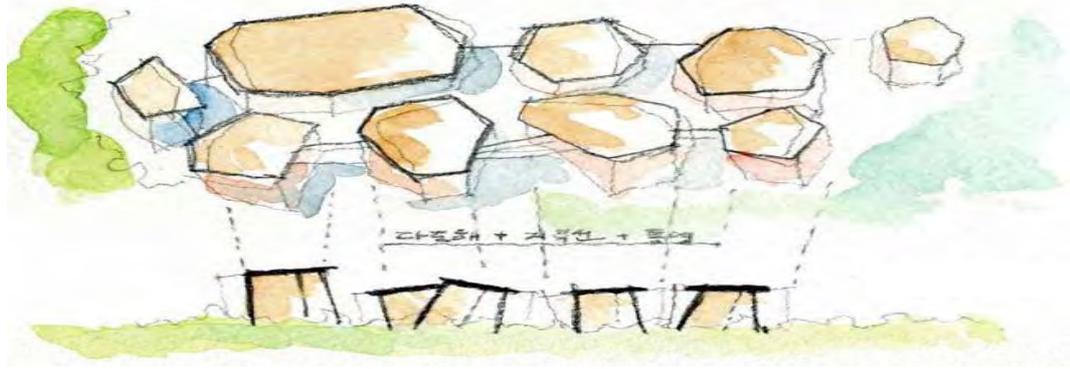
✓ RCE : A network of formal, non-formal and informal education and learning-related institutions who are mobilized to promote ESD at regional(sub-national) and local levels



03. Education Programs



04. Future Plans

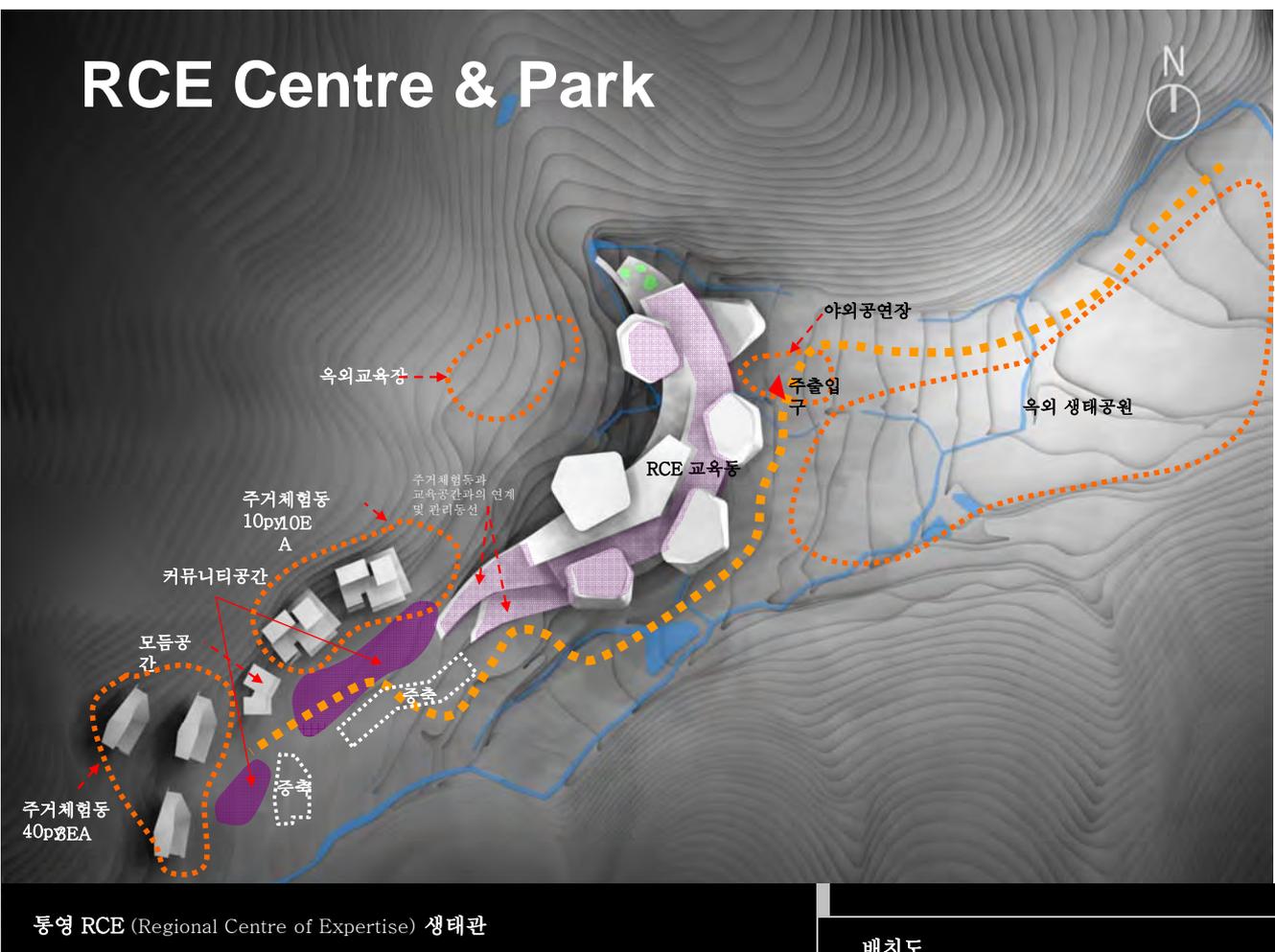


RCE Eco Park & ESD Centre

- Area: 200,000m²
- Timeline: **2007-2014**
- Budget: **20millionUSD**
from Ministry of Environment/ Provincial Gov./city gov.
- Planned as a Part of the Sejahtra Project of the Asia Pacific RCEs

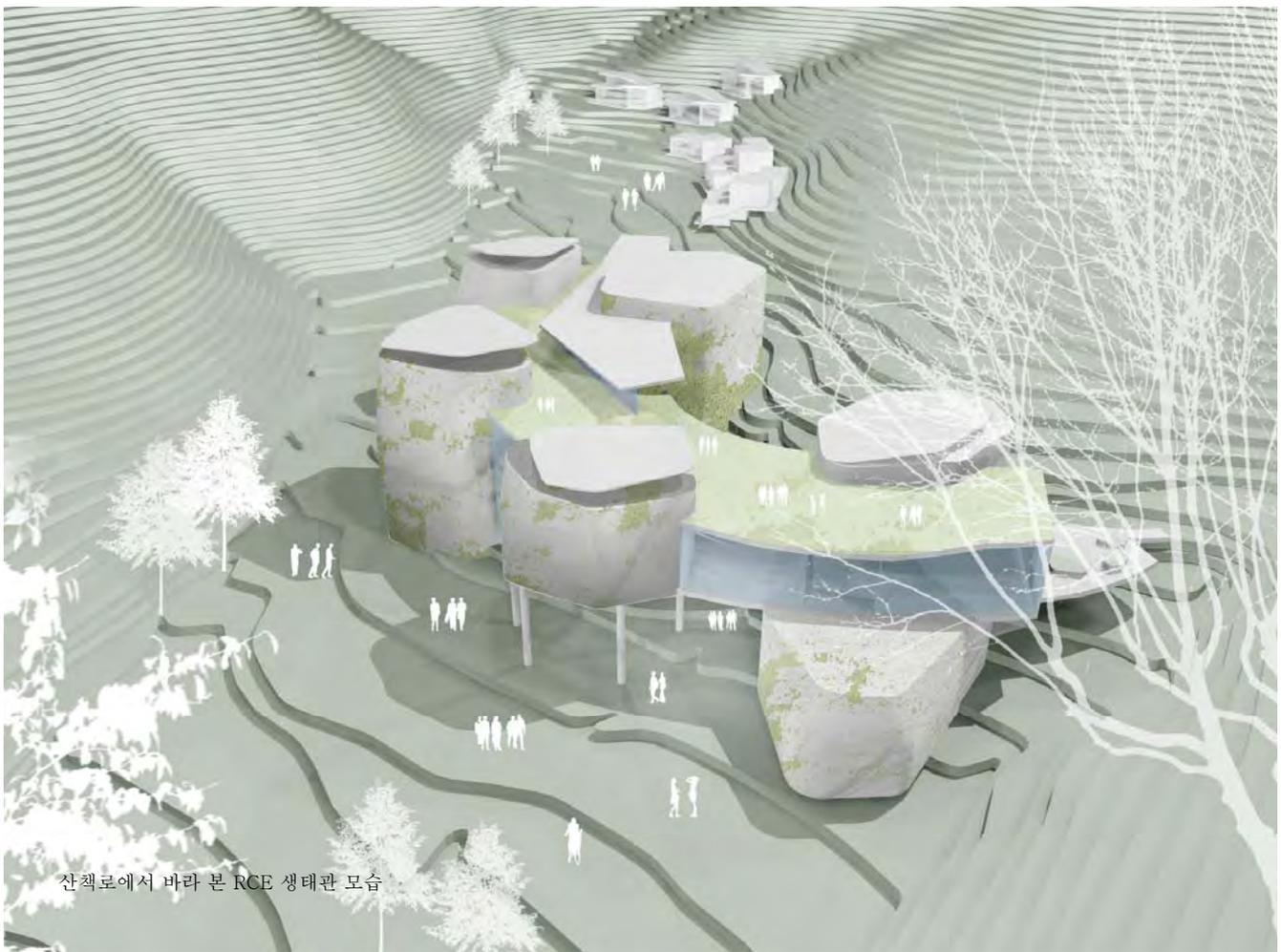
13

RCE Centre & Park



통영 RCE (Regional Centre of Expertise) 생태관

배치도



산책로에서 바라 본 RCE 생태관 모습

Youth in Action



- Bridge to the World
 - Collaborative Effort : Schools + local Government + local NGOs + Groups in Seoul + International RCE Community(esp. RCE South Pacific)
 - YUVA

Tongyeong Youth Global Challenge Program Bridge to the World

- to present the vision of sustainable development to future leaders, the youths of Tongyeong, by providing opportunities for a self-researched study trip abroad to experience and study topic related to participants' sustainable future in RCE cities around the world
- one of the first overseas research program solely targeting secondary school students in Korea and it is fully sponsored by RCE Tongyeong
- participating students can select the researching RCE cities and topics which relates to sustainable development
- a gateway to the world for the young people and open their eyes to the road to a sustainable future



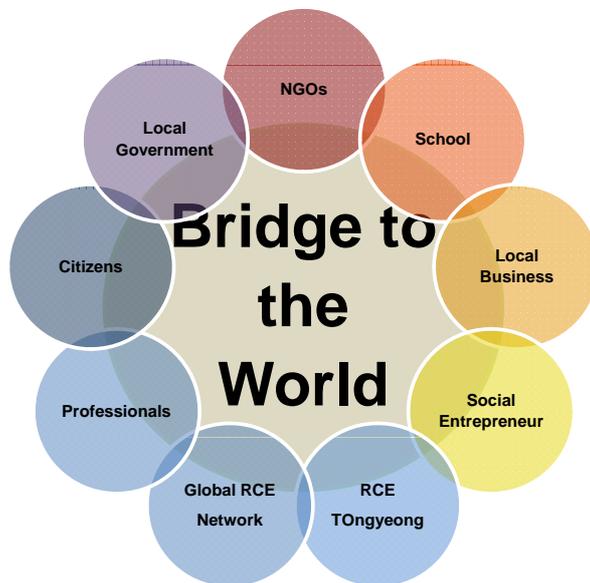
4 Years of BTW

2008~2011 13 Teams of 100 Students visited 13 RCEs

year	Team	Theme	Visited RCEs
2008	TTL	Local Festival & youth	RCE Toronto
	Passion Infinity	Climate change and islands	RCE South Pacific
	Purejio	Eco city for youth	RCE Munich
2009	Treasure Island	Island Story	RCE Okayama
	M.O.T	Youth and Traditional Market	RCE Cairo
	MaMonde	Developing Souvenirs for youth	RCE East Midland
2010	Sondanbi	Tourism Tongyeong & video making	RCE Pune
	Tongyeongura	Local food & youth	RCE Barcelona
	J	Future dreams and job opportunity	RCE Yokohama
2011	Charming		RCE Denmark
	Maidongpung	Meeting professionals and Finding future dreams	RCE London
	Bridge		RCE Kitakyushu
	Aureum		L.A & Ridley city

ESD Factor 1

Multi-stakeholder participation



- 1) Local government
 - Funding
- 2) Local NGO
 - Training
- 3) Schools
 - Promoting youth participation
- 4) Local Business
 - Providing job experience
- 5) Local social entrepreneur
 - Coordination of the program
- 6) Global RCE network
 - Providing study tour and linking partners
- 7) Professionals
 - Mentors of youth



ESD Factor 1

Multi stakeholder participation



ESD Factor 2

Promoting sustainable development



ESD Factor 3

Partnership with global network





ESD Factor 4

Feedback to the local society

- Annual Report / Reporting event
- Training for parents and teachers
- Learning to Action:
 - Passion Infinity : Campaigned on climate change “Inspiration for all”
 - Tongyeongsura : Introduced new menu to school canteen developed with local seafood
 - M.O.T : Decorated a snack bar in traditional market to promote youth customers
 - Aureum : Introduced Tongyeong’s sister city to citizens
 - TTL : Continues to participate at local festival Hansan Festival as volunteers

Designing the Future of
Education
Thank you



Okayama ESD Project

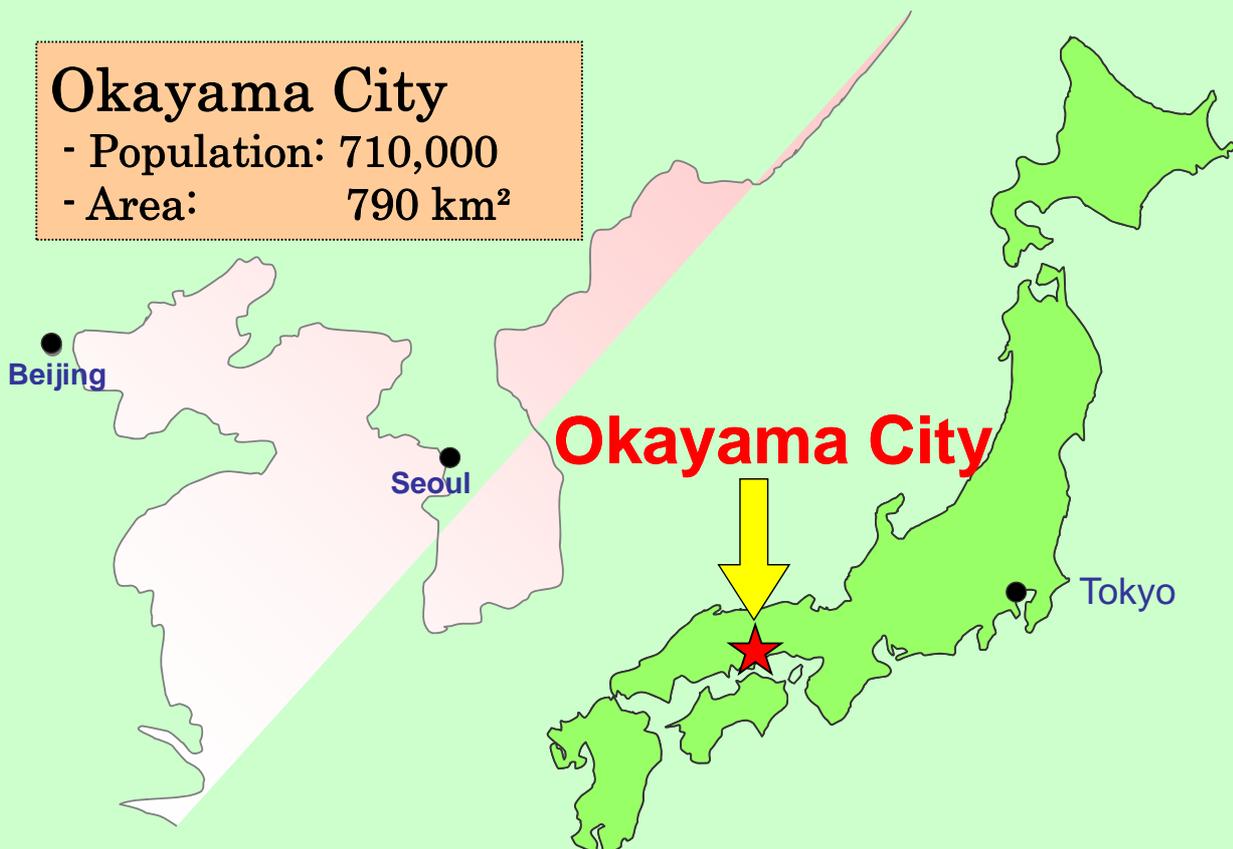
-Making a sustainable society
through diverse networks-

RCE Okayama

1. Location of Okayama City

Okayama City

- Population: 710,000
- Area: 790 km²



2. Okayama ESD Project

Okayama ESD Project began in 2005.

A wide variety of people have been playing active roles in promoting Education for Sustainable Development (ESD) in Okayama. In 2005, Okayama was officially acknowledged by the United Nations University as one of the initial seven RCEs.



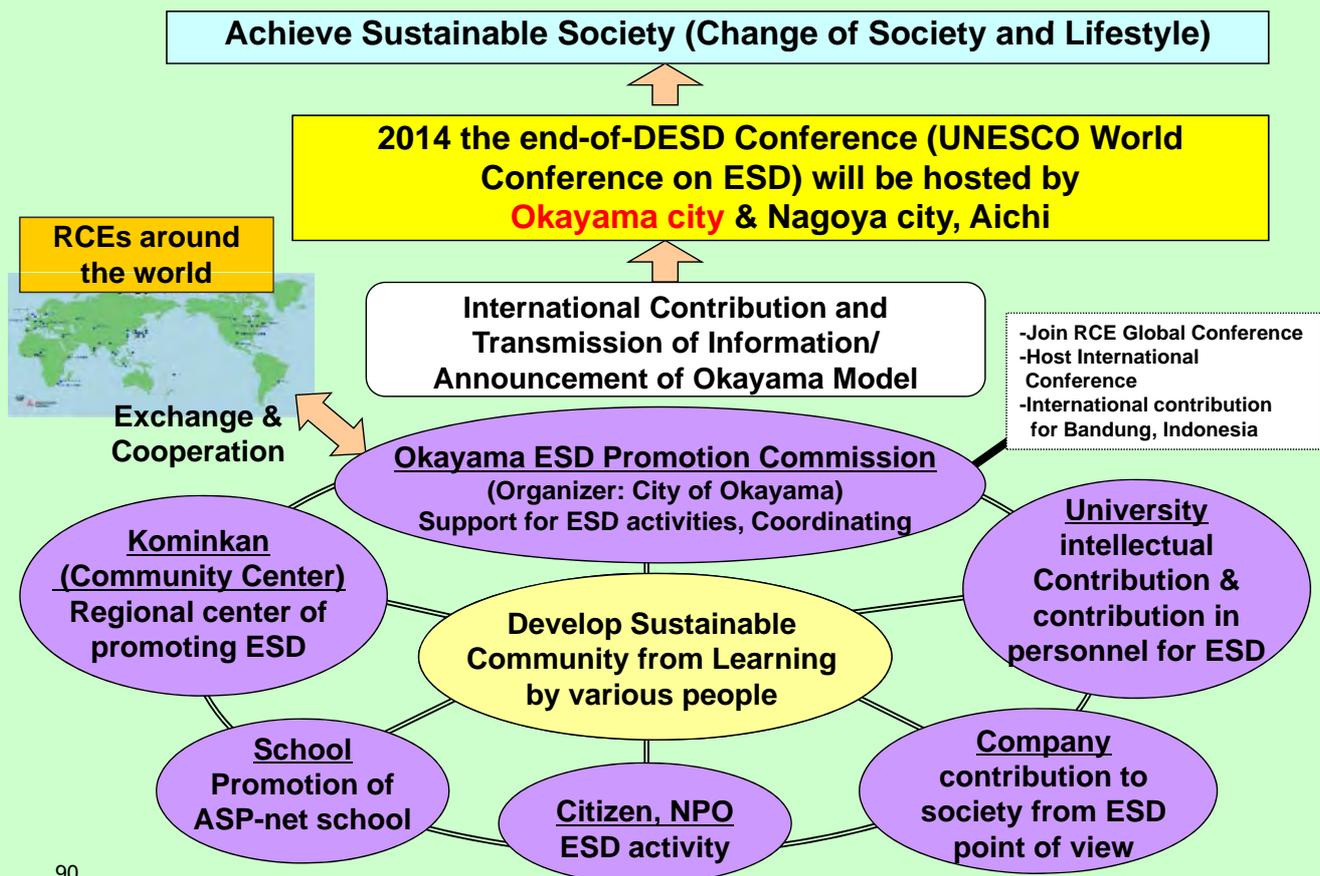
Purpose of Okayama ESD Project

To develop community to learn, think and act each other for Sustainable Development/ Society

In order to achieve the purpose, we need to do;

- (1) Promote ESD by approaching regional issues in Okayama
- (2) Widen circles of people who work on ESD through broadening the understanding of people in Okayama
- (3) Contribute to promote the United Nations' Decade of ESD through collaboration with people in/ around Okayama

3. Structure of Okayama ESD Project



4. Activities of RCE Okayama 2011

The end-of-DESD Conference

<Committee for invitation of the end-of-DESD Conference>



Activity of invitation of Conference
Okayama city was selected as one of the venues of the end-of-DESD Conference (UNESCO World Conference on ESD) together with Nagoya, Aichi **in 2014**.

Publicity for citizens
300,000 brochures about ESD was issued by City of Okayama, local government and distributed.

<Round-table Talk about ESD>



4. ESD Café

Venue of Dialogue to learn Each Other –ESD Café

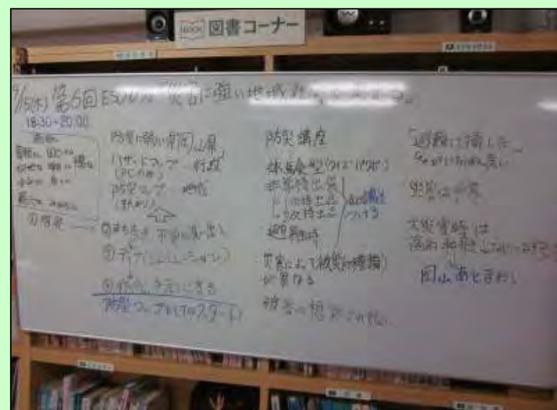
<ESD Café>



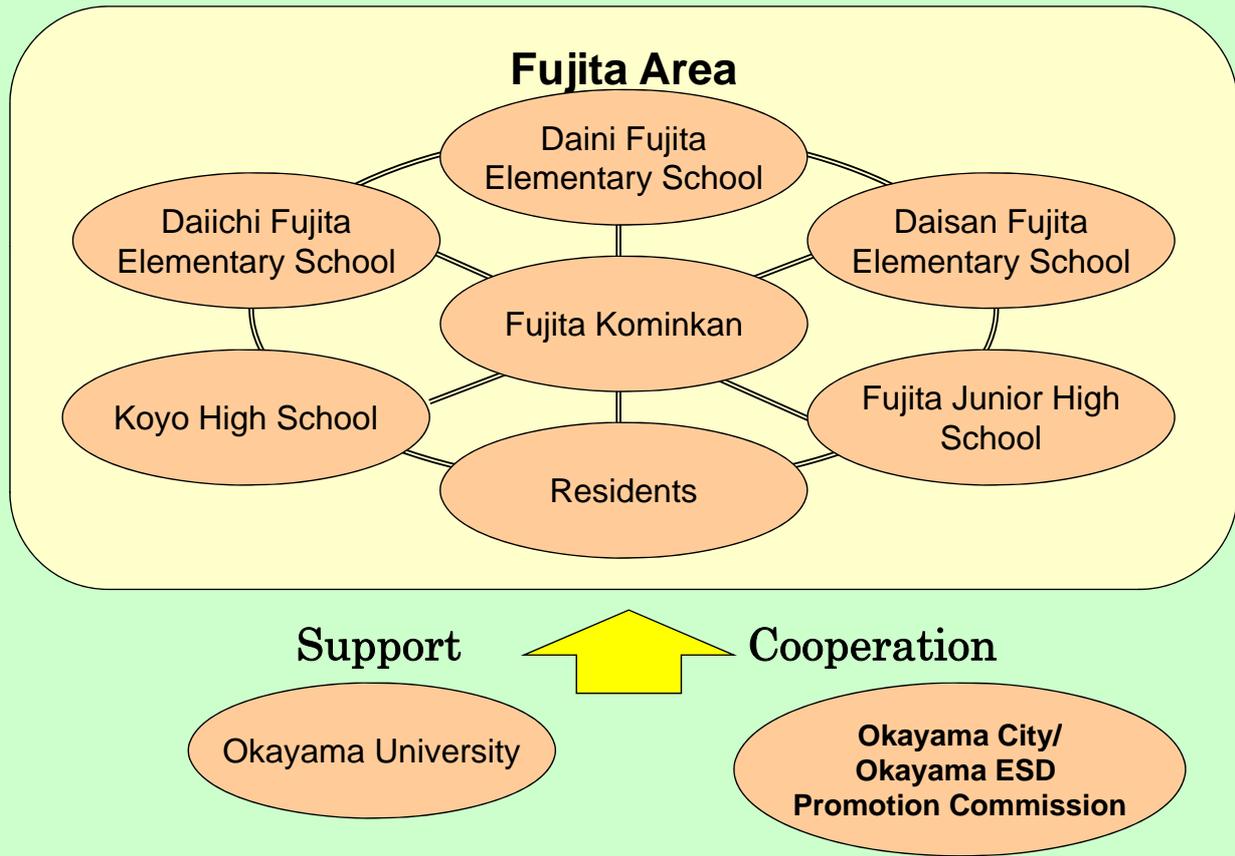
ESD Café (Monthly)

Various people came to ESD Café to talk and learn each other. ESD café is organized by ESD Promotion Committee)

The theme of 6th ESD Café is “Think about Prepared Regional Society.” Ideas and opinions are exchanged.



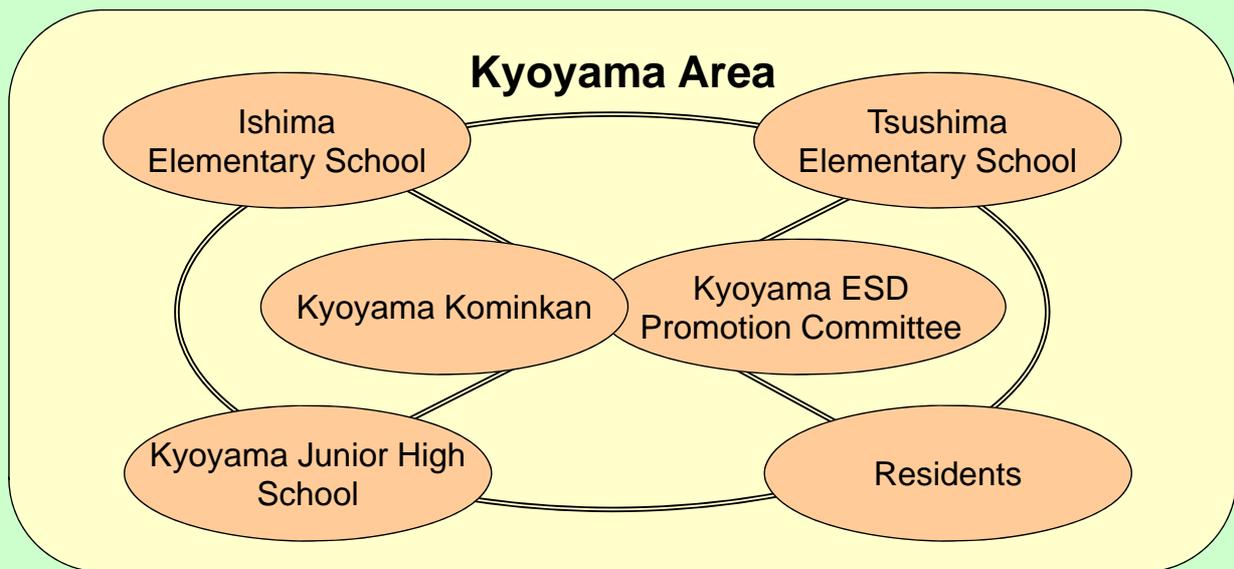
4. Fujita Challenge



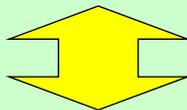


Visit Koyo High School

5. Kyoyama Challenge



Cooperation



Okayama University

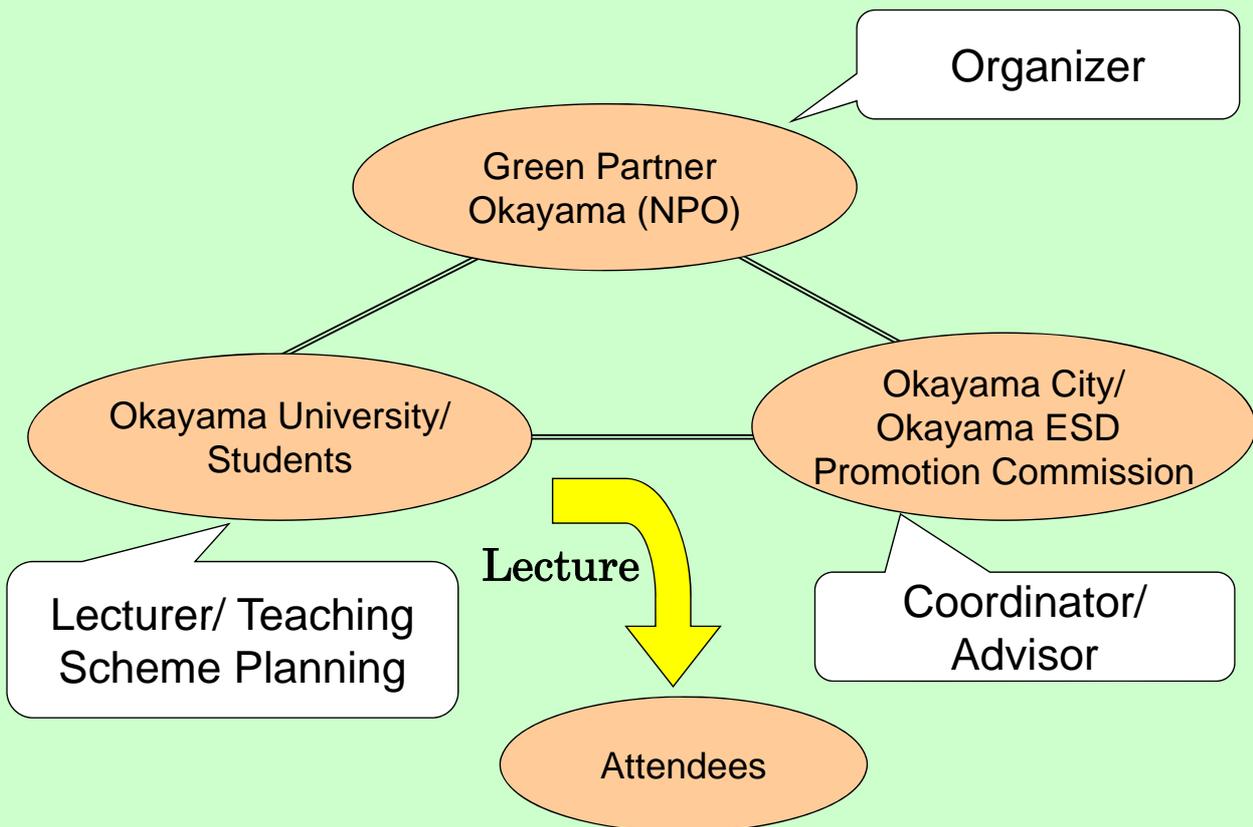
Kibi International University

Okayama City/
Okayama ESD
Promotion Commission



Kyoyama Kominkan
 Regional Environmental Check
 are organized several times a year.
 Junior high school students are the Leader of
 this event, and arrange the event. (18 June)

6. NPO Green Partner Challenge



Lecture in the boat to the Shodoshima Island



Garbage Segregation

Workshop



7. Other Activities of RCE Okayama

(1) Collaboration with University



Lecture from Professor in Okayama University

The professors gave lecture for Elementary school teachers.
(29 July)

Okayama University

Autumn Festival

Okayama city, local government displayed ESD & Biodiversity panels at autumn festival in Okayama University. (3,4 Nov)



7. Other Activities of RCE Okayama

(2) Exchange camp of elementary school pupils



Children from Sendai city (North-East area in Japan) came to Okayama, and had Exchange Camp with Children from Okayama.

They painted beautiful pictures together!



4. Activities of RCE Okayama 2011

(3) Collaboration Project for Waste Management

<Final Disposal Site in Bandung>



Cooperation with Okayama Univ. for Bandung city

Collaboration project with Okayama University, Okayama local government, & Institute Technology Bandung, Bandung city. (25 June_1 July)

Exchange between RCEs
Visit RCE Bogor and exchange information.



For our common future...

Contact:

RCE Okayama

(Okayama ESD Promotion Commission/ Okayama City)

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UNITED NATIONS
UNIVERSITY

UNU-IAS

Institute of Advanced Studies



SESSION: Establishing ESD Indicators at National and Regional Level *Presentations of National ESD Implementation Status Surveys*

13:10 to 14:00

Session Chair: Hironori Ozawa, Asia-Pacific Cultural Centre for UNESCO (ACCU)

Presentations:

- 1) *ESD Implementation in China, Japan and Republic of Korea: Findings and comparison from the National ESD Surveys*
By Robert J. Didham, IGES
- 2) *Research on National Indicators of ESD in Republic of Korea*
By Soon-Yong Pak, Yonsei University

Mr. Hironori Ozawa began this session by welcoming the participants back from lunch, and he introduced Prof. Hironori Hamanaka, Chair of the Board of Directors at IGES, who joined us for the afternoon sessions. Mr. Ozawa continued by explaining the purpose of this session. The session "Presentation on National ESD Surveys" looks at research to develop relevant indicators for monitoring and evaluation of ESD. Robert Didham from IGES will present findings from the recent research conducted in China, Japan, and Korea in an attempt to develop regionally relevant Indicators of ESD. The country surveys were completed by the three national focal points, and they will be part of the panel discussion later this afternoon. Prof. Soon-Yong Pak from Yonsei University will provide a presentation on the research project he led over the past year to establish a set of National Indicators of ESD in Korea.

Robert Didham presented on the behalf of Dr. Ogihara, Dr. Ofei-Manu and himself the findings from the current round of Country ESD Surveys that were completed for China, Japan and the Republic of Korea. The purpose of the research to establish a set of regionally-relevant indicators of ESD for effective monitoring and evaluation of the implementation that has taken place during the Decade of ESD in Asia was explained; along with the fact that this year's research takes on a scoping process to identify what information is reportable and supports effective implementation. He went on to explain that all three countries have a strong mandate for ESD especially for formal education, higher education and civil society participation. Also, each country has established clear learning goals for ESD. Though China is the only country that has defined progressive learning objectives for ESD per grade; while Korea is the only country defining separate goals for knowledge-based, skill-based and value-based learning; and only Japan strongly supports inter-ministerial cooperation on ESD.

Dr. Didham also explained that in non-formal education, it is the Ministry of the Environment in all three countries that has the main role for ESD promotion along with local governments who also contribute to the implementation of ESD activities. None of the three countries have a requirement for all teacher education institutes (TEIs) to include ESD, though some TEIs in each country do include ESD training and

Korea has strong support for in-service ESD training. Civil society in all three countries provide strong support for ESD, and generally the government of each country takes a strong role in supporting this relationship. Dr. Didham also highlighted some areas of difficulty in regards to evaluating the effectiveness of ESD implementation. These include identifying specific budgeting for ESD (as this does not occur in many countries), identifying the usage of progressive learning methodologies and pedagogies for ESD, and demonstrating correlation between ESD and students' changes in values and behaviours.

Soon-Yong Pak provided a presentation on the research he led over the previous year to develop National Indicators of ESD in the Republic of Korea. He began by highlighting the importance of ESD within the national context of Korea and the fact the differences in opinions and world-views needed to be considered in the framing of this research. The country's changing demographics and growing multiculturalism were highlighted as two specific areas of consideration. A second important area to consider in the early phase of the research was on how teachers were to receive training on ESD and what understanding of the concept they have. Prof. Pak went on to explain that the concept for the research was to establish national ESD indicators that would serve as a platform to more fully incorporate ESD centrally into the national curriculum and to provide for greater continuation.

Professor Pak also explained the outcomes of this research to develop National ESD Indicators in the Republic of Korea and presented the distinction of three main thematic areas for ESD implementation: Environmental Responsibility, Social Justice, and Economic Co-prosperity. The project also utilised a division of three types of indicators: Content, Praxis and Outcome. Based on these categories, an indicator set was developed. For example six outcome indicators were developed: curricular integration, diffusion of ESD practices, applicability in education, long-term viability of program, enabling transformative experience, and positive change and accomplishment. These indicators are to support and guide the implementation of future ESD programmes in Korea.

Mr. Ozawa thanked both of the presenters and opened the floor for questions. Several of the questions were actually asked to the national focal points that had completed the individual Country ESD Surveys that Dr. Didham had based his presentation on. Dr. Abel Atiti asked about the validity of the information that was contained in their responses and to what level it represented the view points of the government. It was explained that due to the fact that the goal of this year's research is to conduct a multi-country scoping process on what types of factors support effective ESD implementation in these countries and to identify what information on ESD is actually reportable across the region, that a decision was made to provide for breadth in the number of countries covered rather than depth within each country. However, it was also explained that each national focal point consulted with relevant government information and where possible directly communicated with relevant ESD officers on the survey information, but none the less it must be noted that the findings of this research does not reflect a confirmed country position.



Findings from Country Surveys on National ESD Implementation Status

Robert J. Didham, Paul Ofei-Manu & Akira Ogihara

Institute for Global Environmental Strategies

Strategic Policy Research to Support a Sustainable Asia-Pacific

1

Goals in Research Process towards ESD Indicators

- Demonstrate conceptual framework for developing and structuring indicators so process could be replicated to create other sets of indicators.
- Identify common leverage points (or capacities) and barriers in ESD implementation which can be used in M&E process to show substantial movement.
- Develop system that provides for visual comparability between countries' ESD implementation status.
- Develop indicators for an M&E process that allows for easy replication in data collection and analysis.
- Develop M&E process that can identify clear policy opportunities and recommendations for improving ESD implementation. (consider what policy makers want to know)
- Identify indicators relevant for different sources of information, ie. national government, school-level, and performance testing of students.
- Attempt to demonstrate causality in between systems inputs and outputs, ideally provided in a cost-benefit format.

Country Selection Criteria & Selected Countries

Country Selection Criteria

- Geographic Location: from Northeast and Southeast Asia
- Recent Active Involvement with UNESCO-BKK's M&E process (including cooperation with clear M&E focal point or National Commission)
- Has at least one Regional Centre of Expertise (RCE) on ESD

Northeast Asia:

- ❖ Japan
- ❖ China
- ❖ Republic of Korea

Southeast Asia:

- ❖ Indonesia
- ❖ Malaysia
- ❖ Philippines
- ❖ Viet Nam
- ❖ Thailand
- ❖ Cambodia

3

Country Statistics on Education Systems

		SCHOOL AGE POPULATION ¹ (thousands)	SCHOOL LIFE EXPECTANCY ² (years)		NET ENROLMENT RATION ³ (% of respective school-aged children)		GENDER PARITY INDEX ⁴		PUPIL-TEACHER RATIO ⁵		ADULT LITERACY RATE ⁶ (% of population age 15 and above)	PUBLIC EXPENDITURE ON EDUCATION ⁷		PUBLIC EXPENDITURE PER PUPIL ⁸ (2005 PPP Dollars)	
			Girls	Boys	Primary	Secondary	Primary	Secondary	Primary	Secondary		% of GDP	% of Government Expenditure	Primary	Secondary
Northeast (NE) Asia Countries	China	274,169	11.4	11.4	98.0%	n/a	n/a	n/a	17.7	16.4	93.3%	n/a	n/a	n/a	633.77
	Japan	17,057	14.8	15.1	99.8%	98.2%	n/a	1.00	18.5	12.2	99.0%*	3.5%	9.5%	6,989.45	7,052.42
	Republic of Korea	8,379	15.7	18.0	97.6%	96.9%	0.94	0.94	25.6	18.1	97.9%**	4.4%	15.3%	4,793.62	5,966.53
Southeast (SE) Asia Countries	Cambodia	4,966	9.2	10.4	89.4%	34.1%	0.96	0.88	50.9	28.9	76.3%	1.6%	12.4%	98.56	112.64
	Indonesia	62,293	12.2	12.5	94.8%	67.5%	0.96	1.01	18.8	13.0	92.0%	2.5%	17.5%	n/a	n/a
	Malaysia	8,104	13.1	12.4	99.9%	68.7%	1.00	1.10	16.9	17.0	91.9%	4.6%	25.2%	1,839.46	2,667.22
	Philippines	30,990	12.1	11.5	91.3%	61.3%	1.02	1.20	33.7	35.1	93.4%	2.5%	15.2%	278.98	295.20
	Thailand	14,825	14.5	13.4	93.9%	76.1%	n/a	1.12	17.7	21.0	94.1%	3.9%	20.9%	982.56	1,082.24
	Viet Nam	23,080	9.9	10.7	94.5%	61.0%	n/a	n/a	20.4	21.8	90.3%	5.3%***	n/a	n/a	n/a

Notes:

- General: All figures in this table are based information from UN ESCAP (2010) *Statistical Yearbook for Asia and the Pacific 2009*.
- 1 Calculated from ESCAP (2010) *Statistical Yearbook 2009* figures [Total Population] x [Proportion of Children as percentage of total population]; figures come from 2008; However, children are calculated as those aged 0-14, so there is some minor error in this as the ideal calculation would be from 4-16.
 - 2 Figures come from 2007, except for Malaysia from 2005, Philippines from 2006, and Viet Nam from 2000.
 - 3 Figures come from 2007, except for China from 1991, Korea for primary from 2005, Malaysia from 2005, and Viet Nam from 2000.
 - 4 Figures come from 2007, except for Korea for primary from 2000, Malaysia for primary from 2006 and for secondary from 2005.
 - 5 Figures come from 2007, except for Malaysia from 2006.
 - 6 Figures come from 2007, except for Indonesia from 2006, and Viet Nam from 1999.
 - 7 Figures come from 2007, except for Japan from 2006, Malaysia from 2006 and 2004, and Philippines from 2005.
 - 8 Calculated from ESCAP (2010) *Statistical Yearbook 2009* figures [GDP per capita (2005 PPP dollars)] x [Public Expenditure per Pupil as percentage of GDP per capita]; there is a minor error in this calculation as GDP per capita is calculated from 2008 statistic, while public expenditure per pupil is calculated from earlier statistics. Public expenditure per pupil for China is from 1999, for Japan from 2005, for Korea from 2005, for Cambodia from 2004 and 2001, for Malaysia from 2004, for Philippines from 2005, and for Thailand from 2004.
- * Japanese Literacy rate from the CIA (2011) *The World Factbook*; <https://www.cia.gov/library/publications/the-world-factbook/>
 ** Korean Literacy rate from the CIA (2011) *The World Factbook*; *ibid*.
 *** VietNam Expenditure on Education from from the CIA (2011) *The World Factbook*; *ibid*.

4

ESD in China, Japan and Republic of Korea

National Mandates: All 3 countries have clear policy mandates for ESD

- China: China's National Agenda 21 in 1994 contained a chapter on education and capacity building in sustainable development; and in 2002 the government enacted the Action Syllabus of SD in China.
- Japan: The Basic Plan for Promoting Education of 2008 promotes education for a sustainable society and places value on ESD; it also stresses Inter-Ministerial cooperation for ESD.
- Korea: ESD is included as a cross-cutting learning theme in the 2007 National Curriculum. ESD and Education for Green Growth are closely linked since the declaration of "Low Carbon Green Growth" in 2008.
- Each countries' mandates covers: Formal & Higher Education, along with civil society participation. China also includes non-formal education; Japan includes private sector; and Korea covers teacher education institutes and in-service teacher training.

5

ESD In the National Curriculums

- Each country has clearly defined learning goals for ESD.
- However, mandate and actual implementation do not always fully match.
- The addition of ESD in each country led to some examples of wider curriculum reform. For example, enquiry-based learning and action research are promoted in China since ESD's initiation.
- All 3 countries' ESD curriculum development is supported by good research and expertise.
- Only Japan has a mechanism for Inter-Ministerial cooperation on ESD.
- No countries have feedback mechanism to review and reform ESD implementation.

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Formal Education and ESD

- Only Korea applies clear teaching strategies & educational theories to course content, i.e. project approach & convergence education.
- China is only country with progressive learning objective per grade for ESD curriculum and course content.
- Korea has most holistic approach covering knowledge-based, skill-based and value-based learning for ESD.
China mainly focuses on knowledge-based learning, and is supported by NGOs to develop other areas.
In Japan, ACCU has provided guidelines to support these 3 areas.
- Green-school, whole-school approach is piloted in a limited number of schools in each country.
- SCP, Indigenous Knowledge, Cultural Values of Sustainable Lifestyles and Climate Change are main topics.
- There are no practice standards or auditing mechanisms for ESD teaching in any of these countries.

7

ESD in Non-Formal Education

- Ministries of Environment take a more active role in promoting ESD activities in Non-Formal Education.
- Local governments may also take an active role in ESD promotion (but this is not consistent).
- Most non-formal ESD could be described as awareness raising and information sharing.

Teacher Training

- Only some Teacher Education Institutes include ESD and it is not required for all student teachers to receive ESD training.
- Korea provides strongest support for In-Service Teacher Training on ESD which is supported by the local school boards.
- The RCEs and the UNESCO ASPnet Schools provide the only major opportunities for teachers to share good practices on good practices in ESD.

9

Civil Society and NGOs

- All 3 countries receive strong support on ESD from civil society.
- Furthermore, the government takes an active role in supporting and encouraging this relationship.
- Each country is also actively involved in the main international activities and programmes on ESD.
- Citizen participation in SD planning is supported in China and Korea.

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Private Sector and ESD

- In China and Korea, there are examples of the government partnering with private sector to promote ESD.
- In all 3 countries, governments have taken their own initiatives to engage with ESD (and of course to also raise consumer opinion of their “green” corporate profile).
- Companies in all 3 countries are providing in-service training for their professionals on issues of environmental managements and sustainable production.

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Areas of difficulty for M&E

- 1) Budget for ESD – it is difficult to get substantive information regarding ESD budget and funding. Some countries also do not designate budget for individual subjects, though Korea has clear EE budget for schools.
- 2) Learning Methodologies and Pedagogies for ESD – it is difficult to relate how effectively countries are integrating the progressive teaching methods of ESD into their education system (i.e. critical reflection, action learning, experiential-based education, etc).
- 3) There is no method to link causation between ESD and changes in students’ attitudes and behaviours; which would of course be the most appropriate identifier of successful ESD.
- 4) There is still often a lack of available ESD teaching material.
- 5) ESD entered the scene as a new concept, and as such there has been little effort to integrate the concept with previous educational policies and strategies.

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**Thank You
for you time!**

Robert J. Didham, Paul Ofei-Manu & Akira Ogihara



**Institute for Global
Environmental Strategies**

13

Research on National Indicators of ESD in the Republic of Korea

(Presentation Abstract)

Soon-Yong Pak (Associate Professor, Department of Education, Yonsei University)

The 'national development discourse' of education suggests that a strong education system creates a pool of resources from which competent and skilled labor force will emerge and bring about economic and social development in the long run. According to the discourse, education enables the nation's workforce to become productive and develop the mental agility to retrain for new business environments that supplant old ones. In other words, education is a vital factor in determining a country's overall economic well-being especially under the "growth first" mentality. Many national governments have bought into such 'national development discourse' of education and have faithfully allotted a huge part of their national resources to the education sector. All three Northeast Asian nations (Republic of Korea, Japan, and China) have commonly subscribed to this formula for decades, and in many instances have served as prime examples of success as a result of expanding and utilizing education.

However, the global age has brought about an environment where labor, resources, finance, ideas, and management activities function on a planetary scale in real time. In this historic juncture, all nations face common challenges. While the premise of the "growth first" strategy has been infinite competition, the new global age calls for cooperation across borders and reassessment of the meaning of "development." Globalization demands changes in the education sector both from micro and macro perspectives. From a micro perspective, the concept of teaching and learning within or without schools necessitate changes. In this context, simply providing students with facts or information becomes a superficial form of education. What matters in the global era is to help individuals create knowledge by teaching them how to interpret and evaluate ubiquitous information thereby enabling them to connect and utilize information in novel ways. The role of the schools thus must reflect the changes and needs of the society more realistically and with more swiftness. Cultural elements will filter particular ways of interpreting the world, but overall the growth of the knowledge

economy with the aid of information and communication technologies(ICTs) will change the way we understand and practice education.

From a macro perspective, regardless of national borders, there will be increasing pressures to find solutions for common global problems such as environmental degradation, food and water shortages, armed conflicts, natural hazards, etc. Education will have to be suited to tackle those problems, preferably in the form of Education for Sustainable Development(ESD). Many nations will find plenty of common ground to work on the education sector in response to the challenges of the global era that necessitate nations to pay particular attention to new economic trends, communication technologies, movements of population, and cultural evolution. Schools therefore have to re-prioritize their mission according to the needs of the times in order to accommodate such a vast undertaking. In fact, education in general and ESD in particular may be the best hope for a common future in that the current and next generations will constantly have to be enlightened on, and be reminded of, the importance of growth in terms of long term viability both environmentally and financially. However, without a common indicator to determine the general direction and scope of ESD, much effort and time may be wasted on areas that have little to do with the desired outcomes that ESD pursues.

In such a context, my team of researchers set out to come up with ESD assessment indicators that reflect the needs of Republic of Korea in order to help channel resources and efforts into programs and ventures that will best serve the original mission of ESD. The main challenge was how to meaningfully categorize ESD contents that do not overlap with one another and at the same time to not omit any other ones. Since this task was the first of its kind in the Republic of Korea, all areas that ESD could cover had been laid out on the table and then put into order according to similar category and scope. Three indicator categories emerged; contents indicator, praxis indicator, and outcome indicator. The first two categories were further divided into social domain, economy domain, and environment domain.

In the end, my team realized that sustainable development policies in most cases only arise from perceived problems. But ESD should go beyond fixing existing problems. And it should

not be a means to inculcate fixed bodies of existing knowledge. ESD could do better to address predictable futures in which prosperity is not overshadowed by its side-effects. ESD can be at its best when it can teach individuals and/or groups to discern opportunities from constraints. Therefore our team suggests that the goal of ESD should include environmental literacy, critical evaluation skills, and intercultural communication methods that provide substance to the sustainability rhetoric and generate cooperation across borders. Such a goal is expected to provide future direction of ESD and further refinement of ESD assessment indicators.

National Indicators of ESD in the Republic of Korea

Soon-Yong Pak, Ph.D.(Yonsei University)

ESD indicators for Korea Rep. Contents

1. Objective of
Korean ESD
indicator

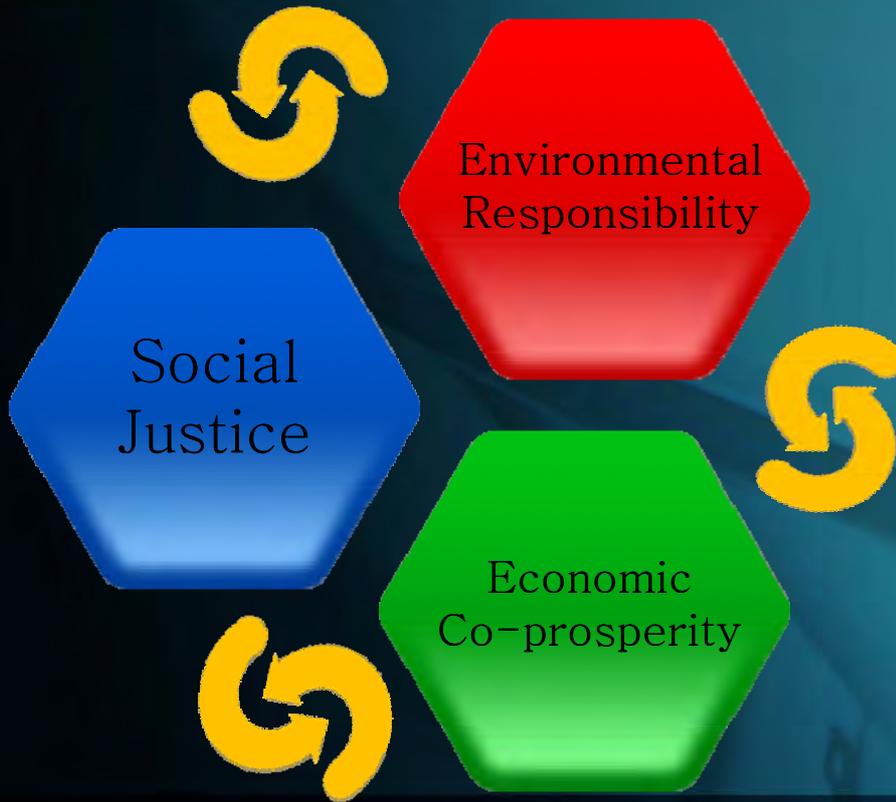
2. Desired
outcome of ESD
indicator

3. Process of
developing ESD
indicator

contents

4. Summary of
Korean ESD
indicator

1. Objective of Korean ESD indicator



2. Desired outcomes of ESD indicator

- Providing a general consensus on ESD categorization thereby concentrating efforts and resources on existing & new ESD projects.
- Studying existing examples of ESD practices in Korea and utilizing them as foundation.
- Minimizing future trials and error in ESD practices by providing certain guidelines.
- Enabling the diffusion of ESD in schools.
- Encouraging communication between ESD practitioners.

3. Process of developing ESD indicator

Examining major global issues

Categorizing according to topic

Prioritizing categories based on local necessities

Making meaningful connections among categories

Inspecting and finalizing ESD indicators

4. Summary of ESD indicators – Korea Rep.

Content Indicator

Social domain

human rights, gender equality, understanding multiculturalism, conflict resolution, upholding democracy, enhancing peace, global awareness, cherishing local tradition, education welfare, volunteering

Economic domain

fair trade, international cooperation on poverty elimination, socially responsible commerce

Environment domain

green development, alternative energy, CO2 reduction, recycling, protection of species, climate changes, disease control

4. Summary (continued)

Praxis indicator

Social domain

- Guaranteed participation as democratic citizens
- Cooperation between urban and rural areas
- Connecting the local with the global

Economy domain

- Responsible consumption such as purchasing recycled goods
- Contributing to local economy

Environment domain

- Conserving energy and resources
- Monitoring carbon footprints
- Ensuring safety of food and water

4. Summary (continued)

Outcome indicator

Common domain

- Curricular integration
- Diffusion of ESD practices
- Applicability in education
- Long-term viability of program
- Enabling transformative experience
- Positive change and accomplishment



Thank You.

SESSION: Capacity Assessment on M&E of ESD Status: *Investigating System Leverage Points for Effective ESD Implementation*

14:00 to 15:15

Presentations:

- 1) *Evaluation Framework for Monitoring and Evaluation of Education for Sustainable Development*
By Robert J. Didham, IGES

Group Activity: *Capacity Assessment – Identifying System Leverage Points for ESD Implementation*

Dr. Robert Didham began this session by explaining the main purpose of this session and the session after this one. Both sessions provide capacity building activities and allow an opportunity for group work and input. This session focuses on the quantitative investigation of ESD implementation and aims to conduct an assessment of system capacities to identify the important leverage points that generally lead to good ESD implementation. The next session focuses on the qualitative investigation to address effective learning performance for ESD.

Dr. Didham provided a presentation on the evaluation framework that was established to structure the quantitative investigation in the current research project. He presented the two major divisions used to create the evaluation framework: a sectorial approach and a division based on aggregated types of system levers. Under the sectorial approach, a total of six distinct sectors supporting ESD were identified for investigation during the initial ESD Expert Consultation meeting that took place at the beginning of this research process. These sectors are: national curriculum, formal education, teacher training, non-formal education, community & civil society, and private sector. The three divisions based on system capacities or levers helps to frame different types of indicators and can be linked to inputs, throughputs, and outputs of the system. These indicators are: status indicators (inputs – baseline information), facilitative indicators (throughputs – knowledge and leadership), and effect indicators (outputs – learning performance). It was then explained how these two divisions were used to create an overall framework under which potential leverage points, barriers and indicators were drafted for each category. Finally, it was from this framework that the questions for the Country ESD Survey used by National Focal Points were developed.

An explanation was then provided on the group capacity activity. This activity used a simplified version of the evaluation framework that considered all six sectors but only the status and facilitative indicators (inputs and throughputs respectively). Using this simplified framework, the groups were asked to consider what was one significant leverage point or capacity necessary for achieving successful ESD implementation at each of the twelve entry points.

Following the productive group discussions, each group then presented their findings and recommendations back to the workshop participants and these were compiled together for presentation (*see the last page of this section for the detailed findings of the group activity*). In regards to national curriculum, the findings focussed on how well ESD is integrated into the existing curriculum, inter-ministerial coordination on ESD activities, and locally relevant interpretations of ESD. The recommendations for formal education were in regards to a whole-school or integrated-school management approach to ESD, the quality of ESD contents and methodologies, and the linkage between formal and non-formal ESD activities. Teacher training points mainly addressed the overall amount and the funding for both pre-service and in-service teacher training.

The groups highlighted the importance of experiential education and learning-by-doing methodologies in regards to non-formal ESD, along with the number of after school programmes. For civil society, findings looked at the number of partnerships and networks for ESD, the quality of communication among these networks, and pervasiveness of community service opportunities linked with sustainable development. Recommendations on the private sector were made for strengthening the relationship between education and business sectors, increased funding for ESD activities from the private sector, and businesses' necessity for sustainability reporting and environmental management training.

Monitoring and Evaluation of Education for Sustainable Development
**Evaluation Framework & Identifying System
Leverage Points**

Capacity Assessment Activity

Northeast Asia Workshop on Monitoring & Evaluation
of Education for Sustainable Development

20 February 2012



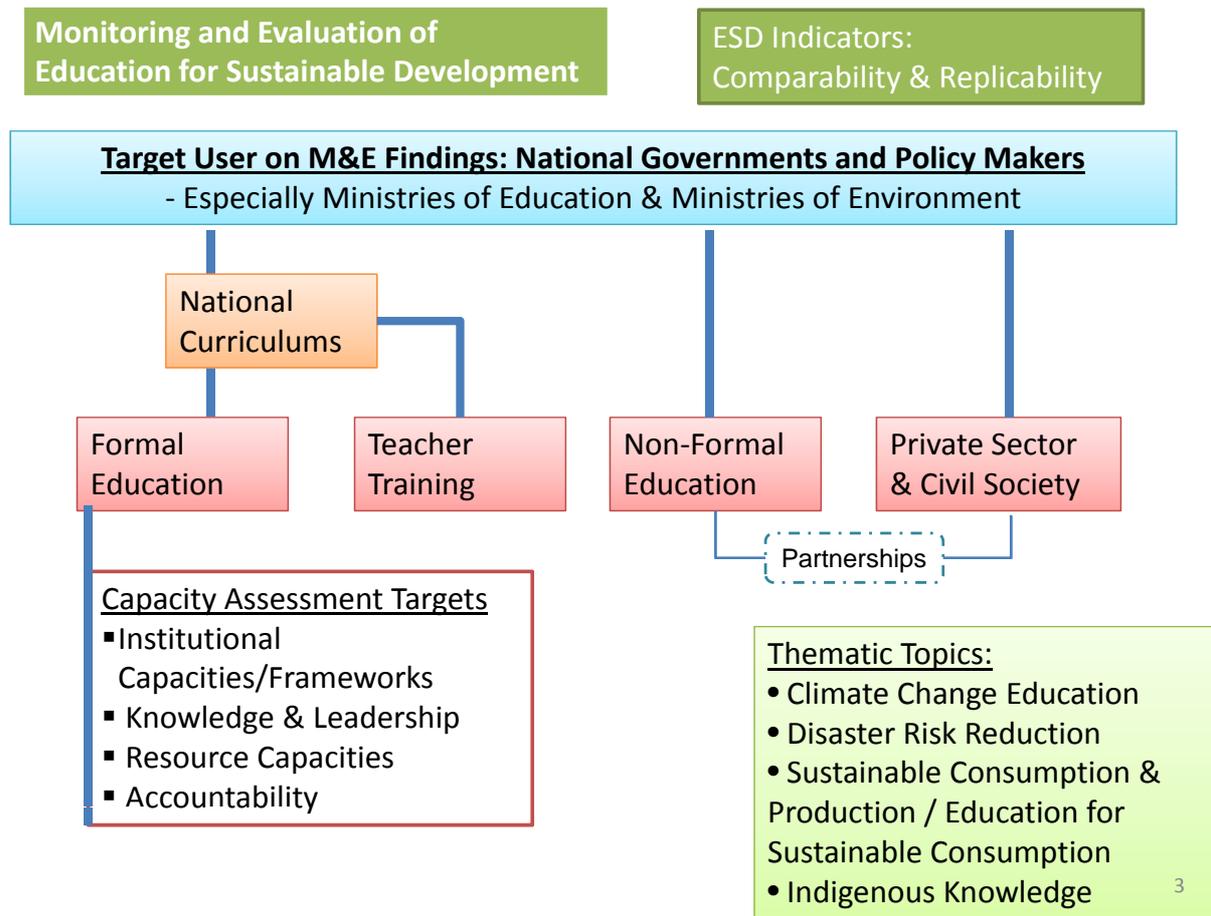
Institute for Global Environmental Strategies



Applying a Capacity
Assessment Approach
to M&E of ESD

- Goal: To identify the system capacities that support successful implementation of ESD.
- These capacities provide important levers for improving the overall performance, and thus can support M&E based on educational inputs.
- **2 Types of Divisions:**
 - **Sectorial Approach** → 6 selected sectors
 - **System Levers** → 3 levels of reporting

FIGURE 1: Systems Map of M&E of ESD Focal Areas



Sectorial Approach

• National Curriculum

main agent: national government

• Formal Education

main agent: school boards, school administration & teachers

• Teacher Training

main agent: teacher education institutes

• Non-Formal Education

main agent: national and local governments, continuing education systems

• Community & Civil Society

main agent: NGOs and civic participation, also role of media

• Private Sectors

main agent: businesses and corporations, professional organisations

*** The first three sectors are the primary focus, and the last three sectors are the secondary focus**

FIGURE 2: Common Division of Measuring Approaches for Educational Evaluation

	<u>Examples</u>	<u>(General) Source of Information</u>	<u>Ease of Collecting</u>	<u>Quality of Information</u>
INPUTS	<ul style="list-style-type: none"> Funding amount Disciplines integrating ESD curriculum Available teaching materials Number of ESD Trained Teachers 	National Government; available from Ministries of Educations' statistics	Easiest	Least Beneficial; limited ability to evaluate quality of ESD
THROUGH PUTS	<ul style="list-style-type: none"> Number of students receiving ESD Variety of ESD programs Hours of ESD teaching 	School-Level or local/school board-level; likely reported by principals and teachers	Medium	Medium; still mainly quantity assessment of ESD, but some quality factors can be implied
OUTPUTS & Outcomes	<ul style="list-style-type: none"> ESD Knowledge Gain Student Learning Behaviour Change 	Performance testing of students	Hardest	Most Beneficial for quality assessment of ESD

FIGURE 3: Types of Indicators and relevant information/topics

Status Indicators <i>Inputs – Baseline Information: Institutional Frameworks & Resources</i>	Facilitative Indicators <i>Throughputs – Information on Knowledge & Leadership</i>	Effect Indicators <i>Outputs – Information on Learning Performance</i>
Input Indicators looking at if appropriate policy and curriculum mandates exist. Is ESD linked with other mandates for SD and SCP? Are appropriate resources directed towards ESD implementation?	Throughput Indicators looking at the knowledge framing and structuring ESD implementation. Does the appropriate knowledge, expertise and leadership go into the system? Is the use of this knowledge done in a holistic and systemic manner?	Output Indicators looking at the learning achievements from ESD and its quality. What is the overall quality and performance of the ESD being implemented? What impact is ESD having on the learners?
Do mandates for ESD clearly exist?	Is education based on good knowledge & training?	Are learning outcomes being achieved?
Are the necessary resources made available?	How well are teachers trained in ESD?	Are learners gaining new learning methodologies?
Are SD principles applied to whole school management?	Are good teaching materials available?	Achieving Five Pillars of Learning?
Is the education system sustainable and resilient?	Are core ESD subjects addressed; ie. climate change, indigenous knowledge, DRR & SCP?	Are learners shifting behaviours to be contributors in achieving sustainable societies?

System Capacities/Levers

Breakdown of Indicator Levels

Input Capacities (for Status Indicators):

- Institutional Arrangements (*including Streamlined Process, Clear definition of Roles/Responsibilities, Merit-based Appraisal mechanism, Coordination mechanism*)
- Policy Mandates
- Resource Capacities (*include financial, material, infrastructure and human resources*)

Throughput Capacities (for Facilitative Indicators):

- Leadership (*including Vision, Communication Standards, Management Tools, Outreach Mechanisms*)
- Knowledge (*including Research Supply & Demand, Brain Gain and Retention, Knowledge Sharing*)
- Pedagogies and Methodologies

Output Capacities (for Effect Indicators):

- Accountability (*include audit systems and practice standards, participatory planning mechanism, stakeholder feedback mechanism, monitoring & evaluation process, and systems learning cycles*)
- Learning Outcomes/Performance
- Value and Behaviour Change

Evaluation Framework – base format

SECTORS	Sub-Sectors	Status Indicators (Input Capacities) - Institutional Arrangements - Policy Mandates - Resource Capacities	Facilitative Indicators (Throughput Capacities) - Leadership - Knowledge - Educational Pedagogies and Methodologies	Effect Indicators (Output Capacities) - Accountability - Learning Performance/Impact - Value and Behaviour Change	Sectorial Assessment
National Curriculum <small>(agent: National Government)</small>	Leverage Points				
	Barriers				
	Indicators				Score/rank?
Formal Education <small>(agent: school boards, schools, classrooms)</small>	Leverage Points				
	Barriers				
	Indicators				Score/rank?
Teacher Training <small>(agent: teacher training institutes)</small>	Leverage Points				
	Barriers				
	Indicators				Score/rank?
Non-Formal Education	Leverage Points				
	Barriers				
	Indicators				Score/rank?
Community & Civil Society	Leverage Points				
	Barriers				
	Indicators				Score/rank?
Private Sectors	Leverage Points				
	Barriers				
	Indicators				Score/rank?
Indicator Assessment		Inputs Score/rank?	Throughputs Score/rank?	Outputs Score/rank?	

National Survey on M&E of ESD

- A survey for national reporting on ESD implementation was developed.
- The survey contains 57 questions in total.
- National Focal Points were identified to report on ESD implementation status in their country.
- The completed surveys help to identify what information is reportable and what is significant for good ESD implementation in each country.
- The survey was utilised with the 3 NE Asia countries. Following this, the survey is to be refined, and then used with SE Asian countries.
- A second round of revision should narrow us down to a potential core indicator set.

**** See attached survey form for following discussion***

Review Criteria for Refining Indicator Set

- 1) Is it clearly defined, reportable and replicable?
- 2) Can the data be easily obtained without professional/scientific measurements?
- 3) Is the indicator measurable and will the data actually express a value of some type?
- 4) Does it measure something useful and relevant and will people (i.e. government officers and educators) care about this?
- 5) Will it lead for comparability between countries?
- 6) Does a change in this indicator suggest a course of action?

Thank you for your kind attention!

For Further Information & Contact

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Institute for Global Environmental Strategies

Strategic Policy Research to Support a Sustainable Asia-Pacific

SECTORS	<u>Status Indicators</u> <u>(Input Capacities)</u> - Institutional Arrangements - Policy Mandates - Resource Capacities	<u>Facilitative Indicators</u> <u>(Throughput Capacities)</u> - Leadership - Knowledge - Educational Pedagogies and Methodologies
National Curriculum (agent: National Government)		
Formal Education (agent: school boards, schools, classrooms)		
Teacher Training (agent: teacher training institutes)		
Non-Formal Education (agent: National and Local Governments, Continuing Education systems)		
Community & Civil Society (agent: NGOs and Civic Participation, also role of Media)		
Private Sectors (agent: Businesses and Corporations, Professional Organisations)		

EVALUATION FRAMEWORK AND TARGET AREAS FOR M&E OF ESD RESEARCH AND DEVELOPING ESD INDICATORS

SECTORS	Sub-Sectors	Status Indicators (Input Capacities) - Institutional Arrangements - Policy Mandates - Resource Capacities	Facilitative Indicators (Throughput Capacities) - Leadership - Knowledge - Educational Pedagogies and Methodologies	Effect Indicators (Output Capacities) - Accountability - Learning Performance/Impact - Value and Behaviour Change	Sectorial Assessment
National Curriculum (agent: National Government)	Leverage Points	A) Political Mandate for ESD; B) Clear Authorities for ESD implementation; C) Resource provision for ESD	A) ESD mainstreaming and implementation as systemic approach; B) Inter-ministerial Coordination; C) Knowledge Sharing; D) Regional Cooperation on ESD;	A) Holistic & Interdisciplinary Approaches to education; B) Encouraging Reflective & Responsible Behaviour and Critical Thinking; C) Accountability to Promote Institutional Learning	
	Barriers	Lack of continuous political support for ESD; Lack of clear authorities for ESD implementation	Coordination btw countries/sharing good practice; Inter-ministerial cooperation; & Connection w/ educational objectives	Difficulty in evaluating ESD implementation; Lack of awareness on promoting behaviour change	
	Target Areas	1) Clear Policy Mandate for ESD 2) Funding/Budget for ESD (total amount or as percentage of educational expenditure) 3) How is Integration into Curriculum structured? 4) Is process Streamlined? (with smooth integration and connection to previous policies) 5) Authority, Roles, Responsibilities; are they clearly defined?	1) Inter-governmental Coordination and Intra-governmental Cooperation (good communication and management) 2) Curriculum Development (expertise supply & demand) 3) Clear Objectives and Achievement Targets for ESD (i.e. Vision for ESD) 4) Knowledge Sharing and Dissemination (decentralisation of curriculum to classrooms – from policy to implementation)	1) ESD as a stimulus of wider educational or curriculum reform, i.e. systemic change. (Such as incorporation of interdisciplinary teaching approaches, team building activities, more action-experiential learning, etc.) 2) Feedback Mechanisms & M+E Systems	
Formal Education (agent: School Boards, Schools, Classrooms)	Leverage Points	A) Cohesive curriculum strategies on ESD; B) Clear definitions of ESD	A) Good learning materials, B) Good learning methodologies on ESD	A) Promoting a view of synthesis, rather than just analysis;	
	Barriers	Continual provision of ESD as progressive educational strategy; Lack of quality criteria/guidelines for teaching tools/materials	Lack of teaching materials and course curriculums on ESD; Weak or no linkage btw. ESD, EFA and MDGs	Difficulty in assessing student learning on ESD; Teachers difficulty in developing ESD courses and materials	
	Target Areas	1) Mandate 2) Budget for ESD (managed by school boards & schools) 3) Teaching Strategies & Course Content (how is ESD framed and entering teaching materials) 4) Progressive Learning Objectives (educational strategy) 5) Whole School Management Approach to ESD promotion 6) Merit-based Appraisal (i.e. positive reinforcement by School Boards for school implementation of ESD) 7) Roles/Responsibilities for implementing ESD teaching (Who coordinates, manages, teaches, assesses, etc.?)	1) Content/Thematic Topics of ESD (<i>are these topic covered</i>): a. Climate Change Education b. Disaster Risk Reduction c. Sustainable Consumption & Production / Education for Sustainable Consumption d. Indigenous Knowledge 2) Teaching Materials for ESD (availability & diversity) 3) Innovative Learning Methodologies (i.e. critical reflection, problem solving, experiential learning, etc) 4) Innovative Teaching Approach (ex. Inter-disciplinary vs. Disciplinary; integrated teaching vs. separate subject)	1) Practice Standards & Auditing 2) Learning Outcomes –Process & Skill set development (i.e. collaboration and dialogues, engagement of the whole system, innovation and participatory learning, etc.) 3) ESD achieving change in consciousness (link between ESD and behaviour/practices, such as in-school recycling programmes and also school disciplinary issues)	
Teacher Training (agent: Teacher Educational Institutes)	Leverage Points	A) Mandate for ESD in Teacher Education Institutes B) Teachers need to be inspired about ESD!	A) Innovative Educational Pedagogies and Theories B) Strong Professional Competency (based on progressive educational theories including holistic and systemic approach)	A) Linking highly competent ESD staff with individual schools; B) Strong ESD Teaching awareness and skill-sets	
	Barriers	Disciplinary boundaries for training in ESD	Lack of trained ESD Teachers; Lack of cross disciplinary teaching ability.	Teachers receiving ESD in teacher training institutes, Teachers receiving in-service ESD training	
	Target Areas	1) Mandate for all student teachers to receive ESD 2) Budget (for ESD in Teacher Education Institutes) 3) How are TEIs engaging with and implementing ESD? 4) Experience with SD experts/professionals and practical SD examples/experiences (i.e. Are future teachers being inspired about ESD?)	1) Thematic SD topics (<i>as above</i>) 2) Innovative Learning Methodologies & Progressive Educational Theories 3) In-service Training & Continuing Education on ESD	1) Mainstreamed process for teachers to share good practice on ESD 2) Assessment of teachers qualifications on ESD	

Non-Formal Education (agent: National and Local Governments, Continuing Education systems)	Leverage Points	A) Experience Based and Field Based Learning B) Practical Learning Centres	A) Outreach and Knowledge Sharing B) Learning by Doing – Good Action & Communication Process		
	Barriers	Availability of institutions specialising in ESD; Ability to provide on the ground advice for ESD implementation	Lack of Strong Coordination to Vision: often due to learning model based on good practice replication		
	Target Areas	1) Mandate 2) Budget for non-formal ESD initiatives 3) Quantity and diversity of EE and ESD Learning Centres 4) Authority & Roles/Responsibilities for promoting ESD in non-formal education (both in the national and local governments)	1) Vision or Strategy outlining objectives/achievement targets for ESD in non-formal education sector 2) Public Outreach and Awareness Raising Activities/Events 3) Application of good Learning Methodologies • <i>This section is trying to address the general theme of: How to achieve an impact in non-formal ESD?</i>		
Community & Civil Society (agent: NGOs and Civic Participation, also role of Media)	Leverage Points	A) Networking & Partnerships on ESD B) Usage of Media Resources	A) Specialised Knowledge and Expertise; B) International Networking; C) Citizen Voice and Empowerment; D) Fostering role of media in consumer awareness raising		
	Barriers	Availability of institutions specialising in ESD; Ability to provide on the ground advice for ESD implementation; Involvement of Civil Society participation in ESD policy formation	* really depends on country context		
	Target Areas	1) Mandate 2) Budget 3) NGO and Multi-Stakeholder networks/partnerships for ESD 4) Quantity and quality of government support and cooperation with these networks/partnership (and what kind of legitimacy does government bring to them) 5) Citizen Involvement in SD Planning (Is there a mandate? To what extent does it occur?) 6) Civil Society Engagement/Autonomy Rating (use Democracy Index) *not n survey	1) Diversity of Knowledge on Sustainable Development among civil society (i.e. How many SD themes are currently covered by NGOs?) 2) Involvement in international ESD activities. (could be government, academia, civil society, etc) 3) Good usage of Media technologies in promoting ESD (or government support for media promotion of ESD)		
Private Sectors (agent: Businesses and Corporations, Professional Organisations)	Leverage Points	A) Business engagement with government on promoting ESD; B) CSR C) Green product promotion	A) Advancing employee skill development on SCP B) Education Role to Consumer (businesses promoting consumer awareness raising on SCP activities)		
	Barriers	Lack of government cooperation with Private Sector on ESD	Lack of awareness by Business Leaders on SD/ESD		
	Target Areas	1) Mandate 2) Budget 3) Existing networks/partnerships 4) Government led training for business leaders on SD/ESD 5) Mandate on (aspects of) CSR – especially environmental areas (*no survey question) <i>This area focuses on activities led by government or in cooperation with them</i>	1) In-service Training and Continuing Professional Development (CPD) on supply chain greening and SCP approaches 2) Consumer Awareness Raising Programs/Initiatives <i>This area focuses on activities led by businesses and corporations.</i>		
Indicator Assessment		<u>Inputs</u>	<u>Throughputs</u>	<u>Outputs</u>	

Input from Group Activity – Capacity Assessment on M&E of ESD Status: Evaluation Framework

From the NE Asia Reporting and Capacity Building Workshop on E&E of ESD; 20 February 2012 at Pacifico Center, Yokohama, Japan

SECTORS	Status Indicators (Input Capacities) - Institutional Arrangements - Policy Mandates - Resource Capacities	Facilitative Indicators (Throughput Capacities) - Leadership - Knowledge - Educational Pedagogies and Methodologies
National Curriculum (agent: National Government)	<ul style="list-style-type: none"> Integration (and mainstreaming) of ESD into the National Curriculum Identifying entry points for ESD promotion and development 	<ul style="list-style-type: none"> Locally-relevant Interpretations and Content of ESD Inter-Governmental and Inter-Ministerial Coordination of ESD
Formal Education (agent: school boards, schools, classrooms)	<ul style="list-style-type: none"> Integrated School Management of ESD Whole School Management of ESD Addressing ESD in student testing and entrance examinations 	<ul style="list-style-type: none"> Good Evaluation and Accountability (including reward based system) Networking to link Formal and Non-Formal Education Sectors Allowing flexibility in interpreting ESD curriculum and educational materials to local contexts and needs
Teacher Training (agent: teacher training institutes)	<div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <ul style="list-style-type: none"> ESD coverage in contents and methodologies <p style="text-align: center;">↕ <i>linking</i></p> <ul style="list-style-type: none"> Teacher Training (pre-service and in-service) </div> <ul style="list-style-type: none"> Funding for teacher education/training Amount of Pre-service Teacher Education and In-service Teacher Training 	<ul style="list-style-type: none"> Trained teacher and focal points of ESD (total number) Trained education officials on ESD (total number) Sharing knowledge and good practice
Non-Formal Education (agent: National and Local Governments, Continuing Education systems)	<ul style="list-style-type: none"> Policy for non-formal ESD Experiential Education 	<ul style="list-style-type: none"> After School Curriculum (total number) Learning by Doing
Community & Civil Society (agent: NGOs and Civic Participation, also role of Media)	<ul style="list-style-type: none"> Partnership and Networks for ESD (total number) “ ditto “ “ ditto “ 	<ul style="list-style-type: none"> Access to Community Service opportunities Good Communication Tools and Networks
Private Sectors (agent: Businesses and Corporations, Professional Organisations)	<ul style="list-style-type: none"> Private Funding Sources Relationship between Education and Business Sectors 	<ul style="list-style-type: none"> Promotion of Public Awareness of ESD Sustainable Reporting System Business Sector requirements for SD and SCP training and capacity building

SESSION: Capacity Building Activity

Addressing the Effectiveness of Learning Performance

15:30-16:45

Presentations:

- 1) *Address the Effectiveness of Learning Performance and Good Practices inRCEs*

By Paul Ofei-Manu, IGES

Group Activity: *Capacity Building for Addressing the Effectiveness of Learning Performance in ESD*

Dr. Paul Ofei-Manu began his presentation by stressing the importance of capacity building, learning and competence development for the DESD implementation and the need for evaluation of the progress made so far on ESD implementation, especially as the UNDESD draws to a close in 2014. Consequent to that, in developing an assessment tool like indicators for M&E of ESD, he mentioned the importance of the need to know how for example, educational inputs and throughputs impact the contexts and processes of learning and also, how to achieve improvements in learning performance and ESD outputs. He gave some of the reasons why addressing learning performance using performance-based testing has been difficult. These include 1) Pedagogical objectives that have a narrow focus as they rely on a few performance indicators, primarily test results; 2) Assessment of the individual on the assumption that learning occurs independent of one's motivation and the environment; and, 3) Teachers concentrating on helping students pass the tests because entire school systems are evaluated based on performance on such tests.

Dr. Ofei-Manu continued by explaining that in trying to understand what constitute effective ESD learning performance (LP) through the development of an actionable conceptual framework, the research team has attempted to identify what it calls Elements of ESD LP by investigating the characteristics/aspects of effective ESD learning that are grounded in several educational theories and learning methods and are being validated by identifying linkages in the content of the RCE practice cases in an action-reflection process with an equal interplay between them. Regarding the ESD elements, four areas comprising two elements related to the process side of learning and education, i.e., Progressive Pedagogies (PP) and Cooperative Learning Relationships (LR)) and also, two elements under educational contents namely Sustainability Competencies (SC) and Framework of Understanding and World-View (WV) were identified.

- Progressive Pedagogies: Looks at the educational theories and learning methods that are used to ground the entire instruction and teaching of ESD;

- Cooperative Learning Relationships: Involves the incorporation of the multi-stakeholder , social learning & networking processes that ESD engages with, especially as seen through the RCEs;
- Sustainability Competencies: Consists of capacities people need in order to be able to contribute to SD; these include a variety of different knowledge-learning, skill-learning and also value-learning along with certain ethical issues, and
- Framework of Understanding and World-View: Looks at the overall framework of our understanding and worldview.

Characteristics of the respective elements were described. The absence of clearly-defined boundaries between the elemental components and hence the characteristics were pointed out and the overall goal of bringing together the elements into an actionable framework to effect/drive social change was also mentioned. Dr Ofei-Manu also pointed out that the research team is now trying to apply the elemental characteristics to the RCE cases in order to identify those aspects/processes that will improve learning performance.

Participants were then divided into 3 groups of six or more members, each with a facilitator and a rapporteur. The workshop activity was based on the division of the four elements, with an extra division under competencies to separate knowledge, skills, and values. For each category there were two questions for participants to consider. For the 'learning objective/goal', participants were asked to identify a key learning objective for the element of ESD learning. For 'educational achievement', participants were asked to identify what would be a visible outcome that would demonstrate achievement of the objective. Ideally, there should have been three aspects but due to time constraint the third aspect: 'strategy to reach goal' was not included. Participants were asked to brainstorm and come out with at least one answer for each box provided on the sheet. After 35 minutes of discussions/brainstorming, rapporteurs were asked to present their answers to the entire workshops and these were all collated for presentation purpose on a big board for further processing/evaluation and incorporation into the research framework.

The following are some of the findings/recommendations the group activity produced (*Please see the last page of this section for the entire findings of the group activity*). Regarding Progressive Pedagogies, participants cited development of modules and documentation materials to achieve the learning objective of developing capacities of learners in a participatory manner. Also, combination of (educational) theories and practice could lead to achieving experimental & experiential learning. Under Cooperative Learning Relationships, collaborative projects that emanate from learning could be due to alignment, collaboration and increased partnership among multi stakeholders to effectively impact society. Also, a number of networks and platforms could indicate that collaborative learning has taken root beyond schools e.g., in an RCE. For Sustainability Competencies, knowledge competency in the form of environmental literacy could mean acquisition of core facts on ESD. The skills to examine different perspectives, understand the process then take action is an indication of the ability to link knowledge to action. With respect to values, attaining the objective to be global citizens, respecting and tolerating others means in part the formal/informal opportunities and the willingness to share with others. Regarding the Framework of Understanding and World-View element, an inclusive and tolerant society would indicate an understanding of our interconnectedness. Also, multi-cultural understanding among societies would suggest the attainment of the objective of respecting differences.

Addressing the Effectiveness of [ESD] Learning Performance

Northeast Asia Workshop on Monitoring & Evaluation of Education for Sustainable Development

February 20, 2012

Paul Ofei-Manu

Institute of Global Environmental Strategies, Japan

- Current UNESCO and RCE Vision documents emphasize capacity building, learning and competence development

- Evaluation of the progress made on ESD implementation is also emphasized as important objective

- To develop an assessment tool like indicators for M&E of ESD, it is important to know *for e.g.:*
 - how educational inputs and throughputs impact the context and processes of learning
 - and, how to achieve improvements in learning performance (& ESD outputs)

Challenge of assessment/learning performance (LP)

Addressing learning performance using standardized methods of assessment (i.e., performance-based testing) has been difficult largely because:

- The pedagogical objectives have a narrow focus;
- Curriculum is compartmentalized;
- The individual is assessed independent of motivation and one's environment;
- Teachers mainly concentrate on helping students pass the tests;
- Only the measurable aspects/"tangibles" (e.g. knowledge) get measured; values-based testing overlooked.

Challenge of assessment/learning performance

The literature is clear that our present educational system needs a complete overhaul to provide learners with skills to meet (current and future real-world) challenges.

Furthermore, UNESCO is clear about the need for assessment that not only pays attention to knowledge competency but also values, skills, perception and behaviours.

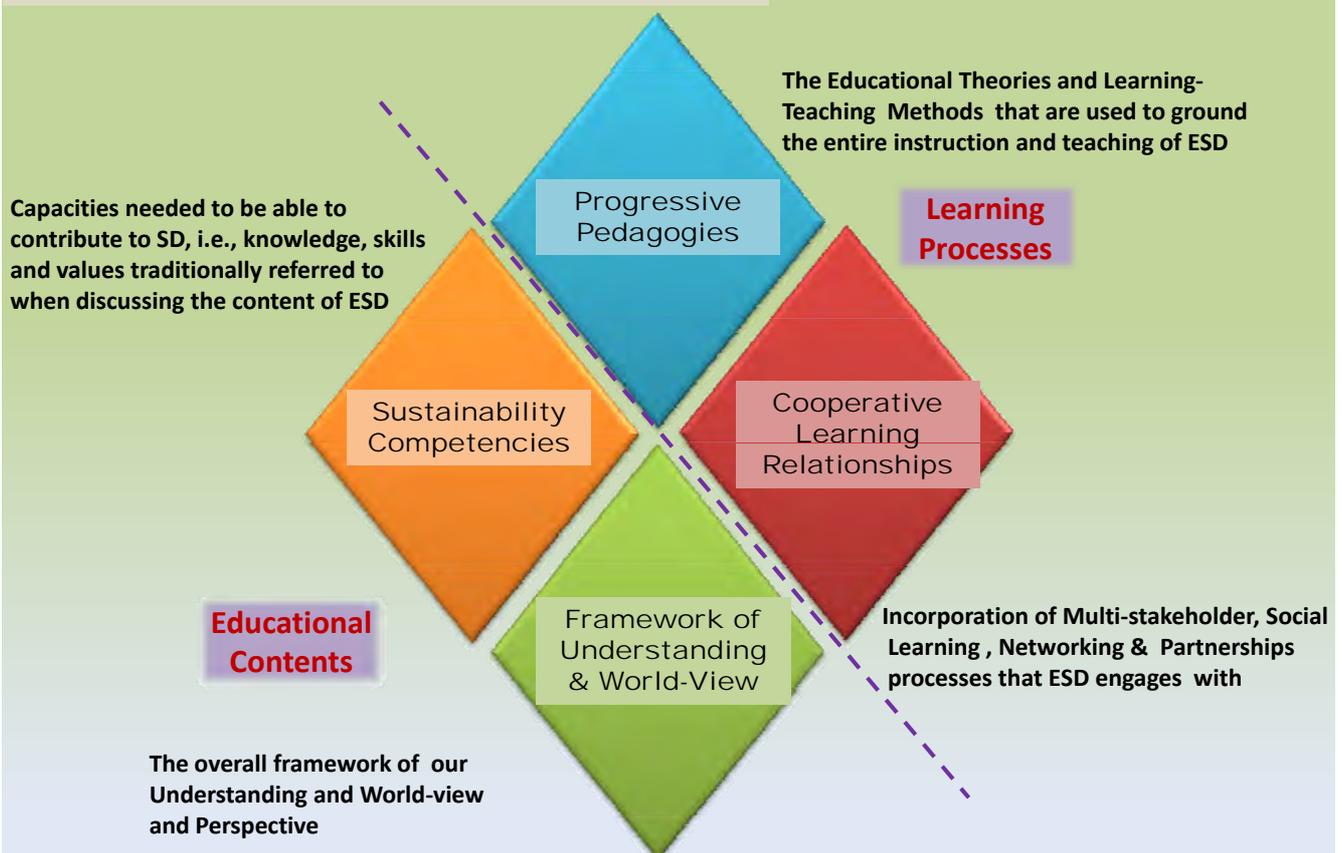
- *“Traditionally, literacy, numeracy, and disciplinary knowledge are assessed using standardized tests..... however, these do not measure many aspects of quality education. **Missing are assessment and evaluation of life skills, perceptions, behaviours and values, which are part of quality education.....**”*
[(UNESCO 2005; <http://unesdoc.unesco.org/images/0014/001410/141019e.pdf>)].

LEARNING PERFORMANCE (LP) EVALUATION

In trying to understand what constitutes effective ESD LP,
we have attempted to:

- ❑ Identify what we call Elements of ESD LP by investigating the *characteristics/aspects* of effective ESD learning that are
- ❑ Grounded in several educational theories & learning methods (Reflection);
- ❑ Validation using the RCE practice cases (Action).

4 ELEMENTS OF ESD LEARNING PERFORMANCE



Learning Processes 1: Elemental Aspects/Characteristics



Educational Theories & Learning-Teaching Methods

- Student-centred, active learning
- Action/experience-oriented learning
- Critical reflection and problem solving
- Knowledge production through iterative interaction
- Life-long learning
- Cyclical process of collective inquiry

Learning Processes 2: Elemental Aspects/Characteristics



Social Learning, Networking & Partnerships

- Inclusion & network structure for interaction
- Participation and power sharing (shared ownership /commonality)
- Clear definition of roles and responsibilities
- Accountability of individual/groups
- Group processing: managing the different knowledge systems to make sense of the available information
- Opportunities for reflexivity and discourse
- Positive interdependence and building of trust

Learning Content 1 : Elemental Aspects/Characteristics

Knowledge,
Skills &
Values

Sustainability
Competencies

KNOWLEDGE

- Climate Change
- Disaster Risk Reduction
- Sustainable Consumption and Production/Education for Sustainable Consumption
- Indigenous Knowledge
- Well-being, Development & Environmental Quality
- Resilience and Socio-ecological Systems

SKILLS

- Critical thinking, systems thinking, complex thinking, real-world problem-solving,
- Seeking alternative solutions
- Adapting to change & advocating for change
- Future-mindedness
- Social action, collaboration and cooperation,
- Conflict resolution, negotiation
- Creativity, imagination

VALUES

- Respect
- Care-empathy, Charity
- Citizenship
- Stewardship
- Motivation
- Social and economic justice
- Empowerment
- Commitment, cooperation, compassion
- Self-determination, and self-reliance

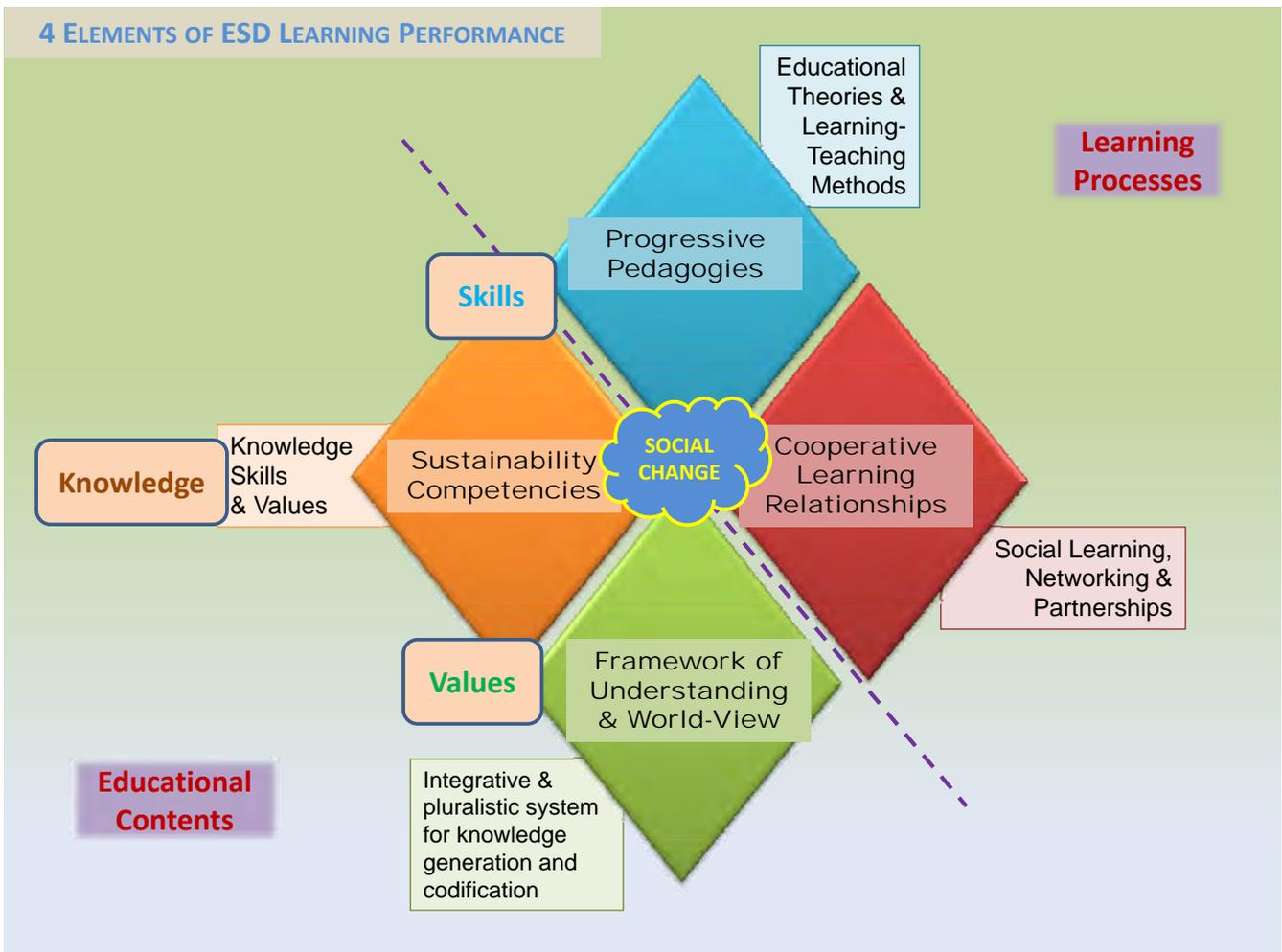
Learning Content 2: Elemental Aspects/Characteristics

Integrative &
pluralistic system
for knowledge
generation and
codification

Framework of
Understanding
& World-View

- Holism & Integration
- Systems thinking
- Interdisciplinarity and Cross-Boundary
- Cultural relativism and social constructivism
- Pattern recognition, system design from patterns to details (synergy)

4 ELEMENTS OF ESD LEARNING PERFORMANCE



- which means the educational/learning processes and content that seek to advance sustainability should exhibit these and other related characteristics
- Now we are trying to apply these elemental characteristics to the RCE practice cases in order to identify those aspects/learning processes and content that could improve ESD LP

'Not everything that counts can be measured. Not everything that can be measured counts.' (Albert Einstein).

THANK YOU

(ofei-manu@iges.or.jp)

GROUP ACTIVITY

- **1. This activity is on LP and how to evaluate the quality of LP for ESD in a way that helps start to move backwards from outputs to link up with system inputs (for developing indicators around).**
- **2. Basically we have divided the main factors of ESD learning performance into 4 elements, which are:**
 - 1) Progressive Pedagogies: the types of educational theories and learning-teaching methods that are used,
 - 2) Cooperative Learning Relationships: the inclusion of social learning, networking and partnerships as an important educational component of ESD,
 - 3) Framework of Understanding and World-view: this is the integrative and pluralistic system for knowledge generation and codification promoted in SD and ESD (this may seem the trickiest to get, but it is attached to the idea of paradigm change often discussed with ESD topics), and
 - 4) Sustainability Competencies: these are the knowledge, skills and values traditionally referred to when discussing the contents of ESD.
- Then for each category there are two questions to think about.
- 1) The Learning Objective/Goal -- **identify a key learning objective for this element of ESD learning.**
- 2) Educational Achievement - **Identify what would be a visible outcome that would demonstrate achievement** of this goal/objectives.
- *Ideally, the third question to address: ii) Strategy to reach the goal, but has been taken out for sake of time.*

Elements	Learning Objective/Goal <i>Please identify a key learning objective for this element of ESD learning?</i>	Educational Achievement <i>Please identify what would be a visible outcome that would demonstrate achievement of this goal or objective?</i>
 <p>Progressive Pedagogies Educational Theories & Learning Methods</p>		
 <p>Cooperative Learning Relationships Social Learning, Networking & Partnerships</p>		
 <p>Sustainability Competencies <i>Linking Knowledge, Skills & Values to Action</i></p>	Knowledge	
	Skills	
	Values	
 <p>Framework of Understanding & World-View Integrative & Pluralistic system for Knowledge Generation and Codification</p>		

Elements	Learning Objective/Goal <i>Please identify a key learning objective for this element of ESD learning?</i>	Educational Achievement <i>Please identify what would be a visible outcome that would demonstrate achievement of this goal or objective?</i>						
 <p>Progressive Pedagogies</p> <p>Educational Theories & Learning</p>	<ol style="list-style-type: none"> Lifelong learning Learning to transform oneself and society Develop capacities of learners in a participatory manner Experimental & experiential learning 	<ul style="list-style-type: none"> Develop modules, documentation materials and participants ...? Combining theories and practice 						
 <p>Cooperative Learning Relationships</p> <p>Social Learning, Networking & Partnerships</p>	<ol style="list-style-type: none"> Sharing leadership on sustainable society Mutual understanding among stakeholders Alignment, collaboration to bring more impact on society Increased partnership Learning different perspectives Collaborative learning beyond schools .e.g., RCE 	<ul style="list-style-type: none"> Collaborative projects that emanate from learning Number of networks and platforms 						
 <p>Sustainability Competencies</p> <p>Linking Knowledge, Skills & Values to Action</p>	<table border="1"> <tr> <td data-bbox="635 1079 848 1251">Knowledge</td> <td data-bbox="848 1079 1659 1251"> <ol style="list-style-type: none"> Local/ traditional knowledge, connects with environment Learn, comprehend, understand [how...] Core facts on ESD </td> </tr> <tr> <td data-bbox="635 1251 848 1423">Skills</td> <td data-bbox="848 1251 1659 1423"> <ol style="list-style-type: none"> Long-term thinking skills, (intergen'nal, future mindedness) Application of knowledge to transform into action Communication </td> </tr> <tr> <td data-bbox="635 1423 848 1583">Values</td> <td data-bbox="848 1423 1659 1583"> <ol style="list-style-type: none"> Think globally, act locally and vice versa To be global citizens, respecting others and tolerance The 3 pillars of sustainability </td> </tr> </table>	Knowledge	<ol style="list-style-type: none"> Local/ traditional knowledge, connects with environment Learn, comprehend, understand [how...] Core facts on ESD 	Skills	<ol style="list-style-type: none"> Long-term thinking skills, (intergen'nal, future mindedness) Application of knowledge to transform into action Communication 	Values	<ol style="list-style-type: none"> Think globally, act locally and vice versa To be global citizens, respecting others and tolerance The 3 pillars of sustainability 	<ol style="list-style-type: none"> Participation in local activities System for continuing traditional knowledge and practices Presentation and how students/people relate to the issues at stake Environmental literacy <ul style="list-style-type: none"> Examining perspectives, understand the process then take action Problem solving; application of technologies <ul style="list-style-type: none"> Formal/informal opportunities & willingness to share with others Critical thinking
Knowledge	<ol style="list-style-type: none"> Local/ traditional knowledge, connects with environment Learn, comprehend, understand [how...] Core facts on ESD 							
Skills	<ol style="list-style-type: none"> Long-term thinking skills, (intergen'nal, future mindedness) Application of knowledge to transform into action Communication 							
Values	<ol style="list-style-type: none"> Think globally, act locally and vice versa To be global citizens, respecting others and tolerance The 3 pillars of sustainability 							
 <p>Framework of Understanding & World-View</p> <p>Integrative & Pluralistic system for Knowledge Generation and Codification</p>	<ol style="list-style-type: none"> Positive attitude and self-esteem; moving towards a better future Diversity and multi-culturalism To understand interconnectedness Multiple perspectives Respecting differences 	<ul style="list-style-type: none"> Inclusiveness Tolerant society Multi-cultural understanding System thinking 						

PANEL SESSION: What Knowledge should M&E of ESD identify to support governments in strengthening ESD implementation?

16:45 to 17:45

Panel Chair: Hironori Hamanaka, Institute for Global Environmental Strategies

Panellists:

- 1) *Chinese Focal Point* – Qing Tian, Beijing Normal University
- 2) *Japanese Focal Point* – Yoshiyuki Nagata, University of the Sacred Heart
- 3) *Korean Focal Point* – Hae Jae Oh, Korean National Commission for UNESCO
- 4) *International ESD Expert* – Katie Vanhala, UNESCO – Asia-Pacific Regional Bureau

Prof. Hironori Hamanaka, Chair of the Board of Directors for IGES, kindly chaired this panel session. He provided a generous introduction of each of the panellists, and he then introduced the purpose of today's panel discussion. Prof. Hamanaka explained that the panel was to address what types of knowledge and information on ESD will allow governments to make appropriate interventions for improving its implementation and success. He then identified two specific questions for the panellists to respond to: 1) What knowledge would support governments in strengthening ESD implementation? 2) What should M&E of ESD identify to allow for government interventions? Finally, he informed the panellists that they each had seven minutes to provide a response following which the floor would be opened for further questions and discussion.

Dr. Qing Tian provided the first response and began by explaining that in China it is important to relate the needs for ESD to the needs and objectives of the government. She explained that China has strong top-down policy/laws but they are flexible in their implementation, and furthermore that the Chinese government is interested most in GDP and growth. Thus, Dr. Tian argued that reporting on ESD should address how ESD could help support the government in earning money in regards to areas such as low-carbon technologies. Furthermore, she suggested that a strong argument could be made for the link between ESD and improving the government's ability to contribute to global political and environmental issues especially by highlighting the important capacity building and learning features of ESD for problem-solving and systems thinking. The promotion of ESD should also demonstrate how it can help in terms of dealing with wider social and environmental challenges along with general improvements to the educational system in China. As far as the monitoring and evaluation of ESD, this process could identify the enriching foundations of ESD that help to improve the overall quality of education and also identify best practices in ESD that the government could help to replicate.

Ms. Hae Jae Oh began by explaining that both generally and in Korea specifically ESD is a hard concept to grasp and to bring into practice. Monitoring and evaluation of ESD should aim to support policy

development for encouraging better implementation of ESD. To achieve this, ESD indicators should help to support not only the M&E process but also to provide clear achievement targets for ESD implementation. These indicators should also help to better root ESD into the national school curriculum. A further important area for ESD in Korea is teacher training, and this is one area where the Korean National Commission has worked significantly and can provide policy support.

Prof. Yoshiyuki Nagata started by explaining that he found the process of completing the Country ESD survey a valuable reflection process on ESD implementation status and that it was very interesting to undertake this process. As far as Japanese policy, there is strong ESD mandate but at the same time there is no specific mention of ESD in the national curriculum guidelines, rather sustainable society and sustainable development are often promoted. In the most recent five year plan for education though, ESD is clearly mentioned. In Japan, there is an overall vision of social and environmental justice leading to sustainability, and at the bottom there are schools, communities and practitioners taking efforts on sustainable development. However, in between these two areas there is a large gap where there are very few guidelines or regulations explaining the steps to take to reach the overall vision of a low-carbon, sustainable society. This leaves us with a sustainable development pyramid with a vision at the top and actors at the bottom, but with no clear process for one to reach the other. Thus, this is an important area in which the government needs further knowledge support. Prof. Nagata also explained that several of the concepts connected with ESD are viewed as too radical or forward thinking by the average Japanese citizen, and that there needs to be a better way to explain and integrate ESD without necessitating so much critique and challenging of the current system. Generally, education systems in Northeast Asia are very top-down and hierarchical, so there should be more consideration given to bottom-up approaches for the development of ESD concepts and teaching to aid in reforming these systems.

Ms. Katie Vanhala opened by stating that a clearer defining of the parameters of ESD is important, but also that each country or government must define and contextualise their own approach to ESD. UNESCO has found that many countries are conflicted in terms of what teaching methods and learning approaches are most effective. While ESD often argues for a progressive pedagogy and learning approach, some countries have purposely chosen to apply more traditional, route-based learning approaches as they find these more effective to their educational goals and objectives. Thus, the promotion and M&E of ESD must better take into account the diversity of teaching strategies applied among various countries. Ms. Vanhala also noted that several countries have developed their own unique development approaches/concepts and in these cases ESD could gain substantial momentum by piggy-backing on these concepts; such as Sufficiency Economy in Thailand, Gross National Happiness in Bhutan, and Green Growth in Korea.

Ms. Vanhala went on to point out that one area on national level M&E of ESD that would be highly beneficial is to provide better mapping of who are the main actors involved in ESD implementation. This process could support better management coordination of ESD and better streamlining into education systems. A further question UNESCO often hears comes from developing countries who want to know how ESD will help improve their country's and society's development; so this would be another issue to consider addressing in ESD monitoring and evaluation. Finally, it is important to keep in mind that many government officials are quick to say if we can't measure it than why would we do it, so a quantifiable approach to M&E of ESD is very important.

CLOSING SESSION

17:45 to 18:30

Session Chair and Summary of Workshop: Mario Tabucanon, Asian Institute of Technology & UNU-IAS

Explanation of Future Activities on M&E of ESD: Abel Barasa Atiti, UNU-IAS

Closing Comments: Hironori Hamanaka, IGES

Prof. Mario Tabucanon provided the overall summary of the workshop. He pointed out the strong message of support for the project from key partner organisations namely IGES, UNU-IAS and UNESCO. He touched on the research overview, aim and state of the research process and the possibility that participants of the next workshop in Thailand would benefit from the outcomes of this workshop. He highlighted the main points covering the RCE presentations especially in the areas of collaborative and networking activities in relation to the formal, non-formal and informal aspects of the learning process, and the innovative learning models and/or methods being applied by the RCEs to achieve their goals. Prof. Tabucanon also talked about the support of some RCEs from the local authorities, the achievements and barriers/challenges facing the RCEs in general.

Regarding the national ESD surveys covering the Northeast Asian countries of Japan, South Korea and China, he briefly described the findings that the presenter, Dr. Didham, gave early on and especially highlighted the areas of difficulty for M&E ESD, occasionally relating some of the problems to the cross-cutting nature of ESD. He also touched on the presentation of Prof. Pak regarding the fact that ESD policies are often reactive in nature and perhaps it was time they were dealt with proactively.

Prof. Tabucanon commented on the panellists' statements and the interesting discussions that followed. He particularly touched on the need to 'enlighten' government bureaucracy since they have been reluctant to change. He also mentioned the changes needed in the school admission system to reflect the affective aspects of learning, the need for curriculum reform, the re-alignment of education systems to facilitate integration at all levels, and a more active role played by the mass media.

Prof. Tabucanon's personal observations regarding the workshop were as follows: The Evaluation Framework including ESD Learning performance Framework were "comprehensive, holistic, analytical and easy to use"; 2) The information on the National ESD Survey was clear even though differences might exist in their implementation, and 3) For Good Practice cases the ingredients for success were available namely wide collaboration, diverse participation, community and civil society engagement, school engagement, engagement of higher education institutions and all sectors of society.

Regarding the post-workshop activities, Dr. Abel Atiti asked members what they thought should be the future activities to be pursued. Prof. Tabucanon said that since the comprehensive framework had been provided, its current form aims for breadth at the expense of depth hence it would be good to go deeper to look into specific cases. Adding to this point, Dr Didham talked about the appropriateness of potential indicator sets that can be used at different levels. This is because in addition to what he and his team are doing at the regional level, there is more depth and hence increase in relevance at the local level. Consequently, it would be more interesting to have different means of reporting on the different aspects of the indicators.

Prof. Nagata reiterated the importance of the workshop by saying the two sub-regions could learn from each other by sharing ideas garnered from this workshop and the impending one for Southeast Asia to. Dr. Atiti briefly touched on the continuation of the scoping exercise of the research involving Southeast Asia through survey and a workshop to follow in two months' time as well as an expert consultation workshop down the line to review the development of an indicator set. He commended the RCEs that are attempting situated evaluation of their practices and suggested they publish the case studies to reach a wider audience.

The closing address was given by the Chair of the Board of Directors of IGES, Prof. Hironori Hamanaka. He thanked the participants for the rich contributions they made to the deliberations. He also thanked the participating organisations. He reiterated the importance of ESD and the urgency to monitor and evaluate the progress of ESD implementation. He said that ESD remains an important topic beyond 2014 if we want to produce future leaders equipped with whole education (knowledge, skills, and values, etc.) to respond to the rising challenges that humanity faces in constructive and creative ways. And to achieve that, the development of effective indicators for ESD M&E will remain a pressing challenge if we are to truly reflect on the achievement of ESD and also to consider what improvements to make for the future.

Finally, Dr. Didham thanked the participants for their attendance and their rich contributions which constitute an important part of the on-going research process.

SUMMARY OF WORKSHOP

NORTHEAST ASIA REPORTING AND CAPACITY BUILDING WORKSHOP ON MONITORING & EVALUATION OF ESD

ORGANISED BY UNU-IAS AND IGES
20 FEBRUARY 2012, at UNU-IAS, YOKOHAMA, JAPAN

SUMMARY PREPARED AND PRESENTED BY:
PROF. MARIO TABUCANON

INTRODUCTION AND BACKGROUND

Messages

Strong messages of support for the project from the key partner organizations:

- ✘ IGES (Opportunity to share experiences)
- ✘ UNU-IAS (Int. Implementation Scheme; strengthen ESD implementation)
- ✘ UNESCO (EFA+ESD; UNESCO supportive of M&E process)

Research Overview

Research Aim

To establish regionally-relevant indicators of ESD to assess UNDESD implementation in Asia-Pacific

Process

Multi-country scoping process (NE & later SE Asia)

Scoping

- ✘ Quantitative country survey – National ESD focal points
- ✘ Qualitative research through case studies – RCEs in country

SESSION: RCE PRESENTATIONS

RCE Chubu

Characteristics of the Chubu Area with unique environment:

- ✘ Natural Environment – mountains, rivers, bay
- ✘ Social – urbanization, depopulation, multi-cultural
- ✘ Economic – manufacturing, commerce, agriculture & forestry

RCE CHUBU, ctd.

- ✘ CBD COP10 in October 2010
- ✘ Biodiversity Cyber Dialogue Project using Social Networking Service to provide a worldwide overview of the diversity of ideas about biodiversity.
- ✘ The Project focuses on Non-formal and Informal education, which serves us cross boundary and multi-sectoral learning on biodiversity conservation.
- ✘ **Challenges**
 - RCE participation
 - SNS system and language barrier
 - Forming consensus building system

RCE Beijing

Vision:

To build capacity to deliver, support and generate innovative education for sustainable development (ESD) in Beijing. This will be achieved by working with stakeholders and by developing a coordinated communication and dissemination framework for regional ESD projects and programs.

RCE BEIJING, ctd.

✦ Objectives:

- Training for In-service teachers
- Environmental education research
- Schools & their sustainable programs
- Curriculum about SD for schools
- Outdoor environmental education
- Coordination of existing activities, partnerships and networks

RCE Kitakyushu

- ✦ **Vision:** To integrate the perspectives of sustainability into all types of education and citizen's activities to realize a just and sustainable society based on the full understanding and the collaboration of citizens.
- ✦ **ESD learning process:** feel; study & think; take actions; network & link to take actions; spread; and share (in the context of multi-themes, varieties of education and learning opportunities)

RCE KITAKYUSHU, ctd.

ESD Initiative:

Strengthen the capacity and network of communities

Success factors:

- ✘ Active multi-stakeholders
- ✘ Motivated citizens
- ✘ Leaders who brought multi-stakeholders together
- ✘ Support of the local government/mayor

RCE KITAKYUSHU, ctd.

Challenges/Barriers:

- ✘ development of innovative methods to promote mutual learning and teaching avoiding top-down manner
- ✘ secured human and financial resources
- ✘ capacity building of members and secretariat

RCE Tongyeong

- ✘ **Mission:** Individual growth & sharing; capacity building of education institutions; from local to global – enriching grass root resources
- ✘ Youth Global Challenge Program – *Bridge to the World*
- ✘ RCE Eco Park & ESD Centre
- ✘ Sejahtra Project of Asia-Pacific RCEs.

RCE TONGYEONG, ctd.

ESD Factors:

- ✘ Multi-stakeholder participation
- ✘ Promoting sustainable development
- ✘ Partnership with global network
- ✘ Feedback to the local society

RCE Okayama

- ✘ **Okayama ESD project (Vision)** – Making a sustainable society through diverse networks
- ✘ *The purpose is to develop community to learn, think and act with each other for SD*
- ✘ In order to achieve the purpose, there is a need to:
 - Promote ESD by approaching regional issues in Okayama
 - Widen circles of people who work on ESD
 - Contribute to promote the United Nations' Decade of ESD through collaboration with people in/ around Okayama

RCE OKAYAMA, ctd.

- ✘ End-of- DESD conference
- ✘ ESD Café
- ✘ Challenges – Fujita, Kyoyama, NPO Green Partner
- ✘ Collaboration with university
- ✘ Exchange camp of elementary school pupils
- ✘ Collaboration on Waste Management (with Indonesian institutions; RCE Bogor)

SESSION: NATIONAL ESD SURVEYS

Comparative ESD Implementations – China, Japan and Korea

- × **National mandates** – all have clear policy mandates
- × Each has **clearly defined goals** for ESD; however mandate & actual implementation do not always fully matched (Japan has inter-ministerial cooperation on ESD)
- × **Formal education** -There are no practice standards or auditing mechanisms for ESD teaching in these countries (China has progressive learning objective for ESD curriculum; Korea has most holistic approach)

COMPARATIVE ESD IMPLEMENTATIONS, ctd.

- × **Non-Formal Education** – Min. of Environment, local governments engaged mostly in awareness raising
- × **Teacher training** – Only some Teacher Education institutes include ESD (Korea provides strong support for in-service teacher training)
- × RCEs and UNESCO ASPnet Schools provide good practice opportunities
- × **Civil society and NGOs** – Received strong support on ESD from civil society
- × **Private sector** –Providing in-service training for their professionals on environmental management and sustainable production (China & Korea have examples of govt. partnering with private sector)

COMPARATIVE ESD IMPLEMENTATIONS, ctd.

Areas of Difficulty for M&E

- ✘ **Budget for ESD** –difficult to get substantive information
- ✘ **Learning methodologies and pedagogies** for ESD – difficult to relate integration into education system
- ✘ No method to **link causation (or correlation)** between ESD implementation and changes in students' attitude and behavior
- ✘ Lack of available **ESD teaching material**
- ✘ ESD not well **integrated with educational policies** and strategies

Research on National ESD Indicators – Republic of Korea

- ✘ Reflective of needs of country to better serve original mission of ESD
- ✘ **Indicator categories:** Contents; Praxis; Outcomes
- ✘ **Contents/Praxis:** Based on Social justice, Economic co-prosperity, Environmental responsibility
- ✘ **Main challenge:** Categorizing contents and avoiding overlap

KOREA NATIONAL ESD INDICATORS, ctd.

Findings and Recommendations

- × **SD policies** in most cases only arise from perceived problems; ESD should go beyond fixing existing problems
- × ESD can be at its best when it can teach individuals and/or groups to discern opportunities from constraints
- × **The goal of ESD** should include environmental literacy, critical evaluation skills, and intercultural communication methods that provide substance to the sustainability rhetoric and generate cooperation across borders. Such a goal is expected to provide future direction of ESD and further refinement of ESD assessment indicators.

SESSION: CAPACITY ASSESSMENT ON M&E OF ESD STATUS

Evaluation Framework

- × Capacity assessment approach to M&E to identify system capacities
- × **Target users:** National governments and policy makers
- × **Sectorial:** National Curriculum; Formal Education; Teacher Training; Non-Formal Education; Community & Civil Society; Private Sectors
- × **System Levers:** Input Capacities; Throughput Capacities; Output Capacities
- × **Indicators:** Status Indicators (Inputs); Facilitative (Throughputs); Effect Indicators (Outputs)

SECTORS	Sub-Sectors	Status Indicators (Input Capacities)	Facilitative Indicators (Throughput Capacities)	Effect Indicators (Output Capacities)	Sectorial Assessment
		- Institutional Arrangements - Policy Mandates - Resource Capacities	- Leadership - Knowledge - Educational Pedagogies and Methodologies	- Accountability - Learning Performance/Impact - Value and Behaviour Change	
National Curriculum (agent: National Government)	Leverage Points				
	Barriers				
	Indicators				Score/rank?
Formal Education (agent: school boards, schools, classrooms)	Leverage Points				
	Barriers				
	Indicators				Score/rank?
Teacher Training (agent: teacher training institutes)	Leverage Points				
	Barriers				
	Indicators				Score/rank?
Non-Formal Education	Leverage Points				
	Barriers				
	Indicators				Score/rank?
Community & Civil Society	Leverage Points				
	Barriers				
	Indicators				Score/rank?
Private Sectors	Leverage Points				
	Barriers				
	Indicators				Score/rank?
Indicator Assessment		Inputs Score/rank?	Throughputs Score/rank?	Outputs Score/rank?	

CAPACITY ASSESSMENT, ctd.

Review Criteria for Refining Indicator Set:

- Is it clearly defined, reportable and replicable?
- Can the data be easily obtained without professional/scientific measurements?
- Is the indicator measurable and will the data actually express a value of some type?
- Does it measure something useful and relevant and will people (i.e. government officers & educators) care about this?
- Will it lead for comparability between countries?
- Does a change in this indicator suggest a course of action?

*****Group Work**

SESSION: CAPACITY BUILDING

Addressing the effectiveness of ESD Learning Performance

Emphasis: Capacity Building; Learning; Competence Development

Elements:

Learning Processes –

Progressive Pedagogies; &
Cooperative Learning Relationships

Educational Contents –

Sustainability Competencies; &
Framework of Understanding & World View

***** Group Work**

SESSION: PANEL DISCUSSION

Questions:

- 1) What knowledge would support governments in strengthening ESD implementation?
- 2) What should M&E of ESD identify to allow for government interventions?

- ✘ Needs-based knowledge; ESD help government raise funds – e.g. Low-carbon; ESD to increase competition capacity; Govt. challenges – equity, social justice, etc.
- ✘ Identify unreached goals; provide best practice; ESD values to satisfy govt. interest
- ✘ Statistics; indexing; curriculum indicators could lead to strengthened ESD implementation
- ✘ Absence of govt. laws/regulations in-between the sustainability summit (social/environmental justice and schools levels); challenge hierarchical nature of education systems, to be bottom up
- ✘ ESD to be streamlined as main focus of educ. systems; govt. to learn what ESD is; identify entry point (e.g. SE in Thailand and GNH in Bhutan); embrace indigenous knowledge – balance conflict

OPEN DISCUSSION & QUESTIONS TO PANELLISTS

- ✘ Enlightened governmental bureaucracy since they have been reluctant to change
- ✘ Vertical alignment of education systems
- ✘ Change in admission system
- ✘ Curriculum reform
- ✘ Role of mass media
- ✘ Systems thinking

SOME OBSERVATIONS

Assessment Framework (including ESD learning)

- ✘ Comprehensive; Holistic; Analytical; Easy to use

National ESD Survey

- ✘ Clear national ESD for all; differences in implementation and in priorities

Good Practice Cases

- ✘ Wide collaboration; Diverse participation
- ✘ Community & civil society engagement
- ✘ School engagement
- ✘ Engagement of higher education institutions

Thank you

Northeast Asia Reporting and Capacity Building Workshop on Monitoring & Evaluation of Education for Sustainable Development

Organised by UNU-IAS and IGES

CLOSING ADDRESS

By Prof. Hironori Hamanaka
Chairman of the Board, IGES

Dear Participants,

It has been a great pleasure to have the opportunity to participate in this “Northeast Asia Reporting and Capacity Building Workshop on Monitoring & Evaluation of Education for Sustainable Development”. There has been a wealth of valuable presentations and exchanges, and I am very happy to see so much expertise developing around this important topic. Education for Sustainable Development remains an important topic, not only in the present but also in the future beyond the end of the Decade of ESD, if we want to educate the leaders of future to be equipped to properly respond to the arising challenges that humanity faces in both a constructive and creative way. Monitoring and Evaluation of ESD and the development of effective Indicators of ESD remain a pressing challenge for this field if we are to be able to truly reflect on the achievements of this Decade of ESD and to consider what improvements should be made for the future decade. Already we see many great achievements, but without a systematic approach to monitoring and evaluation, it is difficult to plan truly effective interventions and to develop a progressive vision for ESD. This workshop serves as a major step in the right direction for achieving this goal.

I would like to express my sincerest gratitude to all of the participants for the valuable insights and expertise they have brought to this workshop. Without your cooperation, this research process would not be a success.

I would like to specifically thank Mr. Takemoto and Ms. Vanhala for providing the keynote introductions to this workshop, to Prof. Tabucanon for chairing this session and his in-depth summary, and finally to UNU-IAS as a whole for hosting this important workshop.

