

**Proceedings of Regional Workshop:**

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# **ASEAN+3 POLICY DIALOGUES ON EDUCATION FOR SUSTAINABLE DEVELOPMENT**

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3-4 December 2009  
Auditorium, UNESCO Building, Bangkok, Thailand



Co-organised by:

**Institute for Global Environmental Strategies**

**United Nations Educational, Scientific and Cultural Organization**

**United Nations Environment Programme**

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## BACKGROUND OF REGIONAL WORKSHOP

### ASEAN+3 POLICY DIALOGUES ON EDUCATION FOR SUSTAINABLE DEVELOPMENT

*Centred on "Modelling ESD programmes for Sustainable Livelihoods"*

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#### **Rationale**

Substantial attention has been paid to Education for Sustainable Development (ESD) in the formal education sector during the first half of the UN Decade of Education for Sustainable Development (2005-2014) both in policy and in practice. At the same time, much less research and investigation has addressed the cross-sector deployment of ESD within the area of community practice. The importance of this "informal" area of ESD is clearly stated in international policy.

As part of the Decade of Education for Sustainable Development, UNESCO has identified these key characteristics of ESD: 1) Builds civil capacity for community-based decision-making, social tolerance, environmental stewardship, adaptable work force and quality of life, 2) Participatory decision-making, 3) Local relevancy. Nonetheless, the application of ESD as an informal component of building communities of practice is rarely undertaken and is overlooked in the majority of research concerning ESD.

Achievement of sustainable development is effected by a plethora of diverse and coexisting factors, including: poverty, livelihood security, resource consumption, environmental degradation, climate change mitigation, and not least of all the need for further education regarding all of these issues. Capacity Development can play a crucial role in simultaneously addressing these multiple factors. More importantly, local-level capacity development aids the establishment of sustainable livelihoods and contextualises issues of sustainable development in the everyday practices of ordinary people. This provides a unique role for Sustainable Livelihoods initiatives to be linked with ESD because it opens an arena of practical, real-world learning and facilitates participation in community-based decision-making. However, for this to occur, ESD programmes must be established within the community so people can understand the pressing need for such activity and be empowered to act for positive social change.

It therefore would be a great opportunity to bring together ESD policy decision-makers, practitioners and researchers to discuss and explore the interchange between ESD, Communities of Practice and Sustainable Livelihood initiatives. From the workshop, we can gain deeper understanding of how to strengthen local-level practice of sustainable development and climate change mitigation through the application of ESD models, especially about how government plays a critical role in expanding ESD to wider livelihood and community development programmes. We also expect that this workshop can contribute to broadening the scope for ESD by demonstrating an important interchange with work to build communities of practice, both in fact and methodologically.

### **Workshop Aims**

The major aims of the regional workshop on Education for Sustainable Development (ESD) in Southeast Asia are:

- Providing an opportunity for ESD policy decision-makers to exchange productive dialogues and status reports on ESD policy and implementation in ASEAN+3 countries;
- Sharing knowledge of practitioners on implementing community-based ESD activities to strengthen Sustainable Livelihoods, and;
- Supporting future ESD policies and programmes to strengthen local-level practice of sustainable development.

### **Targeted Invitees**

- *Governmental officers* responsible for ESD policy at a national level,;
- *Practitioners* who have been implementing ESD, especially concerning community-based programmes and connected to Sustainable Livelihood initiatives, and;
- *Experts* in ESD practice including university/institute researchers at a national/international level.

### **Date**

3-4 December, 2009

### **Location & Venue**

Auditorium, UNESCO Building, Bangkok, Thailand

## KEY MESSAGES OF WORKSHOP

The Regional Workshop on ASEAN+3 Policy Dialogues on Education for Sustainable Development was held at the UNESCO building in Bangkok, Thailand on the 3<sup>rd</sup> and 4<sup>th</sup> of December, 2009. The workshop brought together governmental officers, experts and academics in the field of ESD, and community practitioners for a series of stimulating and productive dialogues on the current status of ESD throughout East Asia and on specific means for improving its implementation and efficacy. The workshop was attended by a total of 42 participants, and during the two days the participants explored twenty presentations in total. The ensuing discussions were both diverse and in-depth. During the policy dialogues, participants debated on ways to better conceptualise “education for sustainable development”, means to advance ESD both in policy and implementation, mechanisms for strengthening educational practices in non-formal sectors through ESD, and the possibilities for linking ESD with community capacity building and sustainable livelihood approaches.

The workshop examined four key sectors for improving and advancing the practice of Education for Sustainable Development. First, from the perspective of leading international agencies, the achievements of the first half of the UN Decade on ESD (UN-DESD, 2005-2014) were discussed. The progressive focus for DESD in the next five years was also elaborated, and it was explained how direct connections are being drawn between ESD and the practice of poverty alleviation, climate change adaptation, and post-disaster redevelopment. Second, reporting on the current progress on the ASEAN Environmental Education Action Plan (AEEAP) 2008-2012 was investigated across the present member countries. In addition, reports were provided from the +3 members on the status of ESD in policy and practice in these countries. Moving beyond reporting on current status, the policy dialogues took a strong focus on opportunities and challenges for the advancement of ESD in each country. Third, the participants explored the potential for application of ESD in non-formal sectors with the primary consideration of how ESD can serve as a community capacity building tool and aid in strengthening sustainable livelihood approaches. Fourth, the panel discussion and the conclusive session addressed practical means for advancing the current application of ESD policy and its implementation.

Substantial discussion focussed on how ESD can be improved in formal education. This is an area in which much existing good practice was shared, and from this a clear framework was promoted. ESD should be viewed as a tool for educational reform and should be directly connected with the development of a whole school approach. In this model, ESD is not a specific topic or subject of teaching, rather it is a thematic method for providing integration across the entire curriculum. The issue of curriculum reform must consider both how to develop locally based learning opportunities while at the same time ensuring a national consistency. Several objectives for the whole school approach were detailed:

- Maintenance of the school campus should be green and ecological;
- Opportunities for students to develop inquiry-based learning should be advanced;
- Students should be encouraged to become environmental advocates and sustainability leaders in their communities;

- Field based learning should be promoted, but also directly connected to structured learning of sustainable development and ecological principles in-class.
- Projects and learning opportunities should be developed to incorporate investigation across diverse disciplines.
- Active communication, participation, and knowledge sharing should be encouraged as important tools of learning.
- Capacity development is needed for both educators and administrators to understand the value and purpose of this process.

The workshop provided for significant discourse on the expansion of ESD in non-formal education sectors. It was well agreed that one of the major challenges in SE Asia for securing sustainable development is achieving full-scale poverty alleviation, and furthermore the importance of education to support this was well cited. It was within this theme that the idea for developing ESD as a tool to strengthen sustainable livelihood approaches was creatively expounded. One of the key efforts for this process must be to advance common methodologies that can respond to local contexts and accommodate diversity. The process of ESD for Sustainable Livelihoods should be grounded in participatory action learning, with communities learning through their doing, and in securing more direct access to/management of local resources and environmental conservation. The goal of this process should aim at establishing resilient livelihood assets/support systems that communities have the knowledge and skills to wisely manage and conserve.

In the final session of the workshop, participants discussed several means for promoting better knowledge sharing and to ensure better regional cooperation. First and foremost, countries need to undergo internally a clear mapping of the existing capacities for supporting ESD and then develop clear strategies for integrating these diverse aspects. This was highlighted due to a concern that though there has been substantial 'ESD-related' action, it remains disconnected and lacks any cohesive strategy. Second, clear mechanisms for distinguishing appropriate information and policy based on situational contexts must be developed to support the more effective sharing of good practice. Third, better tools for supporting implementation and practice of ESD should be developed. Fourth, efforts should be made to secure more communication across the region and further opportunities for regular networking should be provided for.



**ASEAN + 3 POLICY DIALOGUES ON  
EDUCATION FOR SUSTAINABLE DEVELOPMENT**



## Workshop Agenda

### ASEAN+ 3 Policy Dialogues on Education for Sustainable Development: Centred on Implementing ESD Programmes for Sustainable Livelihoods

3 - 4 December, 2009  
Auditorium, UNESCO Building, Bangkok, Thailand

<b>Day 1 – Thursday, 3 December, 2009</b> <i>= Promotion of ESD for Sustainable Livelihoods in Policy =</i>			
<b>9:30 - 10:00</b>	<b>Registration</b>		
<b>Opening Session</b>	<b>Chairman: UNESCO – Mr. Derek Elias and Mr. Mikko Cantell</b>		
10:00 – 10:20	Welcome Remarks	UNESCO, Dr. Gwang-Jo Kim	5 min.
		UNEP, Mr. Mahesh Pradhan	5 min.
	Key Remarks: Workshop objectives & its scope	IGES, Dr. Mee Young Choi	10 min.
<b>10:20 – 10:30</b>	<b>Group Photo</b>		
<b>10:30 – 10:40</b>	<b>Coffee Break</b>		
<b>Session 1</b>	<b>Chairman: IGES – Dr. Mee Young Choi</b>		
Regional ESD Policy and Its Strategy  10:40 – 12:20	Introduction of the participants		35 min.
	UNESCO	Mr. Mikko Cantell	15 min.
	UNEP	Ms. Seon-Mi Choi	15 min.
	SEAMEO- RCESM	Mr. Julito Aligaen	15 min.
	Q & A		20 min.
<b>12:20 - 13:20</b>	<b>Lunch</b>		
<b>Session 2</b>	<b>Chairman: WWF – Dr. William Schaedla</b>		
National ESD Policy and Strategy – ASEAN Group 1  13: 20 - 14:40	Brunei Darussalam	Ministry of Education, Ms. Sarimah Abu Bakar	15 min.
	Philippines	Environmental Management Bureau, DENR, Ms. Cristina A. Francisco	15 min.
	Singapore	National Environment Agency, Mr. Meng Hiong Ng	15 min.
	Indonesia	Ministry of Environment , Mr. Sasmita Nugroho	15 min.
	Q & A		20 min.
<b>14: 40 -14: 50</b>	<b>Coffee Break</b>		
<b>Session 3</b>	<b>Chairman: The Japan Foundation - Mr. Katsumi Kakazu</b>		
National ESD Policy and Strategy – ASEAN Group 2  14:50 - 15:55	Thailand	Ministry of Natural Resources and Environment, Ms. Savitree Srisuk	15 min.
	Lao PDR	Department of Environment, Ms. Phouangmalay Sorvalith	15 min.
	Malaysia	Ministry of Natural Resources and Environment, Ms. Hajah Husien	15 min.
	Q & A		20 min.
<b>Session 4</b>	<b>Chairman: Thai Education Foundation – Mr. Marut Jatiket</b>		
National ESD Policy and Strategy – North-East Asia Group  15:55 – 17:00	China	Ministry of Environmental Protection, Ms. Yang Ke	15 min.
	Republic of Korea	Presidential Committee on Green Growth, Mr. Je-Chul Yoo	15 min.
	Japan	Ministry of Environment , Mr. Teruo Kogu	15 min.
	Q & A		20 min.
17:00 – 17:10	Day1 Closing & A Brief Guidance of Day-2	IGES, Dr. Mee Young Choi	10 min.
<b>19:00-21:00</b>	<b>Welcoming Dinner</b>		

<b>Day 2 – Friday, 4 December, 2009</b> = Good Practice on ESD for Sustainable Livelihoods =			
<b>Session 5</b>		<b>Chairman: UNEP – Mr. Mahesh Pradhan</b>	
Modelling ESD Programmes to Strengthen Sustainable Livelihoods:  9:30 – 11:00	Introduction of Day-2	IGES, Dr. Mee Young Choi	5 min.
	Strengthening Sustainable Livelihood through ESD Initiatives	IGES, Dr. Robert J. Didham	15 min.
	Good Practice on Education for ESD	Chiang Mai University, Prof. Prasarn Tangsikabuth	15 min.
	Community Based Tourism and ESD	Thailand Community Based Tourism Institute, Ms. Potjana Suansri and Mr. Peter Richards	15 min.
	ESD Practice in Thailand	WWF, Mr. Bhuvadol Namdokmai	15 min.
	Q & A		25 min.
<b>11: 00 -11: 15</b>		<b>Coffee Break</b>	
<b>Session 6</b>		<b>Chairman: UNU – Prof. Mario Tabucanon</b>	
<b>Conclusive Session</b>  11:15 - 13:00	Panel Discussion on Day 1 and Day 2 Dialogues	Japan Foundation, Mr. Wathana Onpanich	5min.
		Prem Tinsulanonda Center for Interational Education, Ms. Lynda Rolph	5min.
		Chulalongkorn University, Mr. Athapol Anunthavorasakul	5min.
		Beijing Normal University, Dr. Qing Tian	5min.
		Ministry of Natural Resources and Environment, Ms. Nantawan Lourith	5min.
		Ministry of Education, Ms. NuanPan Pulsrisawat	5 min.
		Q & A	15 min.
	Conclusive Discussion	1) Follow-up Discussion on ESD Policy Survey: What are the opportunities for advancing ESD Policy in ASEAN +3?	25 min.
		2) How do we strengthen ESD implementation in ASEAN + 3?	25 min.
	Closing Remarks	IGES, Dr. Mee Young Choi	10 min.
<b>13:00 - 14: 00</b>		<b>Closing Reception and Lunch</b>	

**WELCOME REMARKS FOR REGIONAL WORKSHOP:  
ASEAN+ 3 Policy Dialogues on Education for Sustainable Development**

***Dr. Gwang-Jo Kim***

Director

UNESCO Regional Bureau for Education, Bangkok

Dear Colleagues from UNESCO Member States, NGOs and research institutes,

Dear colleagues from IGES and UNEP, a special thank you for organizing this event with us in the spirit of genuine collaboration for the benefit of the aims of the Decade of ESD spanning the years 2005-2014.

Welcome to UNESCO. It is an honor to give welcoming remarks to a set of distinguished experts in the field of sustainable development. Since its inception, UNESCO has stood for and depended on the intellectual capacity of committed people like yourselves whose primary motive is to find ways to promote sound development, human security and peace. I wish to thank you in advance for your valuable contribution to the advancement and concretization of ESD over the next day and a half.

In my opinion, ESD is left hollow if it is not tied closely to a context. Because ESD is a broad concept and a wide endeavor, possible contexts come in very different shapes and forms. For this reason, I have personally been engaged in a close dialogue with the ESD unit leading UNESCO's regional efforts in the decade of ESD. The results are a focused, strategic approach to coordination and collaboration. I would emphasize the latter, collaboration. UNESCO cannot – and indeed by definition should not – do everything by itself. Partnerships like the one coming together in this room today are one of the central elements in carrying the messages of the Decade forward.

When you embark on discussions over the course of the workshop, I encourage you to take into account the capacities and potential of UNESCO's different entities. These include, of course, the network of National Commissions in each Member State, which is a unique interface between government and the UN system that UNESCO is deservedly rather proud of. Importantly, UNESCO's efforts in the Asia-Pacific can also be complemented by UNESCO Category 2 centres for rural education in China (INRULED), on education for international understanding in the Republic of Korea (APCEIU), and on Lifelong Learning and Sustainable Development in the Philippines (SEACLLSD). In addition, although outside the geographic scope of ASEAN +3, the newly established category 1 institution on peace education and sustainable development in India could be taken into account as a potential future partner in some of the planned strategic action following this workshop.

The discussions today and tomorrow will be funneled through several lead questions set forth by the organizers. As I mentioned, I believe ESD must be carefully placed in a context for maximum impact.

One of the key contexts for sustainable development is the local one – this is where the difference between sustainable and unsustainable is made, and we must stand ready to fully support local capacities to deliver for sustainability.

Supporting human development is not possible without giving due attention to where and how people can earn a living. In the absence of such deliberation we can make beautiful plans for the future; but these plans remain much like projects without budgets. As you well know, such projects are called “dreams”. It is then very important to stress the validity of the end goal, a sound project and then identify the means to do it. For as we also know, a budget without a project is a “nightmare”.

The “budget” for ESD is there. We have plenty of commitment from Member States and pledges to move forward at the hint of concrete and concerted action. Almost everyone today is aware in one way or another of the many challenges we face on the way to a more sustainable development. We nevertheless need to focus and refocus on delivery, on coordination and on follow up for sustainability of our own actions.

I am therefore pleased that the topic chosen for this subregional meeting is sustainable livelihoods. It links development with poverty reduction which in the context of the Asia-Pacific is a critical element of sustainable development. Despite the region’s impressive economic growth, Asia-Pacific is home to two thirds of the world’s poor. Southeast Asia, reinforced with three East Asian Member States, China, Japan and Republic of Korea, will play a major role in pulling the whole region out from the scourge of poverty.

I do not wish to make many requests to you who are experts in the field of this workshop. I will, however, encourage you to strike a healthy balance between concrete activities as illustrative and inspirational examples, and between Member State interventions at government level. What are ministers of education wise to do now to change or reform the current policies for sustainable development for all? I am happy to be able to say that this is precisely what the background papers and agenda promise to do. One of the expected results reads that you will discuss supporting future ESD policies to strengthen local-level practice of sustainable development and climate change mitigation. This is indeed the level where UNESCO may be able to make the most important contribution with the help of partners. How can they best reach the unreached and provide spaces for them to fulfill their potential.

Dear Colleagues, I am looking forward to hearing of the results and agreed follow-up action after a successfully conducted workshop. Thank you.



## **WELCOME REMARKS FOR REGIONAL WORKSHOP: ASEAN+ 3 Policy Dialogues on Education for Sustainable Development**

***Mr. Mahesh Pradhan***

Director

UNEP – Regional Resource Centre for Asia and the Pacific, Bangkok

Welcome colleagues from ASEAN+3 governments, NGOs and research institutes,

I would like to extend a special thank you to IGES, Dr. Mee Young CHOI and Dr. Robert Didham, and to UNESCO, Dr. Gwang-Jo Kim and Mr. Mikko Cantell, for organizing this event and for extending the opportunity for UNEP's collaboration.

I would also like to take this opportunity to extend a warm welcome from the UNEP Regional Director Dr. Young-Woo Park who expressed his wish to participate in this workshop but has other urgent obligations. On his behalf, I extend hopes for a successful workshop.

I am very glad to have the opportunity to participate in this workshop and to receive the chance to collaborate with experts from across ASEAN+3 on these important policy dialogues on Education for Sustainable Development. UNEP views ESD as a priority issue for achieving sustainable development and desires to actively participate in advancing this important topic. This workshop provides a perfect venue to advance policy dialogues on ESD, to review current progress on the ASEAN Environmental Education Action Plan (AEEAP), and to consider how we can take this forward.

From next Monday, eyes around the world will be turned on Copenhagen with hopes of sealing a deal on carbon reductions. There has been some scepticism regarding the possible achievements to be made at COP 15, but of recent there is much to hope for. The message from the US and China are much stronger now, while Japan and Korea have set forth very ambitious targets. Countries are ready to see how we can make this happen and how we will achieve drastic carbon reductions. Even if COP 15 achieves very ambitious targets, education on climate change and sustainable development will remain an extremely important factor for achieving the necessary social change to transition towards low-carbon society.

I am very pleased to see that this workshop will not only address a broad perspective on policy and implementation of ESD, but in the second day it will also take a focussed look at practical opportunities for ESD to strengthen Sustainable Livelihoods. Because livelihoods directly address concerns of poverty alleviation, this is a very important issue for the achievement of lasting sustainable development. At UNEP we have prioritised a focus on Climate Change, and now we are

not only looking at aspects of mitigation but also considering issues of adaptation. UNEP is very interested in building a programme of education for Climate Change adaptation, which I feel directly connects with the concerns of this workshop as it will be the poorest who are most affected by Climate Change.

We must also look into the future. The year 2012 will be extremely important when the 20 year follow up talks to the Rio Summit are held. These talks will likely look at developing a new global architecture and provide the foundations for a society modelled on the principles of sustainable development. But education still remains crucial, if we are to support the next generation and prepare them for the noble challenge they will face, then we must provide them with the tools and knowledge now.

I am looking forward to a successful workshop and rewarding dialogues. Thank you.

## KEY REMARKS: WORKSHOP OBJECTIVES AND SCOPE

***Dr. Mee Young Choi***

Project Manager/Senior Policy Researcher  
Capacity Development and Education Project  
Institute for Global Environmental Strategies (IGES), Japan

My distinguished guests and participants,

First of all, I would like to convey my heartfelt appreciation to everyone for their attendance and participation in this workshop in spite of your own busy working schedules.

I also would like to express my big thanks to the Director of UNESCO Bangkok, Dr. Gwang-Jo Kim, and the Director of UNEP-Regional Resource Centre for Asia and the Pacific, Mr. Mahesh Pradhan, for taking the time to give welcoming remarks.

I would like to extend my deep appreciation to UNESCO, UNEP and UNU for supporting the Institute for Global Environmental Strategies (IGES). In particular, my deepest gratitude goes to Professor Mario Tabucanon, Mr. Mikko Cantell and Ms. Seon-Mi Choi from UNU, UNESCO and UNEP respectively. Without their constant and kind help, IGES could not be able to make today's workshop in success with such distinguished guests and participants as yourselves.

Education for All (EFA), UNESCO recently stresses that "enabling people to free themselves from poverty and to build sustainable livelihood is both a key role for education and a prerequisite for sustainable development". UNEP also emphasises that "the global community cannot turn its back on the poor and the vulnerable", especially those exposed to poor economic and environmental conditions. In this regards, Education for Sustainable (ESD) can bring a synergy effect by crossing over issues amongst three arenas such as education, poverty and environment. EFA's limitation is that it is basically concerned with formal education only. MDGs also cannot be achieved without education and international cooperation because of environmental problems which have impacts for a wide-range of regions and countries. Whilst, ESD covers diverse educational sectors including formal, informal and non-formal education with a wide-range of targeted population which are interested in poverty and environmental issues.

To contribute to these international concerns on education, poverty and environment, the major aims of today's regional workshop are:

- Providing an opportunity for ESD policy decision-makers to exchange productive dialogues and status reports on ESD policy and implementation in ASEAN+3 countries;

- Sharing knowledge of practitioners on implementing community-based ESD activities to strengthen Sustainable Livelihoods, and;
- Supporting future ESD policies and programmes to strengthen local-level practice of sustainable development.

From the workshop, we are expecting to:

- Report on current status of ESD policy and implementation in ASEAN+3 countries;
- Identification of good practice for implementing community-based ESD activities to strengthen Sustainable Livelihoods, and;
- Policy recommendations for establishing ESD programmes to support community practice for sustainable development.

I sincerely hope that each of you can find benefits from this workshop. Once again, I would like to acknowledge all of the distinguished guests and participants of today's workshop, and please let me conclude my speech with a quote from Bonn Declaration to emphasise the importance of ESD in helping vulnerable people to improve their quality of life and let them participate in building a sustainable society:

“Investment in ESD is an investment in the future, and can be a life-saving measure, especially in post-conflict and least developed countries (Article 3, Bonn Declaration, 2009)”

Thank you very much for your attention.



## SUMMARY OF SESSION DIALOGUES AND PRESENTATIONS

3-4 December 2009

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### **SESSION 1: REGIONAL “EDUCATION FOR SUSTAINABLE DEVELOPMENT” POLICY AND ITS STRATEGY**

- *UNESCO Regional ESD Policy and Strategy*
- *UNEP/UNDP Poverty Environment Initiative (PEI) for the Asia-Pacific Region*
- *Education for Sustainable Development – On the Way Forward: Schools and Community Engagement for Sustainable Development*

### **SESSION 2: NATIONAL ESD POLICY AND STRATEGY – ASEAN GROUP 1**

- *Education for Sustainable Development (ESD): Implementation – Progress in Brunei Darussalam*
- *Philippines: National Policy on Education for Sustainable Development and its Implementation*
- *Education for Sustainable Development in Singapore*
- *Indonesia: National Policy on Education for Sustainable Development and its Implementation*

### **SESSION 3: NATIONAL ESD POLICY AND STRATEGY – ASEAN GROUP 2**

- *Thailand: National Policy on Education for Sustainable Development, and its implementation*
- *Lao PDR: National Policy on Education for Sustainable Development*
- *Malaysia: National Policy on Education for Sustainable Development, and its implementation*

### **SESSION 4: NATIONAL ESD POLICY AND STRATEGY – NORTH-EAST ASIA GROUP**

- *EE and ESD Policies and Cases in China*
- *Korea: Education for Green Growth*
- *Japan’s National Policy on ESD and Its Implementation*

### **SESSION 5: MODELLING ESD PROGRAMMES TO STRENGTHEN SUSTAINABLE LIVELIHOODS**

- *Strengthening Sustainable Livelihoods through ESD Initiatives*
- *Eco-School: Education for sustainable development project*
- *Community Based Tourism and Education for Sustainable Development*
- *WWF Greater Mekong Thailand Country Programme: Modelling ESD Programmes to Strengthen Sustainable Livelihoods*

### **SESSION 6: CONCLUSIVE SESSION**

- *Follow-up Discussion on ESD Policy Survey: What are the opportunities for advancing ESD Policy in ASEAN +3?*
- *How do we strengthen ESD implementation in ASEAN + 3?*

## SESSION 1

3<sup>RD</sup> DECEMBER 2009, 10:40-12:20

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### REGIONAL “EDUCATION FOR SUSTAINABLE DEVELOPMENT” POLICY AND ITS STRATEGY

**Chairman:** Dr. Mee Young Choi, IGES

*UNESCO Regional ESD Policy and Strategy*

Presentation, UNESCO-Bangkok, Mr. Mikko Cantell

*UNEP/UNDP Poverty Environment Initiative (PEI) for the Asia-Pacific Region*

Presentation, UNEP-Bangkok, Ms. Seon-Mi Choi

*Education for Sustainable Development – On the Way Forward:*

*Schools and Community Engagement for Sustainable Development*

Presentation, SEAMO RECSAM, Mr. Julito C. Aligaen

Dr. Mee Young Choi began by explaining the purpose of this session to gain a regional overview on Education for Sustainable Development and to learn about the approach that the responsible international organisations are taking to advance ESD. Dr. Choi then introduced each of the participants and explained their experience in working with ESD. Following this, the floor was opened for all of the workshop participants to briefly introduce themselves and to explain their expectations from this workshop.

UNESCO associate expert on ESD, Mikko Cantell began the first presentation of this workshop. Mr. Cantell pointed out that though the Bangkok Regional office is one of UNESCO’s five regional offices, the Asia-Pacific region includes two thirds of the world’s population. He went on to explain why UNESCO places such a high priority on Education for Sustainable Development. Standard education has been unable to strongly address all the sustainability challenges well, while ESD provides the opportunity to address these challenges and to achieve the Millennium Development Goals and the goals of Education for All by integrating the principles, values and practices of sustainable development directly into education. The aim of ESD should thus be to prepare individuals and communities for a secure and peaceful future, but at the same time to also acknowledge the importance of equipping people with the abilities to adapt and deal with uncertainties and unforeseen challenges.

UNESCO works with ESD in four main ways: 1) coordinating the Education for All movement; 2) preparing the Global Monitoring Reports on EFA; 3) coordinating the Decade on Education for Sustainable Development, and; 4) promotion and monitoring of normative and standard setting instruments in education. In specific regards to DESD, UNESCO works as an advocate for ESD, provides capacity-building to Member States on ESD integration, supports policy frameworks for ESD curriculum development, and provides specific technical assistance such as teacher training. During the first half of DESD, UNESCO had to work mainly as an advocate for ESD and to promote its uptake. Now moving into the second half of the Decade, UNESCO is trying to provide more concrete, focused and strategic advice to drive action and actual outputs. In Asia-Pacific, three priorities have been highlighted as part of ESD: 1) disaster risk reduction and post disaster education; 2) climate change

education, and; 3) developing leadership in ESD. In conclusion, Mr. Cantell explained how ESD can be an important factor in Climate Change mitigation and adaptation.

Ms. Seon-Mi Choi presented the work of UNEP and UNDP on Poverty Environment Initiative (PEI) in the Asia-Pacific region. The presentation began with Ms. Choi highlighting the importance of the Millennium Ecosystem Assessment reported in 2005 and how this may provide a clear model for understanding how to consider sustainable development and ESD. The approach of the PEI team was then explained as addressing the increasing issues around 'environments of poverty' – causes of poverty that are based on local environmental conditions and crisis that cannot be dealt with due to a lack of access to resources. The PEI team works directly with Ministries of Finance, Ministries of Planning and local governments to get strong support where it is needed and to change the process of investment by integrating environmental considerations for pro-poor growth.

Ms. Choi went on to explain that currently in Southeast Asia there is little appreciation for ecosystems services and little investment in protecting environmental assets. Furthermore, for the poor a major challenge is the current situation of weak environmental governance. The PEI approach is programmatic and tries to create appreciation for the fact that throughout Southeast Asia national wealth and GDP is directly connected to natural capital. In developing countries, their natural wealth is much higher than in developed countries. Nonetheless, public expenditure spending on environment remains low, thus the PEI team tries to promote the idea that sustained economic growth can be advanced through environmental investment. Local participation in environmental management, decentralisation and increased efforts by local governments are all highlighted as means to strengthen environments for the poor. Following Ms. Choi's presentation, Dr. Mee Young Choi commented that this topic is an important addition to the proceedings on ESD because poverty must be addressed if sustainable development is to be achieved and education is an important part of poverty alleviation.

Mr. Julito C. Aligaen provided a presentation on the work of SEAMEO collaborating centre in Malaysia for education on science and mathematics RECSAM. Mr. Aligaen began by emphasising the fact that how we educate our children today is what we can expect to happen in the future, and ESD is a solution in the challenge of providing the matching-type of education for the type of world we want to move towards. He went on to highlight several of the projects RECSAM has been involved in. First was the programme SEAMEO-UN HABITAT Cooperation on Promoting Human Values-Based Water and Sanitation and Hygiene Education in Southeast Asian Schools (2005-2008) which helps to build teacher capacity and provide mechanisms for in-school water and sanitation assessments. The second programme reviewed was the development of a Teachers' Guide Book for Integrating Climate Change Issues in Southeast Asian Schools (2009-2010).

Mr. Aligaen went on to explain SEAMEO's work with Rural Ecology and Agricultural Livelihoods (REAL) education. This work partners schools with local communities to establish more integrated learning opportunities and strengthen local engagement in addressing environmental, health and social problems. REAL is heralded as a form of educational reform that promotes an understanding of ecology and the development of critical thinking skills through problem solving in the context of the local environment and livelihoods. Mr. Aligaen identified two inter-linking barriers to ESD advancement: 1) there is no mandate on ESD from national governments or integration into

education system, and; 2) local teachers do not take responsibility for ESD because this is not directed as a top-down priority. This led to the suggestion that national governments should provide a clear mandate for ESD and education, more generally, to be adapted and developed in accordance with the local context.

Dr. Choi opened the floor to all participants for interventions and questions:

Professor Mario Tabucanon explained the work of the United Nations University including ProSPER.Net in Japan and Northeast Asia, the ASEAN leadership programme on Sustainable Consumption and Production, and the development of a MBA programme on Green Growth.

Mr. Marut Jatiket emphasised the point that when environmental protection or conservation is discussed at the level of policy, it usually focuses on the forest. However, in terms of human impacts on the environment, agricultural practices have a very significant part and should be considered when addressing ESD.

Ms. Cristina A. Fancisco asked the presenters if there has been clear monitoring of ESD and its implementation.

Professor Mario Tabucanon explained that ESD monitoring and evaluation has been slow to develop, and that there are still few reliable indicators for assessing the effectiveness of ESD initiatives.

Mr. Julito Aligaen replied that one of the difficulties is the lack of ESD skills that teachers currently hold, and that one way to both improve this and monitor ESD is to integrate ESD directly into the examination process for teachers.

Mr. Mikko Cantell explained that the data that is needed to effectively monitor ESD is not available from most countries. Education is usually examined based on the competencies students are gaining, however the goals of ESD focus on engendering a value shift and this is not measured in educational examinations. There has been effort to develop indicators, but still requires further effort.

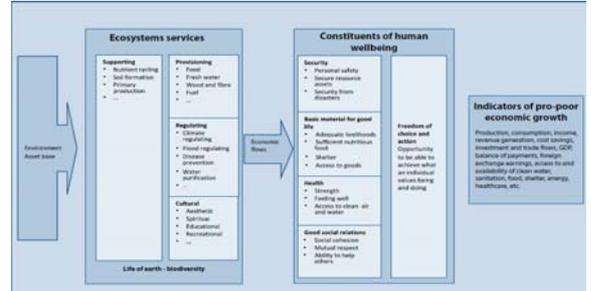
# Poverty Environment Initiative (PEI)

## Asia-Pacific Region



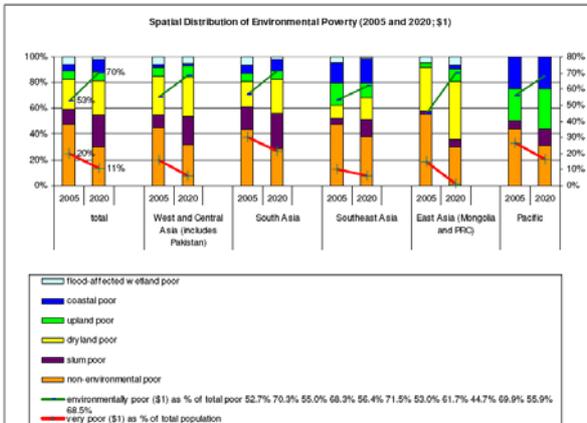
Seon Mi Choi, Asia Pacific PEI Team,  
UNEP Regional Office for Asia Pacific

## Why are environment assets important for human wellbeing?



60% of ecosystem services are being degraded or used unsustainably (Millennium Ecosystem Assessment, 2005)

## The Environments of Poverty



Source: ADB (2008),  
Environments of Poverty

## Poverty Environment Initiative

[www.unpei.org](http://www.unpei.org)

### Outcome

-Environmental improvements to support the livelihoods, health and vulnerability of poor women and men

### Approach

UN technical and financial support to Ministries of Planning, Finance and Local government to change public and private investment by integrating environment for pro-poor growth into national, sectoral and subnational planning and economic decision-making



## PEI Countries in Asia – Pacific

[www.unpei.org](http://www.unpei.org)



6 countries with core PEI country programmes: Bangladesh, Bhutan, Lao PDR, Nepal, Timor-Leste and Thailand

Regional Support to several countries (expanding): Pakistan, Papua New Guinea, Philippines ...

Regional PEI team based in Bangkok. Activities implemented by Country Offices and national governments

## Environment for poverty reduction: challenges in Asia-Pacific



- **Difficulty in measuring the real value of ecosystem services**

- **Limited investment** for environment: In Southeast Asia almost no country's environmental expenditure exceeded 1% of GDP and often lower



- **Weak environmental governance:** limited enforcement of laws, lack of land and resource rights for poor

- **Private Sector** is significant agent of environmental change

- Current and future **climate change impacts and vulnerabilities**

## Contribution of natural capital to national wealth and GDP

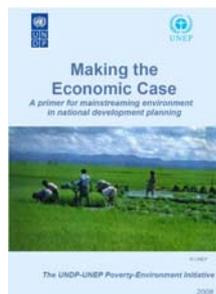


Advocating change in government perspective:

Environmental sustainability as economic and development necessity, not luxury

	US\$/ capita	% total of total wealth
Bhutan	4,945	64%
India	1,928	28%
Indonesia	3,472	25%
Nepal	1,229	32%
Thailand	3,936	11%

Natural assets = 26% of total wealth in low income countries vs. 2% of wealth in industrialised nations (World Bank, 2005)



Above: Value and contribution of natural capital in selected countries (PEI Primer, 2008)

## Contribution of natural capital to national wealth and GDP – cont.



**Cambodia:** fisheries contributes 10% of GDP

**Maldives:** fisheries contributes 10% of GDP; marine and coastal tourism contributes 20% of GDP

**Bhutan:** hydropower accounts for more than half of national revenue.

**Lao PDR:** Natural resources (directly and indirectly) contribute 75% of per capita GDP, more than 90% of employment and just under 60% of exports and foreign exchange earnings.

**Indonesia:** forests contribute 1% - 2% of GDP (Govt. estimates); 15% - 20% of GDP (World Bank estimates)



Ton Le Sap, Cambodia ©QT Luon  
[www.tonleapsap.com](http://www.tonleapsap.com)

## Contribution of public expenditure to environmental protection measures



But investment in environmental protection account of only 1% - 2.5% of public expenditure in most countries.

Share of Total National Public Expenditure Spent on the Environment Protection for Selected Countries

Country	Share of Total Public Expenditure	Year of Data Collection
Indonesia <sup>[1]</sup>	0.7	2005
Lao PDR	0.7	2005
Vietnam	1.4	2005
Thailand	1.0	2005
Papua New Guinea <sup>2</sup>	2.5	2003

Lack of investment in environmental wealth reduces gross national income: e.g. in Vietnam, particulate emissions, carbon dioxide damage and the net loss of Viet Nam's forests reduce gross national income by 2.1%

<sup>[1]</sup> Most recent year for which actual figures are available  
<sup>[2]</sup> Includes expenditure on spatial planning

## PEI and Asia – Pacific: Emerging Themes



Decentralization and local government support – effective to engage local communities; public expenditure; revenue; benefit-sharing; planning

Private Sector – a key agent of change; changing rural landscapes; creating new opportunities but also threats

Climate change – opportunities to increase financing; sustainable environmental management reinvented



Mainstreaming across development assistance programmes

Working across UNDP practices and UNEP priority areas

Collaborating with ADB, IFAD, DANIDA, etc

## PEI – A programmatic approach



- Assessments to understand and prioritize key environment issues that have a bearing on the poor;
- Establishing the economic case for addressing these issues
- Analysis of market, institutional and policy failures that cause poverty environment related issues
- Creating awareness,
- Building partnerships
- Supporting the use of tools for mainstreaming
- Supporting policy and institutional changes
- Strengthening institutional capacity



## Bhutan PEI: Gross National Happiness through sustainable natural resource management



### Links between economy, environment and poverty:

- 1/3 of its GDP from the Renewable Natural Resources
- About 69% people depend on an integrated RNR system (crop, livestock and forest)
- More than 270 industries depend on forests for their raw materials



### PEI Objective in Bhutan:

- Build the long-term capacity of the government to integrate environmental concerns into the design and implementation of development plans
- Increase national budget allocations towards the environment

### Implementing Partners

- Gross National Happiness Commission (GNHC)
- Local government
- Civil Society Organizations

### Key activities

- Guidelines for mainstreaming poverty-environment issues in national and local plans
- Participatory assessment of sustainable livelihood options in 10 targeted villages
- Assessment of public expenditure to identify direct and indirect environmental expenditure in all sectors, towards a set of Green Accounts

**Lao PDR PEI: managing private investment for poverty reduction and environmental conservation**



- **Investment planning, management and enforcement capacities:** integrated spatial planning, investment strategy, incorporating environmental and social costs and benefits, community participation
- **Integrating environmental sustainability in the 7th National Socio Economic Development Plan 2011-15 in 7th NSEDP:** analysis, indicators, guidelines
- **Enhancing the national capacity of Environmental and Social Impact Assessment**
- **Raising awareness of the National Assembly in rural livelihoods and natural resource management**



©UNDP Lao PDR

**Thailand PEI: Enhancing local planning process and community participation**



- **Increased coherence of national development plans and policies:** policy analysis, public expenditure review on environment, promoting environmental fiscal reforms
- **Integrating pro-poor environmental priorities in the local development decision making and budgeting processes:** capacity building of local governments and communities, ecosystem assessment
- **Lessons-learning and sharing among ASEAN and other countries:** promoting pro-poor environment friendly business practices of the private sector



**THANK YOU!**

For more information on PEI:

[www.unpei.org](http://www.unpei.org)





**Mikko Cantell**  
Associate Expert, ESD  
UNESCO Bangkok  
Asia-Pacific Regional Bureau for  
Education

## Session 1: Regional ESD Policy and Strategy

IGES ASEAN +3 Policy Dialogues on ESD  
3-4 December, UNESCO Bangkok



### Why ESD?

- Education has not been able to address all sustainability challenges well/Education as a tool for achievement of MDGs and EFA goals;
- To integrate the principles, values and practices of sustainable development into education;
- To prepare individuals and communities for a secure and peaceful future (but also for change and insecurity);
- At the heart of UN and UNESCO founding texts: human dignity, human security and human development;
- Link to key issues (e.g. poverty reduction, sustainable livelihoods, climate change, human rights, gender equality, corporate social responsibility, protection of indigenous cultures).

### (D)ESD work within UNESCO 2010-11 (35 C/5)

ESD is placed under BSP 2: *“Providing global and regional leadership in education”*

- MLA 4: *Leading the education agenda: coordinating international efforts in education and tracking trends*

Thematic areas include:

1. EFA coordination
2. GMR
3. **DESD coordination**
4. Promotion and monitoring of normative and standard setting instruments in education

### (D)ESD work within UNESCO 2010-11 (35 C/5)

- advocating for ESD (policy-makers, civil society, private sector including the media);
- technical assistance and capacity-building to Member States to improve the integration of ESD into tools for sector-wide planning and management;
- policy frameworks and guidelines for curriculum and programme development in areas of concern for ESD;
- technical assistance to Member States to develop more specific learning content and curricula, attn. teacher training institutions

## (D)ESD work within UNESCO 2010-11 Asia-Pacific

*Emphasis shifting away from:*

- the general (e.g. illustrative activities) with low regional impact;
- seeking out alternative modes to interpret and implement DESD;
- monitoring and evaluating the *process* of DESD.

*Emphasis shifting to:*

- the focussed and the strategic;
- national capacity development;
- monitoring and evaluating DESD outputs and impact;
- to action based on evidence and demand;
- the central question being: "is the proposed action leading to institutionalized change?"

## (D)ESD work within UNESCO 2010-11 Asia-Pacific

Demand for UNESCO's attendance to Internationally Agreed Development Goals (IADGs) aside from EFA in the Asia-Pacific is growing.

3 areas of particular interest to Member States:

- Disaster Risk Reduction and Post Conflict Post Disaster
- Climate Change Education;
- Leadership role in the coordination and implementation of the UNDESD.

*At present no coherent educational approach to these interlinked areas at the system level.*

## (D)ESD work within UNESCO 2010-11 Asia-Pacific

*Partnerships:*

- Ministries, EFA Community (M&E)
- Academia, NGOs
- UNESCO Category 1 and 2 Centres in the region
- UN Reform, CCA/UNDAF
- UNESCO National Commissions

## ESD and EFA?

EFA	EFA/ESD positive overlap	ESD
Basic education and literacy available to all learners	<i>Commitment to quality Education;</i>	Broader purposes beyond education
Particularly addresses those who are excluded from quality basic education	<i>Promotion of education as a human right;</i>	Relevance/importance of ESD for all within or outside planned learning activities
	<i>Promotion of human rights, e.g. gender equality and rights of marginalised people;</i>	Includes those in privileged positions in societies where consumerism dominates
	<i>Improve quality of life, reduce poverty, improve health;</i>	Emphasis on basic values, processes and behaviours as part of all learning
	<i>Importance of primary education</i>	
	<i>Participation of all in education and development: governments, CSOs, private sector, communities and individuals;</i>	
	<i>Includes non-formal learning</i>	

## What are the Challenges to SD? Global Challenges

- ⦿ While countries have made progress since the Johannesburg Summit, many are still only developing a strategic and coordinated sustainable development plan
- ⦿ States have experienced challenges with the following:
  - Developing a feedback mechanism, including monitoring, learning, and adaptation
  - Coordinating strategy initiatives with the national budgeting process
  - Coordinating with sub-national and local sustainable development action
  - Understanding the linkages among economic, social and environmental systems
  - Establishing a clear legal mandate for the national strategy



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## Governments' Role

To achieve wide-spread sustainable development, Governments need to:

- Develop and implement integrative and participatory National Sustainable Development Strategies (NSDS)
- Assess and evaluate policies to ensure that their impacts are as intended through indicators that reflect countries' concerns and priorities
- Support global Sustainable Development priorities (e.g. clean energy, poverty reduction, multilateral cooperation, respect for human rights etc.)
- Cooperate with other governments, civil society, and NGOs on sustainable development initiatives



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## Other Actors' Roles

Every individual, agency, and institution has a role to play in helping approach Sustainable Development

- **Civil Society and NGOs** connect sustainable development to specific issues, often with an invaluable linkage to grassroots level
- **Educational Institutions** incorporate sustainable development practices and concepts into the curricula
- **Private Companies** practice corporate social responsibility and invest in sustainability
- **Communities** apply principles of sustainable development to their local context and culture



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## What are the Challenges to SD? Asia-Pacific

- 3 F's: Financial, fuel and food crises (or 3 E's: Economic, Ecological and Exchange imbalances)
- Economic growth > rest of world, increasing env pressures, urbanization/social challenges, unsustainable consumption;
- Staying within limits; building resilience; and responding to challenges with appropriate linkages (AP RIM – CSD/18);
- Few common sets of standards, norms, conventions and approaches to development;
- Knowledge gaps; poverty and population; consumption and resource use; inequality; institutional challenges;



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## What are the Challenges to SD? Asia-Pacific

- Sustainable Development Issues**
  - Natural disasters and climate change
  - Rural poor and agriculture
  - Education and literacy
  - Access to water and sanitation
- Sustainable Development Concepts**
  - Lack of linkages between Sustainable Development and other national priorities
  - Scarcity of resources (financial and human capacity)
  - Donor coordination and support
  - Attention focused on environment and natural resource management



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## What is Sustainable Development?

*NOT...*

### Society

- Human Rights
- Peace and Security
- Gender Equality
- Health
- Good Governance
- Cultural Diversity

### Environment

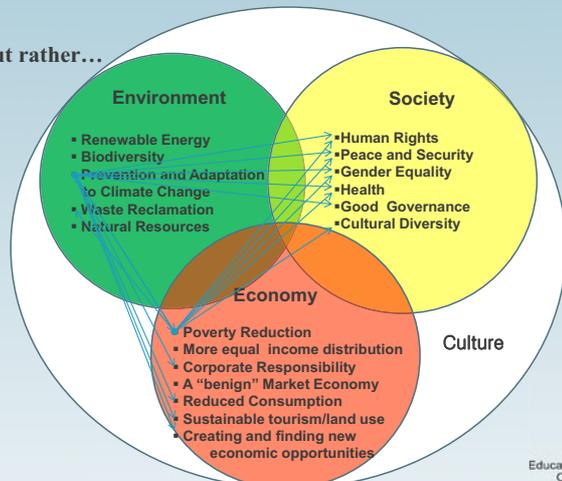
- Renewable Energy
- Biodiversity
- Prevention and Adaptation to Climate Change
- Waste Reclamation
- Natural Resources

### Economy

- Poverty Reduction
- More equal income distribution
- Corporate Responsibility
- A "benign" Market Economy
- Reduced Consumption
- Sustainable tourism/land use

## What is Sustainable Development?

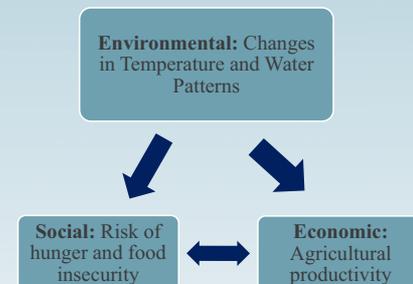
But rather...



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## Sustainable Development Approaches

- Environmental: Ex. Climate Change**
  - By helping mitigate, and prevent, the effects of climate change, we can help farmers with crop productivity and increase the availability of food for impoverished communities

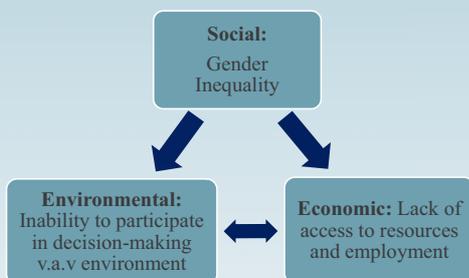


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## Sustainable Development Approaches

### ◉ Social: Ex. Gender Equality

- By improving women's rights and giving them equal access to education and jobs, we can assure full-participation in environmental and development initiatives



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## Sustainable Development Approaches

### ◉ Economic: Ex. Sustainable Consumption

- By promoting more sustainable consumption, we can increase food security for rural poor and decrease the amount of forests destroyed for agricultural purposes



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## EFA-ESD; COMMON CONCERNS ON QUALITY

The increased concern for education quality has resulted from a variety of factors including:

- (i) inability to adequately staff and finance rapidly expanding education systems;
- (ii) research-based evidence of low levels of learning in basic skills;
- (iii) new demands for advanced language, mathematics, and, increasingly, computer skills, stemming from industrialization; and
- (iv) financial crises that have had an adverse effect on education budgets – in some cases reducing internal efficiencies and eliminating plans for qualitative improvement.



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## ESD and Climate Change

- ◉ Quality education is a critically important component of Sustainable Development;
- ◉ Quality is to a large extent about relevance and climate change an impending and immediate challenge relevant for all;
- ◉ Working solutions to climate change adaptation and mitigation can mostly be found at the community and individual levels;
- ◉ ESD takes education to the local level and seeks to adapt to local needs and provide local solutions;



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## ESD and Climate Change

- ⦿ Attitudes and values are at centre stage in climate change relevant education;
- ⦿ Because values are caught rather than taught, attention must be given to the learning environment and ability and willingness of teachers and schools to lead by example;
- ⦿ Finally, educators should also refrain from raising false expectations of miraculous rescues – the impact of education is by its very nature a medium- to long-term one
- ⦿ ...and Education needs to be strongly embedded in overall sustainable development frameworks.



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Thank You.

For information on UNESCO's work on ESD  
in the Asia-Pacific region:

Visit our website

[www.unescobkk.org/esd](http://www.unescobkk.org/esd)

Or email us

[esd@unescobkk.org](mailto:esd@unescobkk.org)



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## SUMMARY OF PRESENTATION

### Education for Sustainable Development – On the Way Forward: Schools and Community Engagement for Sustainable Development

Mr. Julito C. Aligaen,  
SEAMO RECSAM

As Abraham Lincoln said that “*children are the message we send to the future*”, then an environment grounded education should be the message in our learning system. The race between education and disaster is imminent if the course of action of every country focuses not on the education that may change behavior, lifestyles and consumption pattern for sustainable society.

Southeast Asian countries are occupying only 3% of total world surface and yet it nurtures the 20% of the world biodiversity in the planet. The population is now 0.67 billion, of which 60% are residents in the rural areas, and 80% of their income are generated from the “natural capital” or the ecological services provided by its natural resources. However the region is facing a distinct pressure on rapidly growing population, urbanization and high vulnerability to the impacts of climate change because of its agrarian landscape. The coming dilemma is how to meet the demand of ever burgeoning population growth against the ever shrinking natural resources (ARCBC, 2008).

Environmental education is to facilitate learning for the children on the proper and sustainable use of natural resources which to be made core areas of learning. Thus, formal and non-formal education is expected to play a critical role in facilitating our transition towards sustainable societies (UNCED, 1992).

#### Community of Practice: Schools and Community Engagement for Sustainable Development

- |                |            |             |                            |
|----------------|------------|-------------|----------------------------|
| 1. Philippines | 3. Vietnam | 5. Cambodia | 7. China (Yunnan Province) |
| 2. Indonesia   | 4. Lao PDR | 6. Thailand | 8. HWVSHE-Project          |

#### The Significant Impact

- Reconnected the young people and adults to their immediate environment as manifested in high awareness level. (Significant reduction of Pesticides use in the Farmland)
- Build up the capacity of teachers, farmers and students to cultivate and manage their own local resources and manage to sustain local production of food.
- Teachers, students and the community develop the sense of greater local ownership of Education
- Enrichment and enhanced knowledge/skills for resource persons, curriculum writers and coordinators of HWVSHE activities/programmes to inspire and motivate learners to change their behavior with a view to promote wise and sustainable use of water and natural resources

### **The Barriers to Practice**

- No mandate from the national government and so no concrete integration program of ESD to the Education System.
- Local teachers do not take the responsibility to disseminate information related to environmental education as the utmost priority of their work as there was no direct instruction from the top management to do so and they are also fully loaded with other duties in their current teaching career.
- The initiative taken by the local teachers to promote environmental education was only conducted at personal level, occasionally supported by school. Not much encouragement or recognition was given by MOE.

### **Emerging Issues to Policy Direction: (Providing solution to the Barriers)**

1. Purposes of Education for Sustainable Development
  - As a first priority, policy makers should consider Education for Sustainable Development effort as tool to develop human resource. ESD can best provide for the young people as they move through the stages of life skills development as responsible individual.
  - Policy makers should consider ESD as core content of the national program and must be included in the national budget for education.
2. Reform education delivery including pedagogy and school governance
  - Policy makers should consider shifting the procedures of literacy; to strike a balance between technological and ecological literacy.
  - Policy makers should consider localizing the context of science, health, economy and social problems as a fundamental learning in the early stage of young people in educational engagement
3. Young people being engaged by 'able' Environment oriented Teacher Facilitators.
  - Policy makers should consider, within whatever funding is available, how to maximize the number of young people whose life skills education is in the hands of able environment oriented teacher facilitators
  - Policy makers should consider reviewing the teacher education curriculum in colleges and universities and develop in-service training program and put emphases on environment grounded teacher education training program

## PRESENTATION OUTLINE

1. SEA (Southeast Asia) Profile
2. SEAMEO Project (HVWSHE)
3. Schools and Community Engagement for Sustainable Local Development (REAL)
4. Impact
5. Barriers
6. Emerging Issues to Policy Direction

As Abraham Lincoln said that *“children are the message we send to the future”*, then an environment grounded education should be the message in our learning system. The race between education and disaster is imminent if the course of action of every country focuses not on the education that may change behavior, lifestyles and consumption pattern for sustainable society.

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### Southeast Asian Profile:

- Southeast Asia occupying only 3% of total world surface
- Nurtures 20% of the world biodiversity in the planet
- Southeast Asian population .67 B  
(<http://www.biotrop.org/pop.php>)
- Southeast Asian population 60% of those are residents in the rural areas
- 80% of their income are generated from the **“natural capital”** Natural Resources

### SEAMEO-UN HABITAT Cooperation on Promoting Human Values-Based Water and Sanitation and Hygiene Education in Southeast Asian Schools (2005-2008) Its about to be extended

The project was implemented on three tracks:

1. Development of an Assessment Protocol on Water and Sanitation Facilities in Schools
2. Developing competencies of teachers in selected Southeast Asian schools in integrating VBWSHE in their lessons, effective use of resource materials and in assessing knowledge, skills, attitudes and behavior change among students
3. Integrating Human Values in Water, Sanitation and Hygiene Education in Southeast Asian Schools.

**SEAMEO-UN HABITAT Cooperation on Promoting Human Values-Based Water and Sanitation and Hygiene Education in Southeast Asian Schools (2005-2008) Its about to be extended**



**Development of TEACHERS' GUIDE BOOK Integrating Climate Change Issues in Southeast Asian Schools (2009-2010)**

**Objectives:**

- To develop TEACHERS' GUIDE BOOK integrating climate change issues in different subject areas in the school curriculum of Southeast Asia; and
- To publish and disseminate the Teachers' Guide Book to all the MOEs of SEAMEO member countries.

**Collaborating Centres;**

SEAMEO RECSAM	-Malaysia
SEAMEO SPAFA	-Thailand
SEAMEO TROPMED	-Philippines
SEAMEO TROPMED	-Indonesia
SEAMEO SEAMOLEC	-Indonesia
SEAMEO SEARCA	-Philippines
SEAMEO BIOTROP	-Indonesia
SEAMEO INNOTECH	-Philippines

**Schools and Community Engagement for Sustainable Local Development**

REAL stands for Rural Ecology and Agricultural Livelihoods

*REAL education* is an integrated learning process in which school children explore what is happening in local farms and thereby gain an understanding of ecology and develop critical thinking skills with respect to environmental, health and social problems

*REAL education* is a movement among educational planners and practitioners in several Asian countries who are interested in educational reform, community development and sustainable rural livelihoods.

PARTNERS

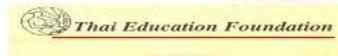
## Next phase 2010-2013

- Expansion of the REAL schools and communities
- Pilot innovations on school-community risk reduction projects
  - Bridging knowledge on agro-biodiversity utilization and management
  - Impacts of climate change
  - Health related issues
- Linking national policies and donors
- Networking and dissemination

## Schools and Community Engagement for Sustainable Local Development



**Schools, Community, and Environment:  
Glimpses of the Agro-Biodiversity  
Conservation and Pesticides Impact  
Assessment Project  
in Davao del Norte,  
Philippines**



## Schools and Community Engagement for Sustainable Local Development

### Workshop on

School and Community Chemicals, health and Environmental Impact Assessment and ABD Conservation

CAMBODIA

Agriculture Technology Services Association (ATSA)



CAMBODIA

Biodiversity Conducted for Student by School Teacher



## Schools and Community Engagement for Sustainable Local Development

*Rural Ecological Agriculture for Livelihood in Laos (REAL)*

Non-profit Association of Lao Development and Environment (NALDE)

Bandith KEODHONGJUM

On School and community Chemicals, Health and Environmental Impact Assessment and Agro-Biodiversity Conservation (2008)

LAO PDR

*Student surveyed pesticide*



## Schools and Community Engagement for Sustainable Local Development



**Methodology:** 9 topics were introduced weekly

**Implementors:**

- Tsu/vis.
- 01 school teacher
- 01 staff of Plant Protection Gu-Dept
- Graduates (in grade 6th)
- Farmers



VIETNAM

## Schools and Community Engagement for Sustainable Local Development

### Hand in Hand in Conserving the Nature for Sustainable Livelihoods



A Share Learning by:

USAID's Environmental Services Program (ESP) –  
FIELD Indonesia Foundation

## Schools and Community Engagement for Sustainable Local Development



## Schools and Community Engagement for Sustainable Local Development

**REAL Project in Yunnan province**  
P.R.China  
—2007-2008

Zhou Jinxuan  
Pesticide Eco-Alternatives Center

"This plan could be used to cure stomachache..." -teaching while collecting

CHINA

Group 4 showing the harvests in field survey

Observing with magnifier

Category the living samples

## Impact (HVWSHE)

Enrichment and enhanced knowledge/skills for resource persons, curriculum writers and coordinators of HVWSHE activities/programmes to inspire and motivate learners to change their behavior with a view to promote wise and sustainable use of water and natural resources

## Impact (REAL)

Reconnected the young people and adults to their immediate environment as manifested in high awareness level. (Significant reduction of Pesticides use in the Farmland)

Build up the capacity of teachers, farmers and students to cultivate and manage their own local resources and manage to sustain local production of food.

Teachers, students and the community develop the sense of greater local ownership of Education

## Barriers to Practice

No mandate from the national government and so no Concrete integration program of ESD to the Education System.

Local teachers do not take the responsibility to disseminate info. related to environmental education as the utmost priority of their work as there was no direct instruction from the top management to do so and they are also fully loaded with other duties in their current teaching career.

## Barriers to Practice

The initiative taken by the local teachers to promote environmental education was only conducted at personal level, occasionally supported by school. Not much encouragement or recognition was given by MOEs.

## Emerging Issues to Policy Direction

### Purposes of Education for Sustainable Development:

1. As a first priority, policy makers should consider Education for Sustainable Development effort as tool to develop human resource. ESD can best provide for the young people as they move through the stages of life skills development as responsible individual.
2. Policy makers should consider ESD as part of the national program and must be included in the national budget for education.

## Emerging Issues to Policy Direction

### Reform education delivery including pedagogy and school governance:

1. Policy makers should consider shifting the procedures of literacy; to strike a balance between technological and ecological literacy.
2. Policy makers should consider localizing the context of science as a fundamental learning in the early stage of young people in educational engagement.

## Emerging Issues to Policy Direction

### Young people being engaged by 'able' Environment oriented Teacher Facilitator.

1. Policy makers should consider, within whatever funding is available, how to maximize the number of young people whose life skills education is in the hands of able environment oriented teachers/facilitators
2. Policy makers should consider reviewing the teacher education curriculum in colleges and universities and put emphases on environmental grounded teacher education program

## THANK YOU FOR YOUR TIME



**National Governments Should Give Mandate to Education to be locally oriented.....**

**EDUCATION FOR SUSTAINABLE DEVELOPMENT  
ON THE WAY FORWARD**

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**SCHOOLS AND COMMUNITY ENGAGEMENT  
FOR SUSTAINABLE DEVELOPMENT**

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julito c. aligaen  
Research Specialist (RnD)  
SEAMEO RECSAM  
ENVIRONMENTAL SCIENCE EDUCATION

## SESSION 2

3<sup>RD</sup> DECEMBER 2009, 13:20-14:40

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### NATIONAL ESD POLICY AND STRATEGY – ASEAN GROUP 1

**Chairman:** Dr. William Schaedla, WWF

*Education for Sustainable Development (ESD): Implementation – Progress in Brunei Darussalam*  
Presentation, Ministry of Education, Brunei Darussalam, Ms. Sarimah Abu Bakar

*Philippines: National Policy on Education for Sustainable Development and its Implementation*  
Presentation, Environment Management Bureau, Department of Environment and Natural Resources, Philippines, Ms. Maria Cristina A. Francisco

*Education for Sustainable Development in Singapore*  
Presentation, National Environment Agency, Singapore, Mr. Meng Hiong Ng

*Indonesia: National Policy on Education for Sustainable Development and its Implementation*  
Presentation, Ministry of Environment, Indonesia, Mr. Sasmita Nugroho

Dr. William Schaedla welcomed everyone back from their lunch and explained the purpose of this session and the following sessions of the day to present national ESD Policy from the countries of ASEAN+3 and to demonstrate how it is being implemented. Dr. Schaedla introduced the presenters for this session and conveyed the apologies of Mr. Nugroho who was unable to make the workshop.

Ms. Sarimah Abu Bakar began her presentation by explaining the present situation of ESD Policy in Brunei Darussalam. The country is currently reviewing the concept of ESD and considering if it should be incorporated into the national education policy. Ms. Abu Bakar explained several of the milestones in the ESD policy process in Brunei Darussalam: in 2005 the country became a member of UNESCO; in 2007 the Ministry of Education established a National Commission on Education for Sustainable Development; in 2008 a focal point within the Ministry of Education was established on ESD; and in 2009 a task force on ESD was initiated to consider the formulation of the National Policy on ESD. Even though a national policy has not yet been enacted, there are already several plans of action on ESD including identification of priority areas in ESD, socialising and dissemination of the concept of ESD, and reporting on integrating ESD into educational policy.

Current linkages are made between ESD and topics of health promotion, environment and energy. There are activities occurring in formal education that can be considered as ESD since the curriculum already contains a strong focus on environment, energy and health science. The University of Brunei Darussalam has a Masters of Environmental Management, and students address issues such as e-waste, food packaging and overspending. In primary and secondary schools, eco-clubs have been initiated and a project to plant one million trees was started. Ms. Abu Bakar suggested several ways forward to promote ESD in Brunei Darussalam: developing a database of initiatives; implementation of several priority projects; enhancement of linkages, partnerships and collaboration of stakeholders, and; a study of progress and impacts.

Ms. Cristina A. Francisco started her presentation by explaining that the Philippines produced the first draft of a national policy on ESD in 2004 in correspondence with the outline for UN-DESD. At a policy level, ESD is now guided by the National Environmental Education Action Plan (NEEAP) which incorporates the frameworks of both the UN-DESD and the ASEAN Environmental Education Action Plan (AEEAP). The vision expressed in this document is to secure environmental literacy, proactive citizenry, enhancement of environmental quality, and social justice and equity in resource consumption. In 2008, the Environmental Awareness and Education Act was passed (R.A. 9512) and specifies the need to strengthen the integration of Environmental Education for Sustainable Development through the curriculum, education materials, teacher training, and institutionalisation.

Ms. Francisco went on to explain that under National Environmental Education Action Plan for Sustainable Development, the Environmental Management Bureau has developed many types of materials on various aspects of environment and natural resources management including instructional posters, leaflets, videos, television adverts and radio plugs. They have furthermore organised modules on environmental issues for the Civic Welfare Training Service for the National Service Training Programme and have mobilised other sectors for participation in special events. The YES Camp has run under the Department of Education since 2003 to bring together all eco-clubs under one common theme. Ms. Francisco went on to address some of the challenges that are faced in environmental education:

- Maintenance of a common resource facility for environmental exchange across the government;
- Teacher Training on EE and ESD;
- Development of Curriculum and instructional materials for EE for SD;
- Utilisation of alternative venues and media sources for promoting EE/ESD;
- Strengthening partnerships and networking, and;
- Funding support (especially at a regional level) for ESD programmes.

In closing, Ms. Francisco identified how ESD can be linked with community efforts to strengthen sustainable livelihoods through a convergence of local governments, academia and small-to-medium businesses.

Mr. Meng Hiong Ng began his presentation by explaining that Singapore has come a long way through rapid development and that this has achieved many benefits but also challenges for achieving sustainable development. In Singapore, Sustainable Development is approached through the 3P Partnership Strategy to facilitate and promote collaborations between People, Private and Public sectors to work together to achieve a sustainable, quality environment for Singapore. A four pronged approach is used to operationalise the 3P Partnership Strategy: programmes, showcase platforms, resources, and recognition. While measuring the achievements of environmental education is done through the 'Knowledge, Attitudes, Beliefs and Practices (KABP) Survey' and the '3P Partnership Index Survey'.

Mr. Ng went on to explain how ESD is incorporated into social studies, sciences, geography and languages in primary and secondary school. ESD is also encouraged in non-formal education through the Corporate and School Partnership (CASP), the student youth environment envoys and champion programmes. The National Environment Agency has established many different formats to disseminate ESD including educational materials, competitions, eco-camps, internet sites (on

facebook and twitter), Cub Scout and Brownie programmes, and community carnivals. Singapore has also engaged in networking and partnership forming with the private sector, between government agencies and with other countries. The NEA has furthermore established many awards and recognition to promote and encourage good practice.

Dr. Schaedla opened the floor to all participants for interventions and questions:

Mr. Je Chul Yoo asked what are the steps to transfer from EE to ESD and who should be the champion of this transfer?

Ms. Francisco replied that in the Philippines there is a need for greater inter-departmental cooperation on promoting ESD. The main focus in the country remains on EE because it is seen as not fully developed yet, and once this is realised the plan is to move on to the concept of ESD.

Mr. Ng explained that in Singapore the Education and Environment agencies can work closely together due in-part to the small size of the country. The changes in education have been directly connected to the advancement of the 3P Partnership.

Dr. Schaedla explained that in Thailand there is a movement to localise ESD activities. He asked the presenters how is localisation approached in their countries, and how at the same time do they maintain a national consistency?

Ms. Abu Bakar explained that in Brunei Darussalam efforts are made to work in partnership with professional experts and to encourage schools to set up initiatives out with the normal curriculum.

Ms. Francisco replied that in the Philippines they use multiple media types to provide a wide coverage of EE topics and concepts, but at the same time the curriculum is fully structured at the national level.

Mr. Ng also explained that the formal curriculum in Singapore is controlled at the national level, however the government has encouraged schools to develop their own informal curriculums to allow for extra programmes where the students can excel in the subject.

## **SUMMARY OF PRESENTATION**

### **Education for Sustainable Development (ESD) and its implementation : Progress in Brunei Darussalam**

By Ms. Sarimah Abu Bakar,  
Ministry of Education

Brunei Darussalam was officially became the member of United Nation Education, Scientific and Cultural Organization (UNESCO), in the year 2005 and established its National Commission in 2007, in which the Ministry of Education is the focal point of the commission. As member of UNESCO, the country is then committed to initiatives that being initiated by the organization including the implementation of ESD.

As the immediate response to the initiative on ESD, series of discussions were organized through the establishment of task force which consisted of official representatives from key stakeholders within the Ministry of Education. With reference to the definition of ESD and the identified key themes of ESD, the task force had identify priority areas which our education sector should focused. The areas are; environment, energy and health promotion.

Though, the concept ESD was introduced only in last few years but contents in curriculum which are related to matters or issues on ESD had been taught in schools before ESD was launched. In addition, programmes had also been implemented or organized within the school formal system and also by other public sectors or private organizations.

Initiatives include projects, camps, establishment of clubs like environment and energy, cleaning campaigns, tree planting, eco garden, segregation of waste and many others.

To strengthen the understanding of ESD by key stakeholders and implementers, briefings, seminars and workshops had been conducted and will be continued in 2010. These efforts are expected to support and enhance the effectiveness towards achieving sustainable development in Brunei Darussalam. As the result, these will help the focal point or appointed agency in the compilation of information or establishment of database on the initiatives related to ESD, initiation of priority projects, effective collaborations and partnerships between stakeholders, hence study of impacts and progress can done.

# Education for Sustainable Development (ESD) , and its Implementation - Progress in Brunei Darussalam

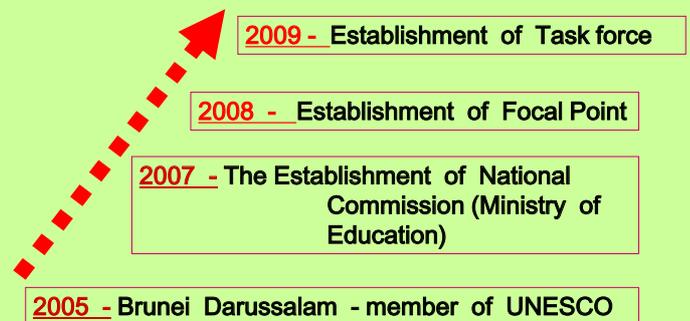
Presented by :  
Sarimah Abu Bakar  
The Science, Technology & Environment Partnership  
(STEP) Centre, Ministry of Education  
03 December 2009

## Outline of presentation

- ❖ Part A : Current Status
- ❖ Part B : Implementation of programmes related to ESD
- ❖ Part C : The way forward

## Part A : Current Status

### Milestones



## National Policy on ESD

Brunei Darussalam is still in progress to consider the formulation of the National Policy on ESD

## Plan of Actions

- ❖ Formation of task force
- ❖ Identification of priority areas
- ❖ Socializing the concept of ESD - through briefing, seminar & workshop
  - ❖ Education institutions
  - ❖ Other government agencies and stakeholders
- ❖ Report on ESD

## Definition of ESD

“The development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”

*(World Commission on Environment and Development, 1987)*

## Key Themes in Education for Sustainable Development

Education for Sustainable Development shares many common themes with Education for All and the United Nations Literacy Decade. These themes include:

- Overcoming Poverty
- Gender Equality
- Health Promotion
- Environmental Conservation and Protection
- Rural Transformation: Education for Rural People
- Human Rights
- Intercultural Understanding and Peace
- Sustainable Production and Consumption
- Cultural Diversity
- Information and Communication Technologies (ICTs)

## Identification of Priority Areas

- ❖ Environment
- ❖ Energy
- ❖ Health Promotion

## Part B : Implementation of programmes / curriculum contents related to ESD

## Non-formal / informal education

Through co-curricula programmes / activities  
Organised by various agencies – government  
departments, business & industries & NGOs

## Formal Education Curriculum

Though Brunei Darussalam has not formulated its  
national policy on ESD but related matters on ESD have  
been included in the curriculum such contents on  
environment, energy and health science in subjects like  
science and geography.

At higher learning institutions like University Brunei  
Darussalam - offers related courses  
Master on Environmental Management  
As part of BSc. courses

## Community Problem Solving (CPS) projects

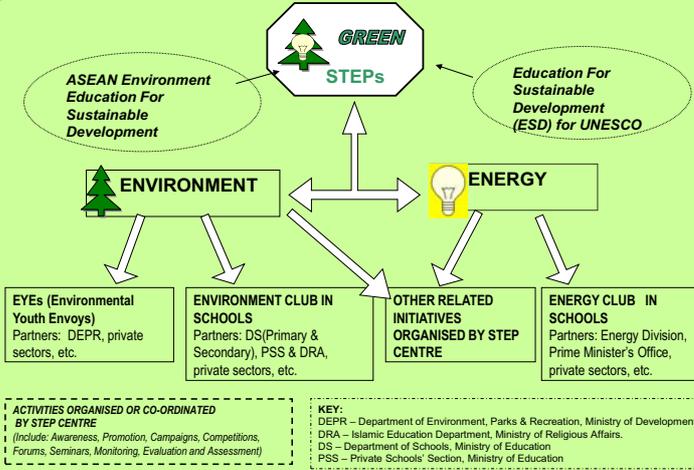
By University Brunei Darussalam – as part of the course

- ❖ E-Waste
- ❖ Food Packaging
- ❖ Overspending

## Green STEPs Programmes - aligning with national, regional & international agenda



## Strategic Plan on Green STEPs Programme



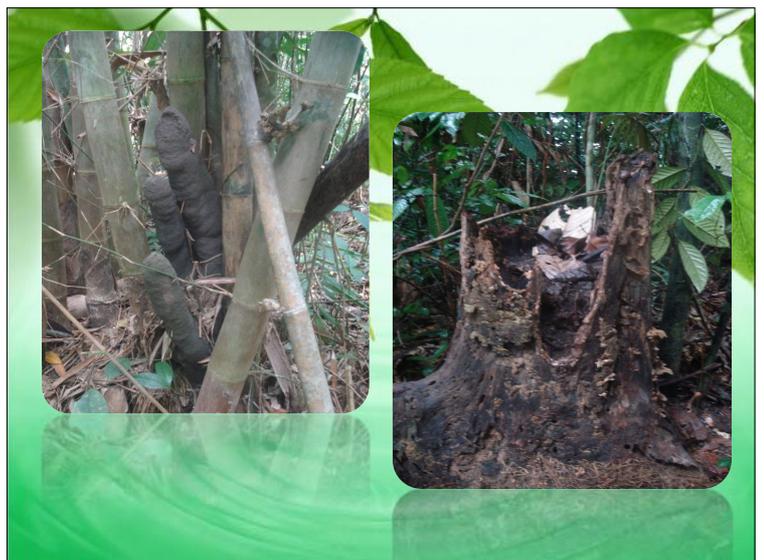
## Energy Day



## Others :

- Eco Club in Schools - Initiated by Department of Environment, Parks & Recreation & Ministry of Development and Ministry of Education
- Princess Rashidah Young Nature Award (PRYNESA) - Initiated by Forestry Department, Ministry of Industry & Primary Resources
- Environment & conservation project work
- Cleaning campaign
- Tree Planting







## Collection Of Plastic Bottles



Dumping site (plastic bottles) for the community.

By PAP Hjh Masna Secondary School

## Sculpture Design



By PAP Hjh Masna Secondary School

## Part C : The Way Forward

- ❖ Database of initiatives
- ❖ Initiation of priority projects
- ❖ Enhance linkages, partnerships & collaboration of stakeholders
- ❖ Study of progress / impacts
- ❖ Report



**Thank You**

**Wassalam**

## SUMMARY OF PRESENTATION

### **Philippines: National Policy on Education for Sustainable Development and its implementation**

By Ms. Cristina A. Francisco,  
Environmental Management Bureau,  
Department of Environment and Natural Resources

#### Current Status

In 2004, the National Environmental Education Action Plan for Sustainable Development (NEEAP for SD) (2005-2014) was formulated, it stems from important and recent initiatives to environmental management and environmental education in the country. The NEEAP for SD (2005-2014) is an initiative of the Philippines in support to the United Nations Decade of Education for Sustainable Development (UNDESD)

The Plan envisions an environmentally-literate and proactive citizenry imbued with a sense of responsibility to care, protect and enhance environmental quality that is conducive to their well-being and supportive of the nation's economic development and unified in its pursuit of peace, social justice and equity in the use of natural resources.

Then in 12 December 2008, President Gloria Macapagal-Arroyo signed into law Republic Act 9512 or "An Act to Promote Environmental Awareness through Environmental Education and for Other Purposes".

The said law reiterates the policy of the State to protect and advance the right of the people to a balanced and healthful ecology in accord with the rhythm and harmony of nature, and in recognition of the vital role of the youth in nation building and the role of education to foster patriotism and nationalism, accelerate social progress and promote total human liberation and development.

#### How policies are implemented in the country

Republic Act 9512 or "An Act to Promote Environmental Awareness through Environmental Education and for Other Purposes" aims in promoting environmental education through an Inter-agency and multi-sectoral effort through the help of the government agencies in the Philippines.

The various agencies will help integrate environmental education in its school curricula in all levels, whether public and private, including barangay day care, preschool, non-formal, technical, vocational, professional level, indigenous learning, and out-of-school youth courses and programs.

It also declared the month of November of every year as "Environmental Awareness Month".

In July 30-31, 2009 a multi-stakeholder consultation on the National Environmental Education Action Plan (2005-2014) that was conducted the following actions were reiterated to be important actions for the strengthened implementation of the NEEAP:

1. Designation of focal points on Environmental Education
2. Maintenance of a common resource facility for environmental IEC exchange in the country and to link these globally

3. Training of teachers and Support Instructional Materials on Environmental Education in the Curricula (in all levels)
4. Need for full utilization of other venues (e.g. multi-media and alternative media) for Environmental Education towards Sustainable Development.
5. Strengthen partnerships and networking on environmental education in the ASEAN region (e.g local governments, NGOs, business, media, community).
6. Provide funds/financial support to expand environmental education programs, particularly in the regions.

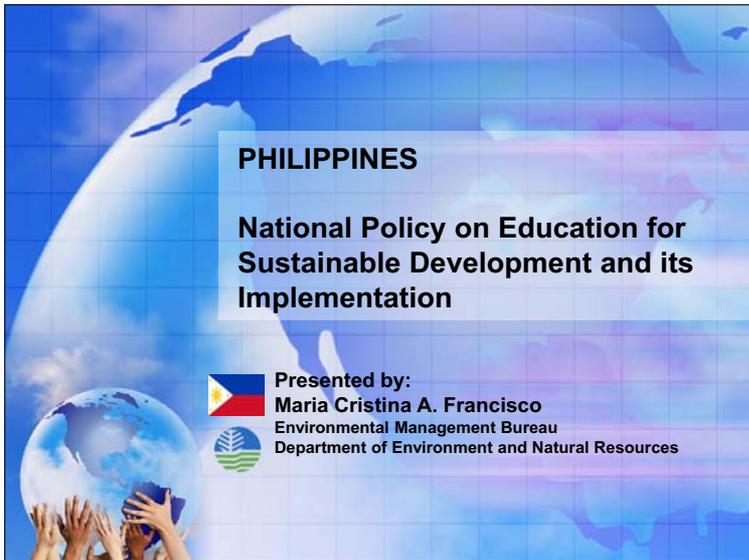
Opportunities for promoting ESD/EEED at a community level to strengthen Sustainable Livelihood development

In 2008, the EMB through the PATLEPAM embarked in Capacity 2015 project that documented good practices in the coco coir and seaweeds industry.

Through the said documentation, the project aims to be a convergence initiative that will enhance the capacities of tripartite stakeholders ( microentrepreneurs, local government units and academe) not part of the pilot sites to directly influence economic and environmental situation at the level of their communities. It will hope to provide a poverty alleviation model embodying real sustainable development where wealth and value creation is managed with an ecosystem view of target industries namely the seaweed and coco coir.

The project would also like to prove that an optimal scenario is possible for micro, small and medium enterprises to achieve their maximum potential without harming the environment and degrading the natural resource base, at the same time, withstanding the onslaught of globalization where:

- Micro, small and medium enterprises can avail of opportunities offered by globalization, particularly in overcoming difficulties pertaining to market technology, human resources development, financing and meeting international environmental standards, among others;
- Local government units can provide the proper policy environment and the basic services and infrastructure for the optimal growth and functioning of micro, small and medium enterprises in their respective localities; and
- Academe can provide continuing technical assistance to micro, small and medium enterprises and local government units in their respective areas.



**PHILIPPINES**

**National Policy on Education for Sustainable Development and its Implementation**

**Presented by:**  
**Maria Cristina A. Francisco**  
 Environmental Management Bureau  
 Department of Environment and Natural Resources

**United Nations Decade of Education for Sustainable Development (UNDESd) (2005-2014)**



Photo Credit: UNESCO ESD

**Vision**  
 A world where everyone has the opportunity to benefit from education and learn the values, behaviours, and lifestyles required for a sustainable future and for positive societal transformation.

**The ASEAN Environmental Education Action Plan (2008-2012)**



**Theme:**  
 Environmental Education for Sustainable Development

**Aim:**  
 Accelerate EE as a key integrating component for achieving SD in the ASEAN member countries.

**Current Status of National Policy on ESD in the Philippines**  
**National Environmental Education Action Plan (NEEAP)**



Photo Credit: jooc.com

- Philippine initiative to the UNDESd (2005-2014) and the ASEAN Environmental Education Action Plan
- Aim is to pursue education to foster the transition to a sustainable society.

## National Environmental Education Action Plan for Sustainable Development (2005-2014)



### Vision

- Environmentally literate & proactive citizenry
- protect and enhance environmental quality
- social justice and equity in the use of natural resources.



## National Environmental Education Action Plan for Sustainable Development (2005-2014)



### Mission

- improve the institutional systems by including EE in all segments of society.
- mobilize resources & encourage partnerships on EE support programs.



## National Environmental Education Action Plan for Sustainable Development (2005-2014)



### Mission

- establish a critical mass of committed environmental educators and practitioners
- promote environmental ethics



## Environmental Education



- R.A. 9512: "Environmental Awareness and Education Act of 2008"  
state shall : - promote national awareness on the role of natural resources in economic growth ;  
- importance of environmental conservation & ecological balance towards sustained national development.



## Environmental Education



- **R.A. 9512: "Environmental Awareness and Education Act of 2008"**

Strengthen the integration of EE towards SD in the Philippines thru :

- Curriculum
- Educational Materials
- Training and Capacity Building for Educators/Trainers
- Institutionalization

## How policies are implemented in the Philippines

### Programs and Initiatives on Environmental Education for Sustainable Development

## National Environmental Education Action Plan for Sustainable Development (2005-2014)



- Multi-stakeholder development of the NEEAP for SD (2005-2014), with annual conferences on EE since 2004.

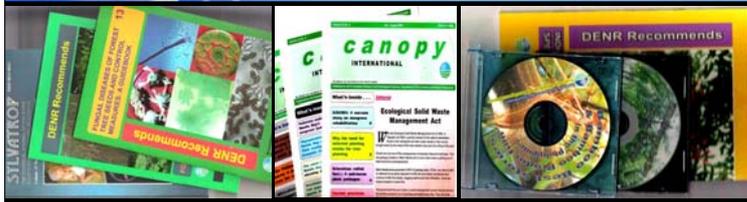
## National Environmental Education Action Plan for Sustainable Development (2005-2014)



Materials development on various aspects of environment and natural resources management:

- instructional posters
- videos, television and radio plugs

## National Environmental Education Action Plan for Sustainable Development (2005-2014)



- Modules, manuals, and guidebooks
- Environment and Natural Resources Module for the Civic Welfare Training Service of the National Service Training Program
- Fact sheets and brochures
- Newsletters and Journals
- Brochures and pamphlets

## National Environmental Education Action Plan for Sustainable Development (2005-2014)



### Spearheaded linking with various educational networks:

- Philippine Association of Tertiary Level Educational Institutions in Environmental Protection and Management (PATLEPAM),
- Catholic Educational Association of the Philippines
- Philippine Association of Colleges and Universities

for conferences, workshops, trainings, consultations

## National Environmental Education Action Plan for Sustainable Development (2005-2014)



- Conduct of year-round mobilization of sectors during national and international environmental celebrations and events

## The DENR Youth Desk



### Eco-Corps

- To give environmentalism a major niche at the tertiary level of the National Service Training Program (NSTP), the DENR and PATLEPAM has come up with eight (8) environmental modules which will become part of NSTP's Civic Welfare Training Services.

## The DENR Youth Desk



### Eco-Corps

- Known as "Eco-Corp," the modules are a collection of 52 hours of lectures and hands-on exercises on community work that revolve on various environmental concerns. The modules are presently undergoing pre-testing in various universities.

## The DENR Youth Desk



### YES Camp

- DepEd Order No. 72, series of 2003, establishes YES-O as the only co-curricular environmental club or organization in schools.
- It consolidates all other environmental and/or ecology clubs or organizations in schools with main and primary programs or projects for the environment.

## Environmental Activities Targeting the Youth



### National Search for Sustainable and Eco-Friendly Schools

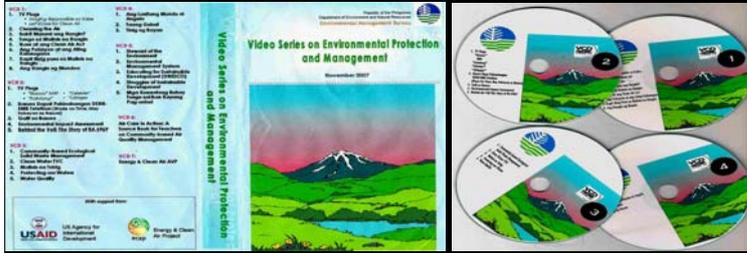
**National Search for Sustainable and Eco-friendly Schools** in coordination with DepEd, CHED, and SMART Communications

Awarding held last November 19, 2009, in celebration of the **Environmental Awareness Month**

## State of the Environment Reports



## Videos and TV Plugs



## Challenges in Environmental Education



- Maintenance of a common resource facility for environmental IEC exchange, and link with the ASEAN Environmental Education Inventory Database
- Training of Teachers or Trainers on EE and ESD

## Challenges in Environmental Education



- Curriculum, and Support Instructional Materials Development on EE for SD
- Full utilization of other venues (e.g. multi-media and alternative media) for EE/ESD

## Challenges in Environmental Education



- Strengthening of Partnerships & Networking for EE/ESD
- Funding support to expand EE/ESD programs, particularly in the regions.

### Opportunities in promoting EE/ESD at Community level to strengthen Sustainable Livelihood



In 2008, PATLEPAM with the EMB, had a Capacity 2015 project that documented good practices in building capacities of communities with coco coir and seaweeds industry, selected sites of the country.



### Opportunities in promoting EE/ESD at Community level to strengthen Sustainable Livelihood



It sought to be a convergence initiative that will enhance the capacities of tripartite stakeholders to directly influence economic & environmental situation at the level of their communities.



### Opportunities in promoting EE/ESD at Community level to strengthen Sustainable Livelihood



It also tried to show that an optimal scenario is possible for MSMEs to achieve their maximum potential without harming the environment & degrading the natural resource base

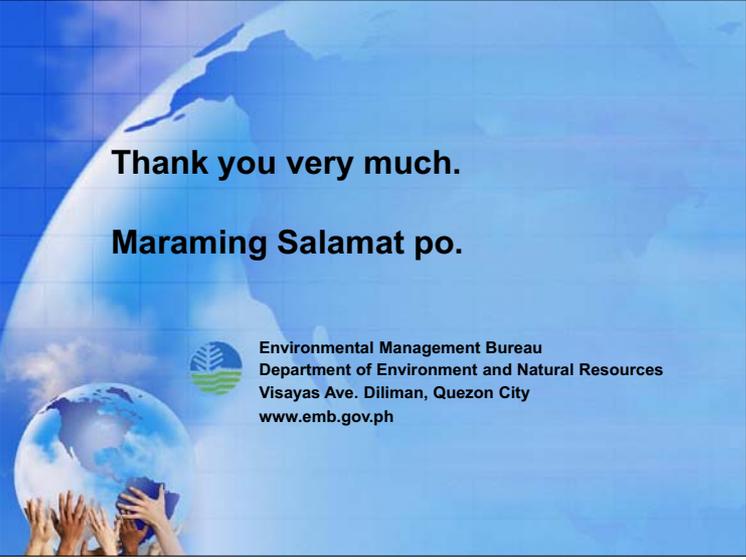


### Opportunities in promoting EE/ESD at Community level to strengthen Sustainable Livelihood



- MSMEs can avail of opportunities offered by globalization, particularly in overcoming difficulties pertaining to market technology, human resources development, financing & meeting international environmental standards.





**Thank you very much.**

**Maraming Salamat po.**



Environmental Management Bureau  
Department of Environment and Natural Resources  
Visayas Ave. Diliman, Quezon City  
[www.emb.gov.ph](http://www.emb.gov.ph)

## SUMMARY OF PRESENTATION

### Education for Sustainable Development in Singapore

By Mr. Meng Hiong Ng,  
National Environment Agency

Singapore views sustainable development as a long-term, ongoing effort. A good environment does not have to come at the expense of economic progress, if everyone believes that sustainable development is important and makes an effort to adopt a more environmentally responsible lifestyle. In response to this, an Inter-Ministerial Committee on Sustainable Development (IMCSD) was formed, to ensure Singapore remains as a lively and liveable city for the current and future generations to enjoy. In a recently launched Blueprint for a Sustainable Singapore, it called for the support of community, NGOs and business leaders to build a sustainable economy and environment.

2 The National Environment Agency (NEA)'s 3P Partnership Strategy compliments the Blueprint as it involves working closely with partners from the People, Private and Public (3P) sectors, to nurture an environmentally-conscious population that embraces and advocates environmental ownership.

3 3P Partnership efforts are not limited to public education, or participation in environmental activities. In the long run, NEA hopes to forge a close partnership with key stakeholders to build a sustainable relationship with them, to jointly develop partnership programmes to impact a larger community.

4 The NEA's strategy involves 3 key thrusts: 'Communicate', 'Engage' and 'Empower'. The 'Communicate' thrust focuses on raising the awareness of the people on general environmental issues, while 'Engagement' objective is to involve more partners to partake in NEA programmes / activities. The 3P Partnership strategy aims to move towards the 'Empowerment' of our partners, so they may be equipped with the necessary skills and knowledge to be able to initiate and sustain environmental programmes in line with our efforts on a sustainable environment.

5 This presentation will cover the various aspects of NEA's effort in operationalising the 3P Partnership Strategy. Formal and informal school education will be discussed in detail, along with various examples of capacity building programmes and showcasing platforms for the respective 3P sectors. Programmes that are initiated by our 3P partners will also be highlighted, as a testament of our 3 Partnership Strategy gaining and sustaining efforts.

## **PRESENTATION REPORT**

### **Education for Sustainable Development in Singapore**

By Mr. Meng Hiong Ng,  
National Environment Agency

#### **Introduction**

Singapore views sustainable development as a long-term, ongoing effort. A good environment does not have to come at the expense of economic progress, if everyone believes that sustainable development is important and makes an effort to adopt a more environmentally responsible lifestyle. In response to this, an Inter-Ministerial Committee on Sustainable Development (IMCSD) was formed, to ensure Singapore remains as a lively and liveable city for the current and future generations to enjoy. In a recently launched Blueprint for a Sustainable Singapore, it called for the support of community, NGOs and business leaders to build a sustainable economy and environment.

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#### **Environmental Education in Singapore**

##### Formal Education

5 The Singapore Ministry of Education (MOE) curriculum has gradually incorporated environmental awareness into formal studies at the primary, secondary and pre-university levels over the years. Currently, environmental topics are covered in Science, Geography, Social Studies and languages.

6 At the Upper Primary School level, environmental education is mainly featured in Social Studies, Science and languages with a focus on air pollution, energy conservation and anti-littering. At the Secondary and Pre-U levels, besides Social Studies and Science, environmental education is also spread across other subjects such as Geography, Physics, Biology and Chemistry. At these levels, the focus moves towards waste management and recycling, energy efficiency and resource conservation, global warming, a clean and hygienic environment, environmental management and sustainability development.

7 In addition to the academic curriculum, NEA has also weaved in environmental programmes into other aspects of formal education. For example:-

- Learning Journey Programme – Schools visit NEA’s key installations eg: waste incineration plants, Semakau Landfill and meteorological stations.
- Community Involvement Programme – Seashore Life Programme and Recycling Outreach Programme are programmes, which enable students to participate in environmental activities that involve and benefit the community.

8 NEA continually engages MOE in reviewing and updating the environmental curriculum, through holding regular dialogue sessions and focus group discussions. Through such sessions, both NEA and MOE gains a better understanding of both parties’ requirement, to further develop environmental education modules so that it may be expanded to more schools.

### Non-formal Education

9 Awareness building is the foundation of the 3P strategy. In support of the strategy, NEA coordinates, organises and facilitates educational campaigns, programmes, projects and activities to educate the community and schools on public health and environmental issues.

10 NEA continually engages our schools through various environmental education programmes, including:

- Singapore, Litter-Free Programme
- Singapore’s OK Programme
- School Recycling Outreach Programme
- Public Health and Resource Conservation Badge for uniformed groups
- Student Environment Champions Programme
- Youth Environment Envoy Programme
- Corporate And School Partnership Programme

NEA has further expanded the Youth Environment Envoy programme to include 6 youths from Brunei Darussalam, who joined in the capacity training workshop in March 2009.

11 Other than engaging the schools, NEA also engages the community and corporate sector through environmental programmes and events, such as:

- Environment Champions (Community) Programme
- Corporate Environment Champions Programme
- Community programmes and events under the Clean & Green Singapore Campaign

12 Due to technological advances, more people are becoming IT-savvy. To keep up with the trend and engage this segment, NEA has embarked on the New Media platforms such as Facebook and Twitter. Also, NEA has produced a new interactive organic outreach campaign for dengue, Operation MACE. Operation MACE (Monster Annihilation, Control and Enforcement) is a dengue-prevention message initiative targeted at households in Singapore through reaching out to school-attending children aged between 8-12 years. It employs a scenario / role-play approach to motivate (inspire) as well as develop positive anti- mosquito breeding habits, educate necessary dengue and mosquito prevention information. It also encourages public and social watchfulness in our fight against dengue and unconscious mosquito breeding.

#### Schools Initiated Programmes

13 NEA's effective 3P Partnership Strategy has been showing results, with more schools being empowered with the necessary skills, knowledge and resources to spearhead programmes. Some examples of the schools which have initiated environmental programmes includes:

- Nan Hua High School's International Youth Environment Seminar
- Nanyang Girls' High School's Regional Environmental Science Conference
- Commonwealth Secondary School's annual "Just One Earth" Environmental Education Seminar for educators and students

14 In addition to initiating environmental programmes, Marsiling Secondary School have gone a step further, to designate themselves as the Centre of Excellence for Environment Education and has recently launched the Environment Education Hub (EEH) exhibition centre. The hub serves as a resource centre for teaching and conducting environmental education enrichment activities for students and a centre for teachers to share experiences and improve pedagogical and content knowledge about environment. The centre is open to other schools and visitors for learning journeys.

15 Commonwealth Secondary School is also designated as West Zone Centre of Excellence for Environmental Education, which is open to other schools and visitors for learning journeys.

#### NGO initiated programmes

16 NGOs are one of NEA's key stakeholders, in engaging the community and schools in the fields ranging from resource conservation, public cleanliness to nature conservation. Being NEA's key

stakeholders, we empower them with the necessary resources, so they may in turn initiate programmes that further NEA outcomes. For instance:

- Singapore Environmental Council (SEC) is one of the most established environmental NGOs in Singapore that focuses on corporate sector engagement. Some of the key events they organise includes:
  1. Schools Green Audit Awards (since 2000) to encourage students to cut down on energy and water wastage and find ways to reduce and recycle.
  2. Climate Change Portal that is catered for consolidating and communicating information on Climate Change issues to the general public. This Portal is geared towards providing tools such as online lifestyle driven interactive Carbon Calculators for individuals, business and the community at large that enables users to assess their carbon footprint.
  3. Project Carbon Zero is an online resource tool for students. Through logging into a specially designed website, the students are able to access energy saving tips that can be applied at home. It allows them to track their reduction in home energy usage over the next 3 months.
- The Restroom Association (Singapore) is the only local NGO that advocates clean public toilets, through educational and labelling programmes and activities. Some of the key events they organise includes:
  1. Appreciating Clean Toilets In Our Neighbourhood and Schools (ACTIONS) Programme is an ongoing fun and educational initiative to inculcate good toilet etiquette, personal hygiene habits and social responsibility in students.
  2. LOO Awards is developed to give recognition and encouragement to proactive individuals who have contributed selflessly to clean public toilets.
- Environmental Challenge Organisation (ECO), Singapore encourages youths to take initiative and choose to live environmentally sustainable lifestyles. ECO (Singapore) organised the inaugural National Youth Assembly which involved around 800 Singaporean youth, aged 17-25, which provided them with an opportunity to consider and debate the policies that will take Singapore forward in a sustainable, yet pragmatic, manner with their elected candidates.
- National Youth Achievement Award Council (NYAA) was started to encourage youths between the ages of 14 and 25 years to develop personal qualities of self-reliance, perseverance and a sense of responsibility to themselves, to society and to the nation. NEA works closely with NYAA youths, to help them self-initiate environmental projects, as they are supportive of grooming youth in environmental areas. We also engage them as volunteers to run NEA events and international environmental youth activities.

#### Corporate organisation initiated programmes for schools

17 As a sign of social and environmental CSR, many corporate organisation have also been forthcoming in implementing iconic environmental educational programmes for schools:

- Sembawang Shipyard's Green Wave Environmental Care Competition
- Senoko Power's National Weather Study Project Competition.
- Bayer's Bayer Young Environmental Envoy (BYEE) programme
- Applied Materials' Bright Future Card Game
- CapitaLand's Green for Hope

18 Apart from the list of corporate iconic programmes above, NEA facilitates the Corporate and School Partnership (CASP) programme between corporations and schools. This programme aims to encourage corporations to take ownership of the environment through initiating environmental programmes and grooming young leaders of the future. It also provides corporations the opportunity to mentor the students and demonstrate their corporate social responsibility, while sharing their technology and technical know-how. Schools and their corporate partner will be invited to showcase their joint environmental project at the annual nationwide Schools' Carnival event.

### **Capacity Building Through the Provision of Resources**

19 NEA recognises the importance of providing the right resources to help drive the overall outcome of achieving an environmentally aware and responsible nation. Providing the right resources would help schools improve environmental education or help realise worthy environmental projects.

- Captain Green Book Series and Clean and Healthy Me! Environmental Health Kit are NEA's educational tools in teaching environmental education to preschools and lower primary as good environmental habits should be inculcated from the young. Using characters which children can easily associate with, good habits and green messages are taught through fun and colourful stories.
- Programme for Environmental Experiential Learning (PEEL) is an "out-of-the-classroom" learning programme that aims to expand knowledge of environmental management through a series of site tours and visits to environmental facilities around Singapore.
- Educational environmental exhibition panels and posters are available for the all schools to be displayed at school events free-of-charge, to promulgate environmental awareness upon request.
- The National Environment and Water (NEW) Scholarship Programme aims to attract outstanding young leaders to the environment and water sectors. Targeted at Junior College students, they are nominated to participate for a 4 to 6 weeks internship with the NEA or PUB. They will get a first hand opportunity to participate in exciting and stimulating environmental or water projects, giving them a better

understanding of the dynamic environment and water sectors. Students who show particular promise during the NEW Programme can be offered the NEW Scholarship.

- Environment Club Fund provides designated sums of financial grants to encourage all schools with Environment Clubs to conduct environment-related activities and events within their schools and the community.

### **Showcasing platform**

20 NEA recognises the importance of providing all our schools and partners an avenue to showcase their efforts, which encourages them to sustain and build-on their programmes. NEA coordinates the nationwide Clean and Green Singapore (CGS) Campaign. The core theme of the CGS campaign, “Adopting a Clean and Green Lifestyle”, emphasises continuous and sustained commitment to pro-environment effort. The core theme is in turn, supported by three pillars of Clean Environment, City of Gardens and Water and Energy Efficiency and Resource Conservation. Some of the key CGS events, includes:

- CGS Launch, which focuses strongly on community involvement and promoting environmental messages. This event has expanded in the last few years, to showcase the programmes under each of the 3 CGS key pillars, as well as a platform for NEA and its partners to profile their environmental achievements.
- CGS Schools’ Carnival was inceptioned in 2003, as an annual platform for the corporate organisations and schools to showcase their joint environmental projects. To cater to the increased participation of the event, more build-up competition was organised to sustain interest throughout the 2-day event and as an informal way for students to learn about the environment.
- Semakau Corporate Environmental Outreach Run started in 2007, to not only encourage more corporate organisations to take part in environmental activities, but also as a way to help profile Singapore’s Semakau Landfill to the business community. This event helped raise fund for our environmental NGOs, so they may in turn, initiate more activities for the school and community.
- Recycling Day was organised as a part of NEA’s on-going efforts to involve and engage its partners and the community in the national 3Rs (Reduce-Reuse-Recycle) drive.
- Energy Challenge Fair is part of the NEA’s 10% Energy Challenge campaign to encourage households to reduce their energy consumption by 10% or more. Energy efficiency-focused community events were organised all over Singapore to raise awareness on energy efficiency.

## **Recognition Platform**

21 NEA also acknowledges the importance of recognising our partners for their initiatives and perseverance in making significant and lasting contributions to Singapore's Clean and Green environment. Their successful efforts serve as a model for more individuals and the community to play their part in Singapore's collective journey towards environmental ownership and sustainability. It has therefore developed two awards to recognize and encourage the outstanding individuals:

- Clean and Green Singapore (CGS) Award recognises outstanding efforts by individuals and the community in helping to sustain a clean and green environment in Singapore. NEA hopes that the winners and others in the community will continue with their efforts to help Singapore achieve environmental sustainability.
- EcoFriend Awards were developed in 2007 by NEA to give recognition to the growing number of proactive individuals in the private and public sectors, educational institutions, non-government organizations, grassroots, youth and students who have taken the initiative to do something to protect the environment on their own accord. It also aims to encourage and inspire individuals at all stages and walks of life to do their part for the environment, by showing that an individual's effort can have a significant, lasting and positive impact on our clean and green environment.

## **Conclusion**

22 Environmental education will always remain an important component of fulfilling Singapore's vision to be a lively, liveable city and a society that balances economic progress with environment sustainability. Singapore will remain committed towards the goal of sustaining and building on our environmental education programmes to educate our young, both locally and regionally that contributes towards the betterment and sustainability of our environment.

# EDUCATION FOR SUSTAINABLE DEVELOPMENT IN SINGAPORE

Presented by:

Ng Meng Hiong

National Environment Agency (NEA), Singapore

## NEA's Mission Statement

To ensure a sustainable quality environment in Singapore



## Desired Outcome



An environmentally-conscious population that embraces and advocates environmental ownership

## NEA's 3P Partnership Strategy

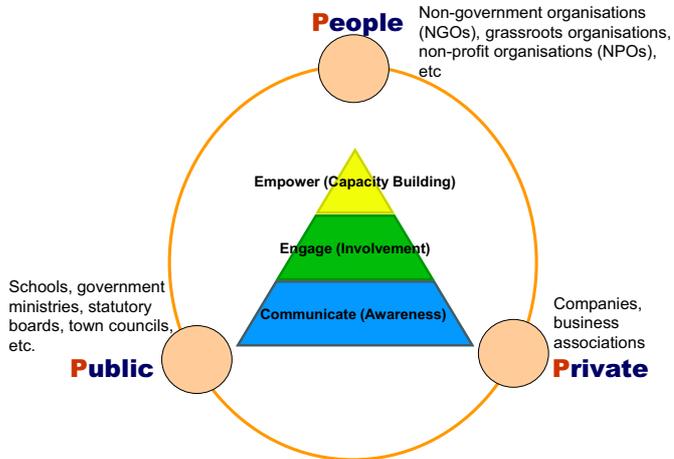
NEA's response to Sustainable Development Blueprint

→ 3P Strategy

# 3P

3P Partnership efforts – to facilitate and promote collaborations between members of the People, Private and Public sectors to work together to achieve a sustainable, quality environment for Singapore

## 3P Partnership Strategy



## 3P Partnership Strategy

– How do we operationalise our strategy?

- Work in partnership with 3P sectors to:
  - Initiate
  - Implement
  - Hand over environmental education programmes and projects
- Support and Service package for activities by 3P partners
- Facilitate partnership between 3P partners

## 3P Partnership Strategy

– Measurement of environmental education is through the following surveys:-

- Knowledge, Attitudes, Beliefs and Practices (KABP) Survey
- 3P Partnership Index Survey

## 3P Partnership Strategy

A 4-pronged approach is used to operationalise the vision

- Programmes
- Showcase Platforms
- Resources
- Recognition

## Formal Education

Primary / Secondary / Junior Colleges

Social studies / Sciences / Geography / Languages

Polytechnic / University

Engineering / Sciences / Design



ENVision Gallery

Learning Journeys

## Non-Formal Education



- Corporate And School Partnership (CASP) programme
- Expanded to international and special schools

## Non-Formal Education



Corporate Environment Champions

Environment Champions (Community)

Student Environment Champions / Youth Environment Envoys

## Non-Formal Education



Preschool



Pri / Sec

Environmental Education Advisors

## Non-Formal Education



Schools Recycling Programme



Litter-Free Schools Programme



Resource Conservation Badge



Singapore's OK Programme

## Non-Formal Education



Resource and Educational Materials

## Non-Formal Education



Competitions

## Non-Formal Education



Co-Curricular Activities and Campus Green Committees

Eco Camps / Field trips

## Non-Formal Education



Operation MACE (Monster Annihilation, Control and Enforcement )

New Media

<http://www.facebook.com/CGSingapore>

<http://twitter.com/CGSingapore>

## Non-Formal Education



Community programmes and events under our Clean & Green Singapore Campaign

## Non-Formal Education

Schools step forward to organise environmental initiatives



International Youth Environment Seminar  
(Nan Hua High School)



Regional Environmental Science Conference  
(Nanyang Girls' High)

## Non-Formal Education



Environmental Education Hub  
(Marsiling Secondary School)



West Zone Centre of Excellence for Environmental Education  
(Commonwealth Secondary School)



Climate Change Exhibition at Science Centre Singapore

## Non-Formal Education

### – Private sector initiatives

- Bayer
- CapitaLand
- City Developments Limited
- Sembawang Shipyard
- Senoko Power
- Applied Materials



## Human Resources Capacity Building

- Singapore Environment Institute provide environmental training programmes



- National Environment and Water (NEW) Scholarship

- To groom aspiring young talents with a passion for environmental sustainability



## Networking, Collaboration & Communication



## Networking, Collaboration & Communication



Networking sessions



Regional environmental events

## Networking, Collaboration & Communication

### – NGO initiatives

- Singapore Environment Council
- National Youth Achievement Award Council
- Restroom Association (Singapore)
- Environmental Challenge Organisation



## Recognition

- President's Award for the Environment
- EcoFriend Award
- Clean and Green Singapore Award
- 3R Award
- Singapore Packaging Award
- Eco-Office Certification

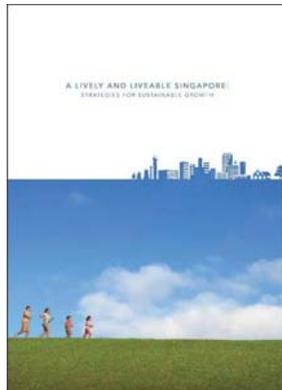


*President's Award  
for the Environment*

Recognising Outstanding Contributions towards Singapore's Environment Sustainability

## The Sustainable Development Blueprint

*"We need the support of the **community** to build a sustainable economy and environment. **Community, business leaders and NGOs** should promote an environmentally responsible lifestyle through their everyday decisions and actions."*



**Thank You**



# INDONESIA

## National Policy on Education for Sustainable Development, *and its implementation*

Prepared for the **ASEAN+3 Policy dialogues on Education for Sustainable Development: Centred on Implementing ESD Programmes for Sustainable Livelihoods**,  
Bangkok, Thailand, Dec 3<sup>rd</sup>-4<sup>th</sup> 2009.



## The Development of EE Policy

- 1983-1984: EE development through formal and non-formal, the policy is signed by the minister of Education, Environment, Religion, and Internal affair
- 1996: MOU between Ministries of education and Ministry of the Environment about EE Development
- Since 2004 : National policy on environmental education
- 2005: MOU between Ministries of education and Ministry of the Environment about EE Development
- Since 2006 :
  - Impelmented environmental education for formal education, The program called ADIWiyATA
  - Prepared EE material for formal education
  - Implemented Informal education for community
- 2006 : Development draft Strategy for Indonesia DESD 2006 - 2014
- Since 2007 : every year conducting national workshop for ESD



## Strategic Plan for Implementation of DESD INDONESIA (2006 - 2014)

### Phase 1: Start Up (2006)

- Identification of ESD problems and announcing of Indonesia readiness
- Made DESDI concept, priority decision and strategic plan for institutional building
- Arrange Promotion/Publication Kit and Launching ESD Nasional – DESDI(Indonesia)
  - Plan prototype program of ESD (existing and new) and piloting project

### Phase 2: Post Launch and Partnership (2007 – 2008)

- Monitor and Evaluation prototype program
- Publication, Initial movement of National ESD and Campaign of ESD Image
  - Formulate collaborative program based on stakeholder need
- Develop a realistic prototype program and duplicate for local community through collaborative action

### Phase 3: Success Story and Inovation (2009 – 2010)

- Create a success story
- Develop Inovation program / ESD product based on local wisdom: Concept, Approach, method, technical aspect, education infrastructure, etc
- Publication and Campaign Program of ESD: testimonial approach (success story)



## Strategic Plan for Implementation of DESD INDONESIA (2006 - 2014)

### Phase 4: Good to Great (2011 – 2013)

- Adding Material Availability / Modules of ESD
- Enhance Organization Capacity and Program for Legislative
- Leadership enhancement, Super leaderships Development at local (Local Champion)
  - Strengthen Local Capacity
- Develop community discipline → discipline thought → discipline action
  - Publication and Campaign: "ESDI in Progress"

### Phase 5: Indonesia: The New Achievers for Sustainable Development Country (2014)

- Make documentary Film "The Indonesian Way in Achieving SD's State"
- Promotion/ Intensive publication / campaign (ATL/ BTL; off-air /on-air): "We (Indonesian) are Ready"
- Enhance ESDI Networks, ESDI reposition ESD of Indonesia as Framework Base
  - National Movement on ESD



## Programs & Activities

1. Launching and seminar of Education for Sustainable Development (ESD) Strategy in Indonesia
2. Dissemination and socializing an ESD Strategy to five region (Sumatera, Sumapapua, Bali and Nusa Tenggara, Java, Kalimantan);
3. Conducting Training on ESD for all stakeholders
4. Development of National ESD Program. Conducting Workshops on ESD Program for all stakeholders;
5. Conducting Training of Trainers on EE for teachers (33 provinces) in accordance with level of education (kindergarten, elementary, junior & senior high schools including vocational school);



## Programs & Activities

6. Conducting Training of Trainers on EE for training facilitators (non-formal / informal);
7. Developing education and campaign materials (books/modules, posters, documentary film, slides, etc) on EE in accordance with levels of education (formal) and for non-formal/informal EE;
8. Establishing guidance on various methods of EE (formal, non-formal/informal);
9. Fellowship Program for Master and Doctoral Degrees on Environmental Education;
10. Enhancing EE for schools (**ADIWIYATA Program**), Etc



## ADIWIYATA

### Goal :

- create good conditions for schools to become places of learning & awareness of citizens of schools (teachers, students & other workers), so in the future citizens of these schools can participate in charge of protect and manage the environment & sustainable development



7



## ADIWIYATA



### Basic Principles:

#### Participatory

- School community engaged in integrated school management covers the entire process of planning, implementation & evaluation of appropriate responsibilities & roles.

#### Sustainable

- All activities must be done in a planned & a comprehensive continuing.

8



# ADIWIYATA



## Indicator

1. Development of school policy that environmental perspective
2. Environment-based curriculum development
3. Development of participatory-based activities
4. Development and management of school facilities are environmentally friendly



## Adiwiyata Achievements 2006-2009

	2006	2007	2008	2009
Regional Scope	Java Island (5 Prov.)	National (17 Prov.)	National (24 Prov.)	National (29 Prov.)
School Participation	156	250	375	800



## Sharing of information



## Field visit to observe nature





## Action



## Action



## Problems of EESD Implementation

1. Minimum public participation
2. Limited understanding & lack of commitment.
3. The material & the method for the implementation so far have been considered inadequate.
4. The material & the method are not applicable in the respective region.
5. Limited Facilities & infrastructure.
6. The lack of available budget.
7. Poor inter agencies coordination to develop EE.
8. The absence of Regional and Local Government policy.



## Way Forward

- **Institutional Arrangement**
  1. Revise its national education system
  2. Enhance institutional coordination
  3. Increase government budget for environmental education
  4. Increase monitoring and evaluation
- **Human Resources**
  1. Develop capacity building for EE teachers and facilitators
  2. Develop capacity building for TOT trainers
  3. Increase access for teachers and facilitators to participate actively in environment organizations
- **Infrastructures aspects**
  1. Develop EE modules, materials, books, posters and other audio visual aids
  2. Facilitate the development of EE centers in every region
  3. Develop EE Data Base and Information System
- **Management aspect**
  1. Develop EE information and communication centers at region
  2. Conduct capacity building for EE management
  3. Upgrade working networks among EE stakeholders
  4. Develop EE communication media for trainer and training administrator
  5. Persuade Business Sectors to support implementation of EE



## Way Forward

### Community

- Change behavior and consumption pattern in the pilot community (e.g; start to give attention on: composition & package of product, waste sorting instead of burning it, litterbug habit, medicine herb, etc)
- Increase knowledge on: day to day-used chemical or hazardous waste, impact of environment damage or pollution to their health, etc
- Increase common understanding that environment issues focused not only on big issues, global problems, etc but also about our neighborhood and that environment education is not only about biological science or conservation but also moral attitude (behavior pattern) towards environment



# THANK YOU

Bangkok, 3<sup>rd</sup> Dec 2009

## SESSION 3

3<sup>RD</sup> DECEMBER 2009, 14:50-15:55

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### NATIONAL ESD POLICY AND STRATEGY – ASEAN GROUP 2

**Chairman:** Mr. Katsumi Kakazu, The Japan Foundation

*Thailand: National Policy on Education for Sustainable Development, and its implementation*  
Presentation, Ministry of Natural Resources and Environment, prepared by Ms. Savitree Srisuk,  
presented by Ms. Natawan Lourith on behalf of Ms. Srisuk

*Lao PDR: National Policy on Education for Sustainable Development*  
Presentation, Department of Environment, Water Resources and Environment Administration,  
Ms. Phouangmalay Sorvalith

*Malaysia: National Policy on Education for Sustainable Development, and its implementation*  
Presentation, Ministry of Natural Resources and the Environment, Ms. Hajah Normadiyah Haji Husien

Mr. Katsumi Kakazu opened the session by expressing his honor to have a chairman role during this workshop and confirmed the desire of the Japan Foundation to support ESD initiatives throughout the ASEAN+3 countries. Mr. Kakazu introduced the presenters.

Ms. Natawan Lourith provided a presentation on ESD in Thailand on the behalf Ms. Savitree Srisuk. Ms. Lourith began by presenting the current status of Environmental Education for Sustainable Development (EESD). The National Policy for EESD covers 2008-12 with aims to incorporate sustainable development into the formal curriculum, to promote opportunities for life-long learning, and to provide for wider collaboration across sectors. The public concern for the environment in Thailand has been growing, and thus efforts on EESD are becoming better supported than in the past.

The Department of Environmental Quality Promotion has undertaken several activities to communicate with the public on EESD. The project 'Kob Junior' provided opportunities for kids to produce environmental videos that are now running on TV, and the periodical journal 'Green Line' now has a wide distribution among education professionals and teachers in Thailand. Formal and informal networks on EESD have been established in the country. This past year, DEQP worked with 41 schools to pilot their Eco-School project which enjoyed success and notoriety. Ms. Lourith went on to explain some of the barriers that are faced in establishing effective EESD policies: there is still a limited understanding of ESD concepts and there is a lack of ownership over EESD policy. Regarding the advancement of ESD, Ms. Lourith highlighted that ESD should be coupled with ideas of sufficiency economy and community capacity building, while also acknowledging that there is a need to provide ESD that can help in disaster and crisis scenarios.

Ms. Phouangmalay Sorvalith began her presentation by identify the existing strategies in Lao PDR: the National Environment Strategy to 2020 and Environmental Education Action Strategy to 2020. In formal education, teaching on the environment occurs in geography, chemistry, and history. Materials including manuals, course books, and posters have been developed by the government to strengthen ESD. In non-formal education, the government promotes campaigns on environmental

awareness raising and carries out events on important environmental days such as World Environment Day, World Water Day, and Fish Day.

Ms. Sorvalith went on to explain that the government is taking efforts for human resource capacity building in order to have more technical staff throughout the country who can promote ESD. Special activities have been held for teachers to provide them with ESD training. Seminars on specific topics are also held for professionals in certain industries so that they can act in a more sustainable manner. Ms. Sorvalith explained that major obstacles currently faced are not enough trained staff, the limited/ irregular nature of environmental curriculum, and lack of financial support. Opportunities for future advancement were highlighted as more cooperation with the Ministry of Education, cooperation with mass media, farmer/agricultural training, better public engagement on environmental awareness raising, and capacity building for a wider range of agencies.

Ms. Hajah Normadiah Haji Husien began by explaining the foundations of Malaysia's sustainable development policy in the country's Industrial Master Plan (1986-1995) for achieving sustained growth. The current Vision 2020 brings in diverse perspectives and details a plan for a holistic approach to growth and development with a clear recognition of the importance of preserving the environment. Malaysia does not have a separate strategy on ESD, but the government has established a National Policy on the Environment that includes as the first of its seven green strategies 'Education and Awareness'. However, Ms. Husien also highlighted that each ministry has produced their own vision and that there is not strong correlation between these.

The vision for the Department of Environment and Natural Resources incorporates seven strategies to "ensure and sustain sound environmental management in the process of nation building":

- Sustainable Development through natural Resources Conservation;
- Integration of Environmental Factors in Development Planning;
- Control and Prevention of Pollution;
- Collaboration with Federal and State agencies;
- Public Participation in Environmental Management;
- Bilateral, Regional and International Cooperation, and;
- Promotion of Education and Environmental Awareness.

Environmental Awareness is promoted through a series of programmes aimed at education institutions, the public sector, industries, and media. The *Sekolah Lestari* programme has been set up to encourage sustainable schools through curriculum development, school management, co-curriculum teaching, and overall institutional greening. Furthermore, specific guidelines on environmental education have been developed for pre-schools, primary schools, and secondary schools.

Ms. Husien also explained DOE's 'Environmental Heroes Project' and 'Environmental Camps'. The newest programme established by the Ministry of Natural Resources and Environment, 'Rakan Alam Sekitar', aims to encourage the participation of local communities in environmental conservation. Ms. Husien explained that the barriers that are currently faced for ESD advancement is the lack of a specific EE policy for its integration across the curriculum, the lack of EE materials and teacher training, and the fact that EE is still addressed as an extracurricular activity. Currently, only one hundred schools have joined in the ESD activities promoted by DOE. More cross-sector and multi-

stakeholder collaboration is needed to promote environmental citizenship through learning and sharing.

Mr. Kakazu opened the floor to all participants for interventions and questions:

Mr. Marut Jatiket asked the participants how their countries are dealing with capacity building for teachers?

Ms. Husien explained that in Malaysia there are inter-agency working groups that support teacher training programmes, but that these currently remain limited.

Mr. Ng replied that in Singapore each school has an environmental officer that works with the teachers to promote ESD learning.

Ms. Lourith described the teacher training program that compliments the Eco-School project in Thailand and also acknowledged the efforts being made to work with communities in localising the curriculum.

Dr. Irene Poh-Ai Cheong suggested that in addressing primary and secondary education, we are only considering half of the current efforts on ESD. In higher education, many efforts are being made to incorporate ESD into teacher training.

Ms. Lynda Rolph suggested that though complaints are often made that sustainable development has not been mainstreamed as its own subject, that maybe this is actually better because it allows for the opportunity for ESD to be integrated across the curriculum and provide for a more holistic and effective form of ESD.

Mr. Mikko Cantell provided a summary of this session by identifying three common themes. First, there is a need for mapping the existing capacities in each country for supporting ESD and developing clear strategies for integrating these aspects. Second, there is a need to provide training and capacity building for educators on ESD. Third, the issue of curriculum reform must consider both how to develop locally based learning opportunities while at the same time ensuring a national consistency.

## SUMMARY OF PRESENTATION

### **Thailand: National Policy on Environmental Education for Sustainable Development, and its implementation**

By Ms. Savitree Srisuk,  
Department of Environmental Quality Promotion  
MONRE, Thailand

Although Thai society has been quite responsive to the idea of preserving the environment and natural resources for more than three decades, the general public or even the environmental organizations in Thailand still have a limited understanding about EESD and do not realize the significant role of EESD in their work to promote citizen livelihood. Most of Development projects pay attention for “environmental” management but not with “people” management.

Currently, Department of Environmental Quality Promotion (DEQP) with an academic/research support from Social Development Institute, Chulalongkorn University had prepared the National EESD Master Plan 2008-2012. The Plan itself is a guideline of EESD development direction for partner organizations concern within the next five year. It’s not yet been saying “National Policy for EESD” of the country in formal. However, the Plan has its 5 targets to achieve during 2008-2012.

1. Key organizations and catalyst groups realize/understand the Role of EESD
2. Institutionalized structure has been set to support EESD development continuously
3. More collaboration and coordination of various sectors to support EESD
4. Development at both Inside and outside Educational Institutions Leading to lifelong learning  
EESD is applied to support the operation of other public policy, strategies and development at national, regional and local levels.

There are some progress in EESD practices, consider from the Plan’s development strategy, especially growing of stakeholders collaboration among various sectors.

Finally, effective EESD that help promote/strengthen Sustainable livelihoods of people must be identified - what kind of EESD that serve people being effected from “unsustainable Development”?  
Where is a place for EESD in the world that still moving to the endless growth of competitive Market?

### Relationship between EESD Strategies and Goals of Master Plan : 2008 - 2012

<b>EESD</b> <b>Development</b> <b>Goals</b> <b>EESD</b> <b>Develop</b>	1. Understanding and Realizing the Role of EESD	2. Institutional Structure to develop EESD	3. Collaboration and Coordination between Units	4. Development at Both Inside and Outside Educational Institutions Leading to Lifelong Learning	5. Application to Determine and Use Policies and Strategies
1. Public Communication of EESD	***	**	**	**	
2. Establishment of Institutional Structure to Support the Development of EESD		***	**		*
3. Integration of EESD with Management of Natural Resources and Environment and Other Public Policies	*	**	*		***
4. Establishment and Strengthening of EESD Network	**	**	***	**	**
5. Marketing for EESD	**		***		
6. EESD Link between Inside and Outside Educational Institutions	*		**	***	
7. Knowledge Management of EESD	**		***	***	**

**N.B.** \*\*\* refers to a strategy which is of great importance to the achievement of the goal

\*\* refers to a strategy which is of average importance to the achievement of the goal

\* refers to a strategy which is of little importance to the achievement of the goal

# NATIONAL POLICY ON EDUCATION FOR SUSTAINABLE DEVELOPMENT, **AND ITS IMPLEMENTATION**

Savitree Srisuk  
Director, Environmental Education Sub-division  
Public Education and Extension Division  
Department of Environmental Quality Promotion  
MONRE, Thailand  
www.deqp.go.th

10/12/52

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## 1.CURRENT STATUS

## 2.PRACTICAL EXAMPLE OF IMPLEMENTATION

## 3.OPPORTUNITIES FOR PROMOTING EESD

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## Targets: EESD Development in the Timeframe of NP-EESD 2008 – 2012

1. Key organizations and catalyst groups realize /understand the role of EESD
2. Institutionalized structure has been set up to support EESD development continuously
3. More collaboration and coordination of various sectors to support EESD

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4. EESD become a life-long learning practices through knowledge/experience sharing
5. EESD is applied to support the operation/ implementation of other public policies and strategies at all levels

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## Current status of NP-EESD : 2008-2009

- More corporation/support of private sector involve in EE program/activities in school (CSR activities is double refund tax)
- Growing of environmental movement concern in middle-class citizen cause from information of global issue about climate change
- Medias play more powerful part in public communication on EESD

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## Practical example of policy implementation



- Strategy : Public communication on EESD**
  - Collaboration of government /company/ media and producer of popular TV program (kob-nog-kala) to produce "kob junior" project to encourage students for making short film/video clips about EESD



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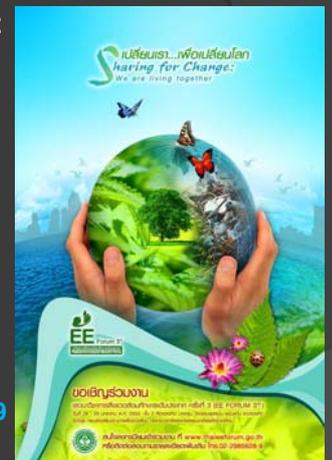


Green line periodical journal

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- Strategy: Establishment of Institutional Structure**
- Strategy: Network establishment and strengthening**
- Strategy: Knowledge management of EESD**
  - Formal and Informal network of EESD experts to prepare the 3<sup>rd</sup> EE Forum (28-29 January 2010)



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- ◎ **Strategy** :EESD Link between Formal and Non-formal Education
  - research/ lesson learned summary from 41 pilot Eco-school



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## Obstacles and barriers in establishing effective EESD policies

- ◎ A limited understanding of EESD among the general public and key implementing organizations
  - difficult to integrate EESD with management of natural resources and environment and other public policies
  - most local governments not realize and understand an important role of EESD
- ◎ Lack of ownership of EESD Policy / how to build up partnership

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## Opportunities for ESD/EESD

- ◎ Current development strategies such as sufficiency economy, community strengthening that support the work of EESD
- ◎ Natural disaster, environmental crisis and global warming which have made Thai people more alert and pay more attention to the environment

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## Next Step

- ⦿ Scaling-up Eco School and Strengthen EESD educator network (University Professor, NGOs , etc.)
- ⦿ Communication about EE/ESD concept and principles through publication, activities, etc.
- ⦿ EESD annual report includes Formal, Non-formal and Informal Education

# NATIONAL POLICY ON EDUCATION FOR SUSTAINABLE DEVELOPMENT

Ms. Phouangmalay SORVALITH  
Officer of Environmental Promotion Division  
Department of Environment  
Water Resources and Environment  
Administration  
Vientiane Capital city,  
3 December 2009

## Outline

- ▣ I. Background
- ▣ II. Policy, Strategy and Legal
- ▣ III. Activities
- ▣ IV. Obstacle and Barrier
- ▣ V. Future Director

## I. Background

- ▣ EEA aims to provide people with environmental knowledge and skills, develop their positive attitude and value for the environment, and by participating in sustainable environmental management, to take responsibility for their environment.
- ▣ All of these element aim to protect the environment and preserve our natural resources, to ensure sustainable development and provide the livelihood of the people

## II. Policy, Strategy and Legal

- ▣ Lao's Constitution, article 19
- ▣ Decree on the Implementation of Environment Protection Law, article 20
- ▣ National Environment Strategy to the Year 2020
- ▣ EEA Strategy to the year 2020 and the Action Plan from 2006-2010
- ▣ ASEAN Environmental Education Action Plan 2008-2012
- ▣ Other laws related to the environment include: Environment protection, forestry, mining...

## National strategy on EEA to the year 2020

- ▣ Formal Education:
- ▣ Non-formal Education
- ▣ Environmental Awareness Raising
- ▣ Manpower Capacity Building
- ▣ Establishment of networking, Cooperation and Coordination



## III. EEA Activity for ESD

- ▣ **Formal Education: Environment teaching is based on teaching manuals, course book, posters and leaflets for both teachers and students.**
  - ▣ Faculty of Environment at National University of Laos: ecology, watershed and land use planning...

## EEA Activity for ESD(cont.)

- ▣ Upper secondary school: environment in geography, Chemistry, history...
- ▣ Secondary school: geography, Chemistry, history...
- ▣ Primary school: World Around us subject...

## Awareness Materials



### III. EEA Activities for ESD

- ▣ **Non Formal Education:** Promote adult Education and literacy. It has a curriculum and training resources and other information.
- ▣ Invited as speaker in the advocacy training at National Politic Institute, University, colleges, and other about Health education, climate change, waste management.



### III. EEA Activities for ESD

- ▣ **Environmental Awareness Raising:** There are active public campaigns to raise public awareness on the responsibility and obligations of the people towards the protection of environment:
- ▣ Building activities on anniversary: World Environmental Day, fish Day, World Water Day...

### III. EEA Activities for ESD(cont.)

- Ministries, Government agencies and local authorities have organized public campaigns to raise the public's awareness
- Children Cultural Centre's across the county include environment in their creative activities.

### Activities on World Environment Day



### III. EEA Activities on ESD

- Manpower Capacity Building
- WREA organize environmental training, seminars and study tours for technical staff within the country and overseas supported by other donors.

### Activities

- Teachers from 14 primary school joined the Environment camping: on Green school in Thailand.
- conducted the training on Awareness building of Environmental for mass media in Vangvieng District, Vientiane.



### EEA Activities for ESD(cont.)

- conducted the Seminar on Awareness building of Environmental (Focus on Hazardous chemical : cyanide) in Xiengkhouang Province
- conducted the training on waste management for bus Drivers.



### III. EEA Activities for ESD

- **Establish of networking, Cooperation and Coordination**
- WREA in cooperation with Sida and other Donors provide financial and technical assistance to implement EEA activities such as a foundation training Course for Trainers on EEA throughout the country and other campaigns.

## Activities

- ❑ WREA jointed Junior Camping , Organize by Lao Youth Union.
- ❑ Coordinate with Lao Youth Union to implement 1 million trees planting project
- ❑ Coordinating with Chulalongkone University of Thailand to support Environment Club for primary school



## IV. Obstacle and barrier

- ❑ Not enough Technical staff of Environment management.
- ❑ Limited and irregular environmental curriculum and capacity building for government staff, teachers, trainers all level.
- ❑ The quality of EEA in formal and non-formal from primary school to University level is not high
- ❑ Public Awareness building on EEA is carried out on an irregular basic.
- ❑ Lack of financial support.

## V. Future Director

1. Cooperating with Ministry of Education on how to separate environment subject at upper secondary school.
2. Cooperating with Mass Media to continue producing environment program on TV, Radio and articles on the news paper and magazines.

## V. Future Director (cont)

4. Capacity Building on EEA for line agencies.
5. Set up permanent signs along the main roads in order to make people in the society to aware of Environment.
6. Conducting training on Reducing pesticides in agriculture for farmer .





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**REGIONAL WORKSHOP ON EDUCATION FOR SUSTAINABLE DEVELOPMENT IN SOUTHEAST ASIA**  
BANGKOK, THAILAND  
3-4 DECEMBER 2009

**NATIONAL POLICY ON EDUCATION FOR SUSTAINABLE DEVELOPMENT, AND ITS IMPLEMENTATION IN MALAYSIA**

By **Hajah Normadiah Haji Husien**  
*Department of Environment Malaysia  
Ministry of Natural Resources and the Environment*



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**SCOPE OF PRESENTATION:**

- A) *Introduction*
- B) *Current Status Of National Policy On Environment Education For Sustainable Development (EESD)*
- C) *Practical Examples*
  - a) *Achievement*
  - b) *Obstacles And Barriers Faced In Establishing Effective EESD*
- D) *Conclusion*



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**A) INTRODUCTION**  
**Overview of national development policies**

**1. Industrial Master Plan, 1986-1995**  
The Industrial Master Plan (IMP) was formulated to guide the development of the manufacturing sector in Malaysia between 1986 and 1995. IMP provided a framework for ensuring a more diversified and integrated manufacturing sector and establishing the foundation for its sustained growth.



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**2) The Second Outline Perspective Plan (OPP2)**  
The Second Outline Perspective Plan (OPP2) document calls for "prudent management of natural resources and the ecology as well as the preservation of natural beauty and a clean environment, to ensure sustainable development for the present and future generations". Environmental programmes under OPP2 emphasize the maintenance of a clean and healthy environment with ecological and climatic stability. Natural resources will continue to be exploited for economic purposes, but that will be done within the context of resource protection to safeguard the needs of future generations. In other words, OPP2 stresses sustainable development. That is important as all other plans and policies undertaken during the OPP2 period need to adhere to its guiding principles; as such, OPP2 will ensure sustainable development.

### 3. Vision 2020

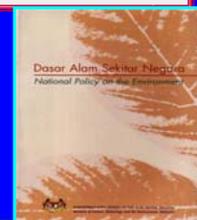
- a) Vision 2020 basically aims for developed country status not only in the economic sense, but also in other dimensions such as political, social, spiritual, psychological, and cultural. In the context of environmental preservation and management, Vision 2020 warns against "growth fixation", the danger of pushing for high growth figures while remaining oblivious to the need to ensure sustainability and improve the quality of life, among others.
- b) The holistic approach to growth and development as espoused by Vision 2020, in particular the clear recognition of the importance of preserving the environment

### B) Current Status Of National Policy On Environment Education For Sustainable Development (EESD) MALAYSIA NATIONAL POLICY ON THE ENVIRONMENT



#### STATEMENT

**FOR CONTINUOUS ECONOMIC, SOCIAL & CULTURAL PROGRESS & ENHANCEMENT OF THE QUALITY OF LIFE OF MALYSIAN, THROUGH ENVIRONMENTALLY SOUND AND SUSTAINABLE DEVELOPMENT**



### NATIONAL POLICY ON THE ENVIRONMENT 8 Principles

- Stewardship of the Environment
- Conservation of nature's vitality & Diversity
- Continuous Improvement in the Quality of the Environment
- Sustainable Use of Natural Resources
- Integrated Decision-Making
- Role of the Private Sector
- Commitment & Accountability
- Active participation in the International Community



### NATIONAL POLICY ON THE ENVIRONMENT 7 Green Strategies

- Education & Awareness
- Effective management of natural resources & the environment
- Integrated development planning & implementation
- Prevention & control of pollution & environmental degradation
- Strengthening administrative & institutional mechanisms
- Proactive approach to regional & global environmental issues
- Formulation & implementation of Action Plans



## DOE'S VISION

That the uniqueness, diversity & quality of the environment are conserved towards maintaining health, prosperity, security & well - being for the present & the future



## DOE'S MISSION

To promote, ensure & sustain sound environmental management in the process of nation building



## DOE'S STRATEGIES

- Sustainable Development through Natural Resources Conservation
- Integration of Environmental Factors in Development Planning
- Control and Prevention of Pollution



## DOE'S STRATEGIES...contd

- Collaboration with Federal and State Agencies
- Public Participation in Environmental Management
- Bilateral, Regional and International Cooperation
- Promotion of Education and Environmental Awareness



## **ACTION PLAN ENVIRONMENTAL AWARENESS PROMOTION**

**Bringing together the resources of a government agency, a private-sector company and a governmental organisation in a collaboration to promote understanding, appreciation and conservation of the natural environment.**

## **ACTION PLAN ENVIRONMENTAL AWARENESS PROMOTION**

- ▣ Environmental Awareness Programs (Education Institution)
- ▣ Environmental Awareness Programs (Publics)
- ▣ Environmental Awareness Programs (Industries)
- ▣ Environmental Publications Programs
- ▣ Environmental Information Dissemination Programs
- ▣ International Affairs Cooperation Programs

## **C) PRACTICAL EXAMPLES:**

### **a) ACHIEVEMENT)**

## **ENVIRONMENTAL AWARENESS PROGRAMMES (EDUCATION INSTITUTION)**

## **OBJECTIVE**

To Plan, Organize and Coordinate  
Environmental Education &  
Awareness Enhancement Programs  
amongst the students

## PROGRAMMES/ACTIVITIES

- i) Sekolah Lestari – Environment Award
- ii) Environmental Heroes Project (Projek Wira Alam)
- iii) Environmental Awareness Camp (KeKAS)
- iv) Inter-Varsity Environmental Debate Among Institutions of higher Learning
- v) Module for Pre-Schools (2009 to be implemented in 2010)
- vi) Others (Organize by other agencies from time to time) :
  - . Eco-Youth Programme
  - . Kits Programme
  - . 3R Programme



### 1) SUSTAINABLE SCHOOL

ORGANIZER

DEPARTMENT OF ENVIRONMENT

IN COLLABORATION WITH

MINISTRY OF EDUCATION, MALAYSIA

ENVIRONMENT AND DEVELOPMENT INSTITUTE, UKM

## DEFINITION

**SEKOLAH LESTARI** embraces environmental education through the infusion and incorporation of positive environmental values in school management, curriculum, co-curriculum and greening activities in a continuous manner towards the development of a way of life that is in line with the concept of sustainable development.

## OBJECTIVES

- ❖ To foster good environmental values amongst the school community;
- ❖ To raise awareness amongst the school community about the importance of environmental protection and conservation;
- ❖ To encourage the school community to carry out effective environmentally friendly activities;
- ❖ To heighten cooperation between schools and communities in making environmental education a success; and
- ❖ To generate a school surrounding that is conducive for producing a school community that practices a sustainable way of life.

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**Launching Ceremony**  
by  
**Minister of Natural Resources & Environment**  
and  
**Minister of Education, Malaysia**

**27 Januari 2005**  
**SMK Bandar Baru Bangi**

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**UMBRELLA CONCEPT FOR ENVIRONMENTAL ACTIVITIES**

**Other Environmental Activities**

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**COMPONENTS**

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**Target Group**

The participation open to all schools in Malaysia.  
Involvement by :

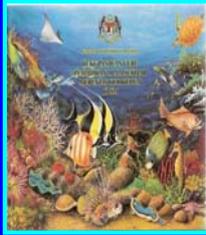
- School Management
- Students
- Parents & Teachers Association
- Local Community

## THE IMPLEMENTATION OF ENVIRONMENTAL EDUCATION IN MALYSIAN SCHOOLS

Environmental Education (EE) was given emphasis within the National Education System. The EE was integrated and infused throughout the Pre School, New Primary School Curriculum and Integrated Curriculum for Secondary Schools. There are three (3) set of Guidelines for teachers were produced related to groups of the students:



Primary Schools



Secondary Schools



Pre- schools

## 2) PROJEK WIRA ALAM ( Environmental Heroes Project )



Organized by Department of Environment with cooperation of Ministry of Education and Malaysia Nature Society (MNS).

### Objective:

To create an opportunity for the students to participate either individually or collectively in environmental conservation activity.

Target Group Open to all Primary and Secondary School students in the country.



FOREST ECOSYSTEM



BLIND TRAIL



RIVER ECOSYSTEM

## What is PWA?

Relevant document consist of :

- a. Guide Book
- b. Activity Book

- Individual Heroes (Stage 1)
- Community Heroes (Stage 2)
- Environmental Heroes (Stage 3)

Activity Book consist of exercises which need to be completed the interested students.

## SCOPE OF PROJECT



### Stage 1 INDIVIDUAL HEROES

- ✓ Based on student awareness, attitude and an action.



### Stage 2 COMMUNITY HEROES

- ✓ Enhance student awareness on current issues such as beautification, conservation and restoration, recycle etc.



### Stage 3 ENVIRONMENTAL HEROES

- ✓ Involve community work, resources consumption and study, conclusion and implications to human and the environment.

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**Learning on flora & fauna using forest ecosystem**



**Introduction to the function of mangrove forest**




Certificate and Prizes

WIRA ALAM Award Ceremony in 2005

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### 3) KEM KESEDARAN ALAM SEKITAR ( Environmental Camps)

ORGANIZER BY DEPARTMENT OF ENVIRONMENT  
IN COLLABORATION WITH STATE EDUCATION DEPARTMENT  
MINISTRY OF EDUCATION MALAYSIA

**OBJECTIVES**

- i) To give exposure to participants about the importance of environmental awareness
- ii) To create positive attitude and responsibility and to inculcate towards loving and caring to the surrounding and natural environment
- iii) To develop student's attitude and cooperation continuously on environmental conservation
- iv) To give opportunities to participants to enjoy on environmental recreation activities

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**Target Group**

- ✓ School students (ages 14-16 year)
- ✓ Collagues students and youths (Facilitator).



COASTAL ECOSYSTEM



RIVER ECOSYSTEM



FOREST ECOSYSTEM

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### MODULES

- Urban Ecosystem
- Highland Ecosystem
- Off-shore Ecosystem
- Oil Palm Plantation Ecosystem
- River Ecosystem
- Organic Plantation Ecosystem
- Forest Ecosystem



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### 4) INTER-VARSITY ENVIRONMENTAL DEBATE AMONG INSTITUTIONS OF HIGHER LEARNING

Organized by Department of Environment

In collaboration with:

- Malaysian Universities Debating Council (MADUM)
- Dewan Bahasa Dan Pustaka (DBP)
- Ministry of Education (KPM)

**Objective:**

- To increase knowledge and awareness in environmental issues among university students so as to be more sensitive to environmental problems.
- To train university students as future leaders to express innovative and effective ideas.
- To enhance debating skills among the university students.

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**Target Group** ✓University students  
✓University Management

### 19<sup>th</sup> Inter-University Environmental Debate

The 19<sup>th</sup> Inter-University Environmental Debate saw participation from 22 institution of higher learning in Malaysia. University Technology PETRONAS (UTP) in Tronoh, Perak hosted the event from 24-28 July 2009. University Putra Malaysia (UPM) emerged the overall winner receiving:

- The Minister of Natural Resources and Environment Challenge Trophy, a cash prize of RM 8,000.00; and
- A certificate of participation.
- The Best Debater received the Director General of Environment Trophy, together with a cash prize of RM 1,500.00.
- Y.B. Tan Sri Joseph Kurup, the Deputy Minister of the Ministry of Natural Resources and Environment gave away the prizes.



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### MODULE FOR PRE SCHOOLS (NEW PROGRAMME)

**Target Group** ✓Pre schools 4-6 years old students  
✓Kindergarten Management



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### ENVIRONMENTAL AWARENESS PROGRAMMES (PUBLICS)



Use Handphone Recycle

Bandar Lestari

Sustainable Urban

Langkawi Award

Environmental Week 21-27 Oktober

MASAM MALAYSIA ENVIRONMENT AWARD

**PROGRAMMES/ACTIVITIES**

**TO INCULCATE AND ENHANCE ENVIRONMENTAL AWARENESS AMONG MALAYSIANS.**

- Malaysia Environment Week (MASM)
- Rakan Alam Sekitar (Environmental Friends) (Launching on 4 June 2009)
- Sustainable Cities – An Environmental Award
- Langkawi Award
- Use Handphone Recycle Program
- Environmental Competition
- Environmental Exhibition
- Client's Day
- Environmental Conference/Workshop/Seminar/Dialogue
- Activities with NGOs – Gift of Trees Program

Launching of National MASM 2005 at Kuantan, Pahang by Chief Minister of Pahang



Launching of National MASM 2006 at Kangar, Perlis by Chief Minister of Perlis

Launching of National MASM 2008 at Paya Indah Wetland, Selangor by Minister of Natural Resources and Environment



**ENVIRONMENTAL PUBLICATION PROGRAMMES**



Annual Report



Environmental Quality Report



Era Hijau Magazine



Compendium

Impak Magazine



Pamphlets/Posters

**CD**

**GREEN TIPS**

**POSTER**

**INFORMATION**

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## Environmental Exhibition Activities



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## RAKAN ALAM SEKITAR (NEW PROGRAMME)



*The Ministry of Natural Resources and Environment has taken an initiative to develop a new programme called "Rakan Alam Sekitar" which was created to increase awareness and urging participation of local communities in the Parliamentary area in environmental conservation and preservation as well as combating environmental pollution. The "Rakan Alam Sekitar" programme serves as an effective channel for environmental complaints because with the involvement of local communities, immediate action can be taken by the respective government agencies.*

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## b) OBSTACLES AND BARRIES FACED

**Major problems standing in the way of successful implementation of Environmental Education in Malaysia:**

1. Although Environmental Education is being implemented in schools by integrating it across the curriculum and its importance is being recognized within our *National Education Policy*, there is no specific policy on Environmental Education. Environmental Education is taught as a classroom subject per se.
2. The implementation of 'Environmental Education across the Curriculum' requires that school administrative staff fully understand and the teachers be adequately trained with the necessary knowledge and skills of the concepts in Environmental Education. The lack of a strong policy on Environmental Education within the National Education Policy pushed this requirement to the bottom of the list of Malaysian schools priorities.

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3. As the guidebooks for the implementation of **Environmental Education** are not widely distributed, teachers are not aware of their existence. Much classroom teachings on environment do not create the awareness that is required to be instilled in our students.
4. Activities on Environmental Education are considered extracurricular activities and as such not given serious attention by many **Malaysian schools**. This is caused by a lack of understanding of the broad and complex concepts in Environmental Education that cover not only extracurricular activities but also every aspect within the education system.
5. There is a lack of teaching materials for teachers to integrate and infuse **Environmental Education at schools**, as there is with budget allocation.

## D) CONCLUSION

- Although a clear recognition of the importance of preserving the environment and natural resources in order to ensure that growth and development are sustainable can also be found in "Vision 2020", which aims at transforming Malaysia into a developed country (not only economically, but also socially, politically and in other aspects) by the year 2020, while ensuring sustainability and improving the quality of life.
- The Government agencies, private organisation, environmental NGOs, universities and the society should instrumental in bringing about changes in the attitudes and actions in the society to embrace and internalise the concept of environmental citizenship through learning and sharing.
- The emphasis of EESD and ESD within the Nation Education Policy need to be re-evaluated to produce EESD Policy for Malaysian.

**THANK YOU  
TERIMA KASIH**

## SESSION 4

3<sup>RD</sup> DECEMBER 2009, 15:55-17:00

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### NATIONAL ESD POLICY AND STRATEGY – NORTH-EAST ASIA GROUP

**Chairman:** Mr. Marut Jatiket, Thai Education Foundation

*EE and ESD Policies and Cases in China*

Presentation, Ministry of Environmental Protection, Ms. Ke Yang

*Korea: Education for Green Growth*

Presentation, Presidential Committee on Green Growth, Mr. Je-Chul Yoo

*Japan's National Policy on ESD and Its Implementation*

Presentation, Ministry of Environment of Japan, Mr. Teruo Kogu

Mr. Marut Jatiket explained that the previous two sessions had provided the opportunity to review the current status of ESD policy and its implementation in ASEAN countries. This workshop would allow the participants to also gain an understanding of ESD policy and practice in Northeast Asia. Mr. Jatiket introduced the three presenters and opened the floor to the first presentation.

Ms. Ke Yang began her presentation by explaining that environmental education began in China in the 1970's, but during this period the main focus was on the treatment of pollutants. In the 1980's, the focus of EE policy shifted to deal with the idea of environmental management. The modern focus on EE and ESD links directly with the country's social policy to promote sustainable development strategies and began in the 1990's. The modern ESD policy now incorporates the idea of developing green communities in schools as the base for environmental education. There are four main target groups under EE policy: 1) social education for all members of society; 2) environmental education at all levels of schooling; 3) professional education to establish environmental experts, and; 4) in-service training for environmental employees and officers. There are also four main objectives linked to environmental education in China:

- To raise public environmental awareness,
- To promote public participation in environmental protection,
- To strengthen public opinion and supervision of environmental protection work,
- To implement environmental protection as a basic national policy.

Ms. Yang went on to present several cases of ESD implementation in China. The first case was of the Green School Programme in the country. As of December 2008, over 42,000 green schools exist in China which accounts for about 10% of all schools in the country. There are now green schools in all of the country's provinces and reach more than 40 million students. Ms. Yang explained that this programme takes a whole schools approach that addresses how the school, the teachers, the students and wider society can all be integrated for a holistic ESD process. There are seven steps that support the process of becoming a green school:

- 1) Discuss school and a whole system,
- 2) Students conduct an assessment,

- 3) Create action plan,
- 4) Set up monitoring and evaluation,
- 5) Teachers integrate throughout teaching,
- 6) Integrate with local community and wider society,
- 7) Students set the Eco-Code for their own school.

The second case presented was the Green Community Programme which was launched in 2004. A guide book for green communities was produced, training workshops have been held for community leaders, and best practice cases are published too. There are now 15,000 communities following this programme covering more than 60 million people, and 236 communities have received a National Award for Green Community.

Ms. Yang summarised the findings of this report on China's implementation of EE and ESD and provided a perspective on how it can advanced. The Green Schools and Green Community Programmes are proving successful platforms for adapting national policy to practice that adapts to the social reality throughout China. However, the main features of EE and ESD still emphasise more on concept than on practice, and more on government action than on civic participation. In terms of formal education, there needs to be more integration of ESD into formal teacher training and there should be more cooperation between the Ministries of Education and of Environmental Protection. This movement should drive an educational reform that focuses on practice and social participation.

Mr. Je-Chul Yoo began by explaining the concept of Green Growth launched in 2008 as a complimentary path to sustainable development. The main targets of the Action Plan on Green Growth for 2009-2013 were explained. Mr. Yoo also highlighted the existing Action Plan on ESD for 2006-2010 and the EE plan for 2010-2014, and he explained that the new plan for Education for Green Growth (EGG) was finalised in August 2009. Within school curriculums, environmental education has been an optional subject to teach since 1992, and as of 2008 there were 282 middle schools and 673 high schools that have opted to include EE as a subject. Since 1985, 221 schools have been established as model schools for environmental education. In March 2009, the government supported the establishment of 47 Green Growth research schools.

Mr. Yoo explained that Education for Green Growth is providing the new defining direction for education reform in Korea. The four main objectives of EGG are to provide an understanding of Green Growth, facilitate greener lifestyles, prepare for a transition to the Green Growth society, and to enhance international cooperation. Seven main tasks have been identified for strengthening EGG:

- Institutionalisation of EGG curriculum,
- EGG Training for Teachers,
- Boosting leading education institutes for EGG,
- EGG hub universities,
- Linking in-school EGG and after-school EGG,
- International cooperation.

An EGG Hall was opened to the public in August 2009 to provide demonstration models for Green Growth practice, such as the green home and the green office.

Mr. Teruo Kogu began his presentation by the development of EE and ESD Policy in Japan. The Basic Environment Law of Japan was enacted in 1993, and a decade later in 2003 the Law for Enhancing

Motivation on Environmental Conservation and Promoting of Environmental Education was passed. In follow-up to the launching of the “International Implementation Scheme for the UNDESD” by UNESCO in 2005, Japan released a national action plan on the UNDESD in 2006. This was complimented in 2007 by the national launching of the strategy for 21<sup>st</sup> Century Environment Nation which supports EE and Environmental Leadership promotion.

Mr. Kogu went on to explain the efforts of the government to promote ESD at a community level. Between 2006 and 2008, MOEJ promoted Community-Based ESD through 14 model projects where local ESD committees were established to develop a plan and implement a specific project. A guidebook was produced for implementing ESD at a local level based on the findings of these pilot projects. Several activities are also being taken to promote ESD in higher education in Japan. These include EcoLeaD – a multi-stakeholder consortium for environmental leadership development, ProSPER.Net – a network of Asia-Pacific Universities to promote sustainability in their education and research which was launched in 2008 with the cooperation of UNU, and the development and promotion of model programs such as Keio University’s master’s programme in “Designing Low-Carbon Society”.

Mr. Jatiket opened the floor to all participants for interventions and questions:

Mr. Meng Hiong Ng asked if the Green School programme in China is by choice, and if so how do they get schools to commit to the programme?

Ms. Yang replied that the Green School programme is voluntary, but that many schools are eager to participate because they are aware of the results the programme has on improving overall education quality and reducing operational costs. Schools are further encouraged to participate through the commitment of support and training that CEEC will provide during the initiation of the Green School.

This question led to a general discussion by the workshop participants on how best to encourage the uptake of whole school approaches for ESD. The simple solution is that it is made part of education policy and national curriculum. Beyond this, several specific points were highlighted. The green management of school campuses and the financial savings this provides was one important aspect highlighted. Direct engagement with the local community in securing learning opportunities out with the school was also provided as an option. A third important point made was the integration of formal teaching with practical experience.

# EE and ESD Policies And Cases in China

Yang Ke

Center for Environmental Education  
and Communications, Ministry of  
Environmental Protection, China

2009.12.3-4 Bangkok, Thailand

## Abstract

Introduce the development of the EE and ESD policies in China according to the relevant policy documents in environmental protection and EE and ESD in order to understand the analyze the trail and direction of the EE and ESD development.

## Content

Brief review

- I. EE policy based on the “pollutants treatment as the core” in 1970’s to 1980’s
- II. EE policy based on the “environmental management as the core” in 1980’s to 1990’s
- III. EE and ESD policy based on the “sustainable development strategy” after 1990’s
- IV. Green School, Green Community and Environmental Education Base as the case.

Conclusion

## Brief Review

- Start and development of EE in China
- Understanding of EE in China
- Tasks of EE in China
- Target groups and measures of EE in China
- Concepts of EE in China

## **Start and development of EE in China**

- EE start since 1970's and lasted for more than 30 years in China.
- Now the EE in China has become a “multi-level, multi-form, multi-channel” system.
- EE is also an important task of MEP.
- The leading department of MEP in EE and ESD is the Department of Environmental Education and Communications.

## **Understanding of EE**

- Education is the basement of Environment Protection
- EE is the effective way to raise the public environmental awareness and enhancing their willingness and creativity in environmental protection. ;

## **Tasks of EE**

- Raising the environmental awareness of the public.
- Promoting the participation of environmental protection of the public.
- Strengthening the public opinion and supervision on environmental protection work.
- Implement environment protection as a basic national policy.

## **Target groups and forms of EE**

- Social education to all the members of the society
- General environmental education to the nursery, primary, secondary and tertiary school students.
- Professional education to the environmental expertise.
- In-service education to the environmental employees, especially officers in environmental authorities.

## Concepts of EE

- Here, the concepts of EE including “environmental education and communications”, “environmental advocacy” and “environmental education” that appeared in the government policy documents.
- EE is a national education covers all citizens in the whole society.

## First stage:

EE policy based on the “pollutants treatment as the core” in 1970’s to 1980’s

## Second stage:

EE policy based on the “environmental management as the core” in 1980’s to 1990’s

## Third stage:

EE and ESD policy based on the “sustainable development strategy” after 1990’s

#### IV. Green School, Green Community and Environmental Education Base as the case.

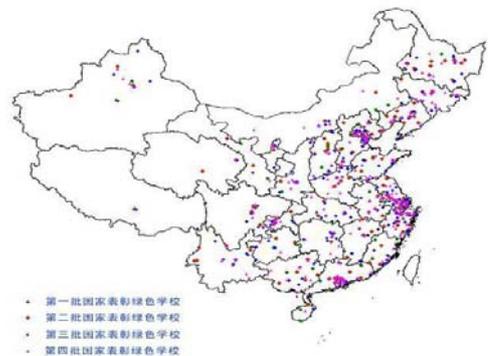
### 1. Green School Programme

- By December 2008, there are more than 42,000 green schools all over the country, covers every provinces in the mainland China, and more than 90% of the cities have green schools.
- The green school programme reached more than 40,000,000 students.
- In 2000、2003、2005 and 2007, 705 green schools got awards cooperated between the Ministry of Environmental Protection and Ministry of Education.

#### National increasement of greens school from 2000 to 2008



#### Allocation of the National awarded green schools



National award ceremony for 105 excellent performance green schools in November, 2000



National Award celebration for green schools in 2007 hold in the People's Conference Hall in Beijing.



Mr. Pan Yue, the Vice Minister of MEP give award board to the green school

### 1. Green School programme (cont.)

- National-wide programme management network.
- Promote the standardization, systematical of green school programme and integrates it into the local environment construction evaluation systeme.
- From 2000-2009, more than 4,500 green school teachers and local GS programm managers participated the training workshop host by CEEC, MEP.
- More than 60,000 green school headmasters and teachers participate the local training workshop host by provincial and city CEEC.

### Green School Management System



Conference for GS Programme managers



2001, Hangzhou



2002, Kunming



2003, Chongqing



2006, Guilin



江苏 吴江 芦墟镇中心小学 节水缸-雨水利用



深圳市学府小学食堂洗菜水浇灌学校菜园



楼顶安装太阳能热水器 江苏教育学院附中



- Developing GS materials
- Media Communication of the GS programme

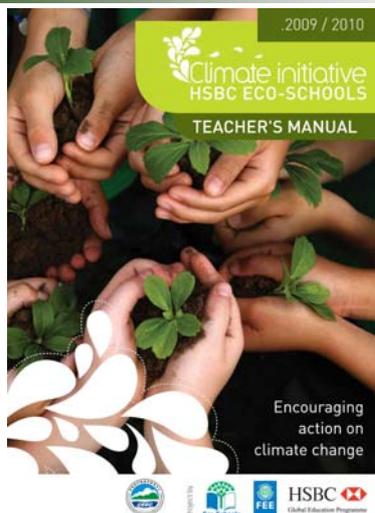
**International Conference of Green School Programme, 2004, Taizhou, Zhejiang**

**Mr. Pang Yue, Vice-minister of MEP**

**Ms. Jiao Zhiyan, the director of CEEC**

**MEMBERSHIP OF FOUNDATION FOR Environmental Education and Communications (FEE)**

## FEE General Assembly



## National Conference of Eco-Schools Programme in China

- Date: September 15, 2009
- Site: Beijing
- Participants: 50 participants from local CEEC (programme coordinators),



## National Training Workshop on ES and HSBC Climate Initiative Project

- Date : September 18, 2009
- Site: Beijing
- Participants: 182 principals and teachers from 80 schools who interested in ES Programme and HSBC CI Project

国际生态学校项目暨生态学校汇丰气候变化子项目培训班

2009年9月18日 北京



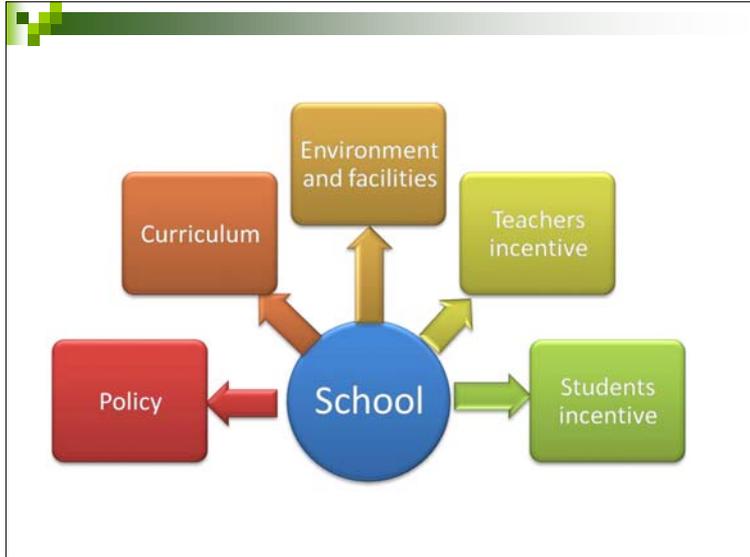
## National Training Workshop on ES Climate Initiative Project (cont.)

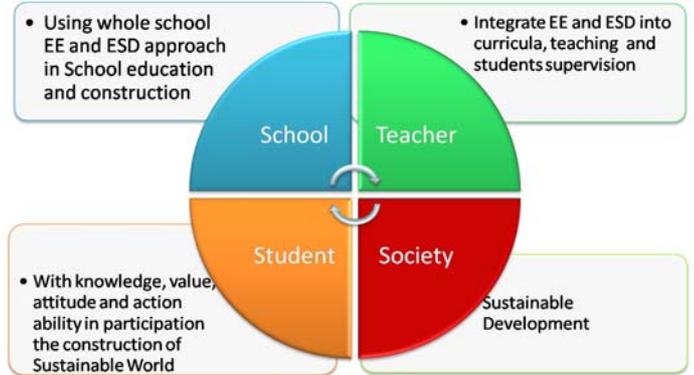
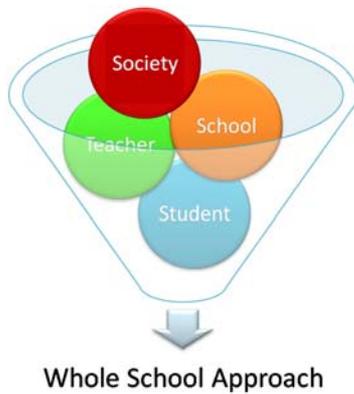
- Contents:
  - Introduction on Eco-School programme and Climate Initiative project
  - Introduction on YRE programme
  - Expert Lectures: Climate Chang and Development in China
  - Expert Lectures: EE and ESD through ES Programme
  - Group Discussion: Analyze on Implementing ES in my school

## Activities

- Launch Ceremony of ES Climate Initiative
- Solar Energy Vehicle Competition
- Campus Energy Saving and Emission Reduction

**ANALYZE THE  
WHOLE SCHOOL APPROACH in  
EE and ESD**





### **Future planning in strengthen whole school approach for eco-school.**

- Promoting Eco-school programme in more schools
- Cooperation with Faculty of Education in Beijing Normal University in Teacher training Programme for ES school Principals and teachers
- Integrating capacity construction of EE and ESD in teachers' professional career development system.

### **Integrating capacity construction of EE and ESD in teachers' professional career development system.**

- Cooperate with pre-teacher education and teacher training institutes.
- Integrate EE and ESD capacity building in the Curriculum for teachers' education
- Using Eco-school as an incentive programme for schools, teachers and student to put EE and ESD into practice.

## 2. Green Community Programme

- In 2001 the State Environmental Protection Administration (now the Ministry of Environmental Protection), the Central Propaganda Department and the Ministry of Education jointly issued the "Working Outline of National Environmental Publicity and Education, 2001-2005" in which Green Community Programme was proposed.
- In 2003, the Shenzhen Environmental Protection Bureau take the lead in carrying out research on the Green Residential.

## 2. Green Community Programme

- In June 2004, the State Environmental Protection Administration issued a " Notice on Further carry out the Green Community Programme " and the launch ceremony was held in Beijing.
- In 2004, leading by the State Environmental Protection Administration, a national steering committee for green community programme was established, and the executive office was set in CEEC.



Launch Ceremony of the National Green Community Programme, 2004, Beijing

## 2. Green Community Programme (cont.)

- On the World Environment Day in 2005, 100 mayors went to the local green community, and the first national green community experience-sharing session was held in Suzhou.
- On the World Environment Day in 2006, with the theme of "building environment-friendly society", CEEC launched the "donate unused items for a green lifestyle" activities.
- On the World Environment Day in 2005 and 2007, the National Award Ceremony for Green programmes were held at the People's Conference Hall in Beijing.

100 mayors went to the local green community in 2005



Vice-Premier Zeng Peiyan went to Feng Hui Yuan Community for the green community events.

"donate unused items for a green lifestyle in 2006



Mr. Zhu Guangyao, Vice minister of SEPA gave certificates to the participants in the donation



The first National Award Celebration for Green Community, 2005, Beijing



The Second National Award Celebration for Green Community, June 5, 2007, Beijing

## 2. Green Community Programme (cont.)

- By January 2009, there are 236 national awarded green communities all over the country, and more than 3600 were named as provincial green community model. There are more than 15000 green communities at different level and the population covered are over 60,000,000.
- From 2005 to 2008, CEEC hosted more than 10 national training workshops and seminars for the Green Communities programme managers, reached more than 1,000 local community leaders and raised their capability in leading and managing green community programmes

## Allocation of the National Awarded Green Communities



## Training Workshops and Conferences of Green Community Programme



The first national workshop for Green Community Programme, in Chifeng, Inner Mongolia, in 2006



The second national workshop for Green Community Programme, in Chengdu, Sichuan Province, in September 2006



The fourth national workshop for Green Community Programme, in Shenzhen, Guangdong Province, in December 2006.



The third national workshop for Green Community Programme, in Changsha, Hunan Province, in October 2006.

## Training Workshops and Conferences of Green Community Programme



Time: 2007.4  
 Location: Beijing and Tianjin  
 Events: National Experience Exchange Meeting for Green Community Programme

Time: 2007.11  
 Location: Xiamen, Fujian Province  
 Events: Training Workshops for Evaluation of National Award Green Community





Guide Book for Green Communities

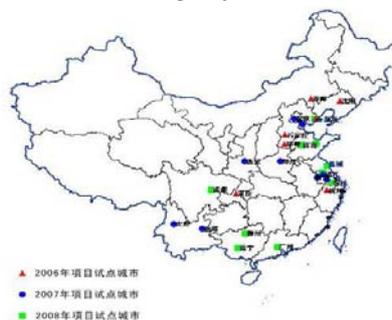
Publications of Green Community Cases



2. Green Community Programme (cont.)

- Community Round Table Dialog Project
- Community 1000 families Carbon Emission Investigation and Public Education Project
- COOL CHINA – national citizen low carbon action pilot project

Allocation of pilot cities of the Community Round Table Dialog Project



-In 2006, 7 cities in 5 provinces piloted the project;  
 -In 2007, 9 more cities in 6 provinces start the project;  
 -In 2008, 10 more cities in 6 provinces start the project  
 -From 2006 until now, there are more than 30 communities from 24 cities in 14 provinces pilot the project.



Tree Planting event in COOL CHINA - national citizen low carbon action pilot project , November 2008, Nanjing, Jiangsu Province



Ms. Jiao Zhiyan, the director of CEEC gave flag to the represents of COOL CHINA programme and announced the launch of the programme on April 22, 2009.

### COOL CHINA in different cities in 2009



Tianjin



Shan'xi



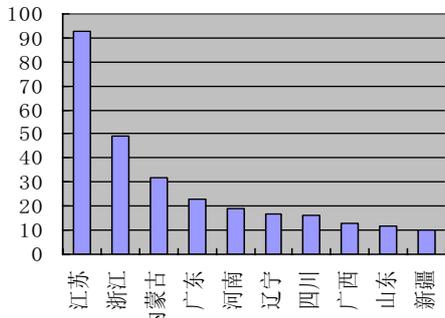
Guangzhou



Shenyang

### 3.Environmental Learning Centre Programme

- There are more than 728 environmental learning centre all over the contry and 22 provinces have 327 provincial level environmental learning centre all together.
- The types of the environmental learning centre include Nature reserves, agricultural demonstration base, environmental facilities, museums, zoological and botanical gardens, environmental protection enterprises and so some environmental demonstration sites and facilities. In Harbin, Nanning and some other Cities, special environmental education museums have also been built.



Provinces that have more than 10 environmental learning centres.



Eco-park in Anji, Zhejiang Province



Wild Duck Lake Wetland Museum in Beijing



Natural Museum in Pingyi, Shandong Province



Wild Duck Lake Wetland Museum in Beijing



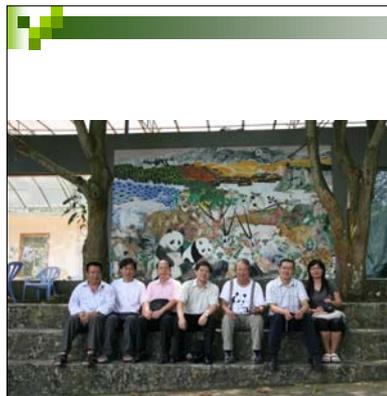
Environmental Exhibition Hall in the Botanical Garden in Kunming, Yunnan Province



Environmental Education Truck, Haerbin, Heilongjiang Province



Environmental Education Exhibition Hall in No. 4 Middle School in Guangzhou, Guangdong Province



protected areas for White-headed langur in Chongzuo, Guangxi Province



Environmental Education Exhibition Hall in Nanning, Guangxi Province



Peach Flower Park in Guilin, Guangxi province

### 3.Environmental Education Base (cont.)

- In August 2006, expert workshop for drafting a national environmental education base evaluation criteria was held in Fuzhou, Fujian Province.
- Since 2007, CEEC made an investigation on the environmental education bases in nearly 15 provinces and municipalities;
- The first National experience exchanging and working meeting on Environmental Education base was held in September 2007 in Urumqi, Xinjiang Province.
- From 2006 to 2009, CEEC held 4 training workshops for environmental education base and more than 100 participants came to the workshops.



**National experience exchanging and working meeting on Environmental Education base, September 2007 in Urumqi, Xinjiang Province.**



**pilot training project for Environmental Education base in Tengzhou, Shandong Province 2009-4**



**main research results and experimental cases for the Environmental education base (2007-2009)**

### 3.Environmental Education Base (cont.)

- Establish a national environmental publicity and education demonstration base in the building of Sino-Japanese Friendship Environmental Protection Center.
- In the next five years (2009-2013), to launch relevant nationwide technical training workshops and experience share meetings for environmental education base with the use of Japanese governmental investment, technology, short-term experts and other support



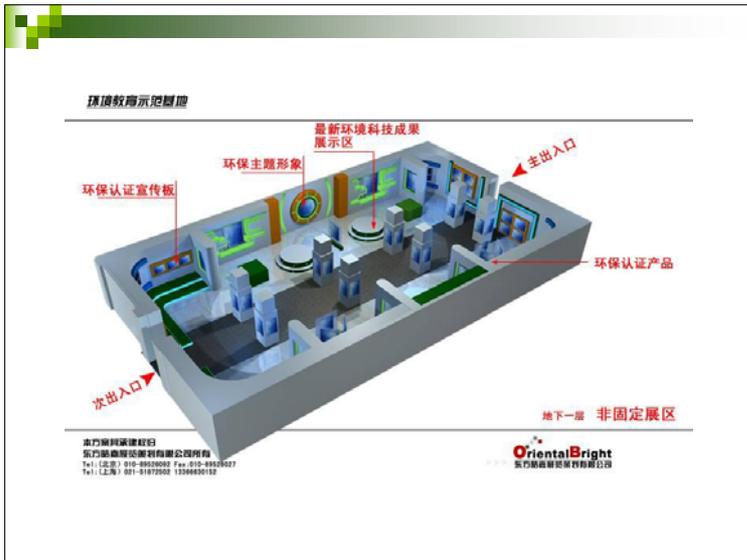
**the first workshop of Sino-Japanese cooperation in environmental education base in March 2008, Beijing**



**The second Sino-Japanese cooperation in environmental education base - Environmental Interpretation Seminar 2009-9 Hangzhou**



**National Environmental Education Demonstration Base Construction Program seminar in November 2008, Beijing**



## Conclusion

- The transformation from EE to ESD is being accelerated. EE has jumped out of the level of techniques and knowledge, extended to environmental awareness, attitudes, values, environmental ethics and concerns and practices of sustainable development for the future human being.
- EE is an integral part of modern education reform. EE is an unity of knowledge, methods, and purpose. It will be an innovation measure to change the traditional education and teaching model.

## Conclusion

- In more than 30 years of the development process in environmental education policy in China, the basic orientation has experienced a "Pollution-treatment as the Centre" which cultivate of environmental protection professionals to the "Environmental Management as the Center" which training leading officers to the "Sustainable Development Strategy as the Center" which focus on citizen-wide environmental education.

## Conclusion

- Green schools, green communities has become an effective measure and platform for practice on national public environmental education adapted to the social reality in China.

## Conclusion

- Overall, the features environmental education in China at present still emphasis more on concept than practice, emphasis more on government action than civic action, emphasis more on mandatory measure than consciousness, emphasis more on propaganda than education, emphasis more on knowledge than ability, emphasis more on classroom teaching than social participation.

## Conclusion

- Environmental education in China in the future will be a driving force for education reform, which will be an important force to make contribution to a comprehensive, harmonious and sustainable developing country.
- “ Road parallel instead of Paradox ”  
—— 《Zhouyi University of China》

THANK YOU !

## **SUMMARY OF PRESENTATION**

### **Korea: Education for Green Growth**

Mr. Je-Chul Yoo,  
Presidential Committee on Green Growth

As in many other countries, education for sustainable development (ESD) in Korea had mostly been understood as environmental education (EE). In spite of the adoption of the action plan on ESD 2006-2010 in October 2006 as part of the “Strategies for National Sustainable Development”, and of the implementation of the “Basic Law on Sustainable Development” since February 2008, most of ESD activities had centered around environmental issues, and as a result, economic and social dimensions of sustainable development had not been well reflected in school curricula and social education programmes for ESD. Bearing the fundamental limitations mentioned above in mind, EE itself in Korea still can be stated as being quite successful. ‘Environment’ was introduced as optional subject for middle and high school in 1992, and 282 middle schools and 673 high schools had opted for the subject until 2008. 221 schools have been designated as EE model schools and supported by government since 1985. With regard to social EE, 1.34 million people including EE Promoting Group were educated by public education institutes such as Natural Environment Institute and public corporates under MOE in 2008. 0.3 million people were educated by 688 NGO bodies in 2007.

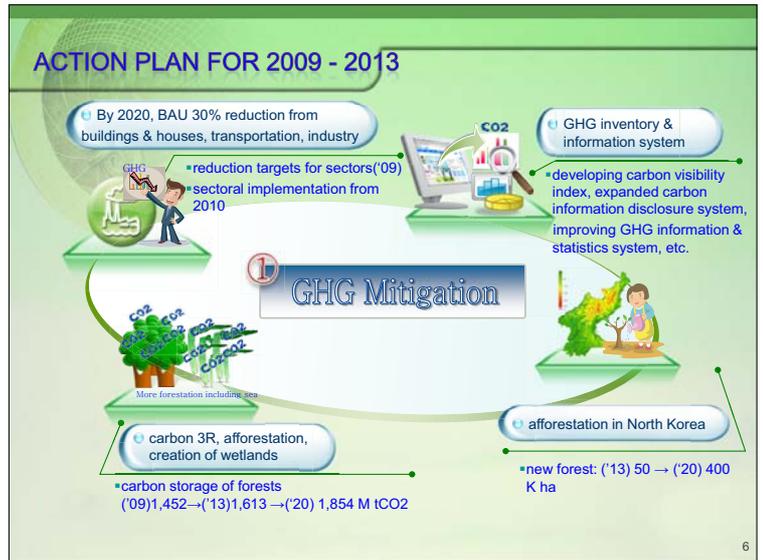
An important milestone for better realization of the concept of sustainable development in national development policies and practices took place when the President suggested “Low Carbon, Green Growth” as new national vision for sustainable development in August 2008. Green growth was identified as ‘sustainable growth that reduces green house gases and environmental problems, and new national development paradigm to create new growth engine and green jobs through green technology and cleaner energy’. Following the President’s initiative, Korea set up ‘National Strategy for Green Growth and the Action Plan 2009~2013’ in July 2009. The strategies are responding to climate change and achieving energy independence, creating new engine for economic growth, and improving quality of life and enhancing national position in international society. These strategies are to be brought about through 10 cross-sectoral policy directions. In addition, mid-term national green house gas reduction target was determined on 17 November 2009, which is 30% less than estimated Business As Usual GHG emission level of 2020, expected to stimulate Korea’s national efforts to cut GHG emissions. 107 trillion Korean Won (about USD 90 billion, 2% of GDP) is planned to be invested by public sector only for 5 years from 2009. Built on these, political decisions have already been made in some areas such as green buildings, cities, transportation, lifestyle, information and technology, etc. At the same time, implementation plans of ministries and local governments are currently being reviewed, and GHG reduction targets by sectors are being worked on. With regard to the relationship between sustainable development and green growth, the latter can be considered to complement what is understood as sustainable development in Korea, in the sense that it seeks more concrete and focused ways to sustainable development through decoupling environment and economy, and enhancing social equity that new jobs, improved mass transportation and energy saving houses may bring. And recognizing the importance of education in achieving national goals and objectives for green growth, Korean government finalized the policy direction on education for green growth (EGG) on 24 August 2009.

Under three strategies of EGG as shown in the presentation, understanding green growth, facilitating greener lifestyle, preparing for green growth society and enhancing international cooperation were set as four objectives of EGG. Some EGG measures already taken for school and social institutes include distribution of textbook titled 'Understanding Climate Change' for elementary schools since March 2009, designation of 47 green growth research schools, establishment of green campus association in November 2008, the publication of new teaching material for schools in June 2009, publication of animation material in October 2009, reflection of green growth in standard qualification course for chief of schools and first grade teachers, development and distribution of 80 green behaviors in 10 sectors, organization and actions of three nation-wide campaign bodies, green office plans and 'Green Day' movement of public organizations, and so on.

The measures to be taken in short time include modifying 2010 school curriculum in order to incorporate EGG, providing training on green growth to teachers, designation and operation of EGG centres, and expanding the area of international cooperation.

The Presidential Committee on Green Growth will make every effort to support and coordinate all the national activities on green growth including EGG under the "Basic Act on Green Growth" which is currently under parliamentary legislative process and expected to be passed by the end of this year.





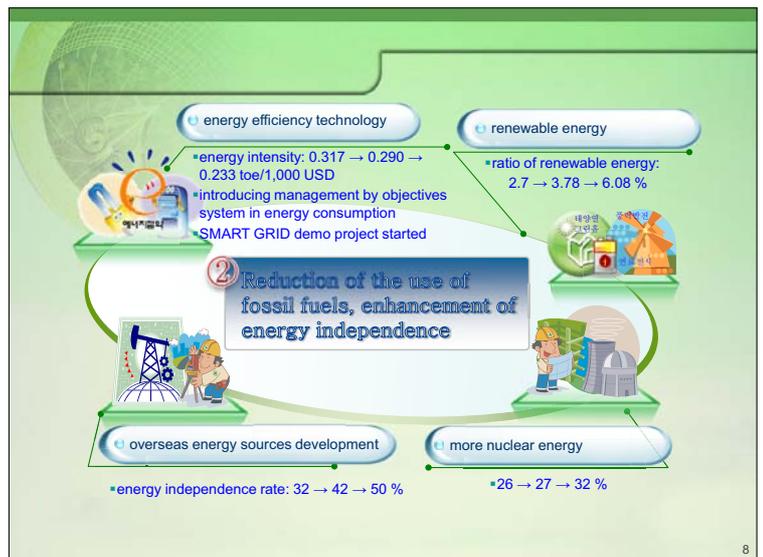
## CO<sub>2</sub> emissions of Korea in 2006 – press released on 19 November 2009 by National Institute of Environmental Research

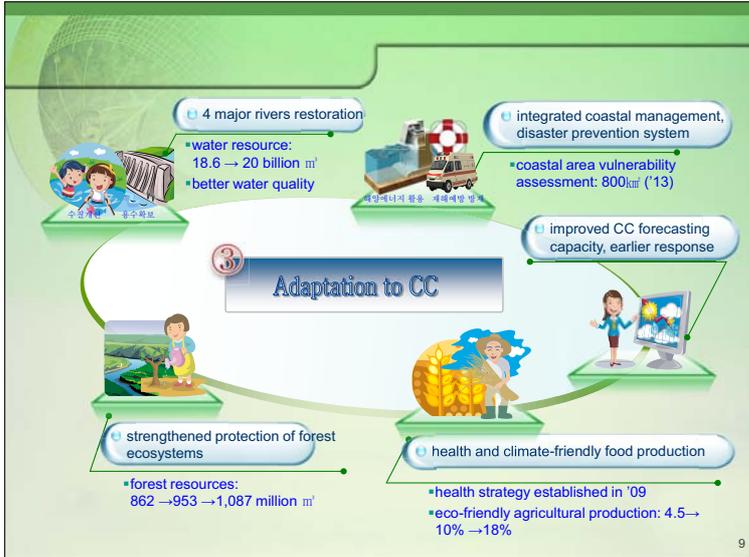
Kilo Ton

TOTAL	INDUSTRY	TRANSPORTATION	HOUSES	COMMERCIAL & PUBLIC SECTOR	FARMING	WASTE	OTHERS
588,011	294,467	103,255	74,209	74,309	14,516	15,358	11,897
100 %	50.1	17.6	12.6	12.6	2.5	2.6	2.0

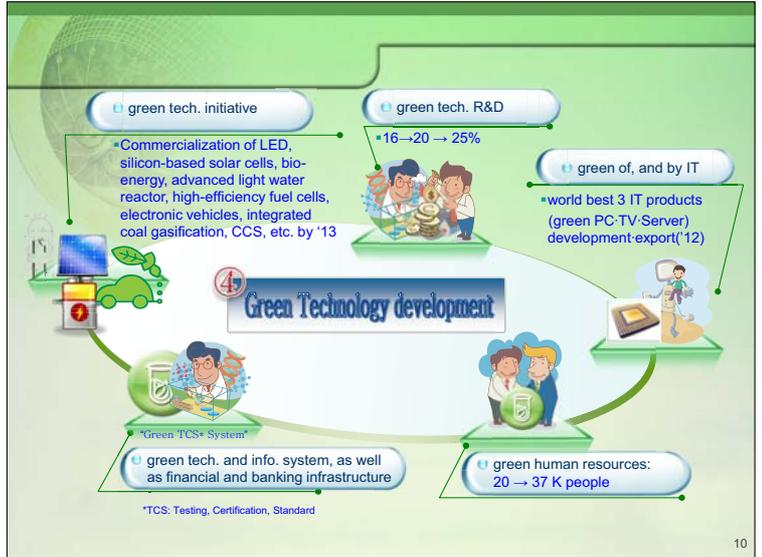
Average amount of CO<sub>2</sub> emitted from a household of 4 family members was estimated as 415kg/month.  
Through greener lifestyle in households suggested by the Ministry of Environment, 6.7 million tones of CO<sub>2</sub> is expected to be reduced annually.

7

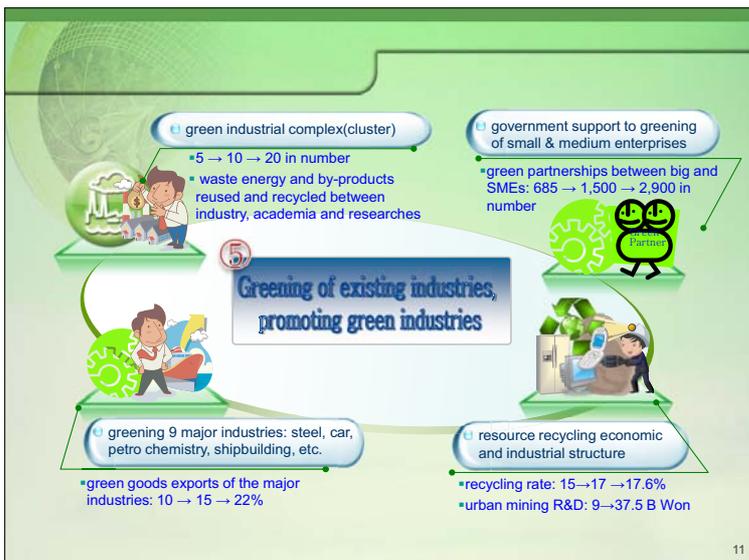




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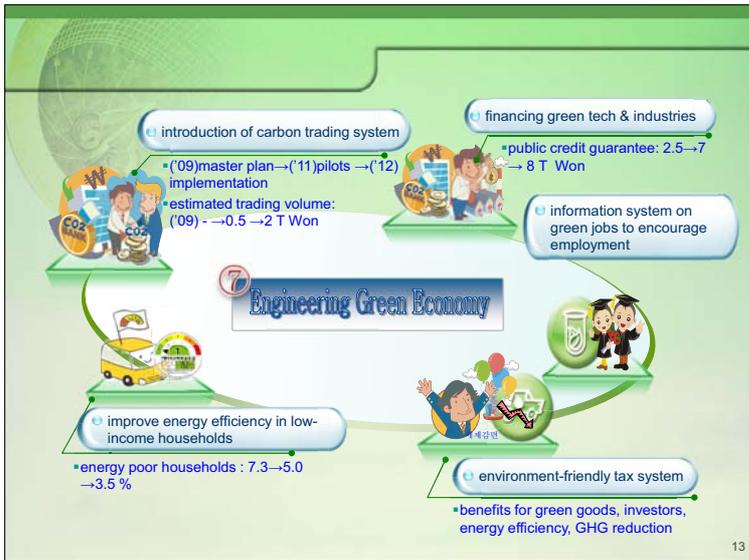
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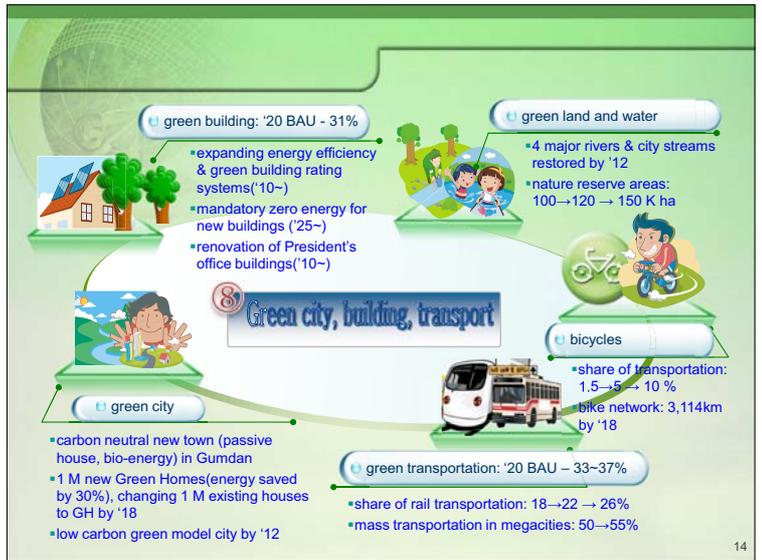
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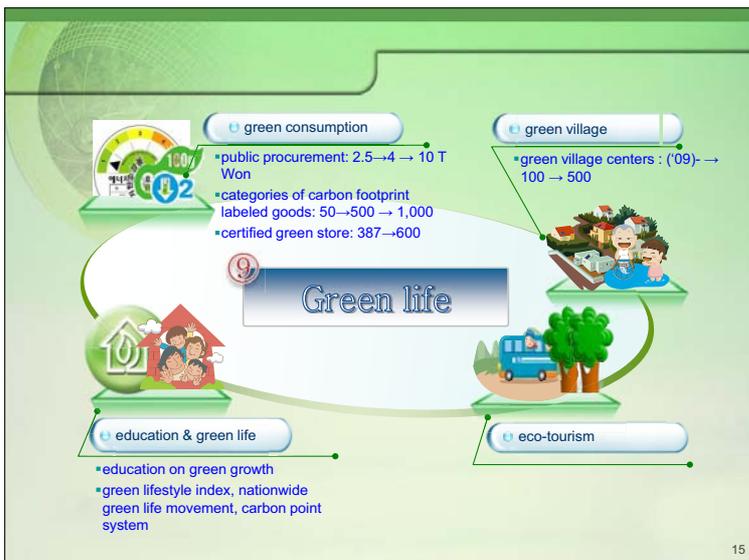
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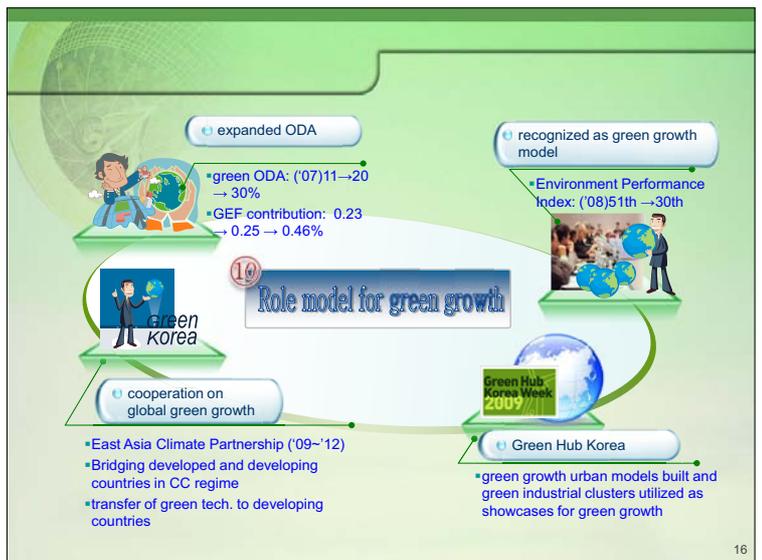
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15



16

## INVESTMENT PLAN

**Investment for '09~'13 will be 107.4 trillion Korean Won (about US\$ 90 billion, 2% of GDP)**

- mitigation and energy independence: 56.9
- creating new engines for economic growth: 28.6
- improving quality of life and enhancing international standing: 27.9

[http://www.greengrowth.go.kr/www/knowledge/reference/publicity/userKnowledge/bbsView.do?bbs\\_cd\\_n=23&bbs\\_seq\\_n=42](http://www.greengrowth.go.kr/www/knowledge/reference/publicity/userKnowledge/bbsView.do?bbs_cd_n=23&bbs_seq_n=42)

17

## 2. Implementation of ESD in Korea

18

## ESD SYSTEM IN KOREA

- Action Plan on ESD 2006-2010 was adopted in October 2006 as part of the 'Strategies for National Sustainable Development'
- 'Environmental Education Promotion Act' was enacted in March 2008, and has been implemented from October 2008
- A comprehensive Environmental Education Plan for 2010~2014 is being drafted from March to October 2009, will be finalized in January 2010
- As the national plan for green growth was confirmed, policy direction on education for green growth (EGG) was reported to the President and finalized on 24 August 2009
  - Contents of green growth are being, and will be reflected in ESD
- The Ministry of Environment (MOE) and the Ministry of Education, Science & Technology (MEST) are major implementing bodies of ESD in Korea

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## CURRENT ACTIVITIES OF ESD AND EGG

### Environmental education in school curriculum

- 'Environment' was introduced as optional subject for middle and high school in 1992
- As of 2008, 282 middle schools and 673 high schools opted for the subject
- 'Understanding Climate Change' started to be adopted in elementary schools as textbook from March 2009

### Environmental education model schools

- 221 schools have been designated and supported by government since 1985

### Green Growth research schools

- 47 schools were designated in March 2009, and will be supported until February 2011

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### Green school project

- 52 old schools were selected to be remodeled to eco-friendly schools through using and installing renewable energy, energy saving devices, eco-friendly building materials, etc.
- Transform schools and adjacent areas to environmental education and resting fields for both students and residents
  - 810 school forests have been formed by the Ministry of Forest from 1999 to 2009

### Low carbon activities among universities

- Green Campus Association established in November 2008
- Dean's of 28 universities jointly declared for green campus & MOU with MOE, MEST in May 2009
- MOU between Seoul National University and MOE in June 2009

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### Environmental education for citizens, government officials, military resources, etc.

- 1.34 million people including EE Promoting Group were educated by public education institutes such as Natural Environment Institute, and public corporates under MOE in 2008
- 0.3 million people were educated by 688 NGO bodies in 2007
- On-line education (e.g. [www.keep.go.kr](http://www.keep.go.kr)) has been expanded from August 2008
- The President addressed "Green life is more important than green technology, and energy saving is the 5<sup>th</sup> energy", on 10 August 2009
- 10 commandments for eco-driving has been disseminated since July 2008
- Guidelines on low carbon green conference since August 2008

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### Environmental education for citizens, government officials, military resources, etc.

- Green behaviors in 10 sectors were developed and distributed since August 2009



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### Environmental education for citizens, government officials, military resources, etc.

- EGG Hall built and open to the public from 15 August 2009



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**Environmental education for citizens, government officials, military resources, etc.**

- 3 bodies for green life movement lead by NGOs were established
  - Green Start in October 2008, WE Green in April 2009, Green Energy Family in May 2009

Nation-wide Green Start organization were established in 185 local areas as of July 2009, with 3,900 NGOs participated



Busan



Gwangju



Ulsan



Jeju island



Changwon



Gwacheon



Namyangju



Yeosu



Namhae

29

### Environmental education for citizens, government officials, military resources, etc.

- 3,500 green leaders volunteered and are being educated
- Climate schools have been operated by 16 provincial Green Start networks since April 2009
- Food waste zero movement was inaugurated in October 2009
- Cool fashion (in summer) and warm fashion (in winter) campaign started from June 2009
- National campaigns take place during Climate Week (the week of 22 April) and GHG diagnosis week in every six months
- Green office plans for each Ministry were established in October 2009

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### Environmental education for citizens, government officials, military resources, etc.

- Every Wednesday was designated as 'Green Day' of public offices for green activities in October 2009
- Low carbon lifestyle for a family of 4 persons were developed & distributed on 25 November 2009
- Training material on green growth for senior government officials was developed by Central Officials Training Institute, and will be utilized from January 2010

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### 3. Plan for Education for Green Growth

Directed by the President on the importance of education at the 1st Committee Meeting on 16 February 2009 and at the cabinet meeting on 19 May 2009

EKG plan reported to the President and finalized on 24 August 2009



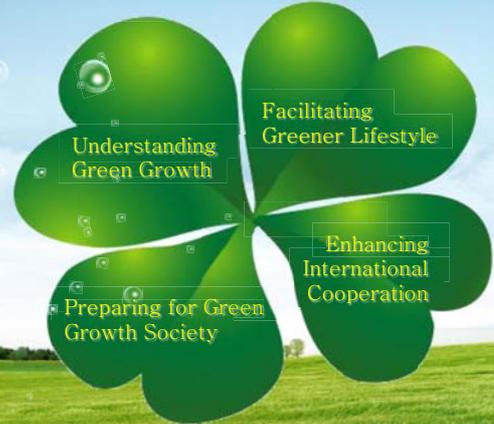
## VISION AND STRATEGY OF EGG

### Vision

International model for  
Green Growth through  
EGG  
Strategy

1. Strengthened EGG for schools
2. EGG for universities and citizens
3. Globalization of EGG

## OBJECTIVES OF EGG



## CONCEPT OF EGG



## TASKS FOR STRENGTHENING EGG

### Task1. Institutionalization of EGG curriculum

- Textbooks and teaching materials for Green Growth have been and shall be developed
  - New teaching material for schools was published in June 2009
  - Animation material was published in October 2009
  - Materials for non-regular curriculum and after-school activities will be prepared
- Through modification of curriculum for 2010, to be publicly announced in December 2009,
  - Green Growth shall be reflected in existing subjects such as 'society' and 'science', and
  - Current subject 'Environment' will be expanded to 'Environment and Green Growth' which will address creative experimental activities

## Task 2. Training of Teachers

- Green Growth focused training will be provided to the teachers who will teach 'Environment and Green Growth'
  - Certificate of qualified Green Teachers
  - Green Growth training will be given to teachers' college students
- Training of teachers of other subjects
  - 'Understanding new growth engine and green growth' was newly reflected in the standard qualification course for chief of schools and first grade teachers (MEST Directive amended in July 2009), and will be implemented from 2010
  - 'Climate Change and Low Carbon Green Growth' will be introduced and expanded in job trainings and qualification trainings for teachers

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## Task 3: Boosting leading education institutes for EGG

- Continuation and expansion of green schools running EGG courses and experience programmes, in connection with existing environmental education research schools
- Designation and operation of EGG centres
  - Education & Science Research Institutes in 16 Provinces, National Ecology Institute (to be open in 2011), 8 Natural Environment Institute, Training Institute for Forest Human Resources, National Eco-Parks
- Development of green playing grounds such as Green Eco Playground, Green Energy Playground, Green Climate Playground

## Task 4: Linking in-school EGG and after-school EGG

- In cooperation with local education facilities,
  - green competitions, green activities for and with households and family members, on-line games and contents for EGG, etc. will be developed

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## Task 5: EGG hub universities

- Low carbon activities of green campus movement will be disseminated and shared throughout other universities
- Green Campus Index and certification system will be developed
- Integrated and comprehensive textbooks and fusalional subjects for universities will be developed and disseminated
- New major will be introduced to undergraduate for human resources for green growth, and specialized post-graduate course will be established
- Localized EGG programmes will be developed and disseminated by hub universities as local services

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## Task 6: Building infra for education of citizens on green life

- Local social education institutes will be nominated as social EGG centres
- Good EGG programmes such as self diagnosis programme on green life will be developed, certified and disseminated
- EGG for occupational groups (opinion leaders, civil servants, white collars, soldiers) will be strengthened, and cyber EGG centres will be established

## Task 7: International cooperation

- ESD committee of Korean National Commission for UNESCO was launched in August 2009
- Will continue cooperation for the implementation of UNDESD
- Information & know-how will be exchanged through TEMM and TEEN
- Will actively participate in PISA & ENSI of OECD, and share EGG experience through diverse international organizations

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Thank you!



## Japan's National Policy on ESD and Its Implementation

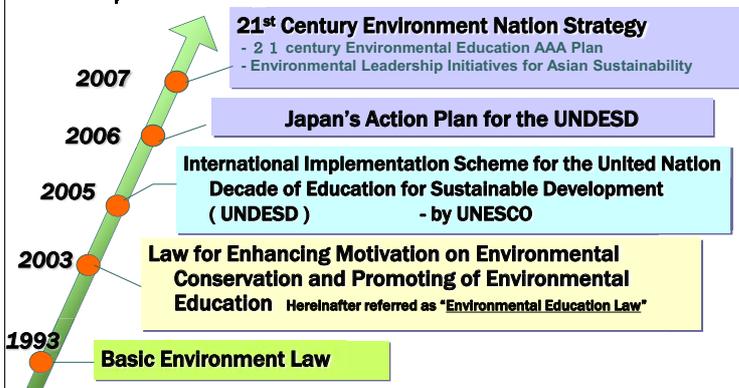
**Teruo KOGU**

Deputy Director, Office of Environmental Education  
Environmental Policy Bureau  
Ministry of the Environment of Japan



## Background

## Legislations and Decisions Relevant to EE/ESD



## Developing Japan's Action Plan for UNDESD

2005 Dec.	Establishment of "the Interministerial Meeting on the UNDESD"
2006 Jan.	Establishment of Round Table involving various stakeholders (government, NPO, academia, mass media, etc)
Feb. Mar.	Public Comment on Provisional Japan's Plan Decision of <b>the Japan's Action Plan for UNDESD by the Interministerial Meeting</b>

## Developing Japan's Action Plan for UNDESD

The following 11 Member Ministries and Agencies of the Interministerial Meeting on the UNDESD decided the Plan.

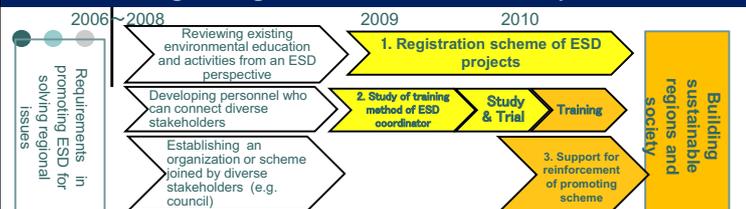
- Cabinet Secretariat
- the Ministry of Foreign Affairs
- the Ministry of Education, Culture, Sports, Science and Technology
- the Ministry of the Environment
- the Cabinet Office
- the Ministry of Internal Affairs and Communications
- the Ministry of Agriculture, Forestry and Fisheries
- the Ministry of Economy, Trade and Industry
- the Ministry of Land Infrastructure and Transport
- the Ministry of Justice
- the Ministry of Health, Labour and Welfare

## Contents of Japan's Action Plan for UNDESD

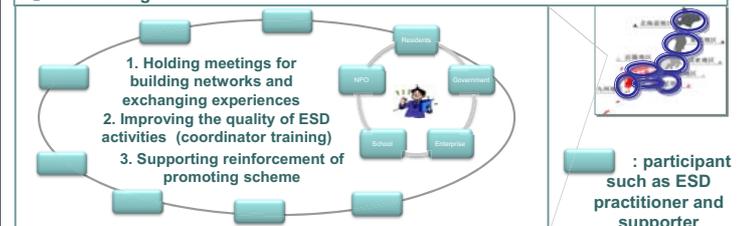
- I. Priority Issues
- II. Guidelines for Implementation
- III. Promotional Methods
  1. Key Programs in the Early Stage
    - (1) Dissemination
    - (2) Implementation at community level
    - (3) Programs at higher education
  2. Concrete Promotion Methods in Japan
  3. Programs Expected of Stakeholders
  4. International Cooperation
- IV. Evaluation and Review

## Implementation at Community Level

### Strengthening ESD Efforts at Community Level



### Roles of Regional ESD Promotion Forum



## UNESD promotion project at a local level (2006-2008)

### Implement Community-Based ESD

**Contents**  
of ESD to deal with local unsustainability

**Structure**  
under which local stakeholders cooperate in ESD

#### Model Areas (14)

- Step 1: Establish a Local ESD Committee
- Step 2: Decide an action plan for the coming some years
- Step 3: Implement the plan
- Step 4: Report the outcome

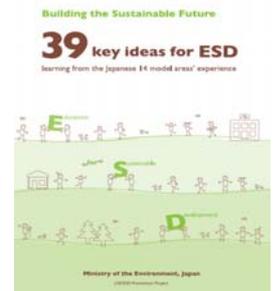
**Disseminate the good practices to other areas**



## 39 Key ideas for ESD

- MOEJ put together UNESD promotion projects(2006-2008) in a handbook which provided ideas to help to implement ESD at a local level.
- You can download it from the following URL.

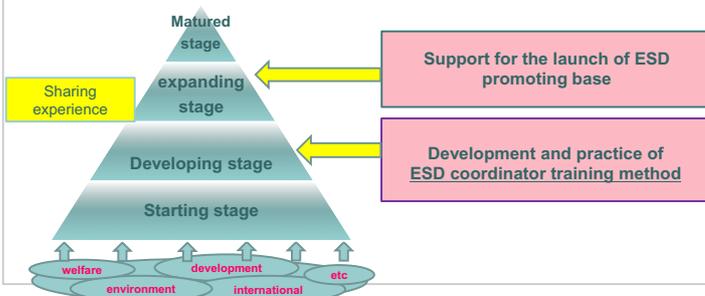
[http://www.env.go.jp/policy/edu/esd/documents/39\\_e.pdf](http://www.env.go.jp/policy/edu/esd/documents/39_e.pdf)



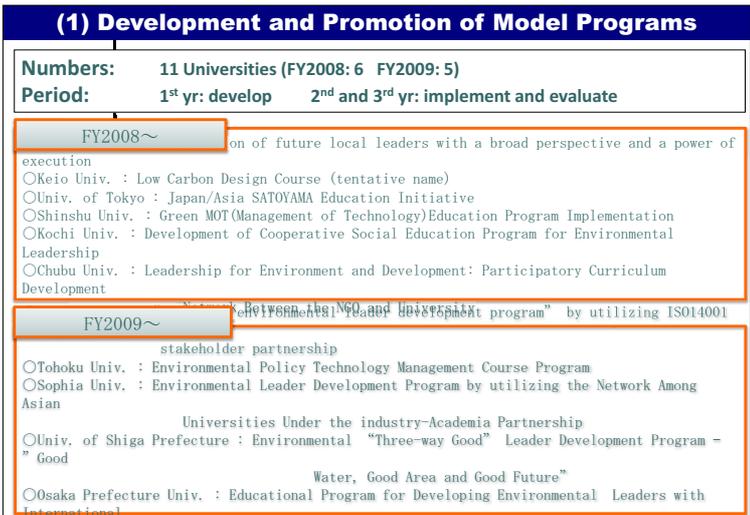
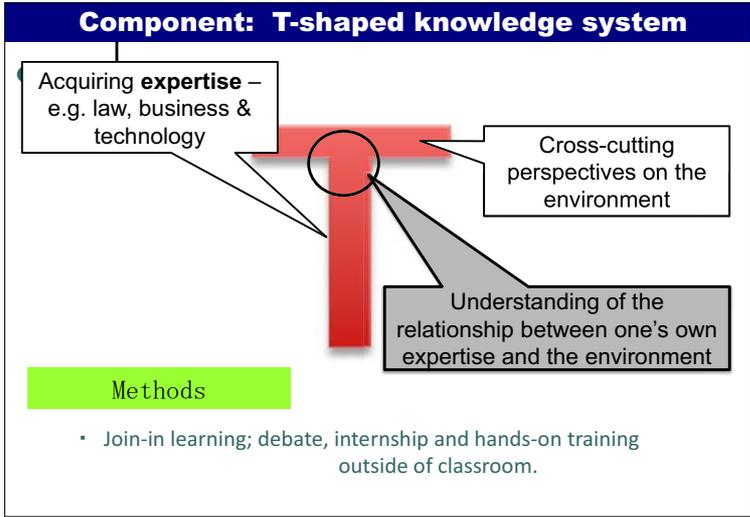
## Promotion of ESD at a local community level (2009- planned)

### Introduction of registration scheme of ESD activities

- Registering ESD activities throughout Japan under a registration scheme
- Aiming to revitalize ESD activities by making them "visible" and "interconnected"

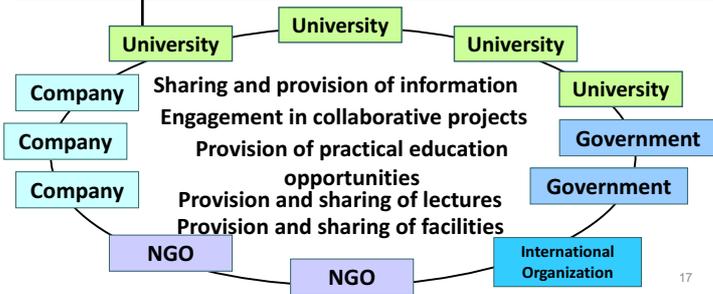


## Programs at Higher Education



**(2) Ideas of Environmental Consortium for Leadership Development (EcoLeaD) 1/2**

**Purpose of the EcoLeaD :**  
 reinforcement of environmental capacity development through stakeholder cooperation (government/industry/university/community)



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**(2) Ideas of Environmental Consortium for Leadership Development (EcoLeaD) 2/2**

**Targets and Projects**



**(3) ProSPER.Net**

**Promotion of Sustainability in Postgraduate Education and Research Network**

**ProSPER.Net**

- Network of Universities in the Asia-Pacific region  
 - Launched in 2008 in cooperation with United Nations University (UNU).

**activities**

- Integrating SD in Business School Curricula
- Public Policy and SD
- Training of Educators and Researchers on SD

**Member Universities (19)**

- Japan(9)** Hokkaido Univ., Iwate Univ. Miyagi Univ. of Education, Univ. of Tokyo Rikkyo Univ., Shinshu Univ. Nagoya Univ., Okayama Univ. Chubu Univ.
- Korea(1)** Yonsei Univ.
- China(1)** Tongji Univ.
- Australia(1)** RMIT Univ.
- Philippines (1)** Univ. of the Philippines
- Thailand(1)** Chulalongkorn Univ.
- Indonesia(1)** Gadjah Mada Univ.
- India(1)** TERI Univ.
- Malaysia (1)** Univ. Sains Malaysia
- Other (2)** Asian Institute of Technology Univ. of South Pacific



**Thank you for your attention**

If you are interested in our programs, feel free to contact us!

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 Environmental Policy Bureau

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 FAX: +81-3-3580-9568

## SESSION 5

4<sup>TH</sup> DECEMBER 2009, 9:30-11:00

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### MODELLING ESD PROGRAMMES TO STRENGTHEN SUSTAINABLE LIVELIHOODS

*Introduction of Day Two:* Dr. Mee Young Choi, Institute for Global Environmental Strategies

**Chairman:** Mr. Mahesh Pradhan, United Nations Environment Programme

*Strengthening Sustainable Livelihoods through ESD Initiatives*

Presentation, Institute for Global Environmental Strategies, Dr. Robert J. Didham

*Eco-School: Education for sustainable development project*

Presentation, Chiang Mai University, Prof. Prasarn Tangsikabuth

*Community Based Tourism and Education for Sustainable Development*

Presentation, Thailand Community Based Tourism Institute, Ms. Potjana Suansri and Mr. Peter Richards

*WWF Greater Mekong Thailand Country Programme: Modelling ESD Programmes to Strengthen Sustainable Livelihoods*

Presentation, World Wide Fund for Nature, Mr. Bhuvadol Namdokmai

Dr. Mee Young Choi welcomed everyone to the second day of the workshop. She went on to provide a brief summary of the previous day's sessions and an introduction to the purpose of this day's sessions. Many of the national policies for ESD we learned about in the previous day focus on formal education, while the cases provided by the Northeast Asian participants present practical examples for implementation. The first session this morning will provide us with ideas on how ESD can be implemented in non-formal education and how it can support sustainable livelihood initiatives. While the panel discussion and concluding session will provide us with the chance to discuss opportunities to advance ESD and to identify areas where further development is needed.

Mr. Mahesh Pradhan opened this morning's session by explaining how concepts of sustainable livelihoods and poverty alleviation go hand-in-hand. ESD was identified as an important tool in the process of alleviating poverty and securing sustainable livelihoods. Mr. Pradhan expressed his appreciation for having the opportunity to chair this session that was investigating practical means for advancing and providing a broader scope for ESD. He then introduced the presenters and opened the floor for the first presentation.

Dr. Robert J. Didham opened his presentation by emphasising the overall goal of ESD by explaining that education provides a direction and pathway to follow. This in turn helps to engender a culture of sustainability. These two factors drive the overall goal of adding momentum to the systems of sustainability (environment, social and economic) and help to stimulate social change. Next, it was explained how the main pathways to advance ESD can be divided between formal and non-formal education activities. Dr. Didham explained the multiple focuses of research on ESD at IGES: to model ESD to strengthen Sustainable Livelihoods; to develop strategies on Education for Sustainable Consumption; to review the current progress on the ASEAN Environmental Education Action Plan (AEEAP) 2008-12, and; to promote environmental leadership in higher education through the development of a multi-stakeholder consortium.

Dr. Didham went on to explain the approach that is being taken in the research focus Modelling ESD Programmes for Sustainable Livelihood Promotion. It was explained that to develop a research criteria a core goal set was identified between the topics of ESD, Community Capacity Building, Sustainable Livelihood Approaches, and Sufficiency Economy. From this, the research is investigating the primary concepts of education, participation, planning, knowledge systems, and responsibility with the objective of identify the mechanisms that support good practice in each area. The conceptual links that exist between ESD and Community Capacity Building and between ESD and Sustainable Livelihoods were elucidated. It was then explained how livelihood alternatives can be investigated and how ESD can strengthen this process. In closing, Dr. Didham explained that the current challenge their research faces is to develop a functional framework for initiating ESD to strengthen Sustainable Livelihood initiatives.

Professor Prasarn Tangsikabuth provided a presentation based on his work as the head of the training team for Eco-Schools in Northern Thailand. The Eco-School project was started in 2005 in Thailand at the lead of the Department of Environmental Quality Promotion and has been piloted in 42 schools across Thailand. The Eco-School project provides schools and educators with a framework for development and the incorporation of a whole school approach. Four sectors are considered in the whole school approach: EE and the Management Policy, the learning process and curriculum management, resource management, and participation and networking. Each sector is guided by a separate set of principles.

Prof. Tangsikabuth explained that the development of the curriculum becomes part of the learning process. Students start by identifying and learning about a problem or challenge in their community. Science education is integrated to provide the means for inquiry and investigation, while the teacher is challenged to ensure incorporation across the course content. Through an in depth investigation of the causes and effects of the problem, students can begin to experiment with action to alleviate this problem. The students then create an action plan and begin to implement it in their communities to deal with these challenges. This process aims to provide students with skills of communication, calculation, analysis, critical thinking, process planning, and conflict resolution. Prof. Tangsikabuth identified several barriers that are still faced for ESD advancement including its lack of integration into curriculum development and across subjects, the lack of cooperation between the Eco-School programme, the Ministry of Education, and universities, and the need for further research and development. ESD though also demonstrates opportunities to support sustainable

livelihood development as a basis for community-based learning. Livelihood projects should be organised around good practice, social communication, and knowledge sharing activities.

Ms. Potjana Suansri and Mr Peter Richards presented together the practice of Thailand's Community Based Tourism Institute (CBT-I). As a partnership of two previous organisations, CBT-I has a 15 year working history and is engaged with over 50 local communities. The idea of community-based tourism comes from the dialogue on national development regarding the use of local resources that Thai communities depend on. CBT attempts to harness tourism as a tool to develop skills and knowledge of local people and support sustainable community development through an appreciation for local cultures and a conservation of natural resources. Local communities are supported to develop the knowledge, skills and cultural aspects they want to share with guests and to choose how they want to present their lives to the world. The support from CBT-I aims at providing skills for participatory planning in the community to manage the tourism process themselves. CBT-I also works with tour operators and guides to help promote the concept and to link local communities with interested tourists.

Ms. Suansri and Mr. Richards explained that empowerment is at the core of their focus, and this helps to strengthen sustainable livelihoods. CBT helps to strengthen sustainable livelihoods in three ways: supporting traditional self-sufficient livelihoods to continue; conservation protection and development of local resources, and; providing new livelihood opportunities through tourism. This year, CBT-I is also working with a group of multi-stakeholders to develop a participatory CBT Standard to ensure the high quality and consistency of projects using this label. In the process of CBT, education is primary. Education must be provided for the communities to help them carry out holistic planning and build on existing strengths. Education must also be provided for tourists so that they understand the process and respect the experience. Obstacles were highlighted as the lack of confidence of community members to engage with outsiders, the dynamic/uncertain situations in local communities, the difficulty of reaching appropriate markets, other projects using the CBT title as a form of greenwashing and not including the content, and finally the current uncertainty of government policy. Several lessons are also learned from the CBT-I model including the importance of integrating education with an active learning space; using a holistic framework where economic benefit is addressed but not as the only driver, and; the provision of capacity building based on existing strengths.

Mr. Bhuvadol Namdokmai began by highlighting the six focal points of WWF globally: climate change, forest, freshwater, marine, species, and toxic. WWF-Thailand incorporates environmental education in all of its projects. The first project presented was WWF's work in wetlands along the Mekong River Basin. These are intermittent wetlands from which local people earn a living from fishing during the wet season and through agriculture in the dry season. However, the pressures of rapid development in Thailand have pushed a move towards industrial agriculture which has disrupted the environment and the fish stocks. WWF has been working with local governments and communities to establish a participatory approach among multi-stakeholders for managing the wetland. The key areas of success in wetland management can be highlighted as beginning with participation, capacity building, and participation in establishing effective institutional mechanisms.

Mr. Namdokmai went on to explain the environmental education centres WWF has established in Thailand. The Nature and Agriculture Education Centre at the Golden Museum of Agriculture was

established in 2007 to develop a nature learning centre, focusing on the central plains ecosystem. The site had been a parking lot and was redeveloped to grow natural crops and to demonstrate the traditional means for meeting needs from local resources. A group of workers from the adjacent industrial area participate in farming projects after their work. WWF also run the Farm for Family programme to allow children to participate in the farming activities and for families to take home the produce. Mr. Namdokmai explains that this project demonstrates that a thriving and sustainable agricultural sector requires both integrated action by farmers and communities, and integrated action by policy makers and planners. Furthermore, the project also demonstrates the importance of incorporating informal, non-formal, and formal educational processes and working with local communities to develop education curriculums.

Mr. Pradhan invited the participants to take questions in the format of a panel discussion and opened the floor to all participants for interventions and questions:

Mr. Meng Hiong Ng asked Dr. Didham about the point in the strategy he presented on improving mechanisms for climate change mitigation and adaptation, and how they plan to address this?

Dr. Didham explained that the basis for adaptation in the focus of livelihood strategies is on providing individuals and communities with more direct management over their local resources, to increase their skills in critical thinking and problem solving, and to strengthen the resilience of livelihood asset systems.

Dr. William Schaedla asked generally how in these cases individuals perceived moving from the ideal to the practical?

Dr. Didham responded that one of the main challenges with local-level sustainable development projects is to provide a strategic process that can allow application of a concept to a local context in a way that is unique but at the same time grounded in more universal principles of sustainability. The key must be in providing not a specific blue print, but a formula that allows for the insertion of specific local factors.

Prof. Tangsikabuth explained that in his work they aim to provide capacity building and understanding for the larger context of ESD, to provide leadership to meet ESD, and to establish a supportive network. He explained that it is not the role of the facilitator to provide specific outcomes but instead to provide the schools or communities with the skills to create their own outcomes in response to ESD.

Mr. Katsumi Kakazu asked Ms. Suansri and Mr. Richards with the national promotion of community based tourism, how can communities cope with a growth in demand while maintaining the principles of sustainable development in CBT?

Mr. Richards replied that the government's recent promotion of Creative Economy is supported by many lessons that have already been learned. The agency responsible for promoting creative economy, the Thai Tourism Association, learned many lessons over its history including several made through past mistakes and now understands the unique needs of Community Based Tourism. One of the main challenges will be to develop appropriate products for these expanding markets based on high quality service provision while avoiding increased resource consumption, such as education and cultural experiences.

Ms. Ke Yang asked how CBT-I solves the conflict between the desires of the local community and tourist needs, and how do you provide public facilities for the tourists.

Ms. Suansri explained that one of the main trainings they provide for communities is on hygiene issues, and that they provide a clear monitoring check list before they have community visits. However, the standards of the facilities for tourists are the same that exist for the community. A clear description of these facilities is provided for tourists, and it is communicated with them on what to expect.

Ms. Ke Yang asked how WWF links their agricultural education to the challenges of local problems and contexts?

Mr. Namdokmai explained that currently large-scale rice production in their area is facing a specific insect-spread disease. The education centre provides small-scale organic solutions that are free of this same disease. The examples at their centre help to provide direct low-impact solutions to deal with the challenges faced locally.

Dr. Irene Poh-Ai Cheong asked WWF what type of funding support and financial incentives they provide for the communities they work with?

Mr. Namdokmai replied that in the Farm for Family programme provides a small grant to families to help purchase soil and a water pump. They begin by promoting agriculture for market products to establish a financial base, but then they promote investment in self-sufficient products. Overtime, the families benefit from a direct savings on food and they develop a sense of community from working and learning with one another.

Dr. Qing Tian commented that the ability CBT-I shows in linking traditional cultural aspects with modern practice in communities is very impressive and needs to be incorporated in more sustainable community development projects.

Mr. Mahesh Pradhan thanked the participants and provided an overall summary for this session. Four themes came of the presentations: the importance of working with local contexts, the focus on using knowledge and skills wisely, the benefit of interactive learning for ESD, and the need for holistic integration in curriculum and programme design. The presentations provided a clear message that education can be a driver for strengthening sustainable livelihoods. In closing, Mr. Pradhan suggested that in the future maybe we will move to a focus on happiness, and in doing so we can begin to think about “education for happiness”.

## SUMMARY OF PRESENTATION

### **Strengthening Sustainable Livelihoods through ESD Initiatives: Current status of IGES research on ESD**

By Dr. Robert J. Didham,  
Institute of Global Environmental Strategies

The goal of Education for Sustainable Development is to provide the momentum to stimulate social change and drive the systems of sustainability (i.e., environment, social and economic sectors). This is achieved in two main ways: 1) education provides a direction and pathway to follow, and 2) education helps to engender a culture of sustainability.

Two main pathways for advancing ESD can be distinguished between formal education and non-formal education. The four major thrusts of ESD that are identified as part of UN-DESD demonstrate these two pathways: formal – 1) promote and improve the quality of education, 2) reorient curricula; and informal – 3) raise public awareness of the concept of sustainable development, and 4) train the workforce.

Current research on ESD at IGES includes:

- Modelling ESD to strengthen Sustainable Livelihoods.
- Developing strategies on Education for Sustainable Consumption.
- Review current progress on ASEAN Environmental Education Action Plan.
- Multi-Stakeholder Consortium for Environmental Leadership in Higher Education.

The research on “ESD for Sustainable Livelihoods” is the newest focus at IGES, and it is still in an investigative phase. This work aims to develop pathways to strengthen the effectiveness of ESD in non-formal sectors by linking it clearly to the methods of community capacity building and sustainable livelihood approaches.

The criteria for case study investigation was established by identifying the core goal set in the methodologies of ESD, community development, sustainable livelihoods, and sufficiency economy. The primary concepts that are examined are education, participation, planning, knowledge systems, and responsibility. Core linkages can be developed between ESD, community capacity building and sustainable livelihoods based on:

- Strengthening access to local resources.
- Participatory planning tools and building capacity for problem solving.
- Securing access to resilient economic opportunities.
- Encouraging local engagement and community cooperation.
- Holistic design, management and integration.
- Be people centred and build broad partnerships.
- Promote links between local participation and policy support.

The livelihoods approach starts by considering the assets people gain support for their livelihoods from: human, natural, physical, social, political, and financial. Assessments are then carried out to consider what types of risks and vulnerabilities are faced, what types of opportunities exist, how do policies and institutions support or hinder the situation. Based on this broad mapping, the potential services are then considered with the idea of trying to strengthen the overall system. This process provides the basis for developing a livelihood strategy that helps to strengthen the assets that are initially identified.

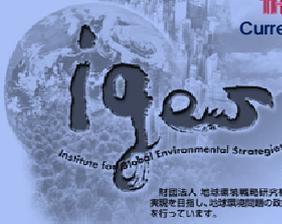
Theoretical connections can be made between education for sustainable development, community capacity building, and sustainable livelihood approaches. In fact, strong linkages and synergies can be identified between the three concepts to strengthen one another. By incorporating the methodologies of communities of practice, experiential education and capacity development it is possible to develop a model that will lend itself to better inclusion and performance. Next, the research approach at IGES attempts to identify mechanisms that government and civil society can use to strengthen this process. However, the challenge that is currently faced is *to develop a functional strategy or framework to initiate ESD for Sustainable Livelihoods*.

Once this strategy is established, we hope we can partner with other organisations to pilot this idea of ESD for Sustainable Livelihoods in their community development work.

**IGES** Institute for Global Environmental Strategies  
 国際法人 地球環境戦略国際研究機関

## STRENGTHENING SUSTAINABLE LIVELIHOODS THROUGH ESD INITIATIVES

Current Status of IGES Research on ESD



**Robert J. Didham, Ph.D.**  
 Policy Researcher  
 Capacity Development and Education Project

財団法人 地球環境戦略研究機関は持続可能な開発の実現を目指し、地球環境問題の政策的、実践的な「戦略研究」を行っています。

The Institute for Global Environmental Strategies conducts policy-oriented and practical "strategic research" on global environmental issues to achieve sustainable development.

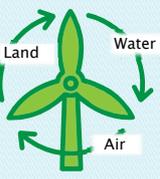
**IGES** CAPACITY DEVELOPMENT AND EDUCATION PROJECT

## OUTLINE OF PRESENTATION

- ▶ What is the goal of ESD?
- ▶ Pathways for advancing ESD.
- ▶ Focus of current IGES research on ESD.
- ▶ (Non-formal) ESD and Community Development
- ▶ Advancing Sustainable Livelihoods
- ▶ Opportunities to strengthen Sustainable Livelihoods through ESD initiatives.

## THE SYSTEMS OF SUSTAINABILITY

**Environment**



**Social**



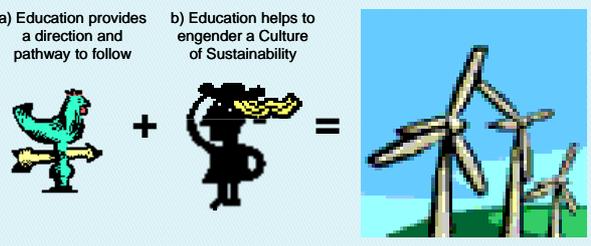
**Economic**



## THE GOAL OF EDUCATION FOR SUSTAINABLE DEVELOPMENT

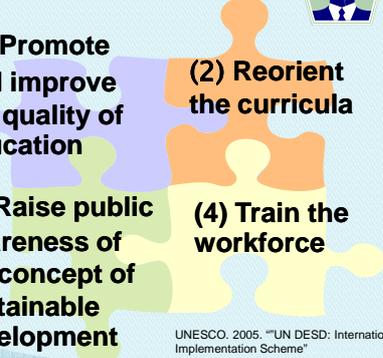
a) Education provides a direction and pathway to follow

b) Education helps to engender a Culture of Sustainability



Momentum is added to the Systems of Sustainability and stimulates social change!

## FOUR MAJOR THRUSTS OF ESD



- (1) Promote and improve the quality of education
- (2) Reorient the curricula
- (3) Raise public awareness of the concept of sustainable development
- (4) Train the workforce

UNESCO. 2005. "UN DESD: International Implementation Scheme"

## PATHWAYS TO ADVANCE ESD

### In Formal Education

- ▶ Integrated Curriculum Development
- ▶ Teaching Materials
- ▶ Training for Education Professionals
- ▶ Further policy support for ESD
- ▶ Establish ESD teaching centres and activities

### In Non-Formal Education

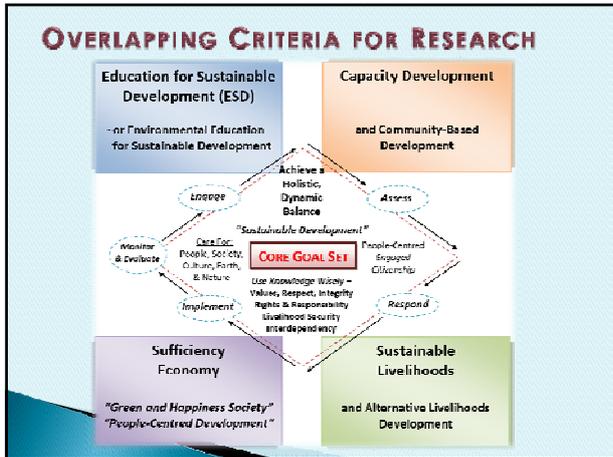
- ▶ Advance ESD initiatives at community-level
- ▶ Combine ESD with participatory action learning
- ▶ Develop ESD in context of local livelihoods
- ▶ Provide professional training with an integrated ESD approach

## CURRENT IGES RESEARCH ON ESD

- ▶ Modelling ESD to strengthen Sustainable Livelihoods:
  - Investigating ESD mechanisms in the context of community development and capacity building.
- ▶ Developing strategies on Education for Sustainable Consumption (ESC)
  - Cooperation with Marrakech Process on SCP
- ▶ Review of current progress on ASEAN Environmental Education Action Plan (AEEAP) 2008–2012
- ▶ Environmental Leadership in Higher Education
  - Developing a Multi-Stakeholder Consortium

## MODELLING ESD PROGRAMMES FOR SUSTAINABLE LIVELIHOODS: RESEARCH QUESTIONS

- ▶ How can the relationship between ESD and communities of practice be advanced to broaden the scope for ESD and promote Sustainable Livelihoods?
- ▶ What are the projects and activities that strengthen the work of and connection between ESD and community-based initiatives for securing Sustainable Livelihood?
- ▶ What are the means for policy makers, government and NGOs to apply ESD methodology to a wider perspective, and in doing so strengthen local-level practice of sustainable development and climate change mitigation?



- ### CORE GOAL SET FOR RESEARCH
- ▶ "Sustainable Development"
  - ▶ People-Centred → promoting behavioural change and capacity building
  - ▶ Achieve a Holistic, Dynamic Balance
  - ▶ Livelihood Security and Integrate for Interdependence
  - ▶ Care for: People, Society, Culture, the Earth, and Nature
  - ▶ Participation in Engaged Citizenship: Rights and Responsibility
  - ▶ Use Knowledge Wisely: Values, Respect and Integrity

- ### PRIMARY CONCEPTS TO INVESTIGATE
- ▶ **Education**- enabling people to understand the relationship between human development and the natural world through more joined-up thinking;
  - ▶ **Participation**- the ability to interact in decision-making processes about how development should occur;
  - ▶ **Planning**- the ability to assess the outcomes and impacts of potential activities;
  - ▶ **Knowledge systems**- a functional interpretation of sustainable development that provides guiding principles for the way development occurs;
  - ▶ **Responsibility**- understanding the importance each individual holds in shaping the quality of the environment and of society.

- ### (NON-FORMAL) ESD AND COMMUNITY CAPACITY BUILDING
- ▶ Strengthening access to local resources
    - Building capacity for local conservation initiatives
  - ▶ Participatory planning tools
    - Building capacity for problem solving
  - ▶ Access to resilient economic opportunities
    - Building capacity for livelihoods skills
  - ▶ Encourage local engagement
    - Building capacity for community cooperation
  - ▶ Develop ability to integrate
    - Building capacity for holistic design/management

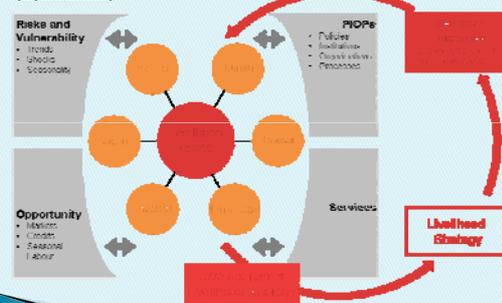
## ADVANCING SUSTAINABLE LIVELIHOODS

- ▶ **Be people-centred.** SLA begins by analysing people's livelihoods and how they change over time. The people themselves actively participate throughout the project cycle.
- ▶ **Be holistic.** SLA acknowledges that people adopt many strategies to secure their livelihoods, and that many actors are involved; for example the private sector, ministries, community-based organizations and international organizations.
- ▶ **Be dynamic.** SLA seeks to understand the dynamic nature of livelihoods and what influences them.
- ▶ **Build on strengths.** SLA builds on people's perceived strengths and opportunities rather than focusing on their problems and needs. It supports existing livelihood strategies.
- ▶ **Promote micro-macro links.** SLA examines the influence of policies and institutions on livelihood options and highlights the need for policies to be informed by insights from the local level and by the priorities of the poor.
- ▶ **Encourage broad partnerships.** SLA counts on broad partnerships drawing on both the public and private sectors.
  - **Aim for sustainability.** Sustainability is important if poverty reduction is to be lasting.

## CONSIDERING LIVELIHOODS

### DFID-Approach to Livelihood

Indigenous Knowledge Institute



## ESD TO STRENGTHEN SUSTAINABLE LIVELIHOODS

- ▶ Combining methodologies of **ESD, Communities of Practice, Experiential Education** and **capacity development** to establish better inclusion and performance
- ▶ Identifying main linkages and synergies between **ESD, CCB** and **SLA**
- ▶ Identify mechanisms that government and civil society can use to strengthen this process
- ▶ **Challenge:** To develop a functional strategy or framework to initiate ESD for Sustainable Livelihoods

## DESIRED ACHIEVEMENTS

- ☑ **Securing Sustainable Livelihoods**
- ☑ **Strengthening local assets and resilient support systems**
- ☑ **Transition towards overall Sustainable Development**
- ☑ **Improved mechanisms for Climate Change Mitigation & Adaptation**

*Thank you for your time!*

For Further Information & Contact

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*Towards A Sustainable Asia-Pacific*  
IGES 10th Anniversary

**SUMMARY OF PRESENTATION**  
**Eco-School: Education for sustainable development project**

By Professor Prasarn Tangsikabuth  
Chiang Mai University

**Introduction of Eco-School project in Thailand**

The concept of Eco-school (environmental education for sustainability school) which is the programs and processes for environmental education and development under the good practice is the school activities contributing to learning in all subjects, including the integration of learners, Instructors, Personal, Parents, and the communities within the area.

**Concept**

The concept of whole school approach was used as a framework for development including the following 4 sectors.

Environmental education and management structure policy	Leaning process and curriculum management
Environmental resource management in school	Participation and environmental education network

Environmental education and management structure policy – Factors in vision of the management of schools on ESD conceptualization.

Learning process management – Process of learning in education structured with respect to Green and EE Concept is:

1. Teaching programs.
2. Learners development activity by all subjects and project studies.
3. Teacher development activity to promote the method of EE, learning and techniques to learner activities.

Environmental resource management in School – Environmental management processes within the school to benefit the learning of students under the Green Concept. It depends on Wise use, Recycling society, Ecological footprint etc.

Participation and environmental study network- Participation processes between school-school, school- external agencies, school-family, school-community etc. which cooperate and develop programs to support and enhance the school ability toward Eco-school or ESD participation.

### ***The school strengthening for Sustainable Livelihood development***

The conceptual framework of Eco-school was intended to construct knowledge management process focusing on problems based on local community with the collaboration between the students, teachers, schools, families and communities. The outcome from the activities created a set of a clear step knowledge which resolved the community's problems by similar practices.

Management processes started from creating the interaction in their community to acknowledge problems that occurred among various parties. When problems were recognized, the science education and social study were applied as a tool for analysis. Then, the details of the problems were studied.

Troubleshooting process is a set of knowledge acquired from the synthesis. Such knowledge can be brought to rationally study the problems or any interesting issues. This interactive learning encourages learners to understand the problem, initiate problem solving process, create project plan, and implement the task. The PDCA (Plan-Do-Check-Act) was primarily used as a tool in systematic working in order to effectively create learning skill.

At the present time, Thailand has Eco-school pilot programs under the project started by Ministry of natural resources and environment focusing on target group of 42 schools nationwide. 9 of which are in 5 provinces in the north of Thailand (Chiang Mai, Chiang Rai, Lumphun, Phare, Nan) and divided into 2 groups; 4 primary schools and 5 secondary schools. Bangkok School is considered the "Good Practice" for primary school and Dara Academy School for secondary school due to the fact that

1. School members participated in the formulation of Eco-school policy.
2. Teacher developed the curriculum according to EE principle.
3. All parties utilized the school resources under GREEN concept.
4. The cooperation and network were formed between school and community.

### **The obstacles and barriers**

- EE and ESD concepts were rarely found in Thai curriculum development.
- EE should be endorsed in all subjects either by including or integrating in curriculum, not just only in science education.
- Universities and Ministry of Education have too little cooperation in building EE Model as concept methodology and curriculum development in school collaborations.
- Collaboration between Government and University to study and research by mean of R&D to achieve the project suitability was infrequently found.

### ***Opportunity for Promoting ESD to Support Sustainable Livelihood Development***

- The schools under the Eco-school programs are able to work under ESD & Green Concept, if they have enough support from the upper organization.
- The project should be run by the Good practice, Social Communication, and Knowledge sharing activity and the model should be made by all parties.
- The government should pay attention on ESD, promote it to be used in the public agenda and give priority to education reformation.
- ESD should be used as the education process for community-based learning and tool in natural resources and environment preservation.
- The concept of international education should be revised from the capitalism to the ESD concept focusing on basic human needs with the aim of making a good citizen for the community and country.

# ECO-SCHOOL

Education for sustainable development Project

Prasarn Tangsikabuth  
Faculty of Education  
Chiang Mai University, Thailand.

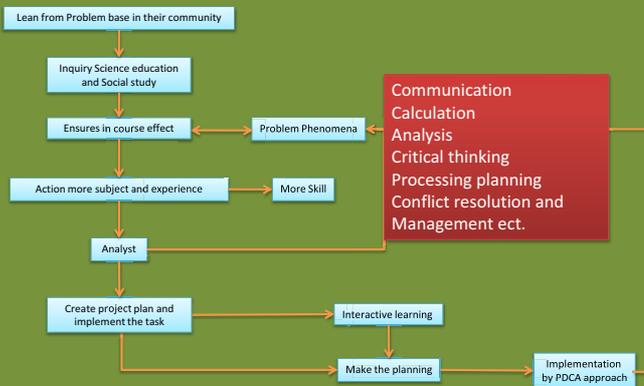


## GOOD PRACTICE ON EDUCATION FOR ESD IN THAILAND.

The concept of whole school approach a framework for development including the following 4 sectors.

Environmental education and Management structure policy	Learning process and curriculum management
Environmental resource management in school	Participation and environmental education network

## THE SCHOOL STRENGTHENING FOR SUSTAINABLE LIVELIHOOD DEVELOPMENT.



## Lean from Problem base in their community



**Inquiry by Science education**



**Ensures in course effect**



**Problem Phenomena**



**Action more subject and experience**



**More skill**



**Create project plan and implement the task**



**Interactive learning**



**Make the plan**

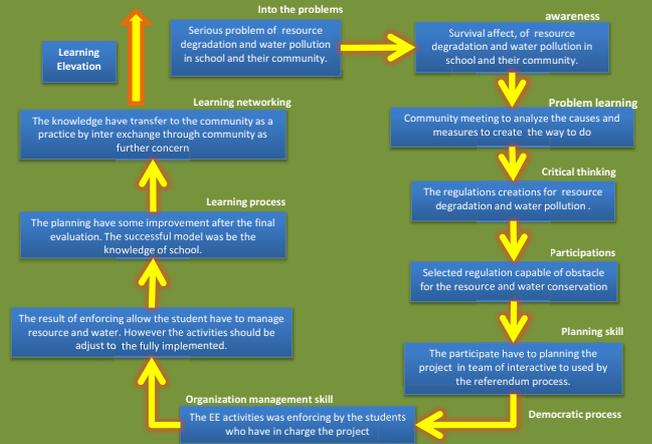


## Implementation



## Analyst

### Environment Education processing



## Summery & discussions

### The obstacles and barriers

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Thank you for  
your attention

[prasarncmu@hotmail.com](mailto:prasarncmu@hotmail.com)

## SUMMARY OF PRESENTATION

### Community Based Tourism and Education for Sustainable Development

By Ms. Potjana Suansri and Mr. Peter Richards,  
Thailand Community Based Tourism Institute (CBT-I)

**Keywords:** community based tourism (CBT), education for sustainable development (ESD), sustainable livelihoods support, lessons learned, Thailand

The Thailand Community Based Tourism Institute (CBT-I) was established in 2006, with the support of the Thailand Research Fund (TRF). CBT-I is a partnership between 2 organisations which have worked for over 15 years, supporting Thai communities to research and develop small scale tourism programs, suitable for their natural and cultural contexts, which enable guests to learn about their way of life while supporting local social and environmental work.

CBT-I's vision is to: ***“Provide support and facilitate cooperation among stakeholders from grassroots to international levels, in order to strengthen the capacity of Thai communities to manage tourism sustainably.”*** To achieve this, the CBT-I team work in partnership with a network of more than 50 local communities around the country, as well as other tourism actors and stakeholders with a firm commitment to achieving tourism which contributes towards sustainable development. CBT-I's partners include responsible tour operators, tour guides, government and NGO practitioners, academics and the media.

In Thailand, as elsewhere, national development frequently impacts local communities, their ways of life, and the resources upon which they rely. CBT-I work according to the conviction that education and capacity building are essential keys to build knowledge, skills, voice and opportunities which are necessary for Thai communities to understand the rapid changes which are occurring around them, and to negotiate the most benefit from development.

At the heart of CBT-I's work is the question ***“how can tourism be harnessed as a tool to develop the skills and knowledge of local people and contribute towards community development and sustainable resource management?”***

Communities develop CBT programs based on special aspects of life, culture and nature which they value and choose to share with guests. Community members manage and operate CBT themselves. They choose how to present their lives to the world. Guests experience local life through activities such as trekking with local woodsmen, cooking with host families, casting a net into the sea with fisherfolk, natural dying, or enjoying time at home.

Community based tourism is developed through a process which emphasizes ***participation and preparation*** of communities and their partners. This process is a powerful Education for Sustainable Development tool, which can support local livelihoods, while educating and inspiring producers

(communities), consumers (tourists) and industry partners (tour operators, tour guides, academics, etc) to understand and support sustainable development.

While developing, marketing, operating and monitoring their CBT programs, local community members develop many new skills such as planning, analysis, management, accounting, communication and presentation, hospitality and green product development. These skills are directly channeled to support sustainable development through a visioning process which encourages community members to establish a holistic range of goals for their CBT programs.

CBT has realized tangible economic, socio-cultural and environmental benefits for many communities around the country. Furthermore, through forums, workshops and study trips, community members have been empowered to share their needs and perspectives on rural tourism development directly with government and the private sector. Over 15 years, CBT has proved to be a useful tool for sustainable development, and a new social space for local communities to celebrate and share their ways of life and engage in dialogue with society.



### Modeling ESD Programs to Strengthen Sustainable Livelihoods

Community Based Tourism and Education for Sustainable Development

Ms. Potjana Suansri and Mr. Peter Richards  
Thailand Community-based Tourism Institute (CBT-I)



"Be Our Guest"

"Living, learning and sharing... moments in our lives..."



### Today's Presentation...

- A description of Community Based Tourism
- How does Community Based Tourism support community capacity building and strengthen sustainable livelihoods development?
- Achievements and obstacles
- Lessons learned and opportunities for ESD

"Be Our Guest"

"Living, learning and sharing... moments in our lives..."

# Vision



The Thailand Community Based Tourism Institute

The Thailand Community Based Tourism Institute (CBT-I) was established in 2006, and lies under the umbrella of the Thailand Research Fund (TRF)

**"Provide support and facilitate cooperation among stakeholders from grassroots to international levels, in order to strengthen the capacity of Thai communities to manage tourism sustainably."**



The Thailand Community Based Tourism Institute team work with over 50 local communities around Thailand....

- Mountains and watershed to the sea
- Buddhist, Muslim, Christian, Animist
- Thai and ethnic minority (hilltribe) peoples

"Be Our Guest"

"Living, learning and sharing... moments in our lives..."

**Community Based Tourism** Thailand

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*"Living, learning and sharing... moments in our lives..."*

**National Development...  
 Uses Local Resources**

**Land Water Forest**  
**Who benefits? Who loses out?**  
**What are the impacts of using these resources?**  
**A fair exchange?**

**Why CBT?**

**Negotiate more benefit from development**

**Skills  
 Knowledge  
 Voice  
 Opportunity**

**Power & Policy**

**Question การพัฒนา?**

**How can tourism be  
 harnessed as a tool to  
 develop the skills and  
 knowledge of local people,  
 and contribute towards  
 sustainable community  
 development???**

**1. Community human resource development and participation**

**2. Empowerment of local cultures and traditional ways of life**

**3. Conservation and sustainable natural resource management**

**4. Cultural exchange between hosts and guests.**

**5. Increases community members' income**

**Goals of CBT**

**'CBT'** programs are crafted by local people, based on very special aspects of life, culture and nature which they value and choose to share with guests.

Community members manage and operate 'CBT' themselves. They choose how to present their lives to the world.

*"Be Our Guest"*  
*"Living, learning and sharing... moments in our lives..."*

*"Be Our Guest"*  
*"Living, learning and sharing... moments in our lives..."*

**Hosts:** Warm welcome, local guides  
**Food:** tasty, local, clean, chance to cook  
**Home:** homestay or community lodge  
**Transport:** Local style, safe, equipment  
**Information:** Language, culture, tourism program, local projects, Do's & Don'ts

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**Community Based Tourism**




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*"Living, learning and sharing... moments in our lives..."*


**Community Based Tourism**


**Managed by community group**  
**Benefits for the local community and environment**  
**Code of Conduct**  
**Learning and sharing**

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**Preparation and Participation**



**Planning, Management, Operation, Marketing, Monitoring**

**Community Tourists, Tour Operators, Tour Guides**


**Community Based Tourism**


**Achievements: How has Community Based Tourism supported community capacity building and strengthened sustainable livelihoods?**

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**Capacity:**  
 New skills and  
 Knowledge for  
 local Thai  
 Community  
 Members...

- Participatory planning
- Analysis
- Management
- Accounting
- Communication and Presentation
- Hygiene and hospitality
- Safety
- Green Product Development
- Designing learning programs
- Responsible Marketing
- Monitoring

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**Empowerment** through partnerships  
 and dialogue with tourism industry  
 stakeholders and the government...

15 years... 'CBT Change Agents'

2009 – Participatory CBT Standard

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*"Be Our Guest"*  
*"Living, learning and sharing... moments in our lives..."*

 **Community Based Tourism**   
Thailand

**New voice and space to celebrate, share and support traditional, sustainable livelihoods...**

**Opportunities to develop new sustainable livelihoods**

- 800 hectares of new mangrove growth in Leeled – increase prawn catches of poor fishers by 300%
- 10 % income increase for Muslim fisher families in Koh Yao Noi
- Improved land security and recognition for hilltribe farmers
- Improved relationships between National Park and community
- Market for green products – e.g. natural dyed cloth, organic coffee

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*"Living, learning and sharing... moments in our lives..."*

 **Community Based Tourism**   
Thailand



*"Be Our Guest"*

*"Living, learning and sharing... moments in our lives..."*

 **Community Based Tourism**   
Thailand

Education for visiting communities

Community organisation

Holistic planning, building on strengths

CD, CBNRM, CRM, CBR...

CBT program design, local guide training

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 **Community Based Tourism**   
Thailand

Education for tourists (consumers)

- *The relationship between human beings and natural resources*
- *Simple life and simple consumption*
- *Value of local wisdom*
- *Cross cultural respect*

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*"Living, learning and sharing... moments in our lives..."*


**Community Based Tourism**




*"Be Our Guest"*  
*"Living, learning and sharing... moments in our lives..."*


**Community Based Tourism**


'On the job' sustainable development / sustainable tourism education for tourism professionals, policy makers.

A deeper, personalised understanding of the impacts and benefits of tourism, and how they can make a contribution.

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*"Living, learning and sharing... moments in our lives..."*


**Community Based Tourism**




*"Be Our Guest"*  
*"Living, learning and sharing... moments in our lives..."*


**Community Based Tourism**


**Obstacles**

- Confidence of stakeholders in community
- Dynamic situation in community – local politics
- Reaching appropriate markets – working with supply chain in competitive, mature destination
- Greenwashing and copying without content!
- Uncertainty of government policy

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## Community Based Tourism



### Lessons learned and opportunities for ESD

- Participation, preparation, facilitator
- Holistic frame (economic benefit, but not driven)
- Capacity building, based on 'Our Good Things'
- Consistent, long-term, commitment
- Research, Development, Movement,
- Stakeholders, Partnerships, Network
- Process, Product, Targeted market,

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## CBT Community Based Tourism



[www.cbt-i.org](http://www.cbt-i.org)

**Community Based Tourism is a bridge for people from different cultures to live, learn and share... and a new space for the voices of the voiceless**

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## SUMMARY OF PRESENTATIONS

### WWF Thailand's Best Practice Education for Sustainable Development

By Bhuvadol Namdokmai,  
WWF Thailand

#### Introduction and background

WWF-Thailand strives to integrate environmental education in all its field projects and national strategies. It is envisioned that this will clarify to local communities and other stakeholders the linkages between their social and economic activities and the natural resource base.

This paper explores educational efforts towards sustainable development, particularly the role of education in the creation of sustainable communities. It is based on a critical review of 2 major case studies of community-based rural development projects and environmental education projects in Thailand, implemented by WWF. These are 2 projects outline below

#### 1. Fresh Water Unit; Community Management of Wetlands in Thailand and Mekong River Basin

The Project emphasizes the use of participatory approaches to wetland management among key stakeholders including government, non-government organizations at the local and national levels, community representative, as well as civil networks in the Mekong Region

Aimed at improving community capability in wetland management, sustainable use and conservation of wetlands, the project will hopefully result in policy recommendations on community wetlands that are based on community participation. The project is scheduled to run for three years (2006-2008) under supervision of WWF Greater Mekong Programme's Thailand Country Office.

This project is a cooperative effort between WWF Denmark, and WWF Greater Mekong's Thailand Country Programme. Other partners are the Loei Fund for Nature Conservation and Sustainable Development, and The Hug Muang Nan Foundation to work in targeted wetland sites with funding provided by DANIDA

Greater Mekong Ecoregion and Wetland Project Sites Map



#### Main activities

- To support and implement collaborative research on biological and socio-economic aspects to obtain background information for wetlands management.
- To promote the potential and capacity of related stakeholders on the management, conservation, sustainable and wise use of wetlands.
- To encourage and promote development of new mechanisms for a more effective wetlands management structure.
- To raise public awareness of the significance and value of wetlands.
- To support the implementation of wetlands conservation and management activities through local community initiatives.
- To promote the creation of a wetlands management network in which communities in Thailand and the Mekong Region can take part.

## **How this case supports community-level capacity**

In order to maintain wetland biodiversity value and to encourage overall quality of life in the longer term, wetland resources on which communities depend to be managed in a sustainable manner. Hence, the wetland project attempts to conserve wetland biodiversity and improve community livelihoods. Project components include setting up effective institutional mechanism for wetland management, wetland management manners have decided on Research based and community provide, support community for conservation, rehabilitations, income generation reduce local subsistence on wetland, etc. More project achievements supporting community livelihood have been divided in to 5 sections as the following below.

### **1. Community participation in formal institutional mechanisms for wise use of wetland**

One of the major problems of wetland management in Thailand is that traditional local users of wetlands resources often do not have their rights to these ecosystems recognized in practice, and the formal mechanisms and platforms for sharing their knowledge and ideas in wetland management either do not exist, or are not functioning effectively. This is the case even though the constitution (1997) of Thailand provides the basis for traditional communities and communities respectively to participate in the management, maintenance, preservation and exploitation of natural resources and despite the fact that a national wetland institution has been set-up.

The main aim of the intervention was to encourage and assist the communities living in immediate proximity to these both sites, and lobby for support from the relevant government agencies to strengthen local wetland management and sustainable use. The project helped build the capacity of communities and relevant government agencies on management, conservation, and sustainable (wise) use of wetlands, while building up their knowledge and positive attitudes toward community participation. The project worked to develop models for new institutional mechanisms with formal government recognition and clear mandates.

Based on this approach, participatory wetlands boundary demarcation, zoning (including demarcation of Fish Conservation Zones) and development of user rules for different zones have been implemented at the two wetlands. Strong support and endorsement from the new local and provincial institutions are enabling wetlands management priorities to be integrated into broader development planning processes at the sub-district, district and provincial levels.

In conclusion, establishing appropriate institutional structures with the right mandate and stakeholder representation (such as PWC and DWG) is proving to be an effective approach and mechanism for greater decentralization and legitimizing local community involvement and influence in wetlands management. In the longer term building on the demonstrated effectiveness of this approach can subsequently generate an effect at the national level bringing about necessary policy and institutional changes to secure more effective management of wetlands with community involvement throughout the country.

### **2. Collaborative research for wetland planning and encourage community empowerment**

**Collaborative research:** Necessary data on wetlands and there users were collected, through (i) baseline socio-economic surveys, (ii) participatory fisheries monitoring with local fisherman and local Department of Fisheries officials, (iii) assessment of aquatic plant utilization with the Department of Fisheries and the Department of National Parks officials; (iv) monitoring of pesticide and fertilizer utilization with the local Agriculture Department officials; (v) surveys of water birds with the Department of National Parks officials, (vi) water quality monitoring with Regional Environment Officials 9 (REO #9) (Udon Thani Province), (vii) forest inventories around wetlands, and (viii) GIS application for decisions on wetland management.

**Encourage community empowerment:** Capacity of related stakeholders (such as fisherman, farmer, government officials etc) were build by local and national meeting attendance, trainings, study tours, sharing experience with wetland management, and village based research/outreach methodology “Thai Baan.”

### 3. Restoration, conservation, wise use and setting user group network by

**Define Wetland boundary and demarcation:** Clear demarcation and zoning are actions of importance for wetland management, with demarcation being an important first step in the process. Prior to zoning decisions, clearly demarcated wetland boundaries are necessary. As new guidelines for management planning of Ramsar sites and other wetlands note that for management units and buffer zones, where possible, zone boundaries should be easily recognizable and clearly identifiable



on the ground. They should include physical features. Moreover, demarcation should be undertaken to reduce wetland depletion. Presently, the boundaries of two wetlands in this project have been clearly defined.

#### **Wetland Zoning and community regulation:**

Issues affecting wetlands include: over fishing, wetland depletion, chemicals from agriculture, and unsustainable utilization, Long term sustainable wetland management strategies are concerned with solving these problems. There are many of methods to ensure healthy wetlands. Zoning is one of important steps to setting guidelines for establishing long-term guidelines for healthy wetland management. However zoning must take into account accurate and current data on wetland boundaries and use. The main objective is to discern appropriate areas for conservation zone and other activities. The establishment of conservation zones depends upon what ecosystems are to be protected and on research information.



**Wetland Restoration:** Local Fishery Department officers and fisherman participate in wetland restoration and re-habitation for aquatic fauna by building artificial spawning habitat (fish houses), and by cultivating aquatic plantation with plants such as lotus. This is one method to increase spawning habitat. In other area, local people have made artificial spawning habitats by sinking lumber into conservation zone. This method works because some fish species use logs for spawning

**Setting user group network:** The wetland project provides funds for each user group. The main objective of this funding is to conserve wetland biodiversity and build up capacity for member in each group, such as fisherman’s groups creating collaborative patrolling activities to reduce violations of community agreed conservation zones. Another funded activity involves farmer’s groups producing and using organic fertilizer in their farms.

#### **4. Raise awareness on CEPA (Communication, Education and Public Awareness) programme.**

**Local Curriculum on Wetlands:** According to the Thai National Education Act of B.E. 2542 (1999) and an Education Ministry Declaration on the details of core curricula for basic education B.E. 2544 (2001), educational curriculums must relate to the communities where they are being undertaken. The acts prescribe core curriculum for basic (non-localized) education at 70% and 30% as relating to needs of the community and the society, local wisdom and attributes of desirable members of the family, community, society, and nation.

#### **5. Long term sustainability of wetland management**

The wetland project has exceeded expectations as a mechanism for conservation. Three key factors are community empowerment, local initiative revolving fund and long term planning. Support for capacity building of communities and District working group with direct responsibility in wetland management have been undertaken. Additionally, Strategic Wetland Management plan have linked with Integrated five years Nong Khai Provincial Development Plan.

#### **Lesson Learned**

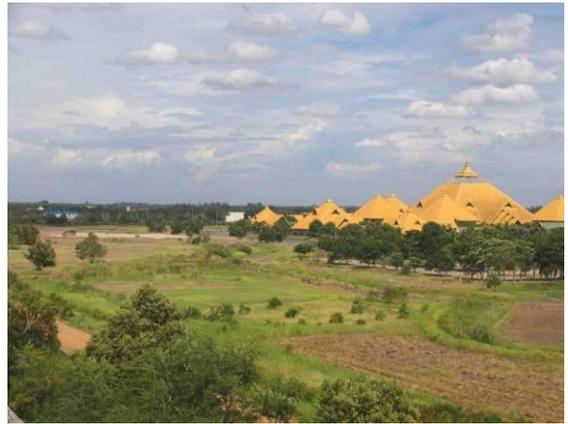
1. Orientation activities to build up comprehension of a project at the beginning are very important for its future successful implementation. Moreover, broad initial participation is also necessary.
2. Stakeholders must be clearly identified and targeted.
3. Research on both the social setting and the natural conditions of the wetland should be taken into account in wetland management and development of a management plan.
4. A major effort is required to raise public awareness and to educate local communities, teachers and students about the values of the wetland. Integration of community work with awareness activities has been a major strength of wetland management
5. Capacity building has been very effective in changing the views and the behaviors of stakeholders toward wetland conservation and management. Study tours and sharing experiences in particular are most effective tools for building up capacity. They allow stakeholders to acquire new ideas in wetland management, zoning models, and community regulations. They also allow participants to learn about developing agreements for collaborative management in a short time.
6. Participation in formal institutional mechanisms for wise use wetland management encourages and assists communities living in immediate proximity to wetlands. It allows them to lobby for support from the relevant government agencies to strengthen local wetland management and sustainable use. It gives a voice to their local concerns.
7. Long term sustainability should be a concern because activities in conservation projects are budget dependent. Hence, Government support (financial support, manpower) is an important means of ensuring project longevity.

In conclusion, three important components for success wetland management are, beginning participation, capacity building, and participation in effective institutional mechanism for wise use wetland management

#### **2. Environmental Education Unit; the Nature and Agriculture Education Centre**

Over the term of its national WWF Thailand has collected substantial experiences from working in environmental education, both at the school and at the national policy level, in the hope that we can be a part of developing the educational system, specifically in environmental education. We see this as a means to conserve Thailand's biodiversity, and promoting a balance of both development and conservation that will ultimately lead to sustainable development.

The establishment of Bang Pu and Nature and Agriculture Education Center into learning centers for schools provides a connection between urban development, natural resource awareness and the environment. Lessons implemented at the Center have been developed to coincide with curriculum standards and use the natural environment to motivate student interest. The aim is to promote a system of learning about the environment in a fun manner, which will follow with awareness building. The ultimate goal from awareness building is a desire to cooperatively maintain conservation of natural resources and environment.



### Nature and Agriculture Education Centre

On the auspicious occasion of His Majesty the King's 80<sup>th</sup> Birthday in 2007, the Golden Jubilee Museum of Agriculture and WWF Thailand have initiated establishment of the Nature and Agriculture Education Center to develop the museum's surrounding areas into a suitable nature learning centre, focusing on Thailand's central plains ecosystem. The education content and activities coincide with His Majesty the King's royal ideas of sustainable economy, and to outline educational activities that conform to the royal ideas of His Majesty the King, which he states,



*“There are three traits in education or the learning process. These are learning from others, learning through critical thinking, and learning from practice until success is attained. It is essential that all these three processes are simultaneously integrated and support each other in order to effectively learn and acquire skills that can be efficiently used.” (25 June 1981)*

The establishment of the “Nature and Agriculture Education Centre” plays a role in educational development. The centre also stresses experiential learning, and student-centered or learner-centered teaching. The curriculum implemented at the center is focused on educating students on agricultural ecosystems as well as ways to live in harmony with the environment of the central plains.

The project has long-term goals to present information on the significance of the central plains' natural resources to youth and all target groups to allow the public to understand the necessity in protecting the biodiversity, use of water and soil resources, plants and animals and the relationships between the populations to the richness of the central plains. The expectations of the project are to provide an education program for youth participating in the project at least 5,000 students per year will learn and place care towards the problems occurring upon the central plains ecosystem. Participants will also understand their role and responsibility towards society and be active in restoring and protecting their local natural resources and environment.

### How this case supports communities - capacity levels

One of the Project activities is to restore degraded land at the northern end of the Golden Jubilee Museum of Agriculture. Ultimately, the restored site will host rich biodiversity, and a variety of agricultural land use examples that showcase the original central plains ecosystem. Conceptually, the model is in keeping with His Majesty the King's ideas, which focuses on development that matches local community needs and resources.

Within a 5 rai area (8,000 sq.m.), we have established integrated agriculture fields have been created to be used as learning sites for target groups. The emphasis of these sites is on understanding the concepts and methods of the agriculture field where multiple natural components, such as soil, water and minerals all depend on one another. The NAEC promotes organic agriculture through hands-on learning and practice to promote a better understanding of the traditional methodologies that local Thai farmers have practiced for hundreds of years. Such practices have been developed and enriched through farmer's knowledge of local agro-ecology and environmentally sustainable way of farming. Despite the imposition of modern agricultural practice, traditional farms continue to exist and local indigenous knowledge of sustainable farming remains. The survival of these farms is a source of the revitalization of modern organic agriculture in Thailand today.



The integrated agricultural program activities include 'participatory' training of target groups in sustainable agriculture (sustainable land use, crop and integrated pest management, food security management, bamboo, banana, medicinal plants and local vegetable rehabilitation) management of income generating activities, and marketing of agricultural products. It also entails enhancing the learners' participation in the development and implementation of program for income diversification, introduction of alternative income generating activities.

- **Key achievements**

During school trips at the centre, Students engage in multiple activities that enable them to experience the elements of natural world. Every day late afternoon is the time allocated for the other target group of the project, adults who are working in the industrial business near the project site (Navanakorn Industrial Parkland). These people gather together after their working hours to come to the center and learn about agricultural practice. Currently, such activities occur regularly on the museum grounds, with a focus on sustainable agriculture, experimental rice paddy production, integrated agriculture, and new agricultural theory. Again, the methods are the important to the Thai context because they are royal ideas put forward by of His Majesty the King Participants see the activities as patriotic an are able to apply them to their own lives and families.



Within these project activities, we encourage the learning and sharing our knowledge and experience on organic farming and integrated agriculture so participants can derive quick benefits by growing their own vegetables and raising chickens and cultivating pond fishes. After a few months of this initiative, outcomes have been successful. The work has shown that it is possible to achieve many of the goals of integrating environment into national education schemes. We can also see this practice can reduce harm to the environment, for example through the reduction or elimination of polluting substances such as pesticides and nitrogen fertilizers, water conservation practices, soil conservation practices, restoration of soil fertility, maintenance of agricultural and natural biodiversity

One of the essential aspects in creating ecologically sustainable agriculture is the promulgation of knowledge about how to live in balance with the Earth's living systems;

meaning how to balance our social, economic activities in accordance with natural laws, energy flows and a finite limit of resources.

- **Lessons learned in the practice of this case and how this identifies wider opportunities for promoting ESD to support Sustainable Livelihood development**

Sustainable agriculture can contribute significantly to increased food production, as well as make a significant impact on rural people's welfare and livelihoods. However, without appropriate policy support at a range of levels, these improvements will remain at best localized in extent or, worse, will wither away. A thriving and sustainable agricultural sector requires both integrated action by farmers and communities, and integrated action by policy makers and planners. It is also very important for farmer-to-farmer learning and sharing of experiences to be encouraged and facilitated. Sustainable agriculture needs to be mainstreamed into agricultural policy and practice to reach its full potential.



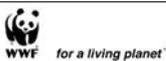
## WWF Greater Mekong Thailand Country Programme

# Modeling ESD Programmes to Strengthen Sustainable Livelihoods.

*By Bhuvadol Namdokmai  
Environmental Education Unit Head  
Manager, Nature and Agriculture Education Centre*



## World Wide Fund for Nature



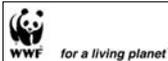
## WWF at the Global scale

WWF's mission is to stop the degradation of the planets' natural environment to build a future in which humans live in harmony with nature, by :

- > Conserving the world's biological diversity
- > Ensuring that the use of renewable natural resources is sustainable
- > Promoting the reduction of pollution and wasteful consumption



**Environmental Education for Sustainable Development**



## WWF-Thailand & EESD

WWF-Thailand strives to integrate environmental education in all its field projects and national strategies. It is envisioned that this will clarify to local communities and other stakeholders the linkages between their social and economic activities and the natural resource base.

There are two major projects in WWF-Thailand that we would like to present as our best practice that support community level according to the building and strengthen Sustainable Livelihood development.



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### Community Management of Wetlands in Thailand and Mekong River Basin

Greater Mekong Ecoregion and Wetland Project Sites Map

The collage features several photographs: ducks in a pond, a person carrying a large basket on their head, a person riding a motorcycle through a field, and a person in a boat on a river. A map of the Greater Mekong Ecoregion is shown, highlighting project sites in Thailand and Laos. The map includes a legend with categories such as 'Wetland Project Sites', 'Wetland Project Sites (Thailand)', 'Wetland Project Sites (Laos)', 'Wetland Project Sites (Cambodia)', 'Wetland Project Sites (Vietnam)', 'Wetland Project Sites (Myanmar)', and 'Wetland Project Sites (China)'. It also shows the 'Mekong River Basin' and 'Mekong River'.

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### Character of Wetland in Northeastern Thailand

The 'Dry Season' image shows a landscape with sparse vegetation and a network of small, dark water bodies. The 'Rainy Season' image shows the same area with lush green vegetation and larger, interconnected water bodies.

**Dry Season**                      **Rainy Season**





ลำพะเนียงก่อนขาด  
ลือก



ลำพะเนียงหลัง  
ขาดลือก




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## Introduction

The Project emphasizes the use of **participatory approaches** to wetland management among key stakeholders including **government, non-government organizations** at the **local and national levels, community representative, as well as civil networks in the Mekong Region.**

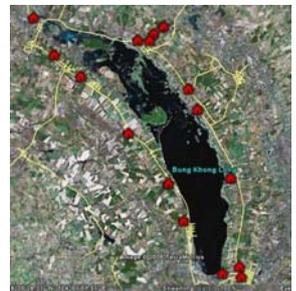



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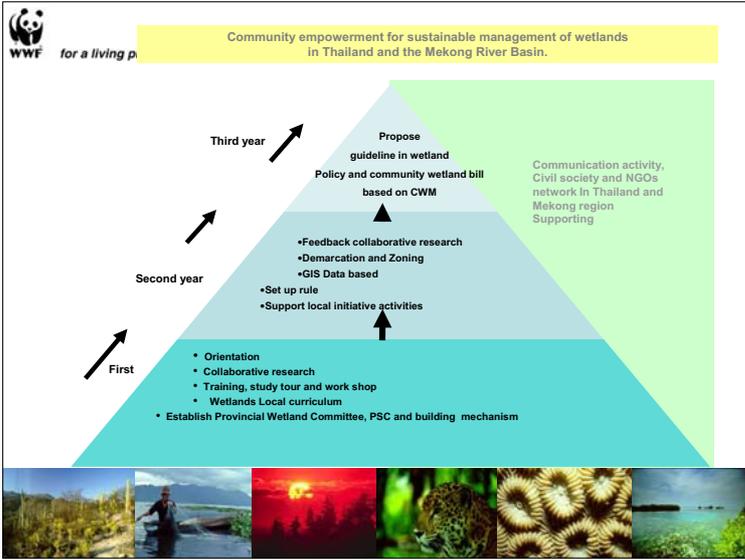
Goot Ting Site and target villages



Bueng Kong Long Site and target villages







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Project Achievement supporting community livelihood and wetland biodiversity

1. Community participation in formal institutional mechanisms for wise use of wetland

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2. Collaborative research for wetland planning and encourage community empowerment

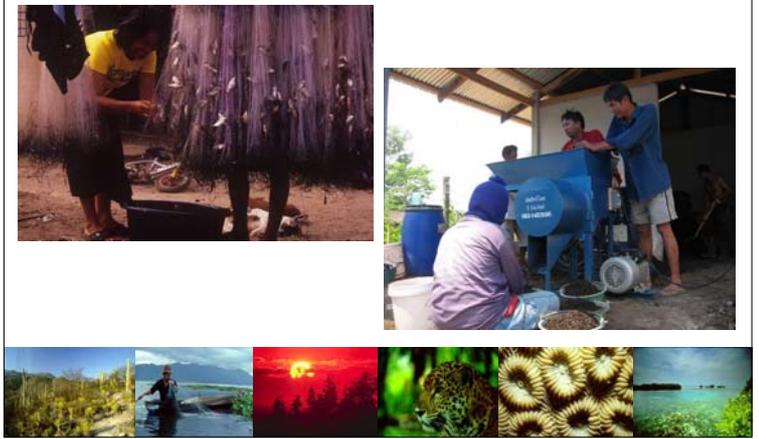
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3. Restoration, conservation, wise use and setting user group network

4. Raise awareness on CEPA (Communication, Education and Public Awareness) Programme.



5. Long term sustainability of wetland management

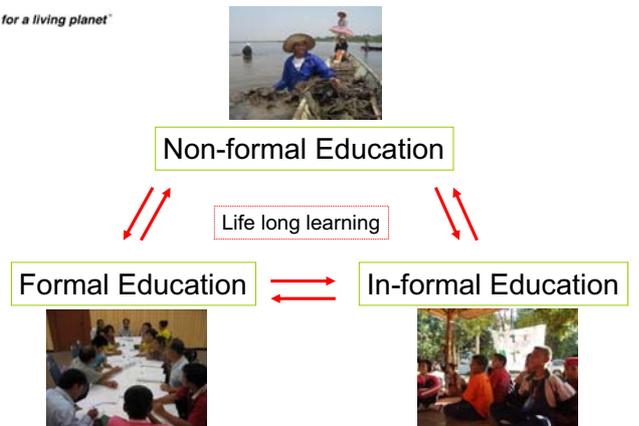


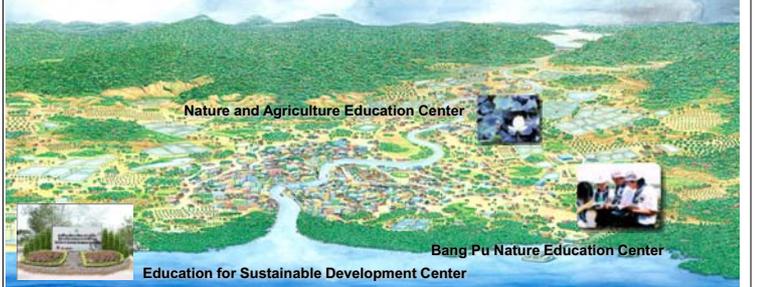
**Lesson Learn**

In conclusion, three important components for success wetland management are,

- beginning participation,
- capacity building,
- and participation in effective institutional mechanism

for wise use wetland management





Environmental Education Unit;  
the Nature and Agriculture Education Centre



**ศูนย์ศึกษารวมชาติและระบบนิเวศเกษตร**  
Nature and Agriculture Education Centre








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## The Golden Museum of Agriculture






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## Background of the Project

In the auspicious occasion of His Majesty the King's 80th Birthday anniversary in 2007, the Golden Jubilee Museum of Agriculture, Thai Bridgestone and WWF Thailand have initiated the establishment of the Nature and Agriculture Education Center to develop the museum's surrounding areas into a suitable nature learning centre, focusing on the central plains ecosystem. The education content and activities will coincide with His Majesty the King's royal ideas of sustainable economy, and to outline educational activities that conform to the royal ideas of His Majesty the King





Rehabilitation Activity

April

April 2552



Green Hands Special # 5






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Within a 5 rai area (8,000 sq.m.),  
 we had set-up of integrated agriculture fields to be a  
 learning plot for all target groups

**Start: January 2009**





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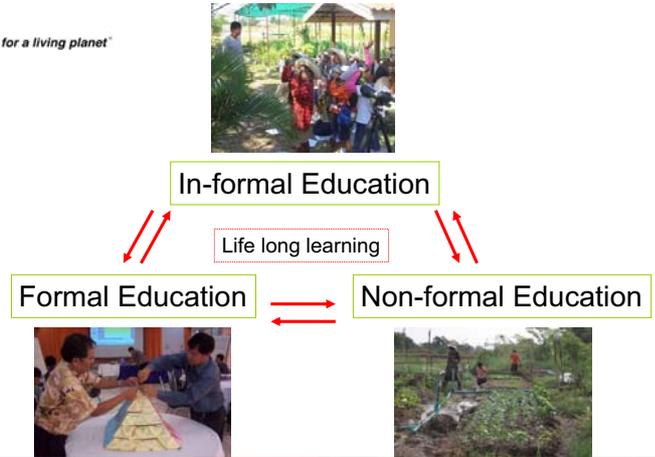
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**F**arm  
 or  
 family




### Lessons learned

Sustainable agriculture can contribute significantly to increased food production, as well as make a significant impact on rural people's welfare and livelihoods. However, without **appropriate policy support** at a range of levels, these improvements will remain at best localized in extent or, worse, will wither away. A thriving and sustainable agricultural sector **requires both integrated action by farmers and communities, and integrated action by policy makers and planners**. It is also very important for **farmer-to-farmer learning and sharing of experiences** to be encouraged and facilitated. Sustainable agriculture needs to be mainstreamed into agricultural policy and practice to reach its full potential.



WWF Thailand

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## SESSION 6

4<sup>TH</sup> DECEMBER 2009, 11:15-13:00

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### CONCLUSIVE SESSION

**Chairman:** Professor Mario Tabucanon, United Nations University

Panelists:

- Mr. Wathana Onpanich, Japan Foundation
- Ms. Lynda Rolph, The Prem Tinsulanonda Center for International Education
- Mr. Athapol Anunthavorasakul, Chulalongkorn University
- Dr. Qing Tian, Beijing Normal University
- Ms. Nantawan Lourith, Ministry of Natural Resources and Environment
- Ms. NuanPan Pulsrisawat, Ministry of Education

Professor Mario Tabucanon opened this final session by explaining its structure. First, there would be a panel discussion and second the floor would be opened to general discussion on the findings of the workshop and expectations for future work on education for sustainable development. Prof. Tabucanon went on to introduce each of the panelists and then invited them to consider in their discussion the original aims and expected outcomes for the workshop as highlighted in the concept not:

- Report on current status of ESD policy and implementation in ASEAN+3 countries;
- Identification of good practice for implementing community-based ESD activities to strengthen Sustainable Livelihoods, and;
- Policy recommendations for establishing ESD programmes to support community practice for sustainable development.

Mr. Wathana Onpanich explained the work that the Japan Foundation is involved in and how they can provide assistance in regards to ESD. The Japan Foundation has hosted the Japan - East Asia Network of Exchange for Students and Youths for five years and the International Forum: "Towards an East Asia Community: Beyond Cross-Cultural Diversity". Their aim is to bring people together to share learning and good practice. For the past two-years, the foundation has brought together teachers and NGO's to investigate issues of sustainable development. Mr. Onpanich explained that the Japan Foundation is eager to encourage the exchange of cultural and political dialogues on sustainable development, and would consider supporting a regular ESD workshop.

Ms. Lynda Rolph emphasised the importance of connecting education with community and real life when we consider developing policy to advance ESD. The interplay between education, practical experience, and community life is very important if we are to stimulate lasting social change. Thus, it is very important to find channels to get the children out of the classroom and into practical field experiences. It is also important to provide opportunities for children to interact with experts and to learn from their experience.

Mr. Anunthavorasakul began by explaining the approach Chulalongkorn University is taking to promote and engender leadership for ESD and to develop a strong morale behind it. As human

resources for ESD are still limited, capacity building and training for teachers must be a high priority. However, a further challenge exists in the fact that there still remains a significant gap between policy/conceptualisation and practice/action. Governments must identify and empower those individuals who should have lead roles in enacting ESD.

Dr. Qing Tian put forth that currently a strong understanding exist around what is the romantic ideal of ESD, however it is still hindered by the lack of clear strategies for its practical application. Dr. Tian went on to suggest three ways in which to improve ESD. First, efforts must be made to establish a common methodology that can meet local contexts, that can account for the divides in urban and rural settings, and apply to both centralised and non-centralised governments. Second, there is a need to develop strong leadership for ESD and to gain their support, furthermore this should help to build international links and the sharing of good practice. Third, ESD projects must incorporate a wide spectrum of issues, activities and interests and demonstrate a holistic and integrated approach to managing the sustainable development concept. This cannot be done with single issue subjects, but must be demonstrated across sectors that individuals usually do not draw linkages.

Ms. Nantawan Lourith expressed the overall benefit of this workshop and the wealth of valuable information she had gained from it. She went on to suggest that capacity building for ESD leaders and encouragement of their role as advocates are important opportunities for strengthening ESD initiatives at a local-level.

Ms. NuanPan Pulsrisawat stated that the Ministry of Education is currently strongly considering how to integrate ESD into the core national curriculum, and she suggested that this workshop was very valuable in considering how to move forward. Ms. Pulsrisawat acknowledged that taken as a whole, there is a considerable amount of work being done on ESD. However, currently these efforts are disconnected, and could be improved substantially if there was more coordinate and efforts made to cooperate. An ESD network would be highly useful, and more partnerships are needed to take policy to action.

Professor Mario Tabucanon brought the panel discussion to a conclusion by summarising several of the opportunities that exist for advancing ESD and highlighting specific activities IGES could undertake to support this.

- Promote Knowledge Sharing and develop clear mechanisms for appropriate information/policy sharing based on the situational context.
- Strengthen means to integrate action through the development of holistic implementation strategies.
- Support communication and networking for ESD.
- Advanced research and development for connecting ESD with processes of transformative education.
- Develop common methodologies that can respond to local contexts and accommodate diversity.
- Ensure more synergy and integration in implementation strategies.
- Develop specific tools and mechanisms for implementing and supporting practice.

Prof. Tabucanon then opened the floor to all participants for further interventions.

Mr. Marut Jatiket expressed his sympathy with the plight of Ministries of Education who regularly receive a diversity of mandates pushed on them for integrating specific subjects into the curriculum. Among these competing mandates, it can be difficult to recognise the priority of ESD. Furthermore, without a clear strategy or resources for integrating ESD into the core education system, it is unlikely to gain uptake.

Mr. Mikko Cantell commented on Dr. Tian's comments and suggested that UNESCO is also dealing with the concern of moving from ideal concept to practical action that is locally conceptualised. The first half of DESD saw general concepts of ESD have broad sweeping, common implications across Asia without there being much depth to the resulting outcomes. UNESCO is now working with individual countries to consider how ESD can drive educational reform in their country. UNESCO is developing new tools to aid this process and have been testing them across several countries.

Mr. Peter Richards suggested that in trying to link top-down and bottom-up efforts, it would be beneficial to develop a data-base to link community-practice with learning centres. He also explained that in community-based tourism, they often hold symposiums or fair which could be replicated in regards to ESD.

Ms. NuanPan Pulsrisawat put forward that we really need to start thinking about learning outcomes and to consider what types of culture, values and citizenship we are educating for. She also added that these aspects could all be incorporated into social studies.

Mr. Anunthavorasakul expressed the importance of research and development, and he put forward that this is something the government should be encouraging. There is considerable need for new skills and knowledge to deal with issues such as climate change adaptation and transition to low-carbon society.

## LIST OF PARTICIPANTS

**ASEAN+ 3 Policy Dialogues on Education for Sustainable Development: Centred on Implementing ESD Programmes for Sustainable Livelihoods**  
**3 - 4 December, 2009 (Auditorium, UNESCO Building, Bangkok, Thailand)**

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3	Thailand	UNESCO	Mr. Mikko Cantell	Associate Expert, UNESCO Bangkok Office	m.cantell@unesco.org
4	Thailand	UNEP	Mr. Mahesh Pradhan	Director, a.i. AIT/UNEP Regional Resource Centre for Asia and the Pacific	pradhan@un.org
5	Thailand	UNEP	Ms. Seon-Mi Choi	Associate Programme Officer, UNESCO Bangkok Office	seon-mi.choi@unep.org
6	Japan	UNU	Prof. Mario Tabucanon	Visiting Professor, UNU	mttabucanon@ait.ac.th

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12	Thailand	WWF	Mr. Bhuvadol Namdokmai	Environmental Education Unit Head, Manager, Nature and Agriculture Education Center, WWF Greater Mekong - Thailand	bhuvadoln@wwfgreatermekong.org
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19	<b>Japan</b>	Ministry of the Environment	Mr. Teruo Kogu	Deputy Director, Environmental Policy Bureau Office of Environmental Education	TERUO_KOGU@env.go.jp
20	<b>China</b>	Ministry of Environmental Protection	Ms. Yang Ke	Project Manager of Green School Environmental Education Department, Center for Environmental Education and Communications	yangke09@gmail.com
21	<b>China</b>	Beijing Normal University	Dr. Qing Tian	Associate Professor, Environmental Education Center	green@bnu.edu.cn

## ASEAN Countries

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24	<b>Brunei</b>	Universiti Brunei Darussalam	Dr. Irene Poh-Ai Cheong	Sultan Hassanal Bolkiah Institute of Education, University Brunei Darussalam	irenecca2007@yahoo.com
25	<b>Lao PDR</b>	Department of Environment	Ms. Phouangmalay Sorvalith	Officer of Environmental Promotion, Water Resource and Environment Administration, Department of Environment	macki132@hotmail.com
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28	<b>Philippines</b>	Department of Environment and Natural Resources	Ms. Cristina A. Francisco	Information Officer III, Environmental Education and Information Division, Environment Management Bureau, DENR	tina_a_francisco@yahoo.com
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31	<b>Thailand</b>	Ministry of Natural Resources and Environment	Ms. Nantawan Lourith	Dissemination Technical Officer, Department of Environmental Quality Promotion	nantawan@mail.deqp.go.th
32	<b>Thailand</b>	Chiang Mai University	Prof. Prasarn Tangsikabuth	Associate Professor, Dept. of Man and Environment Management, Faculty of Education	prasarncmu@hotmail.com
33	<b>Thailand</b>	Thailand Community Based Tourism Institute	Ms. Potjana Suansri	Director, Thailand Community Based Tourism Institute (CBT-I)	potjana@cbt-i.org
34	<b>Thailand</b>	Thailand Community Based Tourism Institute	Mr. Peter Richards	Marketing Support & Development Coordinator, Thailand Community Based Tourism Institute	peter@cbt-i.org
35	<b>Thailand</b>	Chulalongkorn University	Mr. Athapol Anunthavorasakul	Assistant Dean of Research, R & D Centre on Education for Sustainable Development	anun_atha@yahoo.com
36	<b>Thailand</b>	Ministry of Education	Ms. NuanPan Pulsrisawat	Educational Officer, Office of the Basic Education Commission, Bureau of Technology for Teaching and learning	oui_nuan@hotmail.com
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## Observers

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