I. Workshop Summary
Asia-Pacific Strategy Planning Workshop on Education for Sustainable Development
Workshop Summary

1. APCEIU's involvement in ESD
The Asia Pacific Centre of Education for International Understanding (APCEIU), as a UNESCO sponsored centre of UNESCO, mandated to work in the area of EIU has also been active in the area of ESD. With regard to preparations for the UNDESD, APCEIU has been working in close cooperation with the UNESCO Regional Office in Bangkok especially in relation to preparation of regional strategies in the Asia-Pacific region. APCEIU participated in the UNESCO Bangkok Regional Office workshop to prepare the "draft plan of a situational analysis for the promotion of ESD in the Asia-Pacific region" (Aug.19-20). Subsequently we prepared for UNESCO Bangkok, the Situational Analysis Report for North Asia with a special focus on the Republic of Korea.

APCEIU conducts annually Teacher Training Workshop on EIU for the Asia Pacific Region, in which participants from countries to the west of the region, such as Iran, and Turkey to the South of the Region in the Pacific such as Palau and Tonga have participated, with an average of 20 countries participating in each of our annual training workshops. APCEIU has also conducted sub-regional workshops in regions such as the Pacific, for example in Fiji in which over thirty teachers participated and included participants from all the Pacific Island states. An India–Sri Lanka Peace event was held in Sri Lanka, with the participation of teachers from India and Sri Lanka. In all our training initiatives and efforts ESD has been an important component and dealt with by specialists on the subject. APCEIU is also currently enhancing its in-house competency in the area of ESD with experienced competent professionals working with APCEIU in terms capacity building with regard to ESD.

In this context APCEIU as a major stakeholder with regard to the promotion of ESD in the Asia and Pacific Region is also in the process of developing its medium and long term plans to assist and participate in UNESCO-led activities with regard to the UN Decade for Education for Sustainable Development.

3. APCEIU's efforts for synergizing ESD from the perspective of EIU
EIU is very critical in terms of ensuring that ESD is value based and culturally rooted. ESD is also one of the important themes of EIU and both foci of Education- EIU and ESD can be benefited and mutually enrich each other's area of activity. EIU is critical to ESD because EIU is focused on peace, equity, human rights, and value formation, crucially interlinked areas to ensure social and ecological sustainability.

ESD and EIU also challenge our traditional ways of education. They aim at interdisciplinary and holistic learning rather than fragmented learning. They ask us to know both the whole and the parts of reality. In addition, ESD and EIU are
characterized by people-centered and problem-solving practices. APCEIU’s objective in hosting this workshop was to contribute to thinking on the educational tasks needed to mutually connect the Culture of Peace with a Culture of Sustainable Living and in so doing work for the establishment of just, peaceful, and sustainable communities.

2. Workshop results
The agenda of Asia-Pacific ESD Strategy Planning Workshop therefore was to:
1. identify regional/sub-regional ESD strategies in the Asia-Pacific in the medium and long-term;
2. facilitate the development of action plans for both ESD teachers and civil society at the regional and sub-regional level and
3. promote the establishment of a cyber-network for sharing ESD experiences and on-line training courses in the Asia-Pacific. The Workshop was held from November 22 – 24, 2004 in Seoul, Korea and in which 35 ESD experts from 10 different countries (Bangladesh, Cambodia, India, Japan, Kazakhstan, Korea, Malaysia, Sri Lanka, Thailand, and Vietnam) participated.

The workshop consisted of Key Note Speeches, Case Presentations, Panel Discussions (1st Day), Sub-regional Presentations, Group Workshops (2nd Day), and Presentation of Group Workshop Reports (Last Day). Through presentations, panel discussion and other sessions, the participants had an opportunity to exchange their views on the UNDESD and the ESD situation of their respective countries. In working groups the participants also examined the most suitable ESD strategies in the Asia-Pacific region and in relation to different sectors.

Group I which examined “guidelines for developing teaching/training models for education for civil society” emphasized the networking of local communities, NGOs, industries, academia, religious leaders, and media practitioners. They detailed the important issues that civil society was facing in terms of ESD, such as ESD’s relevance and contextualization with reference to community’s needs, implementation of various stakeholders’ involvement and ownership, and self-reliance and institutionalization of ESD among different stakeholders. Also a time frame for implementation was suggested. Group 1 recommended NGOs to involve existing networks related to ESD and initiate consultative processes among stakeholders, to identify resources and methods for information, dissemination and capacity building.

Group II focused on “guidelines for developing teaching/training models for education for formal school system”. Their report stressed sensibility to each country’s socio-politico-cultural difference, decentralization of curriculum, and a new style of teaching which was participatory and learner-centered approach. Group 2’s presentation explained the main issues of ESD for formal school system such as partnership among schools, communities and NGOs, the priority of peace in ESD of
Asia-Pacific, and the responsibility of Government and Ministries of Education in different countries for implementing ESD. The group suggested the establishment of regional ESD learning centers, the revision of school curriculum integrating ESD perspectives, the integration of in-school and out-of-school programs and the training of government official and policy-makers for ESD.

Group III worked on “guidelines for developing multimedia including ICT and alternative media” and pointed out the gap in understanding of ESD issues by the mass media and the lack of usage of mass media by civil society and private sector for promotion of ESD. The group emphasised that ESD concepts should be made understandable to the lay public and the mechanisms of coordination and interaction through partnership among stakeholders should be developed. They also suggested a time frame for the implementation and recommended the establishment of the regional center for communication and media and the linkages within all stakeholders in the region and the exchange of information, experiences and good practices.

Finally, all the groups also stressed the important role APCEIU could play in the region as the only organization in the region mandated to work in the area of EIU. The sharing of experts and other resources through cooperation and networking among UNESCO regional offices, international organizations, governmental organizations, NGOs, local governments for dissemination of good practices especially through on-line information systems was also emphasized. In conclusion, issues such as peace in relation to violent conflicts and fairness, transparency, removal of poverty, discrimination against minorities, and cultural diversity have been greatly emphasized in the Workshop. It is expected that there will be soon active programme development, especially for educators in civil society and schools.
II. Opening Ceremony Messages
II. Opening Ceremony Messages

Opening Message

Dr. Chul-Hwan Koh

Commissioner, Presidential Commission on
Sustainable Development
Republic of Korea

I would like to welcome all of you who have come to participate in the Asia-Pacific Education for Sustainable Development (ESD) Strategy Planning Workshop for UN Decade for ESD. I would like to express my thanks to Dr. Samuel Lee, Former Director of APCEIU, and Secretary-General of KNCU, Dr. SungYong Park, the Acting Director of APCEIU, and Dr. Derek Elias who is representing the UNESCO Bangkok office for co-hosting the Workshop.

Sustainable Development (SD) is not one country’s concern, but a paradigm on which the quality of life for the present and future generation at a global level depends. However, in the public sector where policies are made and implemented the understanding of SD is also low, not to mention the general public. Although the introduction of laws and systems can make possible the values of SD to be in the mainstream, it will be a futile effort without a public consciousness throughout the society.

Therefore education that can facilitate the voluntary practice of SD through fundamental value-change must be emphasized. Children and youth can grow as responsible global citizens by learning at an early age how their activities affect the future generation, and learning what they have to do for a sustainable future. In Chapter 36, Agenda 21 of the Rio conference, it stressed that education to develop sustainable lifestyle and to strengthen the capacity and responsibility to resolve the environment and development related issues is required. And in 2002, to emphasize that education and learning are indispensable for approaching SD, UN adopted UN DESD, and selected UNESCO as a lead agency for the implementation.

For these reasons, this workshop is very meaningful and I anticipate this workshop to frame an implementation strategy before the UN DESD begins. Considering the domestic situation that even the education policy agency is not ready to embrace the concept of ESD, I strongly believe this workshop will raise the consciousness and promote the active practice among the Government agencies, citizens, companies, schools, and local governments. The ESD concept integrates socio-cultural, economical, and environmental perspectives; and the scope of education itself is very wide. It covers the issues from human rights, peace, gender equality, cultural diversity, health, and governance to natural resource, poverty reduction, and enterprise responsibility. Therefore ESD requires a holistic approach to our lifestyle, and the opportunity to educate in every aspect of our life must be provided not only as a formal school education but also as a continuing education.
For this, the role and the responsibility of Government are crucial. UN is suggesting each of its member countries to prepare a DESD implementation plan, because the cooperation and the participation of stakeholders from various sectors can be activated when the basic direction and the vision is established. Some of the forward countries such as Australia, Sweden, and Japan are actively responding to the international demand and challenges being aware of the importance of ESD.

In Korea, ESD is still limited to the narrow area of environmental education focused mainly on ecological receptivity and experiential education. Even though many civil organizations and local self-governments are actively administering environment related programmes, the contents and the focus are slightly different and not well connected to the concept of SD. Even the school education does not include the values of SD in its curriculum but only some environmental issues.

In this context, the tasks and mission of PCSD established in year 2000 is very important. PCSD is the product of the efforts of various environmental and civil organizations that have challenged the development paradigm, which dominated our society for the last few decades. Therefore the expectations and demands from civil society on PCSD are dominating. PCDS in Korea consists of 5 expert committees which are the Head Committee, Committee for Society, Environment and Health, Committee for Water Resources, Land and Nature, Committee for Energy and Industry, Committee for Conflict Management Policy and Committee for International Cooperation and Education, and PCSD performs the mission of promoting the agreement among the various stakeholders to the relevant policy through participation and discussions and reporting and advising it to the President. Also it reviews the important national policies in terms of sustainability and tries to have the result reflected in the policies.

Therefore the ESD is one of the core tasks of PCSD, which plans to set up a Comprehensive Improvement Plan by 2005 and report the results of the implementation to the President. PCSD will promote and spread the discussions of SD and strengthen the feasibility of the policy implementation by promoting the active participation of relevant agencies, schools, civil organizations, local governments, and experts in the policy formulation process. Along with these efforts, I think the role of PCSD is very important as a centripetal point for the network of civil society, the press, private industry and local government in supporting and facilitating the development of various models, teaching material, and good cases and the operation of leader training programme, education center to make ESD more easily understandable to students and citizens. At the same time, we expect the study on the institutionalization of Local Agenda 21, one of our core tasks, will play a crucial role of assisting Local Agenda 21 as a hub for ESD at local level.

The main body, stakeholder, method, programme, and model for ESD may be different depending on the state or the area’s situation or priority of the issues. However there is no doubt that the sharing of the various experiences and the network of experts based on the understanding of the common goal, the realization of ESD, will greatly enrich the content of the ESD. I strongly hope that through this Workshop the implementation basis for each country’s and sub-regional ESD can be established, and I would like to express PCSD’s pleasure in sponsoring this meaningful Workshop.
II. Opening Ceremony Messages

Welcome Message

Dr. Sung-Yong Park  
_Interim Acting Director, Asia-Pacific Centre of Education for International Understanding  
_Korea_

On behalf of the Asia-Pacific Centre of Education for International Understanding (APCEIU), I am delighted to host this ESD workshop and whole-heartedly welcome all of you. APCEIU especially appreciates the support of UNESCO Bangkok Office as co-host, as well as PCSD's institutional cooperation.

APCEIU, operating under the auspices of UNESCO, was established in 2000 with the mandate to promote a culture of peace in the Asia-Pacific region, under the name of Education for International Understanding (EIU). EIU is linked closely with the themes of peace, multi-cultural understanding, human rights, ecological sustainability, and value formation. Education for Sustainable Development, therefore, is also a component of EIU.

Historically, ESD was highly emphasized in Agenda 21 of the Earth Summit in 1992. It focuses on fostering values and attitudes of respect for the environment. However, at the Johannesburg Summit in 2002, the vision of ESD was extended to include social justice and the reduction of poverty among the sustainable goals. Social factors such as peace, equity, partnership and solidarity are intermixed with scientific disciplines for environmental protection. In this sense, EIU and ESD greatly overlap, and they also have the common aim of individual empowerment, participatory social systems and eco-friendly practices.

EIU and ESD especially require critical thinking and moral values to deal with human error, globalized crises, and the uncertainty future. EIU and ESD challenge us to have a planetary consciousness, to recognize the multi-dimensional, complicated interrelationships of all existence. EIU and ESD are both deeply concerned with the human needs of marginalized Others, and committed to ending the destruction of ecological Others.

ESD and EIU also challenge our traditional educational disciplines into new directions. They aim at interdisciplinary and holistic learning rather than fragmented learning. They ask us to know both the whole and the parts of reality. In addition, ESD and EIU are characterized by people-centered and problem-solving practices. Educators cannot stand in a value-neutral position. In an era of crisis, we are called to act for the construction of a global community of justice, peace, and sustainability. However, there is no clear road map showing us to proceed. Given the limited time, we have to move...
on with a spirit of experimentation and creative imagination towards the sustainable future.

As global citizens, all of us are called to adventure into a new reality: a just, peaceful and sustainable future. To attain this goal, we need to do collective and planetary work beyond the boundaries of gender, race, class, culture and religion. We are invited by this universal calling to imagine a new way of life and to construct new lifestyles. This is why we are gathered here today.

Since the year 2000, APCEIU has endeavored to implement its mission to promote culture of peace in the Asia-Pacific region through training workshops, symposiums, publications, and international networking. As a regional center (Category II of UNESCO), APCEIU is committed to the DESD mission through international cooperation in the Asia-Pacific, and we are glad to collaborate with other institutional partners for this long-term agenda.

The Decade of Education for Sustainable Development (DESD) has a global vision. DESD's vision is to construct "a world where everyone has the opportunity to benefit from quality education and to learn the values, behaviour and lifestyles required for a sustainable future and for positive societal transformation." During our workshop, let us concentrate on how to actualize this vision in our life and in the Asia-Pacific region, through different ways of education, public awareness building and training. I am sure that all participants and experts here share this common vision and are ready to seek ESD strategies to overcome our global crisis.

In a sense, the global crisis is another opportunity to awaken us for the fundamental questions: Who are we in the web of beings? Where is our destiny, and how can we care for the suffering and the marginalized in human society and the eco-world? We can accept this universal responsibility and create a momentum towards a new way of life. I respect your participation in response to this calling and I honor your commitment to this agenda. Again, I warmly welcome all participants. I look forward to a fruitful time together.
II. Opening Ceremony Messages

Welcome Message

Dr. Derek Elias
ESD Coordinator
UNESCO Bangkok Office

Honored Secretary-General of Korean National Commission for UNESCO, Dr. Samuel Lee, Vice-rector of United Nations University, Dr. Itaru Yasui, Commissioner of Presidential Commission on Sustainable Development, Dr. Chul-Hwan Koh, Acting Director of APCEIU, Dr. Sung-Yong Park, Members of the Consular Corps, distinguished workshop participants, and ladies and gentlemen,

It is indeed a pleasure for me to be here as a representative of Dr. Sheldon Shaeffer, director of UNESCO Bangkok Regional Bureau for Education in the Asia-Pacific, at this morning’s ceremony of the APCEIU Asia-Pacific ESD Strategy Planning Workshop, supported by UNESCO Bangkok. I very much look forward to discussing issues and priorities for ESD in the Asia-Pacific over the next few days, and the important contributions of these discussions will share the development of the regional strategy for the Decade of Education for Sustainable Development.

As you are well aware, UNESCO is being designated as a lead organization for the promotion and implementation of the Decade of Education for Sustainable Development commencing in January next year. During the current year, universal consultations and initiatives were launched by UNESCO and other agencies and universities in the region. These meetings held in preparation for the decade or relating specifically to ESD in the Asia-Pacific region have involved a wide range of stakeholders and will inform the development of the regional strategy of the Asia-Pacific. Many of you have already participated in some of these consultations and initiatives. It is very encouraging that the exchange and interaction among key stakeholders in ESD in the Asia-Pacific is establishing itself as a norm so early in the decade.

Today UNESCO Bangkok’s key initiative is the Situational Analysis of ESD. This initiative is being specifically undertaken in preparation of the decade and analyzes to what extent countries in the region have integrated ESD policies, programmes, and practices into both formal and non-formal educational settings at grassroots, sub-national, and national levels. It is a collaborative project between UNESCO and research agencies including APCEIU. It is generally supported by the Japanese government. I would like to acknowledge the presence of my esteemed colleague, Prof. Shuichi Nakayama, who is closely involved in this process of UNESCO Bangkok.

The Situational Analysis will form the basis of UNESCO’s ESD programme formulation and activity prioritization as it guides the decade in the region. I am particularly pleased that some of the results of
the Situational Analysis will be shared during this current workshop. The final report of the analysis will be available from January 2005 and published in February.

The purpose of developing a regional strategy is to enable UNESCO to facilitate a coordinated and regionally specific DESD. By outlining its approach and the implementation of the decade, UNESCO aims to facilitate the strengthening of regional ESD networks, partnerships, and programmes and to enable stakeholders at all levels to better coordinate their ESD activities to generate initiatives which meaningfully contribute to the advancement of ESD in the region, rather than duplicating efforts.

A Regional Strategy Workshop for the implementation of the DESD in Asia-Pacific, supported by the UN environmental programme, United Nations University Institute of Advanced Studies, and the Japanese government, will bring together experts around the region and will be held in Bangkok from 1st to 3rd of February in 2005 to draft key sections of the regional strategy. The strategy will focus on collaboration and networking, and the workshop will involve a wide range of participants from all over the Asia-Pacific region representing the wide variety of stakeholders. The participants will include representatives of UNESCO, UN partners including APCEIU, civil society, NGOs, and media in the private sector which is extremely important.

The APCEIU-UNESCO workshop being held in this week will be a key concentration in order to further develop and refine the strategy in the Asia-Pacific. We wish the participants all the best for fruitful discussions in the coming days.

Ladies and gentleman, In conclusion and on behalf of the Director of UNESCO Bangkok, I would like to thank you, APCEIU, PCSD and all the participants here today involved in preparation for the Decade of ESD in the Asia-Pacific as I firmly believe ESD cannot be successfully achieved without important ownership and inclusive partnership at all levels.

Thank you very much.
II. Opening Ceremony Messages

**Congratulatory Address**

**Dr. Samuel Lee**  
*Secretary-General, Korean National Commission for UNESCO, Korea*

As the former director of APCEIU until just one month ago, I actually proposed and initiated this regional Strategy Planning Workshop as a response of APCEIU to the initiatives of UNESCO Bangkok Office on the preparatory work for the Decade of Education for Sustainable Development. I heard several countries have joined in this research and survey on the situations and status of ESD before starting our new decade. It could be an important and significant occasion if we could share the results of the survey and the discussions together.

And it may also be an opportunity for mutual stimulation and cross-fertilization among different countries in the Asia-Pacific region regarding the work of the ESD decade. In this sense I am very glad to see that this joint planning workshop has materialized, and has been well organized with the participation of many concerned countries.

Now, as the new Secretary-General of KNCU, which should promote ESD through educational institutions and networks in Korea in both schools and civil society, and also as the secretary of the education committee of the Korean PCSD, the Presidential Commission on Sustainable Development, which should advise our president and government on how to implement ESD through the decade in school education and continuing social education, I am really delighted to join this planning workshop together with many important experts from many countries in our region. I would like to say just a few words to congratulate this workshop on ESD in Seoul, as the representative of both the National Commission for UNESCO and of the education committee of the Presidential Committee on Sustainable Development in Korea.

I think this workshop is important in three ways. First, it will look for ways of cooperation and mutual support between the Korean government and civil society. PCSD is a governmental organization, but APCEIU and many participating NGOs are representing civil society, and I hope that through this opportunity, good cooperation and dialogue will develop.

Secondly, I think this workshop can seek ways of cooperation and interaction between social movements and education, since there will be involvement by the Ministry of Environment, the Ministry of Education and Human Resources Development, many social workers, and teachers. I
think it is very necessary and important to find out how these two different sectors, social movement and education, can cooperate and interact.

And lastly, I think this workshop will seek ways of cooperation and networking among various organizations and movements in the Asia-Pacific region and international settings. There are just a few countries represented here, but we would like to extend this network among the various countries of the region in future.

In this respect, I would like to express my deep appreciation to our Chairperson of PCSD, Prof. Chul-Hwan Koh; to Mr. Derek Elias, ESD coordinator for the UNESCO Bangkok Office, and our many staff of APCEIU for enabling and facilitating this valuable opportunity for joint and cooperative reflection and preparation of ESD.

There is no need to reemphasize the important, critical role of education. During the Earth Summit, countries from both North and South agreed that education was critical for promoting Sustainable Development and increasing the capacity of people to address environment and development issues.

The UNESCO conference in Thessaloniki, 1998, already emphasized the role of public awareness for sustainability. It declared that education is the most effective means as a societal process for confronting the challenges of the future. Education in the broad sense is the vital part of all efforts to imagine and create new relations among people and to force greater respect for the needs of the environment.

In order to change unsustainable production and consumption patterns and lifestyles, it is essential to emphasize the role of Education for Sustainable Development. There are more than 60 million teachers in the world, and every one of them is a key agent for bringing about the needed changes in life styles and systems. For this reason innovative teacher education is an important part of educating for a sustainable future. One of the key contributions of UNESCO toward Education for Sustainable Development over the decade since the Rio Earth summit is the multi-media approach to Teacher Education for Sustainable Development.

The goal of Sustainable Development is to achieve the multiple goals of economic growth, social cohesion, and environmental preservation, though in many cases they seem contradictory to each other. Economic growth usually brings a gap between rich and poor, and environmental degradation. Environmental preservation may require the sacrifice of economic development. So the critical task of Sustainable Development is to find how to solve conflicts that arise due to these contradictory goals, and to build a broad, global consensus. So one must not forget the importance of maintaining a balance and tension between holistic understanding and contextual strategy in ESD.

For example, the goals and vision of Sustainable Development must be understood holistically and comprehensively regardless of the development stage of each country or of the region. At the same time, the practical strategies and educational tasks should be approached contextually according to the urgent needs and realities of social and economic development.

Furthermore, ESD should not neglect the interdisciplinary character and the dialogical relationships
of issues such as development and environment, economic growth and social cohesion, freedom and equality, and state and civil society.

For effective and creative educational work toward Sustainable Development, critical thinking and reflection is very important. In order to find the right concept and contextual strategy of ESD and EIU, one must adopt a critical analysis of the present development model and peace systems.

The policymakers of the developed countries seem to lean toward the notion that Sustainable Development can be achieved within the dominant Western development model of limitless growth. And many developing countries are following just this model faithfully. But the past history of modernization and industrialization should be reexamined critically for implementation of Sustainable Development. Moreover, Sustainable Development is not just a material or economic programme. A new reflection on the spiritual dimension of Sustainable Development is very necessary in order to overcome the limitations and negative impacts of materialistic development.

Our Asian countries can contribute much by bringing ethical resources and spiritual values from their traditional cultures and religions to influence changes in behaviors and life styles of people toward sustainable consumption and productions. In this regard, ESD needs to gather more resources and examples from different countries, and to realize regional and international cooperation and networking. It has become very clear that we need to strengthen our solidarity among the many national, regional, and international initiatives and institutions that are involved in educational work for Sustainable Development and future.

In this regard, I am very happy to congratulate this regional joint workshop, and I wish you fruitful results, many stimulations, and new awareness coming out of this valuable meeting.

Thank you very much.
III. Key Note Addresses
Key Note - I
Sustainable future for the Asia and Pacific Region and the Challenges to the UN DESD

Dr. Itaru Yasui
Vice Rector, United Nations University
Japan

Thank you Mr. Chairman, Excellencies, distinguished guests, ladies and gentleman.

It is a great honor for me to be invited and to have a chance to make presentation concerning our current status and future efforts to make the Asia and Pacific region more sustainable way, especially in UNU.

PowerPoint Presentation

Slide 1:
This is the title of my today’s talk and I would like to emphasis the last part of this title.

Slide 2:
First of all, I would like to use some time to explain the mission and roles of UNU. According to the charter of UNU, we are to contribute, through research and capacity building, to efforts to resolve the pressing global problems that are the concern of the United Nations, its People and Member State.

And we will play roles as an international community of scholars, a bridge between the United Nations and the international academic community, a think-tank for the United Nations System, a builder of capacities, particularly in developing countries, and a platform for innovative, creative ideas.

And of course Environmental issues and Sustainable Development is one of the most important issues to be solved.

Slide 3:
The headquarter is located in Tokyo, Aoyama, and this fact makes UNU is the only UN organization to have it’s headquarter within Asia.

1 The original powerpoint file of Prof. Yasui’s presentation can be downloaded at APCEIU’s English website (www.unescoapceiu.org)
This slide shows UNU’s Research and Training Centers or Programmes all around the world.

Concerning to UNDESD, IAS located in Yokohama is taking care of the total project not only in Japan but worldwide.

**Slide 4:**
We have two programmes in the headquarter. One is the Peace and Governance Programme and another Vice-Rector, Prof. Ramesh Thakur is now in charge of this programme, and I am the other Vice-Rector, who is in charge of Environment and Sustainable Development.

Environment and Sustainable Development programme focuses on the interaction of human activities and the natural environment, which is in the different word the limitation is the capability of the Earth. We determined our current topics to be challenged as listed in this slide, i.e. Sustainable Urbanization, Management of Fragile Ecosystems, Solution to Water Crises, Environmental Governance and Information. We always are running programme development project to find out the truly severe problems with holistic view of environmental transition, which I would like to explain later.

**Slide 5:**
Let me start to explain, “what is the Sustainable Development” within the International Framework.

I think it is appropriate to start from the description of Millennium Development Goals, normally abbreviated as MDGs.

**Slide 6:**
This is the list of eight MDGs. We can find a word of sustainability only in the seventh item, that is ensure environmental sustainability, but in more general definition of Sustainable Development these items such as eradication of poverty, promote gender equality and HIV/AIDS issue and so on, are also very important components in Sustainable Development.

**Slide 7:**
This is the items listed in the plan of implementation determined in WSSD held in Johannesburg, and red words are probably very important keyword for Sustainable Development.

**Slide 8:**
Let me show you, as an example, why HIV is important in terms of sustainability.

This is the plot of life expectancies for more than 130 countries worldwide and GDP per capita based on the data of 1995. There seems rather good correlation between GDP per capita and life. From this graph eradication of poverty is very effective to increase life expectancy. It seems GDPs with only about 3000 US$ is enough to have life expectancy more than 70.

**Slide 9:**
But something happened these days. This is the same plot and you will be able to find out some funny points on the graph. This is an exception for Luxemburg, where they earned much money by means of investment. And this is nothing bad.
These four points are problematic. If these points moved from left side to current position, then the problem is not so serious. But if you closely look at the data of these countries, it is very easy to judge the situation is almost devastation.

Slide 10:
This is the case for the country of Botswana. Life expectancy increased steadily from the year of 60’s until the year of 1987 or so, but after that you can easily recognize very sharp decrease in Life expectancy. It started to drop from more than 60 or so and in less than fifteen years it was below 40, 38 or so. In Africa, there are several countries where the situation is not much different.

Slide 11:
This is I believe the original definition of Sustainable Development described in the report published by Brundtland Committee, which was held in the year of 1984 to 1987. It says “Sustainable Development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs”. I still believe this definition is the best for the advanced countries, but in global scale, we have so many problems to be solved and the definition of “Sustainable Development” expanded to meet all needs in all countries.

Slide 12:
I tried to express the definition of “Sustainable Development” by graphical way, but it was so difficult. So this represents only one proposal and not the conclusive one.

It is very important to understand the limitation of the Earth in the first place. These seem to be two kinds of limitations. The first one is the limitation for the supply of mineral resources and fossil fuel. The other is the limitation of eco-system, which is driven by the light of the Sun. This limitation becomes one of two axes to consider the environmental aspects, which is colored in green in this figure. The other axis is human equity. We have to attain fairness and justice in human society and this axis is very important to consider recent sustainable problems in developing countries. The most noteworthy problem is the eradication of poverty, but other issues such as gender related issues or children issues will take the same position in this figure.

Behind the environmental screen, there are several light sources like economic aspects or social aspects. These light sources emit light, which are projected on the screen of the environment and cause several issues there. It seems we must do great effort to solve all problems on this screen.

Slide 13:
Recently, Corporate social responsibility, sometimes abbreviated as CSR, became one of keywords in environmental issues. The triple bottom line theory was first proposed by Mr. Elkington, who is the director of British consulting company. The theory is quite simple. In the past, companies used to pursue only economic profit, but it is not enough for any company to do so now, because civil society already started to evaluate company on the basis of three aspects. The first one is of course economic activities, which must be high enough to earn money to continue to operate the company. But the company must be sound enough with respect to social aspects and behave harmoniously with respect to environmental aspects. The triple bottom line theory suggest to take these three kinds of aspects
into account any company will be able to reduce business risks. The figure representing UN style of definition of sustainability has of course some similarities, but the most different point is that, in the triple bottom line theory, the part that is not contained in environmental aspects, this area, is also some kind of improvement in terms of sustainability, but in the UN style sustainability, everything has to have some relation to environment.

**Slide 14:**
Let me try to show you current understandings of development, which is interpreted using the word of “decoupling” or “peak out”. Theory is quite simple. The right half of convex type of curve means the true development. In the first stage of development, people normally depend highly on wood to obtain heat and energy and this leads eventually destruction of ecosystem, especially destruction of woods and forests. But people attained certain amount of economical development then people can buy oils or coal as fuel and as a result destructive use of ecosystem peaks out. Development and environmental destruction go different direction, thus decoupling is attained.

**Slide 15:**
In the 2nd stage, casualties by natural disaster or damage caused by pollution realize decouple from development.

**Slide 16:**
In the 3rd stage, waste generation or landfill decouple from development. In some case, big change of ecosystem by the construction of large scale dams show also decoupling.

In Japan, it seems we are now started the 3rd stage and entering 4th stage.

**Slide 17:**
In the 4th stage, we have to decouple the development from the emission of carbon dioxide. And if we want further development, we probably decouple material use and energy use, and this will be the last decoupling ever assigned for human beings.

**Slide 18:**
Until now, I tried to explain the background and situation of global environment why it is necessary to have the United Nations Decade of the Education for Sustainable Development.

Now I have to explain the main topics for today. What is UNDESD?

This is the very brief history of EfSD. EfSD was first described in Chapter 36 of Agenda 21, which is the famous result of Rio Earth Summit held in 1992. During the World conference on high education in 1998, a thematic debate was organized on sustainable human development, which brought fourteen different organizations together.

During WSSD in Johannesburg 2002, Ubuntu declaration was singed by eleven of the world’s foremost educational and scientific organizations.

In 2002, United Nations General Assembly adopted a resolution on the Decade of Education for
Sustainable Development starting from January 2005 for 10 years. UNESCO was designated to be the lead agency for the Decade and requested to develop a draft International Implementation Scheme for the DESD.

**Slide 19:**
Ubuntu declaration is not so well known, it is shown here.

**Slide 20:**
This is the list of eleven members for Ubuntu Alliance.

**Slide 21:**
What is most important thing concerning to EFSD is, as shown in International Implementation Scheme and Ubuntu declaration, the education for all level of students and for people in all kind of sectors.

The description is rather complex, but I think there is a final target of Education for Sustainable Development.

First of all, everybody should understand the relation between of the limitations of the Earth and Human Activities. And then to understand the difference between to live a life in sustainable way, and to live in non-sustainable way.

It is very important the right answer depends on the region. To understand the characteristics of the region is the most important thing to do.

Let me try to show you the case of pacific islands. This is the list for the area required cooperation which are found in memorandum of understanding with University of South Pacific and United Nations University.

Of course this list only covers the area required some kind of capacity building, namely this list has relation to higher educations or more practitioners.

1) Environmental monitoring and preservation.
2) Climate change, climate variability, extreme events and disaster management.
3) Water resources development and management.
4) Integrated coastal management.
5) Integrated waste management and pollution control.
6) Natural resource management in general
7) Role of indigenous knowledge systems in Sustainable Development

The complete list for Asia and Pacific Area will be found in the report prepared by APFED, which be made public soon.

If you are interested in the report, please get in touch with me later.
Slide 22:
How do we educate everybody? There will be further discussion concerning the methodology because we will have 10 years. In every country more efficient method will be invented and be utilized, but I believe the keyword is “Links and Cooperation”.

The first link is a link to the region: Regional community will be the basis for the Education for Sustainable Development, because sustainability depends much on the region.

The second link is a link between science sector including university and primary and secondly schools. It is very rare to have collaboration between the teachers in primary and secondary school and university professors. But it will be a good trial to have cooperation between them.

The third link is a link between formal education sector to non-formal ones. Non-formal ones include NGO/NPOs, media, business sectors in the region.

Slide 23:
This is one example. UNU/IAS is a one of research and training centers in United Nations University located in Yokohama. This figure represents the idea by UNU/IAS to have all kinds of links already mentions. In the formal education sector, it is necessary to have not only horizontal links but also vertical links between universities and primary or secondary schools.

In addition, it is necessary to have lateral links with regional research centers, museums, botanical gardens, local business, local government and community leaders.

UNU/IAS is now working to have several this type of cooperation scheme in several regions in Japan and UNU/IAS named this scheme as Regional Center of Expertise.

Slide 24:
This is the list of general components for EfSD. As I explained, we should include all kinds of components relevant to human activities, human equity, environment, and so on.

I made this table using the similar framework with triple bottom line theory.

In social aspects, human rights, peace, gender equity, cultural diversity, health, AIDS, Governance.

Natural resource management, climate change, transition of agriculture, sustainable urbanization, natural disaster prevention are the components in environmental section.

For economic section, poverty eradication or CSR are examples listed here.

Slide 25:
Up to here, I tried to explain the necessity of EfSD and very brief description of the history, possible method for EfSD and components included EfSD. I also pointed out that the most important thing in EfSD is how to utilize the characteristics of region. I believe global sustainability can be attained only if regional sustainability has been met for everywhere in the world.
I personally tried to find out the component of education to change ordinary civic people in Japan and make them to think and behave in more sustainable ways. And I would like to explain some simple results to you, because Korea and Japan have very much similarity probably up to 90% or so. I honestly would like to hear from you about your impressions on this.

As already explained, we in Japan is in the 3rd stage of development, but we have to enter the 4th stage of development and have to decouple the emission of carbon dioxide and material / energy use. It is necessary to change life style with deep consideration of future generations, which appeared in the definition of sustainability in the Brundtland report.

I set up first of all three assumptions to this problem. People will change their mind and change their life style if:

1) they have a feeling that their own health is relatively well protected;
2) they understand the current speed of consumption of resource is extraordinary.
3) they have to know their lives in comparison with the other countries.

Slide 26:
From this slide to the last, slides to be impressive to Japanese citizens are shown.

These slides show the trend of Japanese environmental situation from the year of 1970 to 2050. Almost all pollution related burdens have been reduced with the peak in the year of 1970. Soil and sediment pollution are the exceptions because almost all pollutants finally move to there. EDC stands for endocrine disrupting chemicals but I believe this problem does not even exist as far as the human health is concerned.

It is predicted that in the year of 2050 or so, only remaining issues of environment in Japan will be only resource & energy over use and global warming.

Slide 27:
This is example of pollution. I would like to say we already decoupled pollution in Japan in the year of 1970. This is the case for air pollution by NOx.

Slide 28:
This is again the pollution of water. Again decoupled in 1970.

Slide 29:
This is the table showing the life lost in years by daily risks created by myself based on the report by WHO. The most serious loss of life is the results of underweight, which is insufficient nutrition. That is more than 20 years. In addition, concerning nutrition iron deficiency, vitamin A deficiency, zinc deficiency are notable. Second largest loss is due to unsafe sex, which the AIDS and HIV. Water supply and indoor air quality is very much important to improve the health of people. In Japan, almost all values are rather well controlled, except for tobacco smoking and blood pressure. On the other hand, in Northern America, including USA and Canada, the numbers are relatively high. I would like
to point out this figure, which is loss of life due to over weight. In some region of the Earth, underweight is the major cause for the loss of life and in the other region, overweigh is the cause for loss of life. This is why regional aspect is most important factor to be considered in EfSD.

Slide 30:
This is the trend in Infant Mortality and Foetal death in Japan/Tokyo for about 100 year. The Infant Mortality decreased from about 200 out of 1000 to current 3 out of 1000.

Slide 31:
In Japan, people normally believe manmade chemical substances are the major cause for the allergy, cancer and everything. But this table shows that even the biggest effect of formaldehyde is rather small and only about 4.1 days (not years). The famous dioxin may affect human health, but the loss of days is only 1.3. In contrast to manmade chemical substances, tobacco smoking is rather serious and loss of life days are about 2700 and so called passive smoking is far bigger than the other effect.

Slide 32:
As the results of such improvement in environment, life expectancy at birth increased tremendously from 1947 to 1997. For the case of women, life expectancy increased from about 53 to 84. 31 year increase within 50 years.

Slide 33:
From here consumption. In Japan, everybody consumes about 4000kg of Oil equivalent energy per year. But according to one plot, world oil production will peak in the year of 2006 and since then the production of oil will go down and never recovered.

Slide 34:
It has been said for long time, even 40 years ago, that petroleum will deplete in 40 years. After 40 years, we still have petroleum. Some say that this is similar to the story of “wolf and a boy” in Aesop’s Fables. Boy said “Help help there’s wolf”, but it was a lie. He repeated this several times, and village people stop to respond. He finally met really a wolf and yelped again but nobody came to help him.

Historically amount of reserve of oil was always 40 years. It is because 40 years is the optimum value for oil producing corporation. If it is less than 40 years, then people may be afraid of the potential of the corporation and if it is more than 40 years people think oil is abundant and therefore they would like to cut the price of oil.

Most important thing is whether new oil fields are to be found or not, when they try to find them. This figure shows the trend of newly found oil fields. It is clearly decreasing. It seems to be zero in the year of 2020 or so. This implies that oil production will peak out in the year of 2020; a bit different from the previous prediction of the year of 2006.

Slide 35:
It is 14 years difference. But from the viewpoint of human history, 14 years does not mean anything at all. This figure is the plot of consumption of fossil fuel from BC 10000 to AD 10000. Era with fossil
fuel is very short; just more than 300 years or so.

We have to consider what kind of energy will people after the Era use to support their lives. Will it be nuclear energy, especially fusion? Or some kind of very strong renewable energy invented in the year of 2100? At least I should say is we, the current generation, are very lucky, because we have fossil fuel, which has relatively low risk in use.

**Slide 36:**
This shows the correlation between the GDP per capita and Energy consumption in terms of Oil equivalent. As I said before in Japan people use about 4000 kg of energy oil equivalent and in Korea the value is almost same.

I tried to analyze the trend with drawing several lines.

From top to the bottom:

1) Oil producing countries  
2) Big countries  
3) Northern countries  
4) Mid-latitude countries  
5) Warmer countries  
6) Tropical countries

But these curves are not the master curve, of which every trend follows the direction. For example USA is now going to the different direction and Japan has different tendency.

The goal I would like to set for Japan is somewhere in the range of 2000kg or so.

**Slide 37-43**
Lives in several countries in the world.

**Slide 44**
Conclusions:  
UNDESD is a challenge to change all societies in the world to sustainable way of living, which are of course different depending on the condition of the regions.

UNU will take initiatives in two areas.

1) regional center for expertise in Japan, but it is possible to extend our activities to other countries.  
2) I did not explain this concept, but I think it is necessary to have some kind of toolkit to realize EfSD. Most important component of EfSD is the content for education for every region. It must be some kind of common tools to easily create educational materials.

Contents of the education are most important part to be developed. I already showed some examples,
which may be effective to be used in Japan. Every region is requested to create their own materials suitable their own situation of environment. But in order to increase the efficiency of education, all kind of possibilities in collaboration between the regions are to be pursued.
I. Introduction: Significance of ESD

Environmentally Sound and Sustainable Development (ESSD) has been strongly emphasized throughout the world. The essence of ESSD signifies that 'humankind should achieve Sustainable Development in a possible range by protecting ecologically sound environment'. Given this, Education for Sustainable Development (ESD) plays an important role for facilitating ESSD.

Currently, the scope of ESD has been enlarged from ranges of Environmental Education to other ranges that include environmental issues. Among the variety of efforts to implement the ESD both at national and international level, UNESCO has provided important resources; Draft International Implementation Scheme, United Nations Decade of Education for Sustainable Development 2005-2014, 60th session report on UN General Assembly, and other related Action Plans.

Although Ministry of Environment has conducted 'Research on Developmental Strategies of Environmental Education for National Sustainable Development', the concept of ESD is still blurring in South Korea. In fact, current Environmental Education in Korea often overlaps existing Environmental Education. Thus, when introducing current practices of ESD in Korea, I will mainly mention Environmental Education.

II. Current Practices of ESD in Korea

1. Public School Education Sector

1) Primary/ Middle School

Generally, Primary/Middle Schools in Korea conduct Environmental Education in a dual system; emphasizing environmental issues in overall subjects, and teaching 'environment' subject independently. Generally, these two measures are considered not pro-active.

2) Research and Development of 'Environmental' Education Material

Korean Society for Environmental Education (KOSEE) has contributed to the improvement of the propulsion strategy of Education for Sustainable Development. At the Same time, Korea Institute of
3) Environmental Education Teachers
Graduates from Environmental Education major at either undergraduate or graduate level, and trained existing teachers are certified as middle school Environmental Education teachers. There is a problem meeting the demands of specialized Environmental Education majors at the moment.

4) Environmental Education at the University level
There are an increasing number of cultural liberal arts classes on environment at the university level. Also, Environmental Education major is established in over 20 Graduate Schools. At the undergraduate level, there are around 100 universities with environment-related majors. Among these universities, there is a growing number of classes regarding Sustainable Development.

5) Other Activities Related to Environmental Education
Model schools of Environmental Education are financed by Ministry of Environment nation-wide. At the same time, various contests are held such as essays, catch phrases, and drawings on environmental theme for students, teachers, and general public.

2. Social Education Sector

1) Activities of Environment NGOs
Generally, there are around 1000 Environment NGOs in a district, and these organizations have interest in consumption, transport, food, and other related areas, as well as environmental issues. However, most of the NGOs have financial problem.

2) Activities of Environmental Education Societies
There are around 50 specialized Environmental Education societies nationwide, and the number is growing. Among them, KOSEE has played a leading role regarding ESD since 1993.

3. Governmental Organization Sector

1) Environmental Education Expert Committee, Ministry of Environment
The Committee was established in 1999 and operated until in 2001. With 15 Environmental Education experts, the committee has published research report of 'Environmental Education in Korea for the 21st Century'.

2) Civil Environmental NGOs Policy Board, Ministry of Environment
The Board consists of 20 delegates from environmental NGOs, functioning as a advisory board regarding general environmental policies. The Board is reorganized every two years.

3) Environment-Related Organizations in the Local Government
There are separate committees in local governments in Korea, dealing specifically with local environmental issues. Among them, Seoul Metropolitan Green Citizen Committee has been operated
actively by non-government sector since 1996.

4) Presidential Commission on Sustainable Development (PCSD)
The PCSD was established in 2000 for sustainable, balanced development. In 2003, the Commission was restructured and enlarged to the extent of social conflicts. The sub-division of the Commission, International Cooperation and Education Committee deals with ESD.

III. Guidelines for the Development of ESD in Korea

1. Research Orientation
First, the research examines significance and necessity of ESD, further introducing debates, current practices, and outlooks of ESD at both national and international level. Second, it examines aims and objectives of ESD at governmental level, and suggests strategies and plans for the following 30 years. Third, it suggests measures and assessment approaches. Lastly, it frames out assessment plan for the future.

2. Vision and Basic Keynotes
We expect civil society with attainment and participatory will for actualization of sustainable society. Basic keynotes of ESD consist of existing principles of Environmental Education, plus environmental justice and participation.

<table>
<thead>
<tr>
<th>Vision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Civil society for facilitation of Sustainable Development</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Keynotes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Strengthening linkage</td>
</tr>
<tr>
<td>2. Keeping up with the implementation</td>
</tr>
<tr>
<td>3. Integrative approach</td>
</tr>
<tr>
<td>4. Reflecting in every-day-life</td>
</tr>
<tr>
<td>5. Facilitating environment-justice</td>
</tr>
<tr>
<td>6. Enlarging the opportunities for participation</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facilitating understanding and participation of all levels of civil society in order to reform the plan for socially, economically, and environmentally Sustainable Development.</td>
</tr>
</tbody>
</table>

Sub-categorical
3. Aims and Strategies of Sub-categories

1) General ESD
Aim: establishing infrastructure for activation of ESD
Strategy: building institutional basis, training experts, constructing partnership

Table 1: Strategy and Guideline for General Section of SD Environmental Education

<table>
<thead>
<tr>
<th>Goal</th>
<th>Specific Strategies</th>
<th>Related Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formulating Systemized basis</td>
<td>Arrangement of Legal foundation</td>
<td>Arrangement of legal foundation</td>
</tr>
<tr>
<td></td>
<td>Increase Financial funding</td>
<td>Local government's EE budget</td>
</tr>
<tr>
<td></td>
<td>Enhance Administrative policy for systemizing formal education.</td>
<td>Support From NGOs</td>
</tr>
<tr>
<td></td>
<td>Expansion of EE facilities</td>
<td>Establishment of the department in charge</td>
</tr>
<tr>
<td>Training of experts</td>
<td>Strengthening the professionality of middle school environment science teacher</td>
<td>Ratio of EE teacher and the major</td>
</tr>
<tr>
<td></td>
<td>improvement of knowledge on environment of Elementary and Middle school teacher</td>
<td>Including environmental course on curriculum of teacher training programme</td>
</tr>
</tbody>
</table>
III. Key Note Addresses

<table>
<thead>
<tr>
<th>Establishment of Partnership</th>
<th>Strengthening professionality and training of informal EE leaders</th>
<th>License system of EE leaders.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Establishment of EE research institute</td>
<td>Establishment of EE research center</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Establishment of Partnership</th>
<th>Enhance interaction between formal and informal education.</th>
<th>EE network</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Establishment of partnership between South and North Korea</td>
<td>Joint research and project for South and North Korea</td>
</tr>
<tr>
<td></td>
<td>Strengthening planning and controlling function of national ESD</td>
<td>Establishment of EE committee</td>
</tr>
<tr>
<td></td>
<td>Improvement of cooperative work with research and educational field</td>
<td>Development of cooperative research and programme</td>
</tr>
<tr>
<td></td>
<td>Establishment of international cooperative system</td>
<td>Establishment of EE network</td>
</tr>
</tbody>
</table>

2) School Education for Sustainable Development

Aim: conversion to educational process for Sustainable Development
Strategy: conversing to Education for Sustainable Development, enforcing Environmental Education in school, developing educational materials and facilities for ESD.

Table 2: Strategy and guideline of SD Environmental Education in School

<table>
<thead>
<tr>
<th>Goal</th>
<th>Specific Strategies</th>
<th>Related Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>conversion to Sustainable Development education</td>
<td>Inclusion of ESD in Elementary and Middle School education curriculum</td>
<td>ESD content for children, elementary and secondary school students</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ESD content for children with mental retardation and emotional disability</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ESD content for children with visual, auditory and physical disability</td>
</tr>
<tr>
<td></td>
<td>Operate model institute for ESD</td>
<td>No. of model institute for ESD and the content of education</td>
</tr>
<tr>
<td>Strengthening EE at School</td>
<td>Status confirmation of Education-related content</td>
<td>Develop independent subject on ‘Environment’</td>
</tr>
<tr>
<td></td>
<td>increase ratio of selecting environment among the subjects in middle school</td>
<td>Status of selected school environment as an independent subject</td>
</tr>
</tbody>
</table>
36  Asia-Pacific Strategy Planning Workshop on Education for Sustainable Development

<table>
<thead>
<tr>
<th>Goals</th>
<th>Specific Strategies</th>
<th>Related Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strengthening EE at University</td>
<td>Including EE as an elective at University.</td>
<td></td>
</tr>
<tr>
<td>Expanded support of EE research in graduate school</td>
<td>EE research programme at graduate school</td>
<td></td>
</tr>
<tr>
<td>Improving information on SDE and expansion of facilities</td>
<td>Improvement of school EE information</td>
<td>Materials and instrument for ESD EE programme and database</td>
</tr>
<tr>
<td></td>
<td>Expansion of facilities on school EE</td>
<td>ESD educational facilities</td>
</tr>
</tbody>
</table>

3) Social Education for Sustainable Development
Aim: encouraging civil awareness and participation for Environmental Education of Sustainable Development

Table 3: Promoting Strategy and Related Guild line for ESD Social Environment Education

<table>
<thead>
<tr>
<th>Goals</th>
<th>Specific Strategies</th>
<th>Related Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improvement of approach towards education and advertisement of the programme</td>
<td>Expand education relatedness of ESD in the NGOs</td>
<td>No. of Environmental organization actively engaged in the ESD as main business. No. of participants over age of 8 registered in NGOs</td>
</tr>
<tr>
<td></td>
<td>Strengthen the education for unspecified majority through mass media</td>
<td>No. news on the ESD No. advertisement on the ESD</td>
</tr>
<tr>
<td></td>
<td>Training ESD through internet</td>
<td>No of member of ESD related Website</td>
</tr>
<tr>
<td>Variety of topics and the participants education</td>
<td>Women education</td>
<td>Ratio of woman in Environment governance</td>
</tr>
<tr>
<td>Variety of topics and the participants education</td>
<td>Teenage education</td>
<td>No. of organization of adolescent educational assembly</td>
</tr>
<tr>
<td>Variety of topics and the participants education</td>
<td>Firm education</td>
<td>Ratio of firm with more than 1 person for Agenda 21</td>
</tr>
</tbody>
</table>
### III. Key Note Addresses

<table>
<thead>
<tr>
<th>Variety of topics and the participants education</th>
<th>Employees education</th>
<th>No. of ESD programme per occupations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variety of topics and the participants education</td>
<td>Minority group education</td>
<td>No. of vocational education for neglected group. No. of experiential educational programme for children in low economic class.</td>
</tr>
<tr>
<td>Variety of topics and the participants education</td>
<td>Military education</td>
<td>No. of Environment and energy drill team</td>
</tr>
<tr>
<td>Variety of topics and the participants education</td>
<td>Reserved troops education</td>
<td>Lecture of SD related education in the reserved education programme</td>
</tr>
<tr>
<td>Variety of topics and the participants education</td>
<td>Journalist education.</td>
<td>No. workshop on SD for journalists</td>
</tr>
<tr>
<td>Reinforcement of training and reeducation of experts and professionals</td>
<td>Informal ESD expert training and reeducation.</td>
<td>Percentage NGOs member who participated in the workshop on SD</td>
</tr>
<tr>
<td>Reinforcement of training and reeducation of experts and professionals</td>
<td>Strengthening SD in Vocational training</td>
<td>Ratio of training on vocational education which involves SD</td>
</tr>
</tbody>
</table>

### 4. Strategies for the Development of Measures and Assessment

**1) Development of Measures**

The measures were developed referring to the measures of International Institute for Sustainable Development (IISD). Factors include: policy relevance, simplicity, validity, time-series data, availability of affordable data, ability to aggregate information, sensitivity, reliability.

**2) Assessment Strategy**

Assessment strategy includes developing performance assessment model, step-by-step and sub-categorical explanation. However, there is a lack of specific Action Plans or other related measures to promote the development strategies.
IV. Challenges in the Development of ESD in Korea

The following measures are necessary in order to get over the challenges, and facilitate the development of ESD in Korea:

ESD with firm volition of developing ESD in Korea has to be promoted. The awareness and the concern are the most important elements. As we can see from the examples in Pusan and other areas, the importance of concern cannot be overemphasized for the development of school education.

Institutional measures and support have to be strengthened. ESD should be implemented at the national level with a strong will by the government. The Ministry of Education and Human Resources, and regional offices should have separate division of environment. As the Environmental Education Act provided the legal background in 2003, the Environmental Education should be more facilitated. At the same time, ESD should be more emphasized in the actual process in the classed and schools, as examples seen in the U.K. and the U.S.

New concepts and measures have to be accepted and intensified. Not only the new concepts suggested by the UNESCO, but also other related issues should be dealt within the ESD. The practical limit posed by the actual education in school can be overcome by linking NGO education with it. This linkage will result in synergy effect, such as joint education programme, ‘Green School’, jointly developed by Ministry of Education and Ministry of Forest.

Regular meetings of officials from Ministry of Education and regional Offices of Education have to be held, and charged teachers have to be trained. Not only the in-service training for the teachers, but also pre-service training and life-long education should be specifically implemented.

International cooperative activities between international organizations and environmental NGOs have to be strengthened. In order to secure the common interests of the world, the role of UN, UNESCO-UNEP, environment NGOs should be emphasized. At the same time, regional cooperation should be also facilitated such as Tripartite Environmental Education Network (TEEN), North American Association for Environmental Education.

Comprehensive strategies at the national, regional, individual school level have to be established, and the plans on the step-by-step basis have to be implemented. As we have seen, specific action plan should be suggested for implementation of ESD. We should learn from other regions, such as introducing Environment subject such as Australian example; ‘Studies of Society and Environment’, establishing model school such as Chinese example; Green School, implementing comprehensive national project such as German example; Project 21.

Reference

Resources in Korean


III. Key Note Addresses


**Resources in English**


Asia-Pacific Strategy Planning Workshop on Education for Sustainable Development

Sukjin CHOI (2004). *The Education for Sustainable Development in Schools in Korea*, Proceedings of Seminar for ESD by IGES, Tokyo, Japan


UNESCO (2002). *Teaching & Learning for a Sustainable Development*.


**Internet Sites**

Ministry of Education and Human Resources - http://www.moe.go.kr

Ministry of Environment - http://www.me.go.kr

International Institute for Sustainable Development (2002) –

http://iisd1.iisd.ca/measure/default.htm


http://www.ens.gu.edu.au/ciree/LSE

http://www.roap.unep.org/aseanacplan/partl.html

http://www.wssd-education.org.uk
IV. Case Study Presentations
IV. Case Study Presentations

Case Study Presentation - I
On the Current Status, Tasks and Priorities of ESD in Central Asia

Ms. Tatiana Shakirova
Manager of Environmental Education programme
The Regional Environmental Centre for Central Asia (CAREC)
Almaty, Kazakhstan

After the First Sub-regional Workshop on Environmental Education Problems held by the CAREC in cooperation with the Ministry of EP of Tajikistan in 2002 we received an inquiry for a new CAREC programme opening. In order to assist governments, NGOs, scientific and public community of Central Asia countries the CAREC has launched the Environmental Education (EE) Programme at the beginning of 2003.

EE Programme is a component of Central Asian Agenda-21 development and is carried out in close cooperation with the CAREC Informational Programme and Public Initiatives Support Programme and with other regional and global educational programmes.

The preconditions for development of Environmental Education (EE) Programme:
1) Initiatives of UNESCO and Japan on realization of the Decade of Education for Sustainable Development (ESD) in 2005-2014
2) Decisions of Presidents of Central Asian countries on WSSD in Johannesburg, where EE was declared as one of priorities of global environmental policy
3) Partnership of the Ministries of Environment, Education, NGOs, international organizations, and CAREC in the field of EE and ESD
4) EE is closely connected with the first pillar to the UNECE Aarhus Convention, ratified by 4 CA countries – access to environmental information
5) EE is one of actual directions in the UNECE Strategy on Education for SD, which is adopted in July 2004 by UNECE countries and will be approved by UNECE CEP in October 2004.

The Programme purpose is to solve priority regional Environmental Education problems:
1) Arrange stable relationship, experience, information and methodic life lengths exchange in the field of EE between different educational institutions in CA countries;
2) Develop common approaches and principles for EE programme forming and implementing;
3) Work out public database in the field of EE (experts, organizations, legislation, methodic materials, etc.);
4) Create informational, methodic and training centers network in the CA region countries;
5) Introduce modern textbooks, manuals and methodic books in the field of EE and ESD;
6) Attract interested partners’ and donors’ investments for the Programme and projects implementation in the region.

Second Sub-regional Consultative Meeting “Environmental Education for Sustainable Development in Central Asia” April, 2003, (Bishkek) held by the initiative of the Ministry of Education and Culture of Kyrgyz Republic under CAREC and European Commission (EC) support, started active work of EE Programme. The Meeting was a CA countries response to WSSD decisions, where EE and ESD were declared as prior directions of the global environmental policy.

EE Programme and Review “Status, Prospects and Ways of Environmental Education Development in Central Asia Countries” (www.carec.kz) were approved at the Bishkek meeting, and Joint Working Group on implementation of the joint CA Sub-regional Project on EE was organized.

Review was presented at the Kiev Conference of Environment Ministers, May 2003. At the Plenary Session “Education for Sustainable Development” in Kiev presentation of the CA sub-regional position on EE and ESD, the new CA EE Programme, the CA Sub-regional Project and Report on EE were made. Outcomes of the Bishkek Meeting on EE were included into main documents of the Kiev Ministerial Conference.

While planning EE Programme activity special attention was paid to development of regional experts and specialists in the field of EE networks development – ministries, departments, non-governmental organizations (NGOs), scientific institutions representatives and pedagogues. By the moment we have created data bank on experts and organizations, donors and partners specializing in the field of EE; and data bank on legal and methodic maintenance (laws, programmes, methodic books, manuals, textbooks on EE and ESD). All data are presented at the CAREC official website www.carec.kz with an objective to provide free access for public.

Central Asian Working Group on ESD sub-regional project implementation is actively implementing its work (trainings and EE centres network). Thus, CAREC at the expense of its own resources (under EC support) started implementation of the CA Sub-regional Project on EE and ESD training component: on a selective basis team of experts-trainers on EE and ESD in CA was established. WG members, experts on EE and team of experts-trainers on EE and ESD had the introduction workshop training “EE and ESD Theory and Practice” at the CAREC on 5-6 October 2003, under the leadership of trainer professor Moscow State University Dmitry Kavtaradze.

EE Programme successfully implemented the next EE and ESD projects in 2003-2004:

I. Project “Environment for Future Generations” as the first stage of the project.

The project was implemented in 2002-2004 by CAREC Environmental Education Programme with support of European Commission and British Council. Support of the British Council allowed us to attract to the project one of the most well-known organizations, working in the field of Environmental Education - Field Study Council Environmental Education (FSCEE). Ministry of Education and Science of the Republic of Kazakhstan was key partner of the project.
The Project goal:
1) Enhancement of the level of Environmental Education (EE) at schools of Kazakhstan and improvement of understanding of the importance of nature resources rational use by school-children and young people.

The project was aimed at:
1) Organization of workshops for the development team and teachers
2) Elaboration and publication of Environmental Education text-book
3) Its approbation in experimental schools of Kazakhstan.

The team achieved the goal by the following activities:
1) Improving of professional level of teachers as they are the main source of effective education for environment.
2) Development and stimulation of critical mind acquirements of children and orientation them on democratic decision making by means of changing in pedagogical experience development.
3) Development of textbook on Environmental Education by Kazakh specialists on EE and experimental schools network, where the approbation was planned to be held.

The achieved outputs of this first stage of the project are the following:
1) Ready development team of the EE textbook, which consist of personnel of eco-NGOs and practical teachers of secondary schools. There were organized and held series of workshops and trainings with participation of expert-trainer from the British NGO FSCEE. Besides textbook creation, the development team conducted series of workshops and trainings for teachers and directors of those schools, on the base of which there developed experimental course is implemented.
2) Textbook on EE essentially, which consists of 7 chapters, with common content more than 70 pages, provided with map, diagrams, pictures, photos-formed illustrations and data, was prepared and printed for experimental schools of Kazakhstan.
3) The textbook was presented to the Ministry of Education and Science of the Republic of Kazakhstan for approval and expertise. In February 2004 we received positive conclusion of expertise of the Ministry of Education and Science of Kazakhstan for its usage in secondary schools of Kazakhstan and recommendation to use the textbook as school-book in state secondary education system, in frames of natural sciences.
4) Now we have the project experimental stage (March-December 2004), during which the textbook is approbating in 30 Almaty and Karaganda-cities schools of Kazakhstan.
5) Since approbation is over, the project executors will get comments and feedbacks on the textbook through teachers’ survey to donor organizations.

Further Project development prospects:
1) At the end of March presentation of the Textbook and training for Kazakhstan teachers was conducted, and Central Asian WG on EE and ESD members took part in the presentation.
2) Member of the development team NGO TAU received additional support from Soros-Kazakhstan for translation of developed textbook into governmental - Kazakh language. The project was finished in May 2004, so native language schools of Kazakhstan were involved
into the Education for Sustainable Development proves as well.
3) The textbook was presented by CAREC jointly with the UK Embassy and the British Council at the Ministry of Education and Science of Kazakhstan in Astana on 12 May.
4) The methodical manual on application of textbook has been prepared and disseminated among experimental schools of Almaty and Karaganda. After the approbation of manual at the secondary schools the teachers’ inquiry and collection of comments on manual will be carried out.
5) CAREC and the project team planed to offer the experience obtained as a result of implementation the project in Kazakhstan for practical use in other Central Asian region countries, in view of similarity of Environmental Education problems in CA subregion countries.

II. Project “Dissemination of the textbook on EE for the secondary schools in Central Asia” as the second stage of the project:
1) We received positive response from UK Embassy in Kazakhstan, which sent our request to the Public Diplomacy Challenge Fund – (PDCF) on support of the Project on dissemination of textbook experience on Central Asia - through posters and video on climate change issues, and trainings for Central Asian teachers on EE. CAREC and the Field Studies Council prepared the proposal jointly.
2) Name of the project is “Climate Change Posters and Video”; the project is a good opportunity for future cooperation in Central Asia on EE issues. Central Asian Joint WG on EE and ESD takes active part in the project.
3) Project supports the development of EE and ESD and promotes the advance of the Kyoto’s Protocol ideas in Central Asian subregion. We carried out series of meetings and trainings of Kazakhstan Working Group and Central Asian Joint Working Group on EE and ESD in May, July and October 2004.
4) Project team, in cooperation with the FSCEE expert-trainer and Central Asian Joint WG on EE and ESD and in discussions with students and teachers, elaborated together with professional designers set of five posters on Climate Change issues for future presentation at the Conference in November 2004 and dissemination on the schools of Kazakhstan and Centrals Asia;
5) Posters and video will become an additional educational resource and will be used in the educational process in the subjects of natural science for secondary schools.
6) Video is in a process of development, and in December 2004 specialists on video will finalize it for further distribution on Kazakhstan and Central Asian secondary schools as well.

III. Project “Education for Sustainable Development in Centrals Asia”:

The additional financial support of this project has been presented by the UNESCO Cluster Office in Almaty for Kazakhstan, Kyrgyzstan and Tajikistan. UNESCO supported the project through:
1) Assistance to preparation of the Central Asian Conference on EE and ESD in November 2004
2) Additional printing 100 copies of textbook on ESD for participants of the Conference on ESD in November 2004
3) Assistance to preparation of national CA countries reports on EE and ESD issues
4) Report on UNESCO activities on the UN Decade on ESD was made at the Conference
IV. Project “Promotion of Environmental Education in secondary schools in the Republic of Kazakhstan”:
It was started in January 2004. The project foresees development of educational module on Environmental Education for secondary schools teachers, reforming of legislation in the field of EE and development of library and video archive with methodic materials, authoring programmes, educational and informational sources, including multi media technologies in the field of EE and ESD.

At the moment the following materials on the project are prepared:

1) Analysis of international and Kazakhstan EE legislation. Proposals on amendments of national legislation were forwarded to the Ministry of Environmental Protection (MEP), ME&S, and Parliament of Kazakhstan for including into Environmental Code.

2) Two days training module on EE and ESD to introduce them to the system of re-training and improvement natural sciences teachers’ qualification through institutions of improvement teachers’ qualification (IITQ) was prepared.

3) Developed Project on development of coordination and EE interaction mechanisms.

4) Conducted 2 trainings for secondary schools teachers on EE and ESD. Mr. Vadim B. Kalinin (Russia), specialist in the field of EE and ESD, Director of Centre for Environmental Research of Obninsk city, Coordinator of “Environmental Education” Association took part in the training for Kazakhstan teachers. Information of SD course worked out by author was presented to teachers: SD concept, environment, EE and ESD. Experience of Russian Federation in the field of EE and ESD at legislative, governmental, public and pedagogical levels was presented. About 50 teachers, NGOs and specialists on EE and ESD of 9 Kazakhstan cities: Almaty, Astana, Karaganda, Temirtau, Balkhash, Taldy-Kurgan, Shymkent, Kokshetau, Pavlodar were taught SD, EE and ESD theories and raised their capacity on these 2 trainings.

V. Third Sub-regional Conference on EE and ESD in Central Asia:
The Third Sub-regional Conference on EE and ESD took place on November 10-11, 2004 in Almaty. The Conference was organized by CAREC under support of the British Embassy in Republic of Kazakhstan, OSCE Centre in Almaty, UNESCO representative office in Almaty and the European Commission.

This Conference continued decisions of the First Sub-regional Conference on EE (Dushanbe, June 2002) and the Second Sub-regional Consultative meeting “Environmental Education for Sustainable Development in Central Asia” (Bishkek, April 2003), which were the major high-level meetings that served as a start of intensive activities in the field of ESD in the subregion.

The Conference participants discussed the progress in the field of EE and ESD in Central Asia; reviewed proposals on mechanisms for coordination and interaction for development of intersectoral and interagency cooperation in the field of EE; defined needs of the countries for the future and clarify further steps of the sub-region on the threshold of the UN Decade on Education for Sustainable Development.

While the Conference CAREC made a presentation of the project “Posters and Video on Climate Change” on dissemination of the environmental textbook for secondary schools in Central Asia.
through trainings for teachers, posters and video on climate change. In the framework of this project five educational posters and 20-minutes video on climate change were developed. They will be disseminated in the secondary schools of Kazakhstan and Central Asia in 2004-2005.

All the participants receive sets of the posters, collection of reports of the Conference participants, textbook on EE and module of the training on EE for teachers of secondary schools, developed in the framework of project by CAREC and OSCE Centre in Almaty “Support to development of EE in secondary schools of Kazakhstan”. Thus, Central Asian countries representatives received a package of practical educational resources that might be used in daily activities.

**Participation in UNECE and Asia-Pacific regional activities** on preparation Strategies on ESD:

1) CAREC and Central Asian WG on EE and ESD participated in development of the UNECE ESD Strategy as a member of the drafting group on the Strategy. The Strategy draft was finalized in July 2004. In October 2004 Committee of Environmental Policy (CEP) of UNECE considered draft UNECE ESD Strategy and decided to forward it to the High-level meeting of UNECE Environment and Education Ministries on 18 March 2005 for final consideration. The meeting, in coordination with UNESCO, will launch the UN Decade of ESD in the UNECE region.

2) In frames of preparation ESD Strategy for Asian-Pacific region CA sub region also participates in the process taking part in series of seminars and workshops on EE and ESD in APR on preparation Situational Analysis on ESD (Bangkok, Thailand, 19-20 August, 2004); development of EE training courses (Tokyo, Japan, 13-15 September, 2004), and Asia-Pacific ESD Strategy Planning Workshop jointly organized by APCEIU and UNESCO in November 22-24, 2004, Seoul, South Korea.
IV. Case Study Presentations

Case Study Presentation - II
Current Situation, Tasks, and Priorities for ESD - CEE’s Experiences

Ms. Madhavi Joshi
Programme Coordinator
Center for Environment Education
India

Challenges to Sustainable Development
- Scope and diversity
- Poverty
- Population pressure
- Depletion and degradation of natural resources
- Illiteracy and access to quality education especially for the poor and marginalised
- Status of women
- Policy and institutional failures
  * Inadequate awareness and initiatives among national governments, civil society, corporate sector, academia, media, regional initiatives
  * Lack of lateral integration
  * Political will
- Issues related to overseas development assistance, technology cooperation and multilateral systems

CEE and ESD
- CEE - Government recognition of education as major input to change
- CEE’s programmes
  * Aimed at Development and Sustainable development needs
  * SD means environmentally aware citizens: School and formal education programmes, a cornerstone
  * Simultaneously rate of degradation of environment and loss of biodiversity calls for immediate measures
  * Need to show alternatives to have development consistent with environment

Guiding Principles
From its inception, CEE’s activities have been rooted in and guided by certain basic strategies for maximization of their quality, effectiveness and impact.

These include….
### 3 pronged strategy of CEE

- **Demonstration**
  - Education and Capacity Building
    - Greening School Education: Software, hardware – Anandshala; NGC
    - Curricular Intervention and Training: EESS and Samvardhan
    - Developing Supporting Materials: Enviroscope, EOSE
    - Capacity Building Institutions: RHEIs, DIETS; Text book boards

- **Education and Capacity Building**
  - Community Awareness: Samvardhan, Jalsankalp; Sankalp; AmdaVadmA
  - Developing EE Cadre: TEE; CCEE, SASEANEE
  - Facilitating Youth participation in SD: SAYEN; CYWEN
  - Training: TALEEM; Internships

- **Impact on Policy**
  - Decentralised Participatory Process: Sankalp, Jalsankalp, Halvad
  - Inputs into Policy Frameworks: JFM, NBSAP, BMWM, NCERT, Planning Commission
  - Eco-industrial Networking: Naroda CETP; Tirupur
  - Orientation to Policy Makers: IFS; Judiciary
  - Piloting Policy Implementation: Jalsankalp

- **Demonstration and Field Trials**
  - Livelihood Security: Halvad; Coorg; Jasdan; APDPIP
  - Natural Resource Management - Sustainable Agriculture, Livestock management: Halvad; Coorg; Samvardhan, Sankalp, Jasdan
  - Infrastructure – Water and sanitation, EQ and cyclone safe housing : Sankalp, Jalsankalp, Halvad
  - Fragile Eco-system: Coorg; Kachchh; Himalaya; Thar
  - Managing wastes: Industry, SWM, BMW : Naroda, Tirupur, Bangalore
  - Supporting innovations and local interventions: SGP;

### Education and Capacity Building

- Community Awareness: Samvardhan, Jalsankalp; Sankalp; AmdaVadmA
- Developing EE Cadre: TEE; CCEE, SASEANEE
- Facilitating Youth participation in SD: SAYEN; CYWEN
- Training: TALEEM; Internships

### Impact on Policy

- Decentralised Participatory Process: Sankalp, Jalsankalp, Halvad
- Inputs into Policy Frameworks: JFM, NBSAP, BMWM, NCERT, Planning Commission
- Eco-industrial Networking: Naroda CETP; Tirupur
- Orientation to Policy Makers: IFS; Judiciary
- Piloting Policy Implementation: Jalsankalp

### Moving ahead

- Samvaad: A rural dialogue with communities from 250 villages – CEE and partners
- ESF: Sharing experiences and strategies for ESD with international partners
V. Panel Discussion
## UN Decade of Education for Sustainable Development (DESD)

**Objectives**
- Enhance the role of Education in Sustainable Development
- Facilitate links between stakeholders
- Promote vision through learning and awareness
- Fostering quality of learning
- Develop strategies at every level

## Key Areas of Sustainable Development

### Three Pillars of Sustainable Development:
- Society
- Environment
- Economy
**with Culture as an underlying dimension.**

## Role of Stakeholders

- Develop ESD expertise and capacity
- Produce educational and informational material
- Identify and mobilize resources
- Model sustainable development practice
- Exchange information
- Promote cross-sectoral cooperation

## Seven Strategies

- Advocacy and vision-building
- Consultation and ownership
- Partnerships and networks
- Capacity building and training
- Research and innovation
- ICT
- Monitoring and evaluation

## Monitoring and Evaluation

- Identify measurable indicators at all levels
  - Local
  - National
  - Regional
  - International
- Initiative and Programme
  - Quantitative and Qualitative

## Main ESD Activities at UNESCO Bangkok

- Regional Strategy
- Linking Partners
- Community Based Processes
- Monitoring
- National, Provincial, Local Government Processes
### Guidelines for the Regional Strategy

**Phase One**
Finding out what work in the Asia-Pacific region and why?

**Phase Two**
Reaching Out

**Phase Three**
Systemic Change

### Regional Strategy for the DESD in Asia-Pacific

**Collaboration and Networking**

- Core issues for ESD in the region
- Roles of stakeholders
- Monitoring and evaluation

### Preparations for the DESD in Asia-Pacific

- Side event: Education for Sustainable Development, a partnership approach in the Asia-Pacific at the Greening of Industry Network conference (7 November 2004)

### Preparations for the DESD in Asia-Pacific

- Preparations for the DESD in Asia-Pacific
- IUCN World Conservation Conference: Session on Monitoring (20 November 2004)
- Workshop on community-based ESD initiatives (17 – 19 January 2005)
- International Conference on Education for a Sustainable Future (18 – 20 January 2005)
- Proposed Workshop: Regional Strategy for the implementation of the DESD in the Asia-Pacific (1 – 3

### Asia-Pacific Situational Analysis of ESD

- Clear overview of ESD in Asia-Pacific
- Informed planning
- Reduce duplication of efforts

**Sub-region and country specific**

- Sub-regions
- Central Asia
- South Asia
- North Asia
- Southeast Asia
- Pacific

### Asia-Pacific Situational Analysis of ESD

**For each sub-region**

- Current issues, awareness and perceptions, and core concepts
- Ways to advance ESD
- Good practices and Case Study

**Regional Launch**

- Asia-Pacific Situational Analysis of ESD by sub-region
- Regional Strategy for the Asia-Pacific
Panel Discussion - II
Facilitating Change through Partnership and Community Participation

Ms. Zabariah Haji Matali
General Manager
Angkatan Zaman Mansang (AZAM) Sarawak Malaysia

Abstract
AZAM (Sarawak) is the lead NGO in the state of Sarawak that has been implementing various forms of non-formal education (courses, workshops, dialogues, forum), with the main goal of effecting social change, to its target groups – the rural grassroot communities. Development for the rural community here means assisting the community to be independent, resourceful and able to undertake economically viable and environmentally friendly and sustainable livelihoods.

Through partnering with other organisations in the state as well as at the national and international level, the non-formal educational activities are carried out under the various flagship programmes of AZAM such as Community Development, Communication and Knowledge Management, Media, Publications as well as the Radio Programme.

I. Preamble
Sarawak has a population of about 2.2mil\(^2\) and is mainly made up of various ethnic groups. The biggest group is the Ibans (35%), followed by the Chinese (29%) and the Malays (24%). The remaining groups are Bidayuh (8%) and Orang Ulu (4%). Although the state is the biggest in Malaysia, it is the least populated due to its geographical make-up, where half of the land is jungle and its interiors is only accessible by river or on foot. This unique geographical make-up has hindered the overall educating of the population, forcing the availability of government-run schools to concentrate in and around major towns. Educationally, Malaysia has a literacy rate of 93.5\(^3\), an increase of about 5 percent from the 1991-2000 periods. However there is no definite figure for Sarawak’s own literacy rate.

Albeit slow in terms of education-acquisition, the population in Sarawak is by no means, lagging in development. This is because the Sarawak state government actively ensures that the population is exposed to and understands its socio-economic development policy. This is where Angkatan Zaman Mansang’s (AZAM) role comes in.

---
\(^2\) Dept of Statistics, Sarawak; Nov 2004
\(^3\) Dept of Statistics, Malaysia; Nov 2004
II. Rationale for Community Participation

Established in 1983, AZAM was created to disseminate information on the state's development policies as well as to ensure the populations' involvement by way of exposure to these development ideas and its actual practices through community participation, thus ensuring a better quality of life for the community. AZAM's contribution in this includes the organising and monitoring of programmes on Community Development, Knowledge Management and Sharing, Communication, Youth and Women.

AZAM also recognizes that community participation in community betterment projects does not usually occur by chance alone. It happens when participants observe, understand and internalise that positive benefits can be gained especially when some aspects of their way-of-life are threatened. And in order to create this awareness, several steps need to be taken through developing community understanding and awareness of sustainability and Sustainable Development.

III. Education Needs for Community Participation

Without any doubt, education is the agent of transformation in a community especially towards Sustainable Development. Through AZAM's programmes and projects, the population is guided in order to ensure that the community's activities are culturally appropriate and locally relevant so as to redress the threats of and to the community's future. In recognising that community participation is central to Sustainable Development, the participatory approach undertaken by AZAM focuses more on the development of human capacities and capabilities. By actively engaging the community from the start, programmes can truly correspond to the community's priorities, thus benefiting from their willingness to use them effectively.

AZAM, with the financial assistance of the Human Resource Department in the Chief Minister's Office of Sarawak has embarked on a community-leadership programme since 1996. Called The Basic Course for Community Leaders, this programme trains local community/grassroot leaders in the proper management of the village specifically in financial and managerial concerns. This programme, conducted mostly in rural villages, has an underlying goal that the community could be independent and self-sufficient in running its day-to-day activities and more importantly is able to strategize and work towards a vision for a better future. The programmes hope to share knowledge, skills and perspectives in such a way that it encourages sustainable livelihoods and supports the community to live sustainable lives. Since its inception in 1996, a total of 97 such programmes were conducted involving about 15,258 community / grassroots leaders.

IV. Knowledge Sharing

Knowledge sharing is vital in ensuring the sustainability of a community. Ideally, it is a process that focuses on the experience of the community, is able to retain the dignity and self-confidence of the community and have influence over their own future. In developing a strategic knowledge sharing process, it involves the process of (i) awareness; where the community gets the information and regards it to be of use to the community, (ii) interest; a few individual in the community understands and takes an interest in the information received and becomes information gatekeepers for the community, (iii) examination/testing; the idea that crops up is tested within the community, usually on a small scale, (iv) adoption/rejection; the practice may be adopted or rejected, depending on the
income levels, risks and the communities' priorities.

In developing this idea, AZAM has initiated regular roundtable discussions with members of the local grassroot communities in order to expose them to the socio-economic policies of the state as well as the development idea of the nation's leaders. Through these sharing sessions (known as Randau), further improvements on the state's development policies are carried out and at the same time, how this knowledge can be effectively informed and locally accepted by the community is constantly reviewed. AZAM plays the mediatory role in this.

On top of this, AZAM has established the AZAM-SDI Knowledge Centre (ASK Centre) where it hopes to build up its collection of materials on development especially those primarily relating to the development of the state and the nation. It is hoped that this centre could serve as a reference point for any organisations/individuals that would like to learn or share experiences on AZAM's focus area which is community development and knowledge management.

V. Environment and Sustainable Development

In ensuring a better quality of life for the community, AZAM has embarked on several projects that ensure that the community is able to sustain itself amidst the government's development policies. In meeting this objective, it is essential to recognize that (i) developmental progress recognizes the needs of the community; (ii) the environment is protected; (iii) natural resources are used sparingly and prudently; and (iv) the maintenance of high and stable levels of economic growth and employment.

One project in which AZAM is actively involved in is the **GEF-Small Grants Programme (GEF SGP) for Sustaining the Mangrove Ecosystem Biodiversity in Providing Sustainable Livelihood for Local Communities** in Sematan, Sarawak. The project is carried out to curb the fishing and mangrove forest logging which are the two main income generation of the local community in Sematan. In addressing the environmental threat caused by the community's traditional income generation practices, the project's main programmes are Research, Awareness and Alternative Income Generation Programme. This programme hopes to sustain and conserve the Sematan mangrove biodiversity that will provide sustainable livelihoods to the local community. With its experience in local community participation, AZAM coordinates the local community involvement in the project programmes and activities as well as act as the 'intermediate NGO' and fund manager/controller.

Another project in which community participation is required and involving bio-conservation and Sustainable Development is the **GEF Small Grants Project: Community Participation in the Sustainable Management and Fishing of Terubok (Tenualosa toli)** in the coastal areas and estuaries of the state. The two-year project, initiated in 2001 by the Sarawak Development Institute (SDI) a sister organisation of AZAM, aimed at educating and enhancing awareness of the local fishing community on the importance of terubok conservation and to reduce the fishing communities' dependence on Terubok fishing by encouraging the adoption of alternative livelihoods.

VI. Gender Issues in Development

Issues of gender including gender equity have been considered an important crosscutting issue in development. Traditionally women are not actively involved in community development. However, women's key role in raising a healthy family is an integral part of development. Gender related
activities, especially those concerning the women, should (i) take into consideration the legal and the status of women, their needs and contribution to the community; (ii) support and facilitate the inclusion of actions addressing major gender disparities; (iii) develop and promote public and private capacities which can take responsibility for mainstreaming the gender dimension in the development efforts.

In light of this, AZAM saw the need and is currently conducting 'women only' workshops, which targets the rural women in the state. This workshop, aptly called *Rural Women and Voluntarism*, exposes these women to the spirit of voluntarism and its importance to the community’s social and economic development. With the initial grant of RM52,280 (about US$14,500), the workshop aims to empower women to take charge of their future by educating them of the important role (in this case voluntarism) which they could play within their community. Thus far, a total of three workshops were held in three different venues in the rural areas of Sarawak in which about 100 women participated.

### VII. Youth and Nation-Building

Youth as leaders of tomorrow have a great role to play in achieving Sustainable Development. Rather than providing programmes that deliver services to youths, structured service programmes allow youths to play an important role in addressing development priorities within the communities. These can be achieved by creating opportunities and infrastructure for these programmes. AZAM, in collaboration with the Konrad Adeneur Foundation (KAF) of Germany, initiated the AZAM Young Communicators Club (AYCC) programme in the late 1990s. The programme involves young school children aged between ten and eleven years and have the objectives of (i) instilling among these students, their roles and responsibilities towards conserving the environment; (ii) help them plan, prepare and identify careers that are suitable to their aptitude, and (iii) produce students who are forward thinking, creative, proactive and analytical.

AYCC, through its structured programmes, addresses these issues by providing ‘hands-on’ learning opportunities, creating a pathway to further training, offering constructive alternatives to negative behaviours and empower the youths to actively address urgent social and economic issues in their community.

### VIII. Media and Its Role in Community Participation

It is well known that making sustainable policy that is not subject to informed public debate is rarely sustainable. Media and the role it plays in development should be at the heart of policymaking, reflecting and communicating debates. It is crucial that development policy-makers and practitioners surrender its development-agenda by opening up to the media.

This should not be about public relations, but about sensitively placing information so that the community can make up their own minds, have their own ideas, use that information when they need it. In other words, the use of the media should be participatory.

The success of development programmes depends to a large extent on the joint contribution made by different parties, these being the recipients of the information, the community itself, and the media. AZAM has, for the past one decade; actively involved the media in delivering the developmental agenda of policy-makers. Through its joint programmes and activities with private institutions such as
the Malaysian Press Institute and the Commonwealth Journalists Association, development issues and agendas has been successfully channeled to the community. In furthering this effort, AZAM continues to engage the expertise of local journalists and writers in exposing the ideas behind the developmental agendas by identifying programmes and projects of interests in which the media personnels can write about as well as participate in its actual delivery.

And in ensuring that all levels of the community receive and understand these issues, AZAM has taken a step further in the delivery of these messages by using not only the print media, but also the electronic media especially the radio. This is considered to be more effective because its outreach is wider and it can be customized to its listeners especially in terms of language and timing and for Sarawak, with its natural geographical make-up, the radio is used as a means to reach the rural communities.

IX. Conclusion
Community participation encompasses a full range of activities from sharing information, to actively pursuing participants’ feedback and to jointly planning at the grassroots level. It is an active two-way process that may be initiated by local communities as well as the policy-makers. AZAM is the lead non-government organisation (NGO) that has been implementing various forms of non-formal education in effecting social change in the state of Sarawak and will continue to be so until the state’s vision of a developed and self-sustaining society is achieved.
Panel Discussion - III
A Study of Education for Sustainable Development in Korea -Focusing on Socio-Environmental Education-

Ms. Myeong-Su Baek
Senior Researcher
Citizens' Institute for Environmental Studies / KFEM
Korea

I. Introduction
After the United Nations Conference on Environment and Development (UNCED) in 1992, the global community started discussing environmental problems in terms of Sustainable Development (SD), accepting the concept of SD as a universal value. Moreover, as environmental problems were being recognized as problems of the human mind, ways of life, worldviews, philosophy, ethics, and life choices, Environment Education (EE) became an important measure to solve the environmental problems. EE evolved from simply teaching and learning information about environmental pollution, to utilizing it as a preventive measure to solve the environmental problems that arise due to people’s way of life. Therefore, recognizing that the efficient way to change people’s attitudes is not through environmental knowledge but through receptivity, EE tried to produce citizens with ecological receptivity. In 2004, EE in Korea is currently being conducted very widely in schools, environmental civil organizations, religious organizations, corporations, and the military; and the demand for it is steadily increasing. The themes of EE deal with natural media such as Korean flowers, waterways, rivers, tidal flats, seasonal birds, and forests; and artificial media such as trash, recycling, and energy.

However, in spite of the growth of EE in quality and quantity, it has been limited to the narrow area of field experiential activities centered on environmental media. EE sessions on the above themes that are held many places are mostly only short-term events. Since there is no network that can be shared by the key actors conducting EE, there is difficulty in developing the themes more deeply. Even those in charge of EE are experiencing the limits of their expertise. It would not be an exaggeration to say that there are already too many task-oriented EE sessions.

EE should not be EE any more. This means that the theme-oriented EE should be changed into an agenda-oriented education. In short, EE must be changed into Education for Sustainable Development (ESD). For us, the concept of ESD is still an unfamiliar one. However, if we knew that ESD was a developed form of EE, it would be possible for us to see that ESD is to make people understand the related environmental, social, economic, and political issues and to keep citizens, corporations and government living a sustainable life. In that context, EE is cultural education that can develop ecological receptivity, a socio-political education looking for causes and solutions of environmental
problems, and human rights education seeking the right to survival of the victims of environmental
destruction. Because it is also economic education, finding out how the government has used the
budget to destroy the environment, ESD is integrated education.

Then what are the priorities for moving forward to agenda-oriented EE, that is, ESD? In this article,
the situation of EE in Korea will be briefly reviewed and the possibility of ESD as an alternative to
overcome the problems and the limits of EE will be considered.

II. The Situation, the Limit, and the Tasks of Environmental Education

1. The Situation

1) Hardware for Environmental Education

After UNCED in 1992, the number of environmental organizations, especially local organizations,
greatly soared. Most of these organizations conducted EE to raise citizens’ and members’
environmental consciousness and to assist their understanding of specific issues. The financial
situation of civil and environmental organizations is very poor. They usually finance the expenses for
their activities from their operational funds or their session participants’ fees. The financial difficulty
leads to poor programme development. Because most civil and environmental organizations are not in
a situation of abundance for programme development, they usually only pay the direct educational
expenses.

Some of the organizations that conduct EE have space reserved for educational activities, but some do
not, and borrow or rent space as necessary. For the most part, these organizations only have
educational materials for experiential Environmental Education, such as telescopes and illustrated
books, but do not have audiovisual materials for indoor education. Very rarely do they have expensive
equipment such as field scopes and beam projectors, which would indicate that professional education
is being done in those cases.

EE is conducted mostly by civil and environmental organizations, but about half of the organizations
have only one person in charge of educational activities. However, the people in charge of EE have a
definite vision. Considering the current situation of so few environment-related experts and EE
experts in Korea, the expansion of EE experts is greatly needed. The main target of EE is primary
school and middle and high school students. Since the importance of pre-school children’s education
is being recognized, some organizations conduct EE for pre-school children. Considering its potential,
education for housewives is relatively weak.

In Korea there are civil and environmental organizations with various status, such as well-established
organizations, organizations being established, and organizations in a poor status. Consequently their
numbers of educational activities and participants differ. Some organizations have about 100
participants annually, while some have around 500.

2) The contents of Environmental Education

Civil and environmental organizations conduct EE as an active way to solve environmental problems.
The EE of civil and environmental organizations is an important part of social EE, and it is leading EE
in Korea. The themes of EE are closely related to current environmental issues. Important themes of social EE are ecosystem preservation, wild animals and plants preservation, green consumption, food safety, recycling, waterways, wetlands, water pollution, air pollution, sea pollution, life ethics, and life culture. The interest in ecosystem preservation has been substantiated by activities for forests, waterways, wild animals and plants preservation, and since the interest in tidal flats and seasonal birds was heightened by the process of an opposition movement against the Sae-Man-Keum land reclamation programme, currently many organizations are operating as important educational leaders. One way to promote enlargement of citizen participation for enhanced ecological receptivity is experiential education. Korean flower, forest, tree, and nature experiences; environmental camps; eco tours, etc., are being conducted as education programmes for ecosystem preservation. At the same time as social interest in the global warming and energy issues grows following the Kyoto Protocol in 1997, energy-related organizations have started conducting various energy-related educational activities. Especially organizations such as the Korea NGO’s Energy Network and the Centre for Energy Alternative are very active in this regard. After the environmental hormone controversy in 1998 and the birth of cloned sheep Dolly in 1999, Korean society became more conscious of the life safety and genetic engineering issue. At the same time, the need for life ethics against genetic engineering became more urgent, and educational programmes about life ethics and food safety against genetically engineered foods produced by massive multi-national companies such as Monsanto started being conducted by Saenghyup, Korean Women’s Link, etc.

2. The Limits and the Tasks

1) The absence of leadership reproduction mechanisms
Even though environmental experts or environmental activists are mostly in charge of EE in civil and environmental organizations, there is a lack of EE leadership training. A few organizations are conducting leadership training, but post-management is not being done properly. There is insufficient management of former participants’ activities after the completion of training.

2) The absence of programme development
This is currently the poorest area in EE. At first the educational activities of civil and environmental organizations were mostly about raising environmental consciousness and disseminating information. Presently, however, the themes and the contents of the programmes are more diverse. In spite of the diverse themes, there is not much difference in ways of programme organization and results among the many related organizations. It is very difficult to split a big theme into smaller ones or consolidate smaller themes into bigger ones and to find suitable ways of education for the respective themes. Since the end of 1996, when EE gained great support as an efficient way to obtain ecological receptivity, there has not been much progress in terms of programme development.

To produce more programmes and deepen them, many organizations conducting EE need to share their trial-and-error experiences and also need to secure adequate funds and professional workers. However, because most of these organizations finance their expenses with fees from the session participants, they are always short of funds. Moreover, central and local governments more easily support programmes that show quick results, such as activity-oriented programmes. Therefore, many organizations just end up conducting similar programmes rather than developing diverse and new programmes.
3) Poor financial situation
For the establishment of a social EE system, what is most needed is to secure stable funds. Most of the organizations raise their own funds. Accepting the necessity of EE, some organizations with poor funds even divert other expenses to EE as well as collecting fees from the EE session participants. Participants usually pay the educational expenses for the lecturers, materials, and rent. Whenever an EE programme takes place, the programme coordinators are concerned whether they can find enough students to cover the programme expenses. Sometimes their concern even extends to whether the education may be limited to a certain class of people, by only recruiting those who can afford the fee. From time to time, civil and environmental organizations get funded by the government, but this is not continuous or stable. Therefore most of the programmes run by these organizations are short-term.

4) Inefficient practices due to lack of information sharing
Thanks to mass media and Internet, the contents of educational activities by many organizations are now more accessible. However the sharing of trial-and-error experiences and developmental directions inside the organization or among organizations is greatly lacking. This leads to a lack of programme development or EE classroom sharing, and difficulty in securing EE leaders, causing a vicious cycle. Development of new themes is necessary for the new generation of EE.

5) Difficult themes
Even though the global environmental issue is very closely related to our globalized lives, it is not placed in the curriculum of EE as an important issue. Issues such as climate change, genetic engineering, life ethics, and national land development without the consideration of environment are not being considered important, either.

III. From Environment Education (EE) to Education for Sustainable Development (ESD)
EE in Korea is currently very active, trying to produce more citizens with ecological receptivity. There are so many things to do in the area of EE. However, I will talk about the possibility of ESD with reference to a few local movements. Waterway management at the village level, small hill restoration at the local level, tidal flat preservation at the national level, etc., are some good examples. In waterway management, village residents themselves do a lot of work to restore and revive the dried waterways that are recognized as useless. First the residents try to understand the waterway and learn the waterway ecosystem. They learn what kind of creatures live there, how the creatures interact with each other, and what is required to preserve the ecosystem. After the getting-to-know-the-waterway step, the residents discuss what is needed to make a healthy waterway ecosystem. When it is needed, help from an outside expert is sometimes invited. Sometimes they plan and carry out events that will change the image the citizens have about the waterway and try to promote voluntary participation. Once the water starts flowing and animals start living there again, the residents renew the image of the local society, and they even start considering different environmental issues.

Similar things happen in the small hill restoration activities. Until now small hills around villages were not considered as places to be taken care of, but as abandoned places. They were usually considered and used as spaces for physical fitness centers or other facilities for the residents. Now, however, the residents recognize them as precious green tracts that have to be taken care of and well managed. Education played an enormous role to make this change. Continuous education related to
the mountain ecosystem, such as forest and Korean flower experiences, renewed residents’ understanding of forests, and people started appreciating the value of small hills as places that maintain life within the gray, industrialized city. Small hills are helping the villages to be renewed as communities. To preserve small hills, the residents have had to understand the forest and the system of local administration that destroys the forest, and have had to seek every possible way to change the situation. Every step needed education and there were various kinds of education based on one agenda.

Education about tidal flats is currently a very important theme. Various organizations are conducting EE trying to let people know the importance of tidal flats and the diversity of life. We can connect this theme to the current Sae-Man-Keum issue and make a new agenda such as National Land Enlargement and Life Destruction. Then what do we need for these processes? Maybe we need tidal flat education for the tidal flat preservation, ethics education to prevent life destruction, and geography and economics education to show the inconsistency of the National Land Enlargement Plan. However this will take more than the mere presence of EE experts. Their expertise has to be reinforced. But Korean society is going in the opposite direction. Even though, in recognition of the importance of EE, some universities have installed a course to produce environment teachers, schools do not recruit them. Expertise in EE is very hard to secure in the formal education area. Not many people look at environment teachers as experts to support integrated education; rather, they see them as special teachers for a few classes or subjects. Not only environment teachers but other teachers also should expand their areas of work. If this is too much burden for them, at least the environmental activities currently being conducted should be brought together. Within EE, the network should be reinforced, and eventually beyond the boundary of EE, networks with culture, human rights, economics, society, and ethics education should be established. This kind of effort is being made by the Korea Organized Network of Ecologically Conscious Teachers (KONECT). KONECT is voluntarily organized by teachers in Korea, and is trying to make people aware of the necessity of ecological education (also called green education) as a fundamental approach to overcome the 21st century ecological crisis. They are raising the degree of EE expertise in the local society by organizing teachers and developing and practicing ecological and Environmental Education programmes to encourage the schools to treat the environment subject as a holistic subject, reducing the possibility of its being treated as just another subject.

We tend to divide the institution and the education. An EE Promotion Act, voicing the need to advance not only social EE but EE generally in Korea, is being devised to support EE institutionally. This should be welcomed, considering the aforementioned reality of EE in Korea. However, because a more comprehensive approach is necessary for EE to overcome the current limits and to be changed into ESD, we cannot simply welcome it without some concern. If we look at EE as holistic education, the EE Promotion Act should be changed into an ESD Promotion Act. Human rights education, EE, labor education, and economics education are all difficult to carry out. We need to approach them through establishing an institution that supports comprehensive education covering all of the aforementioned education. If we can do that, we probably can accomplish ESD in a much shorter time.
Panel Discussion - IV
Priorities and Themes for ESD in the Asia-Pacific
The Importance of EIU for ESD

Lawrence Surendra
APCEIU
Korea

I. Introduction
This is a draft outline of the presentation on Priorities and Themes for ESD to be made at the Regional ESD Strategy Workshop organized by UNESCO Bangkok and APCEIU. Basically this outline highlights some of the key issues that need to be dealt with in drawing out the Priorities and Themes for ESD in the Asia and Pacific Region. This presentation basically addresses the role of EIU in relation to ESD. In so doing looks at not only the centrality of values in ESD but also what are the basis on which the values and ethics framework needs to erected. Most critically the presentation tries to provide some markers which are crucial and should inform the development of ESD in the region.

Prior to dealing with the issues mentioned above, in this introduction some brief information is provided on APCEIU and which is the only regional institution of its kind with a mandate and mission specifically to promote EIU. Let me state and at the risk of repeating myself, in my view EIU is critical and central to the development of ESD in the region. EIU deals with both inter-cultural understanding which is the relationship between humans and communities, and that of living in harmony with the earth, the ecological dimension and which together makes up ESD, as a totality of ‘living together’ within the social order and between the social order and the natural order.

Firstly with regard to APCEIU, the Mandate of APCEIU according to the agreement between the Government of Korea and UNESCO (Article 2 of AGREEMENT with UNESCO) is to:

1) Strengthen national and regional capacities in education for international understanding.
2) Encourage and facilitate collaborative links between Asia-Pacific initiatives and other regional, international and global efforts in education.
3) Implement research and development of the philosophy, teaching methods and curriculum of education for international understanding.
4) Organize training workshops and seminars.
5) Produce and disseminate teaching materials and other publications.

The mission of APCEIU accordingly is to:

1) PROMOTE, regionally and internationally, EIU which strengthens participatory democracy, protection of human rights, social and economic justice, inter-cultural respect, ecological sustainability, and nonviolent and just reconciliation of conflicts.

* Draft outline of presentation (not to be cited or quoted)
2) COLLABORATE with educators and institutions to expand, strengthen, and institutionalize EIU in schools and society.
3) SERVE as a centre of excellence for EIU in the Asia-Pacific Region.
4) SHARE ideas and lessons for enhancing and implementing EIU with educators, policymakers, institutions, and communities in other regions and countries, through networking and partnerships.

In keeping with the mandate and mission, the main areas of APCEIU work, its programmes and activities are organized around the following areas:

1) Asia-Pacific Teacher Training Workshops on EIU
2) EIU Training for Civil Society Leaders
3) Research and Development of EIU Curriculum & Teaching/Learning Materials including in the future development of online courses using IT
4) Publication and Information Service on EIU and
5) Cooperation and Networking.

II. APCEIU EIU and ESD
ESD is widely recognized as a concept that is still being conceptually developed and therefore confusion does arise not only regarding the relationship between EIU and ESD but also as whether EIU has any role in relation to ESD. In my view if ESD is not to be another avatar (reincarnation) of EE, i.e Environmental Education, then ESD is closely related to values, attitudinal changes and involves all three Hs, Head, Heart and Hands. The head or cognitive domain, the heart or the empathetic domain and the hands or the domain of action. In this sense APCEIU’s work in the field of EIU is closely inter-related to the objectives of ESD.

This is also keeping in line with the objectives of ESD as defined by UNESCO which is the lead agency and task manager for the UNDESD within the UN system. According to UNESCO, ESD is, “the promotion of values and ethics through education at different levels to make an impact on people's lifestyles and behaviour and help build a sustainable future”

III. Conceptual Development of ESD
Let me recognize that ESD is an emerging concept, a position taken also by UNESCO. Yet, it is important that ESD is not only conceptually clarified to those new to the concept of ESD but also work be done to develop the concept in a manner that it can create widespread awareness on ESD and thus draw a whole range of actors in promoting ESD. It is only in such a manner that the ownership and implementation of ESD will become every persons task and not only those of specialized institutions and experts. I am not at all minimizing the role of the latter, but it is important institutions and experts draw more and more people to the importance of ESD for the very future of human beings and planet earth. Only then ESD can be a success globally and have an impact that has implications in a benign sense for the future of planet earth and humankind itself.

Basing oneself on UNESCO’s own contribution to the field of ESD, it should be noted that UNESCO’s ESD work has been based on the three-thronged concept of, transdiciplinarity, innovation and partnering.
1. Transdisciplinarity
To achieve sustainability both socially and ecologically requires a meeting of disciplines and knowledge systems and as UNESCO views it, “to create understandings that are more integrated and contextualised”. This requires a transdisciplinary approach and perspective in addressing not only the problems of Sustainable Development but also to promote education as a means to achieving sustainable futures.

2. Innovation
While knowledge is critical and transdisciplinarity is possible especially within formal knowledge systems, both formal knowledge systems and informal knowledge systems depend on ‘innovation’ critically for their usefulness and reproduction. In so critical an area as fashioning sustainable futures, ‘innovation’ plays an important role and education about Sustainable Development has great potential to promote and multiply innovation for Sustainable Development, especially at the local and community level.

3. Partnering
Education has tremendous possibilities for promoting new alliances at so many different levels, between state and civil society, between institutions of knowledge and those promoting ethics, values and responsible citizenship. There is a vast area that waits to be explored from a genuine approach to partnership and prioritising partnering.

IV. Lessons Learnt about Education and Education for Sustainable Development.
In the Decade between Rio Earth Summit (1992) and Johannesburg WSSD (2002), in the view of UNESCO which has been Task Manager for Chapter 36 of Agenda 21, dealing with Education, five key lessons have been learnt. These are:

1) ESD is an emerging concept seeking to empower people of all ages to assume responsibility for creating a sustainable future
2) Basic Education is a foundation and contributes to ESD
3) There is a need to refocus many existing education policies, programmes and practices
4) Education is the key to rural transformation and is essential to ensuring the economic, cultural and ecological vitality of rural areas and communities
5) Life long learning, including adult and community education are all vital ingredients of capacity building for a sustainable future

APCEIU as the only Regional Centre on EIU Focuses on 4 of the key lessons learnt between Rio and Johannesburg.

These are:

1) ESD, an emerging concept that seeks to empower people of all ages to assume responsibility for creating a sustainable future.
2) Basic Education as a foundation that contributes to ESD.
3) Refocusing on existing education policies, programmes and practices.
4) Stress on education as the key to rural transformation and as essential to ensuring the economic, cultural and ecological vitality of rural areas and communities.
V. Four Systems and Four Principles of Sustainable Development.
Sustainable Development is grounded on four interdependent systems and supports four inter-related principles for sustainable living. The Four Systems are: Biophysical, Economic, Social and Political. The Four Inter-Related Principles are: Peace and Equity, Democracy, Appropriate Development and Conservation. The Four systems and Four principles are closely related to the concerns and themes of EIU.

VI. Promoting ESD in the Region and Challenges for EIU
With this conceptual underpinning of ESD we need to also consider the actual realities and contexts we face in the Asia-Pacific Region. Let me briefly underline three. They are:
1) Macro-Institutional Challenges and Global and Planetary Inter-linkages – Issues such as Global Warming and impacts on local unsustainability and livelihoods
2) Socio-economic Issues – Livelihood, Participation and Partnership
3) Lifestyle Issues – Urbanization, Lifestyles and Consumption

Let me touch upon briefly on each of the three issues we have highlighted. With regard to the first, Macro-Institutional Challenges and Global and Planetary Inter-linkages, it is intimately linked to issues such as global warming and the impacts of global warming on local unsustainability and livelihoods.

Impacts caused by global warming are on a global and planetary scale and affects planet earth as an ecosystem. Mitigation has to be done by humankind as a whole. This requires giving new meaning to the EIU concept of ‘Learning to live together’ as one of not only ‘living together’ between human beings but between humans and sentient beings (nature). Impacts on livelihoods and the resulting poverty, hunger and destitution needs to be addressed through a new ethic of living sustainably. A new ethic built around social justice, democracy, peace and ecological integrity

In relation to the second that of ‘Socio-economic Issues-Livelihood, Participation and Partnership’ there are issues that need serious consideration and which again I shall very briefly touch upon.

The Asia-Pacific Region has seen rapid economic growth and prosperity especially in regions such as North Asia. Yet the region as a whole is beset with problems of rapid environmental and ecological degradation, growing income disparity, mounting youth unemployment and dissatisfaction resulting in threats to both social peace and sustainability

It is important therefore that Socio-economic issues of livelihood, issues of participation and partnership in economic growth and democratisation have to be at the heart of the efforts to promote ESD and build sustainable futures.

Lastly and equally central is the issue of lifestyle and which often relate to issues of rapid urbanization and the associated lifestyles often centering around consumption as the be all and end all of life. It also closely relates to the issues of global warming. We have to make the connection between livelihood destruction, persistent poverty, malnutrition caused by hunger and issues related to the affluence and wealth of a minority. These are lifestyle issues and the values associated with consumer lifestyles.
We live in a world where ill health and malnutrition caused by lack of access to livelihood and food coexists with the malnutrition of excess and modern epidemics of obesity caused by over consumption of the affluent, the latter affecting close to 400 million. This is the contradiction, dilemma and central challenge that ESD faces. The unsustainability of the economic models which we have adopted and continue to live with.

VII. The Challenges and the Response.

It is the face of the contexts we have touched upon above, the Asia-Pacific Region has to address the challenges we face and consider what are the contributions that we can make to shaping and assuring a sustainable future.

In my view the Asia-Pacific region faces a dual challenge:

1) Either to follow blindly the paradigm of unrestrained (socially and ecologically) economic growth contributing to the rapid destruction of the earth’s planetary ecosystem or
2) To learn from our civilisational roots and the philosophy of restraint rooted in all our cultural and religious traditions

We have also a tremendous amount of learning to do from the Diversity of the Asia-Pacific Region.

1) The rich cultural diversity of Asia is based and closely related to the diverse ecological settings within Asia.
2) In the Asia-Pacific Region all forms of ecosystems from tropical and rain forests and semi-tropics, to deserts to temperate climate regions exist.
3) It is by a recognition of this diversity of ecological settings that the basis of education and dialogue that contributes to sustainable futures at the global level can be done.
4) This is particularly true when we see the very survival of planet earth threatened in the face of irreversible climate change.

Education has therefore to transform itself to a new ethic of ‘Mutual Learning’ and that is the double challenge, namely to use education but simultaneously transform education to that of ‘mutual learning’. In such a perspective I would like to underline the following:

1) A major contribution the Asia-Pacific Region can make to both the global community and within the different societies in the Asia-Pacific region is to learn from the sustainable life styles and practices of the indigenous communities of the Asia and Pacific region.
2) As much as the Asia-Pacific Region can contribute from its civilisation roots to a global ethic of sustainability, the region itself can learn from its indigenous communities and they have a major contribution to make to Education for Sustainable Development.

VIII. Conclusion

Finally whether we make it to the path of social and ecological sustainability, whether we can contribute to assuring future generations that humans and planet earth can look to sustainable futures depends on Gandhi’s maxim:

“There is enough for everyone’s need but not enough for everyone’s greed”
VI. Sub-regional Presentations
(Country Reports)
Sub-regional Presentation – I
Two critical ESD issues in Sri Lanka: Coal Power and Municipal Solid Waste Management

Mr. Devanesan Nesiah
Consultant, Centre for Policy Alternatives
Sri Lanka

Within the limited time available, I wish to refer to two ESD related topics of much concern to Sri Lanka and, indeed, to many countries of the Asia-Pacific region. Coal power has been a subject of much controversy for many years, but it appears that there is now a commitment by the state to establish at least one coal power plant – perhaps of 300 MW capacity, at Norichcholai on the West coast of the island, despite much protest from the local population as well as environmentalists. The other topic, viz. Municipal Solid Waste Management, is of perennial salience not only in Sri Lanka but in virtually every developing country, and in several developed countries too. In respect of both topics there are controversial technical, management and siting views, many of which remain unresolved.

Recurrent power shortages despite a succession of costly emergency measures to ease these shortages have ensured that the coal power proposal, repeatedly abandoned in response to protests, resurfaces again and again with renewed urgency. Oil fired power plants cost more, and hydro-electric power generation is close to reaching its maximum potential; in any case most hydro electric power projects are unpopular on both socio-economic (displacement of population, and related concerns) as well as environmental criteria. The natural gas option has now been seriously considered as it is regarded as very costly. Coal is used in many countries for electricity generation, but not yet in Sri Lanka. A persistent critic of coal power, Dr Janaka Ratnasiri, a scientist and environmentalist is on record that:

It is common knowledge that coal power is dirty, confirming “cheap things no good.” They emit sulphur dioxide, oxides of nitrogen, particulates, fly ash and bottom ash containing heavy metals including mercury, and liquid effluents. The countries where these plants operate have introduced strict laws to control their operations so as to minimize the environmental and health damage that these plants inflict on the public. The installation of these controls is very expensive, so much so that many coal power plant operators even in the USA are evading installing them because of the heavy expenditure. The US EPA has prosecuted many of these operators for non-compliance with the law…

According to the EIA report of the proposed Kalpitiya coal power plant, a 300 MW plant will generate each day, 28 tonnes of Nox, 250 tonnes of fly ash and 60 tonnes of
bottom ash. The SO2 generated will vary from 32 to 43 tonnes a day depending on the sulphur content in coal, which could be in the range 0.6 – 0.8%. Without any control measures, all these quantities of air pollutants will be emitted to the atmosphere. The wind data taken at Puttalam meteorology observatory indicates that for 8 months of the year, wind blows towards the land at the time the readings were taken, while it blows towards the sea only for 2 months. Hence, tones of all the pollutants emitted form the stacks each day will find their way into the interior land most of the time. One has to do a detailed study of their impacts on the health of the people, crops and vegetation to assess the cost of damage, and see whether it is worth going for the “cheap” power.

The EIA report recommends installation of various controls to reduce emissions to bring them within the limits set out by the environmental regulations. It also recommends that several monitoring stations be established to ensure that the actual emissions are within the expected limits. It also says that the instruments used in the monitoring exercise should be calibrated once a fortnight at least. The question is who is going to do all these.4

As Dr Ratnasiri goes on to point out, many countries, developed and developing, have had coal power plants for decades. In the case of developing countries, they have suffered heavy environmental damages in consequence, and many continue to do so. In the case of developed countries, they may have the infrastructure to monitor pollution and the resources to take corrective steps. But even in several developed countries, precisely because the corrective steps are so costly, there have been many cases of unlawful evasion of such obligations in an earlier paper, Dr Ratnasiri pointed out that:

A recent study conducted in Europe by some reputed research institutes and funded by EU costing EUR 10 million, has proven that the cost of production of electricity from coal and oil power plants would double when the cost of damage to the environment and to health were taken into account, whereas the corresponding increase with natural gas is only 30%. As a response measure, the EU has decided that Member States may grant aid for generating renewable energy up to US cents 5 per kWh, with the hope of avoiding the external costs.5

It appears that clean coal power is not cheap – perhaps less so than some available options. The attraction of coal power may be that it could be made cheap (for the energy authority, not for the nation) by waiving the requirements to keep environmental and health hazards down to acceptable levels. But the heavy negative externalities of such waiver cannot be evaded. If the environmental and health costs are duly estimated and taken into account, it may be found that coal power is costly, and that there are less costly options.

In respect of Municipal Solid Waste, Eng. Padmani Batuwitage, the senior officer in charge of the subject in the Ministry of Environment, recently presented a paper titled ‘Municipal Solid Waste Management: Challenges and Opportunities’, at the 2004 Annual Conference of the association of

VI. Sub-regional Presentations (Country Reports)  75

consulting Engineers, Sri Lanka. She notes that not only is the quantity of solid waste likely to increase more that’s in proportion to the population of the urban centers, the kind of waste is also likely to become more problematic to dispose of as the degree of urbanization rises. Moreover municipal solid waste management requires a high level of community cooperation in collection as well as institutional support in effective disposal.

Sri Lanka has three kinds of Local Authorities, viz Municipal Councils, Urban Council and in the rural areas, Pradeshiya Sabhas. These reflect three levels of urbanization – of 311 Local Authorities, only 18 are Municipal Councils, but these account for 56% of the total of 2700 tons of waste collected daily. Of this total, 700 tons are collected by the Colombo Municipal Council. Waste collection and disposal systems therefore need to take account of both quantity and kind of waste.

The key to good waste management is pre-sorting before collection. This will facilitate adherence to the hierarchy of re-use, recycling and environment friendly disposal (after treatment as required). Where there is no pre-sorting, and dumping of all waste is resorted to, what happens is that some of the poor spend much time and effort at the dumping grounds to seek to scavenging (to meet their own needs), in an inefficient unhygienic and hazardous manner the sorting that could have been done more efficiently at the household level. Some re-use and recycling may follow, but this is surely the wrong way to do it.

In Sri Lanka, 40-85 of the Municipal waste is bio-degradable if pre-sorted, this component of the waste would be a valuable environmental asset without pre-sorting it is an environmental liability. There are also other reusable and recyclable waste (e.g. wood, paper, glass and metal items) which are best pre-sorted – closing the resource cycle through re use and recycling not only avoids pollution but also arrests resource depletion. With good management, resources will be conserved and quantity of waste for final disposal will be minimized, thus reducing the cost of such disposal as well as the environmental damage on that account.

In Sri Lanka, environment friendly re-use and recycling are culturally acceptable. There have been many who earned their livelihood in this manner, collecting used paper, bottles etc. from homes and selling them. Even earlier, Buddhist monks were directed by their orders that when their robes are no longer usable as clothing, they should be used as binding material in building construction. For various reasons, some of these old traditions have ebbed away. These need to be revitalized and improved. For example, there could be weekly markets at which different kinds of waste could be exchanged, leading to economies in transport and handling, scale specialization in processing of waste, etc. In the early stage, some modest subsidies may be needed, but this may be cost-effective overall.
Sub-regional Presentation – II
A Country Report Coverage on:
Socio-economic Issues – Livelihood, Challenges and Education Status in Cambodia

Ms. Houth Ratanak
Director, Open Forum of Cambodia
Cambodia

Country Background
Cambodia with area of 181, 035 square kilometers is situated on the Southwestern part of the Indochina peninsula in South East Asia, and a member of ASEAN, it is a little over one half of Vietnam and about one third of Thailand. It is bordered by Thailand to the West and Northwest, by Lao PDR to the North, by Vietnam to east and Southeast, and by the Gulf of Thailand to the South and Southwest.

Cambodia is a multi-racial country with a population of 13,124,764 Million (2003 est.). An estimated 85-90 percent of the population lives in rural areas. Ethnically the population consists of about 90 percent Khmer, 5 percent each of Chinese and Vietnamese and small numbers of hill tribes (Chams and Burmese). Khmer is the country's official language. It is spoken by more than 95 percent of the population. French, as a second language, is also spoken, mostly by older people. English is more commonly spoken by the younger generation.

It is important to recall that for nearly 20 years, Cambodia was isolated from the international community by war and internal strife that began in the early 1970s and resulted in a massive loss of life and human capital as well as the devastation of the economic and social infrastructure. To some extent, the considerable socio-economic challenges facing Cambodia are a legacy of this period.

For the first time in almost three decades, with the return of peace and the restoration of macroeconomic stability after the 1993 elections, Cambodia has the opportunity to make far-reaching reforms in all facets of economic and social life. The objective is to raise productivity and living standards, ultimately to alleviate poverty, in the context of one of the lowest levels of per capita income in the world. After almost three decades of disorder, the Royal Government of Cambodia (RGC) is now grappling with complex socio-economic problems faced by developing economies.

After more than 25 years of instability and conflict, which led to the near collapse of governance institutions and systems in the country, the country is now a land at peace, open to the world. Cambodia has resolutely embraced principles of liberal democracy and human rights, free enterprise and the market economy, and full integration into the regional and world economy. Yet, the country is in the early stages of a long road paved with high expectations and severely limited resources. The
change agenda as outlined in various official documents such as the Cambodia Millennium Development Goals (CMDGs), the Second Socio-Economic Development Plan (SEDPII) and the National Poverty Reduction Strategy (NPRS) is demanding. Success will depend on the extent to which shared principles of good governance are upheld.

I. Overview of the Poverty Situation

Despite the absence of reliable data, there are signs that economic growth during the past decade in Cambodia has not produced any significant poverty reduction. Indeed, there are some signs that the situation is worsening - reduced per capita consumption (measured inriel); fewer public health facilities and rising infant and child mortality; poor education outcomes; increasing population pressure on cultivable land with rising rural underemployment due to labour-force entry of baby boomers and lack of growth in non-farm employment. Increased vulnerability of some, resulting in part from Cambodia's war legacy and the threat posed by the HIV/AIDS epidemic, are also important factors in poverty in Cambodia.

Inequality is also very high, particularly along urban-rural lines. In fact most of the economic growth of the past decade has been confined to urban enclaves, while rural growth, especially in staple food production, has barely kept pace with the increase in population. The problem of tackling poverty and inequality is thus largely one of addressing these inequalities between city and countryside by generating more broad-based growth. This is now possible, given the increasing stability of the countryside and successful macroeconomic stabilisation.

The depth of poverty is quite shallow, with the exception of certain especially vulnerable groups, and inequality is lower in the rural areas. Thus a poverty reduction strategy which aims at achieving more egalitarian growth by broadly targeting development of the rural areas is likely to have a significant and widespread impact. Such a strategy will be based, first, on increasing the dynamism of agriculture and, second, on generating non-farm employment, particularly in the rural areas if excessive stress on urban infrastructure is to be avoided. Both supply-side and demand-side measures will be needed. On the one hand, there is a clear need for demand expansion to promote rural prosperity and to integrate more of the rural population into the market economy. On the other hand, there is a need for great improvements in the supply of human and physical assets (both public and private) in order to improve the capacity of the vast majority of Cambodians to take advantage of opportunities which may arise.

Specific actions on the supply side, in education, health, provision of infrastructure and finance, etc., properly belong to the realm of sectoral interventions and largely fall outside the scope of this study. Here, we are concerned with the impact that macroeconomic policy can have on the ability to achieve such sectoral (and more micro-level) changes.

II. The Macroeconomic Framework

In the developing world, Cambodia is special on account of the historical legacy of genocide. This affected its progress towards poverty reduction through destruction of social support networks and shortages of skilled and intellectual human resources. During the 1980s, the country remained isolated from all but Soviet and Vietnamese assistance and, while formal peace was established under UN auspices in 1991, real stability was not achieved until late in the decade. In the last decade, while it
has succeeded in producing fairly consistent economic growth, the macroeconomic framework established under guidance from the IMF has not successfully tackled the key elements of poverty in Cambodia. To be sure, it is difficult to disentangle the impacts of macroeconomic policy from those of the political instability that affected the economy before 1999. The sharp fall in investment and output in the mid-1990s, for example, is more likely attributable to political events than to macro policy as such. However, even during high growth periods, poverty reduction either did not occur or was minimal. The question that we wish to pose in this report, therefore, is what changes could be made to the macro policy settings that would be conducive to a more rapid reduction in poverty and improved opportunities for the vast majority of Cambodians to participate in the benefits of this growth?

Growth in recent years has been very strongly influenced by expansion of the export-oriented garment industry. There are reasons to suppose that the rapid expansion of this sector is unlikely to continue. It is imperative, particularly in the context of the current uncertainty in the global environment to find ways of diversifying the sources of economic growth (including export growth) in order to absorb more of the excess capacity which presently exists. Land, labour and finance can all be used more effectively than they are now.

Up to now, the policy framework has served the country well, in the sense that the focus on tight monetary and fiscal policy has helped to eliminate excessive rates of inflation and generate some confidence in the authorities. Dollarization has also assisted in this process. In more recent years, however, there has been deflation and in the context of global recession, the stabilization package would appear to have outlived its usefulness. Even with global recovery in 2002, inflation has remained too low.

At the meso-level, sectoral policies implemented under donor guidance have largely addressed the problem of human capital, particularly the health and education sectors. These policies do go some way towards addressing poverty reduction, in the sense that they are generally gender sensitive - although the education policy is unlikely to assist the large proportion of older women in the workforce - and will be helpful in overcoming the extremely damaging legacy from the years of war and genocide. They will, however, have a very limited impact on income poverty unless there is a concurrent expansion of investment and employment opportunities for the newly trained and healthy workforce to take up.

A policy of selective and carefully targeted demand expansion seems to us to be a good solution to this problem. We note especially that there is considerable underutilized capacity in Cambodia's rural areas. There are no simple solutions, however. In particular, there are legal and institutional obstacles to a demand expansion policy, partly due to the historical legacy and partly due to the policy framework established under the IMF structural adjustment programme. Many of these policy-driven obstacles are well founded, especially as confidence in the authorities and in the financial sector is only gradually improving. They should not be undone in haste, but they should be undone over time.

III. Socio - Economic Development Challenges and Performance over the last decade

1. Economic Growth
The RGC's recipe for sound economic management includes an appropriate blend of macro-economic
stabilisation policies and microeconomic structural reforms. Since 1999, Cambodia has followed and made significant progress in implementing a macroeconomic framework aimed at achieving equitable long-term economic growth and Sustainable Development. The focus of this framework has been on maintaining macroeconomic stability, strengthening banking and financial institutions, implementing fiscal reform measures, ensuring sound management of public property, and increasing public investment to develop the physical and social infrastructure and human resource of the nation. Cambodia has made impressive strides in strengthening political and economic stability and reintegrating itself into the international community.

From the establishment of the RGC in 1993 up to 2002, average GDP growth was 5.5 percent. Agriculture accounts for 33.4 percent of GDP, and employs more than 70.7 percent of the labour force. The sector is growing on average by 3.6 percent, but agricultural output has experienced large year-to-year fluctuations, reflecting insufficient investment in the sector, over-exploitation of natural resources, and precarious weather conditions.

The industrial sector has been the main engine of growth, increasing annually by an average of 17.7 percent. The sector consists mainly of the manufacturing sub-sector (78.5 percent) and the construction sub-sector (18.8 percent). The textile and garment sub-sector led this spurt, displaying a dramatic growth in its exports during the last four years, following the US granting Most favoured Nation (MFN) status in 1996 and the Generalised System of Preferences (GSP) in 1997. The output share of services sector's output has contracted radually as the industrial sector has expanded. It fell from 39 percent of GDP in 1993 to 34.2 percent in 2002. Over the last few years, the tourism sub-sector has made a significant contribution to economic growth by attracting foreign investment, creating jobs and generating income for the local people. This sub-sector generates about US$200 million per year in income, creating about 100,000 jobs. Thus, tourism has significantly contributed to the country's economic development and poverty reduction. This is a promising sector that could potentially contribute to growth and employment.

2. Inequality
Inequalities take various forms in Cambodia. There are significant gender disparities in social, economic and political spheres of life highlighted in the discussion of CMDG3. Inequalities are also important between rural and urban communities, especially Phnom Penh. Standards of living and income earning opportunities are generally much higher in urban than rural areas. Inequalities are also significant within rural areas, usually to the detriment of regions where minorities are concentrated. Making progress toward CMDG targets over the next decade requires increased investment in physical and human capital, which targets areas that are comparatively worse off.

3. Population
High population growth has implications for virtually all CMDGs. First, it affects poverty by increasing the number of dependents to income earners within the household, by increasing under and unemployment and depressing wages if the increasing labour pool is not absorbed into the economy. Second, it impacts on educational outcomes by increasing the pressure on public service delivery in education. Third, it often reflects significant gender inequality insofar as women are without reproductive choice and subject to traditional norms about female sexuality. Fourth, infant and child mortality are closely related to birth spacing and mother's age at childbirth, both of which are
adversely affected by high population growth, as is the quality of health care provision. The same point applies to maternal mortality. In addition, the burgeoning young population living in very poor hygienic conditions puts undue stress on the health care system, which is unable to respond effectively. Fifth, the high demand for social services strain government finance and threaten macroeconomic balances. Sixth, rapid population growth in rural areas is likely to lead to deforestation, degradation of the land, depletion of water resources and reduction in biodiversity. In urban areas it puts pressure on water and sanitation provision, and often harms air quality. In addition, high population growth is often associated with increasing conflict over land in rural areas and to social ills in urban areas such as overcrowding, spread of infectious diseases and delinquency. The challenge is to implement an effective population policy attuned to the social and cultural context of Cambodia by special taking education as the basis for development.

IV. The Basic Education For Nine Years

1. Major Current Policies and Programmes
At the present, five policy areas have been approved by MOEYS and its partners since mid-2002. Each policy area comprises a strategic action plan over the period 2003-06 to ensure achievement of priority sector goals and targets. The five policy areas are as follows:

1) Effective partnership towards Education For All
2) Increased equitable access to education services
3) Improved quality and internal efficiency of education
4) Enhanced management and de-concentration of education services
5) Increased resource allocation to the education sector

The Education Sector Support Programme 2002-2006 lists twelve Priority Action Programmes of which eight focus on basic education, respectively in the following areas: education service efficiency; primary education quality and efficiency; secondary education quality and efficiency; continuous teacher development; sustainable provision of core instructional materials; expansion of non-formal education; strengthened monitoring systems; and scholarships and incentives for equitable access. In addition, the government has investment programmes that focus on school facility development, institutional development and capacity building.

2. The Key Challenges
Six major challenges have been identified in the education sector:

1) First, there is a need to address inequalities within the educational sector with respect to socio-economic status, gender, ethnicity and location. These disparities as pertain to educational access and quality become more severe as the level of education increases.
2) Second, improving the quantity and the quality of education services is among the major challenges of the government in the education sector. Problems include the undersupply of schools relative to the population density, the undersupply of schools with a full range of basic educational grades, lack of trained personnel, and lack of proper incentives among teaching staff to perform at high levels and encourage some of them to work in remote areas, monitoring staff performance and attendance, shortages of instructional materials, and poor quality of sanitary facilities within existing schools.
3) A third challenge related to the demand side is the need to increase the demand for education by: (i) lowering cost barriers where they exist, (ii) changing perceptions about the likely
returns to education, (iii) reducing the opportunity cost of going to school for poor families and (iv) reducing nutritional deficits which affect both school attendance and scholastic performance.

4) Accelerating the process of decentralization and generating greater community involvement in the management of schools is a further challenge to the education sector. It is necessary to enable schools, institutions and communities to have greater voice and responsibility in the running and management of education services. In the Cambodian context, greater community participation will be essential to improve the quality of educational services as well as the demand for them by families.

5) The above-mentioned problems of supply and demand are reflected in the low survival rates in primary and lower secondary school as well as the low enrolment ratio in lower secondary. A further challenge will be to keep children in school once enrolled through a range of options.

6) A final challenge involves improving the quality and access to preschool education. Many young children are not sufficiently mature to manage education programmes when they enter school for the first time. This is related to a lack of preschool facilities and inadequate nutrition and health care.

3. Framework for Meeting the Key Challenges

The main policy initiatives are the Education Strategic Plan (ESP), the Education Sector Support Programme (ESSP) and the Education For All (EFA) plan, whose core elements can be summarized as follows:

1) Assuring equitable access to basic education through increased budgetary allocation in favour of basic education (primary and lower secondary education) and provision of targeted subsidies for those unable to afford the cost of schooling. In addition, government will need to promote greater community and parental involvement in managing educational services through parent-teacher associations and the like.

2) Targeting students from poor families to ensure equity in opportunities through subsidized transportation and scholarships, for girls in particular. The priority strategy for reducing levels of youth illiteracy in Cambodia in the longer-term is to focus on schooling that ensures the right of all Cambodian children to complete a basic education of good quality. Priority will also be put on phasing out incomplete schools and in the medium run, reducing multi-grade teaching through the following means:
   - Allocation of school operating budgets based on a formula that benefits small schools;
   - Identification of incomplete-grade schools as a priority within facilities development programmes;
   - Introduction of new incentives for multi-grade teaching and remote posting;
   - Preliminary work on multi-grade teacher training curricula.

3) Promoting quality and efficiency improvements through sustained increases in wage and non-wage operational spending targeted on: instructional material; basic education supplies and equipments; teacher development; and quality monitoring and governance reforms. Efficiency measures will focus on more efficient deployment of teaching and non-teaching staff. Other priorities are (i) expanding and improving comprehensive early childhood care and education to enhance school readiness, instructional efficiency and effectiveness and (ii) developing age appropriate teaching methods and materials to ensure that pupils enjoy their
school experience, progress to the next grade without repeating and do so for every grade until they complete basic school.

4) Accelerating decentralization process by increasing operational autonomy of all education institutes, expanding delegated authority to provinces and districts in planning and managing in conjunction with EFA commune initiatives, and strengthening decentralized monitoring and audit systems.

VI. Cross Cutting Education Reform Progress and Impact

1. Reform Progress and Impact Analysis by Gender and Ethnic Minority

1) Progress and Impact on Gender
The reforms are continuing to have a positive impact on female enrolment in primary and secondary school. Despite primary enrolment slowing down, in 2003-04 the number of girls in primary schools increased by 7,000 compared to a net decrease in male enrolment growth. The growth in the number of girls can be attributed to remote and rural areas (growth of around 12,000, larger than overall growth due to a decline in urban female enrolment). Since 2000, the number of girls in primary school has increased from 1.11 million to 1.29 million (girls 16% growth, boys 12%). This suggests that the elimination of start of year contributions continues to have a differential positive effect on girls attending primary school.

A key strategy will be to continue to expand the range of complementary None Formal Education (NFE) programmes in order to allow re-entry at various levels of education. Females are recognising these NFE opportunities demonstrated by the high proportion enrolled in the various programmes, especially primary equivalency and literacy. In various ways, these programmes provide second opportunities for drop outs to return to education and progress to higher levels. The Ministry recognises a number of challenges in optimising the impact of these programmes. Firstly, there is a need to ensure effective standards and accreditation. Secondly, the scope for more formal accreditation of literacy programmes has to be addressed as part of a ladder of opportunity. Thirdly, the scope for expansion of secondary equivalency programmes as a medium term measure to enhance female enrolment will be investigated.

2) Progress and Impact on Ethnic Minority
Improving equitable access to high quality education services in minority areas continues to be a key component of ESP/ESSP strategy and programming. The Ministry acknowledges that the broader ESP/ESSP strategies and programmes will partially address these specific concerns, alongside some targeted interventions. There has been positive impact on primary enrolment in ethnic minority areas with enrolment growth ranging between 6% (Steung Treng) and 16% (Ratanakiri) in 2003/04. At lower secondary level enrolment there has been growth of 27.5% (Preah Vihear) and 37% (Mondulkiri), acknowledging the low base line of total enrolment in previous years. In all cases female enrolment growth in lower secondary exceeded that of males.

Ethnic minority areas remain under-served in secondary education. Lower secondary net enrolment rates in the 4 provinces are low at under 10% compared to an overall national average of 21%. The same situation applies at upper secondary where these provinces have very low net enrolments
compared to the national average of 8%. However, overall secondary enrolment in these ethnic minority areas is growing comparatively quickly from a low baseline. The Ministry has continued two specific measures to address this issue in 2003/04 through targeted secondary school facilities and targeted scholarships/incentives for ethnic minority students.

2. Education in Remote and Border Areas: Progress and Impact
The Ministry has undertaken an initial strategic analysis of key institutional issues relating to the improvement of education services in remote and border areas, alongside the questions of small and/or incomplete schools. The Ministry is already taking a number of measures to improve services in these disadvantaged areas and schools through initiatives such as double-shift, multi-grade and remote teachers allowances. Over the past year, the Ministry has reviewed the scope for introducing additional pupil and teacher incentive strategies.

The high incidence of incomplete schools in the border communes has a number of consequences. Firstly, it contributes to higher rates of primary school drop-out and growth in the number of out-of-school youth. Secondly, it contributes to lower rates of progression to secondary education and reduction in immediate demand for secondary schooling. Low secondary school enrolment in the border areas is exacerbated by the limited availability of lower and upper secondary school facilities. There are 12 border districts with no lower secondary school facilities representing 20% of total, compared to only 8% in non-border districts. At upper secondary level, the figures are 47% and 25% respectively.

VII. Conclusions
Despite steady economic growth during the past decade, poverty has not declined significantly, falling from only 39 to 36 percent between 1994 and 1999. Rural growth has barely kept pace with population growth and there are worrying trends of rising rural unemployment and lack of growth in non-farm employment. If past trends continue, poverty incidence would decline to 28 percent by 2015. Clearly, this falls short of the set target of reducing the poverty headcount to 19.5 percent. Meeting the MDGs targets would require faster economic growth and more poverty reduction associated with that growth.

On the social side, progress has been slow and uneven. While access to primary education has improved significantly over the last decade, Cambodia is unlikely to reach its targets in terms of access to lower-secondary education.

The low-average level of education of the Cambodian labour force and the high level of functional illiteracy (particularly among women) poses huge problems for productive employment generation. The issues of poor quality of schooling and premature dropout, particularly by girls, need to be addressed. An emergency literacy campaign also needs to be mounted, aimed particularly at the 475,000 males and 732,000 females between the ages of 15 and 29 who are, according to the latest survey, functionally illiterate.

Gender equality remains a major issue in most areas of socio-economic life despite clear government commitment to female empowerment. It is too early to assess whether targets will be met. However, the challenges are significant given the relatively recent mainstreaming of gender issues in the policy
process and the scale of attitudinal and behavioural change required reaching the targets by 2015.

**Reference**


A Study of the Cambodian Labour Market: Reference to Poverty Reduction, Growth and Adjustment to Crisis.

Cambodian Royal Government Web Site: www.cambodia.gov.kh
Sub-regional Presentation – III
Viet Nam and Education for Sustainable Development: Reality and Prospects

Ms. Le Thi Hoang Cuc
Secretary of the Vietnam National Commission for UNESCO
Head of Education Unit
Vietnam

I. Vietnamese Government’s Commitment to Education
Viet Nam, a country with more than 80 million people, is a developing country which is in the process of transition from a centrally planned to a market economy and world economic integration. Besides common challenges facing developing countries, Viet Nam is facing with greater challenges, i.e. the need to accumulate for long-term development and industrialization and modernization in parallel with the need to urgently alleviate poverty and create social equality in differently developed sectors. Beside impacts of integration, modernization, hunger alleviation and poverty reduction, Sustainable Development requires special contribution of science and technology in order to preserve biodiversity and cultural diversity, conserve natural resources and prevent environment pollution.

Today, education is treated by governments and various stakeholders as an investment for future and is considered an effective tool for Sustainable Development. This common trend is also clearly reflected in Viet Nam.

Viet Nam enjoys the advantages of a strong political commitment to education. The Government of Viet Nam attaches much importance to education in the development and is strongly committed to develop education, especially ESD. Viet Nam Education Law, Viet Nam Education Development Strategic Plan for 2001 - 2010, Viet Nam National Plan of Action on Education for All and other documents emphasize the followings:

1) Education and training is the Priority-Number-1 national policy. Together with science and technology, education is the determining factor for economic growth and sustainable social development. Investment for education is considered investment for development.

2) Education is the foundation for social development, and rapid and sustainable economic growth

3) Educational innovation should be in keeping with the demands for socio-economic development; at the same time, creating a learning society that provides life long education for all and promotes all for education is an urgent task.

4) To continue educational innovation systematically and comprehensively in order to enhance the quality and effect of education; and to serve the country’s Sustainable Development.
As Viet Nam’s Education System is closely related to social, economic and political changes and developments, it has to reorient to be able to cope with new challenges of the country. Overall objectives of educational innovation for Sustainable Development in Vietnam are as follows:

1) To improve the quality and effectiveness in education;
2) To meet the diversified demands for and levels of human resource in order to serve regional and international integration;
3) To increase the scale and structure of the education system.
4) To guarantee the implementation of policies on social equity in education. The implementation of social policies to ensure social equality (especially to remote and disadvantaged areas and groups of people…) is an essential task of education. It is not merely a priority but a strategy to provide human resource for Sustainable Development.

II. Vietnam and ESD and ESD-related issues:
Education for Sustainable Development is quite new concept in Viet Nam. However, some contents of ESD have actually been taught in schools and colleges/universities. For example:

1) For kindergarten: some concrete goals relating to life-skills of children of 4-5 years old, i.e. personal hygiene, environmental hygiene, hygiene in eating and drinking; know how to avoid some common diseases; acknowledgement of insecurity and dangerous places and know how to avoid these places; understanding in some extent environment around and nearby society.…

2) For general schools: the orientations of curricula innovation meet the need of comprehensive education, ensuring harmonious development of personality and professional orientation, forming and developing necessary capability for serving national industrialization, modernization and international integration.
   - In primary school: We attach importance to community life-skills, adaptable to daily changes in modern society such as communication, negotiation, leadership, cooperation; forming creativities, critical thinking, problem resolving, decision making…. Other issues have been taught in primary schools, for example personal and environmental hygiene, disease prevention, health and nutrition education, security at home, in schools and public places, how to combat with stress.
   - In lower secondary school: Through innovation of objectives, curricula and methodology, developing lifelong learning ability, teaching students with the orientation: learning to know, learning to do, learning to be, learning to live together…
   Life-skills have been taught in some subjects such as technology assists a student to learn to do, i.e. home economics (grade 6) provide students with knowledge and technique easily applied into life…
   - In upper secondary school: We are deploying renovated curricula in upper secondary schools (to start experimentation in the school year 2003-2004) in such a way that objectives and contents of education will help training human resources for national industrialisation and modernisation. Together with the innovation of methodology, some contents of ESD-related issues such as environmental protection, gender, drug prevention, transportation security have been integrated into curricula and textbooks at all levels.

3) In universities, colleges, vocational secondary schools: Following contents have been taught separately or integrally into other subjects:
   - Population education
   - Environment education
- AIDS/HIV education
- Gender and sex-related education
- Drug and addicted substances prevention.
- Sexual connection-borne diseases

Through extra-curricular or non-formal education (Community Learning Centres for example) activities, following issues have been addressed:
- Development of green-clean-healthy environment
- Participation of school-family-community
- Cultural and natural heritage protection and preservation
- Safe drinking water
- Poverty alleviation…
- Preservation of cultural identity
- Law on marriage and family; Law on environment; Law on forest protection.…
- Family planning
- Prevention from social evils

Following are two major subjects which have been rather independently carried out:

1) HIV/AIDS Education:
This programme is to promote actions of pupils and students that are relevant to HIV/AIDS prevention requirements. On knowledge, pupils and students are to have basic and essential knowledge on HIV/AIDS and HIV/AIDS prevention. On attitude, to shape a positive, reasonable and active attitude in pupils and students towards preventing AIDS and protecting themselves, their family and community from AIDS. On faith, pupils and students are to trust in science-based HIV/AIDS preventive measures. On action, pupils and students are to use HIV/AIDS preventive measures everywhere at all times.

At present, total periods of HIV/AIDS education which students have to spend in schools and in universities/colleges or in secondary vocational schools are 13 periods: two periods for grade 3 three periods for grade 4, one period each for grade 8, grade 9, grade 10 and grade 11, four periods each course for students in universities, colleges and secondary vocational schools.

For extra-curricula activities, there are a two-month media campaign organized and participated by schools, the celebration of the World Day of HIV/AIDS prevention (1 December), and other activities such as: contests encouraging creativities and studying issues related to HIV/AIDS, visit to and discuss with HIV/AIDS-infected persons. Schools are to carry out annually 7 teaching periods for the document “For the Future of Life”.

2) Environmental Education:
Up to now, Environmental Education has not been a separate subject in schools but it is integrated into other subjects. We are in the process of carrying out a pilot project on Environmental Education, with the initial stage of training teachers. These are the key persons who can promote Environmental Education in schools at all levels throughout the country.

In accordance with the Degree 36 CT/TW of the Political Bureau concerning the enhancement of
environmental conservation work in the period of national industrialisation and modernisation and the Decision No.1363/QD-TTg “Inclusion of environmental conservation into curricula of national education”, Ha Noi University of Education carried out the Project VIE/98/018- “Environmental Education in general schools in Viet Nam” to train core human resources for Environmental Education. Having passed 6 training courses in 2002 and 2003, 126 persons have been trained with basic knowledge on environment such as the importance of environment towards human life; the need to form environmental ethics; the necessity to preserve biodiversity in order to conserve environment; the impact of economy on environment….

On 9 and 10 November 2004, a Workshop on Building and Sustaining the Local Key-Teachers for Environmental Education and Education for Sustainable Development” was organised by the Centre for Environmental Research and Education at Ha Noi University of Education to provide an opportunity to evaluate achievements in the field of Environmental Education, and to initiate plans for activities in the framework of DESD for coming years.

### III. Activities Related to ESD and DESD to be Carried out in Viet Nam in Near Future:
Raising awareness among policy/decision makers as well as public about ESD and DESD.

1) Setting up a National Committee of Coordination of the DESD, an inter-ministerial organs which has a task to implement all activities concerning the DESD.

2) Developing and implementing policies and strategic plans for ESD on the basis of linking activities in the framework of DESD with those of EFA and UNLD.

3) Training personnel and capacity building, especially for teachers and educators, with interdisciplinary and learner-centred approaches.

4) Implementing education innovation so that issues serving Sustainable Development be inserted in curricula and learning/teaching materials.
Sub-regional Presentation – IV
Framework for Sustainable Development in Bangladesh

Mr. Mohiuddin Ahmad
Co-team Leader & Social Development Expert
Integrated Coastal Zone Management Project
Bangladesh

Summary
Increasing population, competing use of resources, vulnerabilities, lack of opportunities, important ecological hotspots, etc, call for sustainable management of natural resources. Sustainability is often perceived as a governance issue. The overall goal of Sustainable Development is to create conditions, where the reduction of poverty and development of livelihoods can take place on a continuous basis.

The government of Bangladesh has announced, over the years, policies for carrying out mandates in different sectors that contribute to Sustainable Development. Strategic thrusts have been put on adaptation to declining natural resources, increasing population and decentralization. Environmental Education has been incorporated in education curriculum. Area-based approach is being pursued for natural resources management. A host of NGOs are also active in Sustainable Development issues and are implementing a wide range of public awareness programmes.

I. Introduction

1. Context
According to 2001 population census, Bangladesh has about 129 million people living on 147,570 km² of land. The country is known as a zone of vulnerabilities as well as opportunities The combination of natural and man-made hazards, such as erosion, high arsenic content in ground water, water logging, water and soil salinity, various forms of pollution, risks from climate change, etc, have adversely affected lives and livelihoods and slowed down the pace of social and economic developments. However, Bangladesh has distinctive development opportunities that can be instrumental in reducing poverty and can contribute significantly to the development.

Bangladesh also contains several ecosystems that have important conservation values. Part of the Sundarban, the world’s largest stretch of mangrove ecosystem, has been declared a World Heritage Site. The country has not only biodiversity hot spots, but also provides the ecological foundation for important common access resources.
Increasing population, competition for limited resources, natural and man-made hazards, lack of economic opportunities, important ecological hot spots, etc, calls for sustainable management of natural resources.

2. Sustainable resource management - key to development
Sustainability is often perceived as a governance issue. The main principles include:

1) integration through harmonization and coordination;
2) adoption of a process approach;
3) co-management and participatory decision;
4) participatory monitoring and evaluation; and
5) interventions based on the best available knowledge.

The goal of sustainable resource management is to create conditions, in which the reduction of poverty, development of livelihoods and the integration of the backward sections of the people into national processes can take place without destroying the natural resource base. This calls for reduction of natural resources based activities and more thrust on skill based activities for livelihoods.

II. Policy Framework

1. Existing policies
The Government has announced, over the years, its policies for carrying out mandates in different sectors. Various ministries implement programmes directly or indirectly through respective agencies and the resource management and sustainability issues are being adopted directly or indirectly with these policies. The objectives of these policies are mainly:

1) to consider special management approaches;
2) to present a framework for integrated planning; and
3) to create an enabling institutional environment.

The following development objects are mentioned explicitly or implicitly in various policy documents of the government including the national strategy for poverty reduction:

1) economic growth;
2) meeting basic needs and creating livelihood opportunities;
3) reduction of vulnerabilities and enhancement of coping capacities;
4) equitable distribution of resources and economic benefits across social strata;
5) empowerment of communities;
6) women’s development and gender equity; and
7) conservation and enhancement of ecologically critical areas.

To achieve these objectives, the spotlight is on livelihoods of the people and area-based development.
encompassing efficient management and sustainable use of natural resources.

2. Reduction of vulnerabilities
The level of well being of households has direct correlation with exogenous phenomena influencing them. Disasters like cyclone, drainage congestion, land erosion and drought take toll on life and property and depletion of natural resource base that supports particularly the poor adversely affect them. Majority households are vulnerable to climate change. Agriculture continues to be a major source of employment, which is seasonal in nature.

In this regard, Government policy is as follows:
1) Reduction to vulnerability to natural disasters would be an integral aspect of the national strategies for poverty reduction.
2) Effective measures will be taken to enhance coping capacity of the poor during the period of disaster and to initiate insurance scheme for improving their social security.
3) Effective measures will be taken for protection against erosion and for rehabilitation of the victims of erosion.
4) Combining cyclone shelters, multi-purpose embankments, road system and disaster warning system will enhance safety measures. It should include special measures for children, women, the disabled and the old.
5) Sea-dykes will be regularly maintained as first line of defense against storm surges and afforestation on it according to the existing policy.
6) Earthquake management will be strengthened and capacity to cope with earthquakes will be enhanced.
7) Adequate provision will be made for safety of livestock during disaster and post-disaster period.
8) Programmes shall be taken to encourage all for tree plantation in a planned manner in the coastal zone
9) The asset base of the poor, with special focus on women, will be improved through ownership or access so that their coping capacity improves

3. Basic needs and opportunities for livelihoods
The 2002 World Summit on Sustainable Development (WSSD) adopted five areas for particular focus: water and sanitation, energy, health, agriculture and biodiversity (WEHAB)7. To meet basic needs of the people and enhance livelihood opportunities, Government policy in this regard is as follows:
1) Alleviation of poverty through creation of job opportunities, and finding options for diversified livelihoods would be the major principles of all economic activities. Economic opportunities based on local resources will be explored to enhance income of the people.
2) The intensity of coverage of primary education, health care, sanitation and safe drinking water facilities will be increased.
3) Food production will be continued at the self-sufficiency level and of higher production of diversified high-value export goods.
4) Private sector and the NGOs will be encouraged to implement activities for the poor people.

7 Water, Energy, Health, Agriculture and Bio-diversity
5) Collateral-free credit under easy terms will be arranged as part of all livelihood enhancement programmes and activities.

6) No alteration or stoppage of an existing employment opportunity shall be made without creating opportunities for alternative employment.

7) Special measures will be taken during the period of disaster.

8) *Khas* (government) land will be distributed among the landless and a more transparent process of land settlement will be ensured.

9) Free flow of information for the people will be ensured.

4. **Sustainable management of natural resources**

The country is full of diverse natural resources: inland fisheries, marine fisheries, mangrove and other forests, land, livestock, salt, minerals, sources of renewable energy like tide, wind and solar energy. Medium and long-term government policy to ensure sustainable management of both biotic and abiotic resources is as follows:

1) Every possible steps shall be taken to secure just share from all international.

2) Suitable measures will be taken for sustainable use of renewable resources and, to that end, limit harvesting, extraction or utilization to the corresponding cycles of their regeneration.

3) Sustainable use of resources shall be ensured. Combination of resource use, e.g. agriculture, forestry and fishing including aquaculture is often the major economic activity. Efforts will be given to make this sustainable.

4) Optimum utilization of resources will be ensured by taking advantage of the complementarities and trade-offs between competing uses.

5) Rigid enforcement of conservation regulations will affect the livelihoods of many people and such conservation efforts will be linked, as far as possible, with alternative opportunities of employment.

6) Initiation of plan and its implementation will be ensured by participation of people of all sectors.

5. **Equitable distribution**

Different kind of social, economic, technical or institutional barriers limit access of the poor people to opportunities. The resources available in a particular jurisdiction may be good enough to meet everyone’s basic need. However, due to ineffective access mechanism, the disadvantaged cannot get there. To ensure right of the neglected and disadvantaged groups, government policy is as follows:

1) Actions will be designed to reach the poorest and the remote rural areas, which are vulnerable to adverse ecological processes and those with high concentrations of socially disadvantaged.

2) In order to ensure equity, the thrust should be on human development of the poor for raising their capability through education, health, nutrition, employment-oriented skill training and social interventions.

3) Measures will be adopted that increase access to natural resources for the poor and the disadvantaged (on which they are dependent for their livelihood).

6. **Empowerment of communities**

Enhancing their safety and capacity will do mainstreaming of the backward people.

In this context, government policy is as follows:
1) Equal participation of all stakeholders, men and women, will be ensured and establishing effective cooperation between the government agencies, local government institutions and non-governmental organizations.

2) Co-management procedures will be established that will bring decision-making power to the grass root levels.

3) Specific vulnerabilities of the communities will be addressed: like farmers, marine fishers, salt producers, dry fish processors, people living on forestry resources, urban poor, vulnerable ethnic communities and so forth.

4) The power and responsibilities for designing, formulation and implementation of local level development programmes and projects will be delegated to local government institutions.

5) Initiatives will be taken to keep up the cultural heritage of different indigenous communities.

7. Women’s development and gender equity
It is recognized that there are gender inequalities and gaps, particularly in the fields of access to livelihood assets and access to resources. Malnutrition is severe among girls. Poor access to sources of potable water for domestic purposes contributes to heavy workload on poor women. Other gender issue that affects women’s life and limits their participation is personal insecurity, more serious in remote areas. Enabling cultural and institutional environment is necessary to remove hurdles to mobility of women.

The national strategy of the government clearly states the importance of women’s development and reduction of gender gaps as a development objective. The government has ratified major international conventions on the rights of women and children.

Government policy is as follows:

1) A gender sensitive and participatory approach will be adopted that focuses at the reduction of gender inequalities and that takes into account differences in needs and interests between men and women.

2) Efforts will be made to close the gender gap, giving priority to women’s education, training and employment and special support for broadening their coping capacity.

3) Special attention will be paid towards employment generation for women, the promotion of women entrepreneurs as well as the removal of restrictions on women’s employment and economic opportunities.

4) During distribution of newly accreted lands, special attention will be paid to the allocation of land titles to women.

5) Special projects will be implemented exclusively addressed to livelihoods enhancement and empowerment of disadvantaged women.

6) Necessary institutional measures including mass awareness and motivation on violence against women will be taken.

8. Conservation and enhancement of critical ecosystems
Necessary measures will be taken to conserve and develop aquatic and terrestrial including all the ecosystems of importance identified by the Bangladesh National Conservation Strategy (mangrove, coral reef, tidal wetland, sea grass bed, barrier island, estuary, closed water body, etc).
Implementation of all laws for the protection of all special areas\(^8\) will be ensured for environmental balance.

Government policy in this respect is as follows:

1) **Conserving the ecosystems**
   1) Meaningful conservation will be enforced of critical ecosystems including ECAs, heritage sites and marine reserves.
   2) Special measures will be taken for conservation and development of the natural environment of Sundarban.
   3) The programmes for institutional strengthening and capacity building will be supported along with further development of the regulatory framework for the protection of the environment.
   4) The role of the Coast Guard will be acknowledged with emphasis and its capacity will be enhanced so that it can be used on behalf of all relevant institutions as a common resource for enforcement of different regulations applicable to the coastal zone.
   5) For activities that have direct adverse consequences on bio-diversity, steps will be taken to stop those activities and specific mitigation measures will be taken to minimize those effects.
   6) To protect the environment, all commitments shall be honored as signatory to different international protocols and guidelines in planning and implementation.
   7) Efforts will be made to harmonize the provisions of different existing laws and enact new laws, where required, to protect and preserve the coastal environment and its resources.
   8) Special measures will be taken for bio-diversity conservation.
   9) Measures will be taken for hill management including prohibition of hill cutting

2) **Pollution control**
   1) Zoning regulations will be established for location of new industries in consideration of fresh and safe water availability and effluent discharge possibilities.
   2) All industrial units will be required to install built-in safeguards against pollution within a given timeframe and will help them in obtaining financial support from international bodies to carry out the adjustments. Units failing to comply with the pollution standards will be required to pay “green tax” for cleanup of the environment polluted by them.
   3) Sewage treatment plants will be set up for the major cities and gradually in other urban centers.
   4) Steps will be taken to handle the issue of discharge of bilge water from ships and oil-spill according to international conventions to which Bangladesh is a signatory.
   5) A review of the desirability of supporting ship breaking as an industry will be done and, in the event of its continuation, environmental standards will be prescribed under which it has to conduct its activities.

3) **Climate change**
   1) Existing institutional arrangements for monitoring of climate change in Bangladesh will continue. Steps will be taken to support upgrading of technology and institutional

---

\(^8\) Reserve forest, wildlife sanctuary, world heritage site, marine reserve, national park, eco park, game reserve, ecologically critical areas (ECAs), Ramsar site, etc.
strengthening for enhancing their capacity for generation of better data and more accurate long-term prediction and risk related to climate change.

2) Implementation of adaptive measures identified in relation to climate change for coastal zone and resources shall be gradually undertaken.

3) Efforts shall be made to continuously maintain sea-dykes along the coastline as first line of defense against predicted sea-level rise.

4) An institutional framework for monitoring/detecting sea level rise shall be made and a contingency plans for coping with its impact.

III. Vulnerability

1. Vulnerability Context

For poor people, vulnerability is both a condition and a determinant of poverty, and refers to the ability of people to avoid, withstand or recover from the harmful impacts of factors that disrupt their lives and that are beyond their immediate control. In Bangladesh, a wide range of vulnerabilities is identified. These are:

1) the threat of cyclones and storm surges that causes deaths and destruction;
2) the threat of land erosion that causes untold sufferings and dislocation;
3) deterioration and the declining viability of many distinctive and threatened ecosystems;
4) widespread poverty, limited livelihoods opportunities (especially outside agriculture) and poorly developed economic linkages;
5) poor levels of service provision that make the isolation of many areas worse.
6) highly unequal social structures, with a small powerful elite dominating the mass of people, allied to high levels of conflict and poor law and order;
7) changing patterns of land use that are affecting the morphology and water resources characteristic;
8) resource degradation;
9) poor access to infrastructures and technologies; 
10) surface and sub-surface salinization including saline intrusion into the freshwater aquifers; and
11) flooding and drainage problems.

These vulnerabilities affect the livelihoods of the communities. Their significance, however, vary greatly between localities, occupational groups and sexes. Also important is the ways in which vulnerabilities interact with each other, with most households, and especially the poor, facing multiple vulnerabilities that compound each other in terms of both the impact of specific events and the capability to recover from these events when they do strike. For example, the poor infrastructure and remoteness of many localities means that the immediate impact of a major cyclone is likely to be more severe and relief efforts are hampered. Subsequently, when the survivors are rebuilding their livelihoods after the disaster, poor access to market, credit and other services, institutional weaknesses and the deterioration of the resource base delay and hamper the recovery process.

These vulnerabilities affect different households differently. In general, the more affluent a household is, and in particular the more assets it possesses, the more resilient it is to disruption in its livelihoods
base. People, of course, are not passive in the face of these risks, but the poorer the asset base of a household the more they have to forego potentially profitable but risky opportunities.

2. Exogenous factors
Livelihoods are often affected by exogenous factors beyond the control of individuals, households and even public authorities in a particular territory. For example, WTO conditionality may significantly affect the livelihoods in the shrimp sector and thereby tens of thousands of small producers and workers in the shrimp chain (globalization). Unwarranted sea-level rise may dislocate millions of farmers and dislocate enterprises in low-lying coastal areas. A dispute and conflict regarding the use of the marine area (EEZ) with a neighboring country may dislocate thousands of marine fishers. Price fluctuation (market failure) may ruin large number of producers (shrimp, fish, vegetables, etc.) who produce for the global market (globalization and monetization).

Monetization process is being accelerated by the expanding financial sector characterized by credit (both government and NGO), market development (through development of growth centers, roads, etc.) and government policies (tariff, subsidy, etc.). Market is gradually replacing subsistence economy. However, there are differences between rural and urban areas in adapting with the monetization process.

In some rural areas, people are adopting more specialized production system These production systems have some adverse effects on the natural environment (bringing saline water) and make the local resource base (land) unsuitable for other production systems (e.g., rice farming). Due to shrimp farming, production of crops, poultry and homestead trees are declining. Shrimp and salt are produced for the market and profitability at the farm/enterprise level determines the choice of activity.

3. Development dynamics
Development is taking place to different extent from where regional differences or diverse urban-rural development strategies and their impacts are visible. For example, proximity to the city and project intervention have opened up the opportunity for both men and women to work in the diversified public domain rather than hang with their ascribed occupations or remain in the domestic circumference. In contrast, existing trend in social mobility and diversification of occupation is mostly restricted in some areas by social values (less mobility of women) and tradition (land use). However, it should be mentioned that development initiatives are bringing urban facilities closer to rural areas and reducing the gap between the center and the periphery and thereby slowly impacting livelihoods strategies, behavioral pattern, and social attitude.

As more and more people are pushed out of the natural resource based activities, they are to embark on trading and skill-based activities in the secondary and tertiary sectors to earn a living.

VI. Challenges

1. Improved disaster preparedness
The country is prone to natural disasters like cyclone, storm surges, land erosion, saline intrusion, drainage congestion, etc. These obviously threaten productive capacities, disrupt livelihoods and discourage investments. In future, the extent and frequency of these disasters are expected to increase
if one considers predicted impacts of climate change and reduced flow of fresh water. The challenge is to be better prepared by evolving a long-term comprehensive disaster management programme that minimizes risk and enhances coping capability. Better preparedness has paid dividends in reducing death tolls from recent cyclones.

2. Adaptation to declining natural resources
The natural resource base is shrinking fast. The domain of natural resource-based activities has already gone beyond a point of saturation. The challenge is to sustain the natural resource base for the future by reducing dependency on natural resources. Is this a possibility? Can we control or restrict natural resource use?

Shifting focus: Historically people have been depending on the extraction of natural resources for livelihoods. As population is increasing, the per capita endowment of natural resources is declining. With growing urbanization and aspiration for better living, communities often go for over-exploitation of natural resources in a free-for-all manner. This has resulted in the degradation and destruction of the natural habitats and ecosystems to an alarming extent. It is necessary to shift the focus from natural resource based activities to human resource and skill-based activities for livelihoods. This will not happen automatically –alternative has to be provided. Most resource harvesters understand the risk of overuse of natural resources. They continue to do so because of absence of alternatives. The challenge will be to adapt to declining natural resources through creation of alternatives, wise use of resources, restoration/regeneration of declining resources and to apply a control mechanism through zoning and sub-zoning.

Emphasis on value addition of products from natural resources: exploitation of natural resources will remain as key strength in foreseeable future in the economy. Value addition processes of these natural resources should be gradually emphasized. This will give higher return from same or less quantities of natural resources.

3. Ensuring basic needs for increasing population
Despite all efforts of the government, basic needs in terms of health care, safe drinking water, primary education, affordable housing and energy needs of the present population are yet to be met. Remote places are yet to receive basic services through any service provider. Private sector and NGOs have emerged to provide some of these services. Two approaches can be taken, by increasing service provision and by increasing purchasing power of the communities. However, policy and capital support from public sector will be needed in general but specifically on following issues.

Maintaining food security: Bangladesh has recently achieved food autarky at the national level. Unless continued efforts are made, food needs cannot be maintained nationally. With increasing population and declining availability of productive land for agriculture, the state of food security is likely to be threatened. Import of food will again take away resources from national development budget. In order to maintain food security, the challenges are adopting appropriate technological means and intensive farming. Investments to support agriculture, marine fisheries and livestock development will maintain food availability. At the same time, food support to hardcore poor has to be maintained.
Maintaining water security: Water is the lifeblood of economic activities in Bangladesh. This is facing grave threat due to reduced flow of fresh water, saline water intrusion and absence of wise use of water. Proposed river link project in India further threatens water security of Bangladesh. The challenge is, while negotiations continue for just sharing of water, it is also necessary to build up water security nationally. This can be achieved by adopting integrated water resources management, wise use of groundwater, harvesting of rainwater, conservation and maximum use of available water. The National Water Management Plan provides the framework.

4. Harnessing resources
Some resources are untapped and some are not optimally utilized. For example, harbors operate far below their capacity. Tourism potential beyond few enclaves has hardly been explored. Potential natural gas reserve of the country is yet to be estimated. Renewable energy sources like wind and tide have not yet been tapped. The challenge is to develop knowledge base and infrastructures that would harness these resources. All these add up to huge potential for much needed non-farm employment. These can rejuvenate supporting and linked opportunities. Introduction of wind and tidal energy units can boost small and medium enterprises (SMEs) in remote places.

5. Increased non-farm employment generation
Continued economic growth is required with the objective of poverty reduction. While utilization of distinctive development opportunities in natural resources should continue, a shift has to be made in investment and creating employment in both rural and urban non-farm sectors. Agro-based value addition industries, tourism, service sector, transport, shipbuilding are some of the non-farm sectors that should receive attention for further investment. While pressing for continued economic growth, emphasis should be placed on pro-poor and pro-women economic growth, Sustainable Development and enhanced efficiency.

Pro-poor economic growth: Although development interventions are taking place, benefits do not necessarily trickle down to the disadvantaged groups. The challenge is to work out a development strategy that ensures pro-poor economic growth, specially investing in labor-intensive activities, diversifying investment in remote areas, etc.

Sustainable development: Economic growth is often in conflict with Sustainable Development. While there is a need to encourage more investments, to create more jobs and to generate more income, these are to be achieved in harmony with nature, without disturbing the critical ecosystems that support life and habitat. For example, ship-breaking industry immensely contributes to the economy in terms of employment and supply of raw materials for construction and manufacturing. It also ruins the habitat of marine aquatic resources. Urbanization accelerates the pace of industrialization. It also replaces ecological production systems. The challenge is to ensure rapid economic growth in a sustainable manner adhering to conservation laws and regulations.

Enhancing efficiency and remaining competitive: Certain activities have developed over the years in response to global consumer demand for particular products. Among these are export infrastructure (port, freight insurance), shrimp culture, etc. These are highly susceptible to fluctuations in the global market. Any erratic behavior in the international economic environment would adversely affect these
activities and, in turn, would disrupt livelihoods of many people. The challenge is to attain competence and efficiency to respond to fluctuating global market conditions and to evolve necessary coping capacity.

6. Growing urbanization
From the present urban population of only 24%, it will be over 50% in 2050. An inevitable consequence of urbanization is the growth in demand for space for residential needs, and expansion of infrastructure and other associated urban attributes. There is a need for allocating space for a growing population of various income levels, including the needs for services in the direct environment, such as fresh food production, water supply and sanitation, employment, health and education facilities.

7. Investment in human development, specially women
Investment in human development has higher rate of return. This will be more rewarding in investing for rural communities, as that will create resilience to withstand vulnerabilities and enhanced capacities to exploit opportunities. Women are engaged in productive activities in no less proportion than men. Limited social mobility and occupational rigidity are deterring factors to larger women involvement. The challenge is to create an enabling environment in terms of favorable social attitude and gender-friendly job opportunities.

8. Decentralization: local government involvement
Decentralization of development efforts is a declared approach of the government. Different measures are being taken to promote local government involvement. But more concrete steps are needed. The need for local government involvement is urgent because of its diverse vulnerabilities. An understanding of resource availability and local resource mobilization will facilitate local government institutions in realistic planning and development of the locality. The challenge is to press for allocation of substantial resource in the national budget. This will strengthen local government and facilitate decentralization. Examples from a number of pilot exercises are available.

V. Environmental Education

1. Education Curriculum
In the national curriculum for secondary and higher secondary education, environmental science has been introduced as a separate subject. Separate departments/ faculties have been established in almost all public and many private universities on Environmental science and natural resources management. They are offering graduate and post-graduate degrees. The Bangladesh University for Engineering and Technology is presently developing a curriculum for integrated coastal zone management for the post-graduate level.

2. Area-based Management
An integrated approach to natural resources management through resource utilization, conservation, social participation and the provision of expertise development requires a pro-active interaction among stakeholders at all. In South and South-East Asia the implementation of Integrated Coastal Zone Management (ICZM) framework is still in infant level, but there is a trend to apply such a framework in several countries. Sustainable Development and management of coastal resources has consequently become a very challenging and demanding task.
Chittagong University runs a course on ICZM through its Institute of Marine Sciences. This course contains a discussion about the inventory and sustainable utilization of coastal resources, integrated management, and the precautionary approach that underpin coastal resources management. It reviews national and international policy issues and considers modern tools and techniques that are important on the daily work of a coastal zone manager. The general objective is to familiarize the students with coastal and marine biodiversity issues and broaden their knowledge to the special area management and concepts and tools within the context of Integrated Coastal Zone Management. The course is intended to provide the students with an awareness of technical, socio-economic and institutional integration in order to plan and implement coastal zone management strategies.

Coastal Environment Research Unit (CERU) was initiated by the Department of Geography of Chittagong University to conduct research works on various coastal issues of Bangladesh. The unit primarily focuses on: sea level changes, coastal land use change, coastal environment, coastal pollution, coastal urban activities and coastal tourism. Under this unit, a core of faculty members, research students is now devoted to concentrate their investigations on different coastal aspects, particularly along the Chittagong coast. The unit is also working in close collaboration with some faculties of the Institute of Marine Sciences at Chittagong University.

3. Public awareness
A host of non-government agencies are engaged in raising awareness on Sustainable Development and management issues. NGOs like BRAC, Caritas Bangladesh, Proshika, etc. have training programme for grassroots activists. Community Development Library (CDL) runs 27 documentation and resource centers in the country. It also publishes books on environmental issues and produces video documentaries as instrument of public education. CDP, YPSA and CODEC runs resource centers in respective programme areas. CNRS and BCAS are also work on Sustainable Development issues with focus on ecological management.
Sub-regional Presentation – V
A New Approach in Education for Sustainable Development in Thailand

Mr. Pongtep Manattrong
Educational Supervisor
Educational Service Area Region Lamphun 1
Thailand

Case Study
The movement of education toward a Sustainable Development programme in Thai education was started more than 10 years ago when the Department of Curriculum and Instructional Development revised the curriculum to focus on participatory process skill as a core approach to learning. The revised curriculum that focused on preparing citizens to be more proactive when reflecting on the need to change their perspective and the current practice of teaching and learning which are passive to a more proactive participatory method of teaching and learning. Due to the rapid implementation of the study which moved from a fixed content-based education system to a participatory-based process, there was insufficient time to properly train the teachers. The teachers faced great difficulty in implementing the process skills learning approach in their classrooms. Within the same period of time, there were environmental problems regarding forests and water resources that led to a request from the Ministry of Education to improve Environmental Education in the specific areas within the school system. The following are two examples of projects, which improved practices that are related to Education for Sustainable Development. The first project focused on Environmental Education while the second project focused on Sustainable Community Development. Both projects aimed to create qualified students who would become strong citizens moving towards promoting a civil and sustainable society.

I. Social Forestry, Education and Participation (SFEP) Project

1. Introduction
The Social Forestry, Education and Participation (SFEP) Pilot Project encouraged and reassessed teachers of fifth and sixth-grades. It also assessed villagers around two provinces around Lamphun and Chiangrai within two Northern Provinces of Thailand with respect to their views of community participation in the teaching - learning process, and the kind of knowledge base that is important for the youth in their respective communities to learn. By engaging youth in the study of local environmental problems, and by establishing ways for students and the rest of the community to work together and resolve the problems, teachers and students learned how to apply academic knowledge towards a practical endeavor. The response to this approach was positive. Teachers and students found schoolwork more rewarding and the community members found both immediate and long-term benefits from interacting with their respective community schools. This project examined school practices and used the communities as laboratories for learning.
The project’s findings followed the guideline and spirit of the provisions in the National Education Act B.E.2542 (1999) that learners play a highly important role in the learning processes. All learners are capable of learning and self-development. The teaching-learning processes shall aim at enabling the learners to develop themselves at their own pace, and to the best of their potential. All teachers throughout Thailand have to change their ways of teaching by organizing activities for learners to draw from authentic experiences and undertake practical work for a complete success in the learning experience. Despite any initial uneasiness, especially in the whole school approach, participation and support from the stakeholders of the Education Department and the external institutions is crucial. In October 2000, the Thai Ministry of Education and Michigan State University began contributing to the Social Forestry, Education and Participation Project focused on the whole-school approach.

2. Objectives
The purpose of the Social Forestry, Education and Participation Project in Thailand was intended to change the teaching, learning, and school-community relationship by involving students in the studies of local village problems and using the whole-school approach.

3. Target group
School: Seven schools located in two provinces in the northern region of Thailand.
Teachers: Kindergarten to grade six in primary schools, and grade seven to nine in lower-secondary Schools.
Communities: 24 villages from surrounding project schools

4. Project Strategies

1) Seven Steps in the Learning Activities follow:
   1) Data collections in the villages were to identify existing environmental issues or problems.
   2) In-depth study of the causes and effects of the problems.
   3) Present findings to the villagers.
   4) Work with villagers to study and identify possible alternative solutions.
   5) Work with villagers to develop a strategy for the selection of the best possible alternative solutions.
   6) Implement the project to implement the solutions with the villagers.
   7) Evaluate, report, and improve the on going strategy in moving forward to Phase II.

2) Staff Development and on-going support system
   1) 2-week intensive workshop at the beginning of the project.
   2) Orientation for school principals, and community participating members
   3) Teachers to collaborate through weekly meeting in-house and with the various participating schools
   4) One-on-one supervision
   5) End-of-the-term workshop - this workshop would share and exchange the experiences learned in the Case Study and define the knowledge base that is lacking in the Teacher-Learning practices and determine the appropriate corrective action plan for the coming semester.
5. Lessons Learned

1) Teaching-learning process
The students were taken out of classroom and placed into their respective communities to study the problems that were occurring in the world around them at the time. The teaching-learning process was the part that should change accordingly. The communities now became the living classroom. Their human and physical resources were used to enhance students’ understanding of the concepts of learning, based on life today. The process of environmental problem solving regarding, forests and water resources gave the community the capacity to address relevant local issues as they related to the aforementioned topics. The schools, as a result, became more integrated into the communities’ daily way of life.

“It’s like a two-way communication link, not only did the children learn from the adults and their parents, but the parents and adults learn from the children. And the connection became stronger” This was a reflection made by one of the villagers.

2) The new staff development model
The new staff development model consisted of three parts: the “teacher as a learner” workshop, network of teaching-learning, and the follow-up looking at the support and guidance activities required.

II. Participatory Learning Leading to Integrated Community Development Project (PLCD): Phase I (2003)

1. Introduction
In Thailand, as in many developing countries, it was difficult to introduce a Case Study and a participatory school-community development project where residents were not accustomed to either active or proactive participation. While a strong effort was made to build both the institutional and local skills necessary for successful participation of the community in this project, the missing element in this strategy was the local school. Not only are schools the logical place to impart knowledge about community issues, but ideally they should also serve as a place to empower both children and adults to actively participate in decision-making.

There was a strong effort from the government to empower community-based development in both social values and issues relating to the local economy. It is the main function of any school to prepare students by providing with the appropriate knowledge and skills to effectively participate in their respective communities.

In some areas of Northern Thailand, child prostitutes and drugs are not seen to be serious problems but a good business practices and strategies through the eyes of parents and various community members. Therefore, there is a need to help this particular group to develop another view about children development and the impact of education.

Using a Case Study, we developed an approach, which focused on issues in the community. We sought and gained the involvement of the community members to participate in students learning
As an effective way to solve the aforementioned problems, a new learning approach fit nicely with the main objective of the education reform that emphasizes on child-centered learning, meaningful learning, and the development of a living and proactive school curriculum.

The focus of this project aimed to use a new learning approach to involve community members in understanding more about the value of education and greater competency that students would hopefully develop. By participating in the students' learning activities and working together with the school, it was hoped that this would stimulate thinking about possible alternative solutions to solve the local issues. It was sincerely hoped that the community members, especially the parents with children in the school system, would understand and realize how much education affected the development of their children. Moreover, it was with high expectation that through this participatory experience the parents would start to rethink about what should be the best for their children.

The activities of this programme focused mainly on the development of all participating members such as school staffs and key members of the community. The Case Study was intended to change the way of teaching and learning in the school system, and to also change the relationship between school and the community. It was also extremely important and advantageous to change the parents’ perspective about what should be considered an appropriate future for their children and how life would unfold for them. The Case Study was designed to focus on the ongoing development of all participants.

**2. Objectives**

The purpose of the project is to pilot a programme for this experience and new learning approach in 8 schools in Phayao and Chiang Rai provinces, of Northern Thailand. It would use a field-based Case Study to address the issues within the community. It was hoped that the project would lead to an improvement in the practice of teaching and learning and in the school-community relationship with a by-product being a direct benefit to an enhancement to the culture and way of life of the community.

The studies’ objectives were as follows:

1) To improve/change the learning process resulting from the education reforms coming out of the Case Study
2) To improve/change traditional teaching process from teacher-centered base to child-centered approach
3) To enhance the relationship between the school and the community focusing on changing the traditional relationship, moving from a one-way communication approach to two-way communications methodology.
4) To study, a model of learning process, that facilitates a sustainable community development and improves the quality of life in the respective communities.

**3. Positive Features of the Project**

1) Concentrated on changing of teaching-learning practices which lead to a fundamental change of the school culture
2) Teacher development process

1) The training course was based on the concepts:
   - Teacher as Learner
   - Learning by doing what was important to the learner member of the project based on their needs and those of the community
   - Participatory Learning environments
   - Developed skills in team building
   - Created a mentoring system supported by now experienced teachers who were involved in Phase I of the project.

2) Lead to support on-going development practices for facilitators who worked closely to the school and teachers

3) On-going follow up by mentoring, advising, coaching and supervision on an individual basis

3) Creating the participatory learning support model through cooperation with outside organizations.

4. The Next Step - Phase II in 2004

   1) Teacher self-assessment and action plan for their professional development
   2) Master teacher and school principal development.
   3) Two-way community participation in action.
   4) Nation wide conferences on lesson learned and the exchanging of experiences
Sub-regional Presentation – VI
Development Education and Strategy for DESD

Mr. Haruhiko Tanaka
Chairman of the Board
Development Education Association and Resource Center (DEAR)
Japan

DEAR’s Aims
1. To support and facilitate learning programs and activities on development education (D/E) in schools and communities.
2. To collect and disseminate information on D/E
3. To promote research on D/E
4. To advocate and campaign on D/E
5. To network D/E and global education organizations overseas

History of DEAR
-First Symposium on Development Education was held in Tokyo in 1979
-Development Education Council of Japan (now DEAR) was formed in 1982
-Regional Seminars started in 1992. 52 seminars been held in 44 prefectures.

DEAR defines D/E
D/E is the education and learning in schools and communities to raise awareness and understanding of developmental issues, and to discuss the development for a better future.
It also seeks changes of attitudes and morale to participate in solving developmental issues.

Principles of D/E
-To understand the diversity of culture
-To raise awareness of unequal situations of the development
-To understand the interrelatedness of global issues – development, environment, human rights, gender etc.
-To empower people for participation to solve these issues

Projects of DEAR 2004
1. Annual National Conference in Fukuoka
2. Workshops and Seminars of curriculum development and participatory learning
3. Exchange visit to UK
4. ESD Seminar in Chiangmai
5. Publication of Journals, Newsletters, Handbooks, Teaching materials, etc.
6. Advocacy
### Membership

1,000 Members  
Including 60 Organizations  
Half are school teachers  
Half are NGOs, local government staff, community leaders, students, etc.

### Structure

Specified Nonprofit Corporation (NPO)  
Annual General Meeting  
27 Board members  
20 Task teams  
5 Staff  
Interns and Volunteers

### Publications

- **Talk for Peace**  
- **New Trading Game**

### DEAR’s Strategy for ESD - School Education

- Teaching materials of ESD  
- Curriculum Development  
- Teacher training for participatory learning

### For Community and NGOs

- Facilitator Training  
- Partnership  
- NGOs and ESD

### Advocacy

- ESD in every walk of 2010 curriculum  
- Evaluation of Local Agendas and new approaches to local policy of community development

### Partnership

- Partnership with environmental education and international education in Japan  
- Cooperation with ESD-J  
- Exchange with Global educationists in Europe  
  - with DEA in Britain  
  - with North-south Centre (Council of Europe)

### Asian-Pacific Partnership

- Asian-Pacific networking on ESD  
  - with ESD group in Chiangmai  
  - with Development NGOs in Seoul  
  - with ASPBAE groups
### Regional Strategy for the DESD in Asia-Pacific

- Gather stakeholders/ensure ownership
- Draft and Produce adaptable strategy
- Discuss future proposals

### Guidelines for the Regional Strategy

**Phase One**
- Finding out what work in the Asia-Pacific region and why?

**Phase Two**
- Reaching Out

**Phase Three**
- Systemic Change

### Preparations for the DESD in Asia-Pacific

- Side event: Education for Sustainable Development, a partnership approach in the Asia-Pacific at the Greening of Industry Network conference (7 November 2004)

### Preparations for the DESD in Asia-Pacific

- IUCN World Conservation Conference: Session on Monitoring (20 November 2004)
- Workshop on community-based ESD initiatives (17 – 19 January 2005)
- International Conference on Education for a Sustainable Future (18 – 20 January 2005) Ahmedabad

### Asia-Pacific Situational Analysis of ESD

- Collect baseline data
- Create and strengthen regional partnerships
- Inform future ESD work at UNESCO

### Asia-Pacific Situational Analysis of ESD

- Clear overview of ESD in Asia-Pacific
- Informed planning
- Reduce duplication of efforts
- Sub-region and country specific

**Sub-regions**
- Central Asia
- Pacific Asia
- South Asia
- North Asia
- Southeast Asia
### VI. Sub-regional Presentations (Country Reports)

#### For each sub-region:
- Current issues, awareness and perceptions, and core concepts
- Ways to advance ESD
- Good practices and Case Study

#### Purpose of Meeting – Coordination of:
- ESD expertise and capacity
- Production of educational and informational material
- Identification and mobilization of resources
- Exchange information
- Cross-sectoral cooperation
- Division of responsibilities

#### Regional Strategy for the DESD in Asia-Pacific

**KEY STAKEHOLDERS**
- Community based initiatives
- National Commissions
- NGO’s/CBO’s
- Higher Education
- Media
- Private Sector

#### Collaboration and Networking

**DRAFTING SESSIONS**
- KEY ISSUES
- STAKEHOLDERS
- MONITORING AND EVALUATION

#### Regional Launch

- Asia-Pacific Situational Analysis of ESD by sub-region
- Regional Strategy for the Asia-Pacific
- 5th Asia-Pacific Ministers Conference on Environment and Development

27 March. 2005 Seoul, Korea

#### Possible Structure

- Identify current resources
- Definition of key issues
- Partners
- Delivery mechanisms
- Sustainability
- Timeframe

#### Three Separate Working Groups

**ESD Guidelines:**
- Teacher/Training Modules for Civil Society
- Teacher/Training Modules for Formal Schooling
- Teacher/Training Modules for Multimedia (including ICT and Alternative Media)
VII. Action Plans

(Group Discussion Reports)
Action Plan - I  
Group I - Guidelines for Developing Teaching/Learning Modules for Education for Civil Society

Group Members:

Mr. Mohiuddin Ahmad, Ms. Zabariah Haji Matali,  
Ms. Madhavi Joshi, Mr. Yi–Sung Kim, and Mr. Hiroyasu Iwasaki

I. Introduction
In order to come up with guidelines for developing teaching/learning modules for Education for Sustainable Development (ESD) for the Civil Society, the group discussed:

1) Components of Civil Society;  
2) Issues and concerns of Civil Society;  
3) How ESD should address the issues and concerns of Civil Society? That is looking at relevant or appropriate ESD delivery mechanisms;  
4) Resources which are available in the region to address the issues and concerns of Civil Society;  
5) Sustainability;  
6) Timeframe; and  
7) Monitoring and evaluation.

II. Components of Civil Society
The group agreed on a list of the “common components” of the civil society (which are by no means exhaustive). They are:

1) Rural and urban communities;  
2) NGOs and CBOs;  
3) Special Interest Groups such as charity/philanthropic organisations, indigenous groups, issue-based coalitions or groups;  
4) Local institutions like the village panchayats in India, village committees in Malaysia, Union Parishad in Bangladesh, etc.;  
5) Industries – both small and medium;  
6) Academia, research institutions, think tanks or advisory bodies;  
7) Educational institutions at different levels;  
8) Judiciary and traditional legal bodies including informal social institutions;  
9) Media practitioners;  
10) Cultural groups;  
11) Religious and community leaders.

III. Issues and concerns of Civil Society
Civil society assumes an important role in the development of any society and through its activities/programmes, civil society reflect its concerns and attempts at addressing certain issues.
For the purpose of easy reference, the issues and concerns of civil society are outlined here in broad categories (not in order of priority):

1. Socio-economic
   1) Migration – rural-urban, rural-rural, urban-urban;
   2) Literacy and access to education for adults, children, women and indigenous communities;
   3) Poverty, livelihood and gender inequalities;
   4) Health, especially for women and adolescent, in terms of access to information and delivery systems/services;
   5) Belief systems and prejudices that are counter-productive or discriminatory and that hinder ESD;
   6) Social ills/problems like drugs, crimes, violence;
   7) Religious and ethnic conflicts;
   8) Consumption patterns and consumerism which degrade the environment;
   9) Development programmes that only focus on economic growth resulting in destruction of local environment.

2. Legal and political
   1) Low level of participation in decision-making due to lack of awareness about rights and responsibilities within certain policy frameworks. This could be at the local, national or regional level;
   2) Governance – lack of transparency and accountability;
   3) Linking knowledge with practices. For instance there is lack of applying or practicing knowledge obtained or acquired from academic or research institutions, think-tanks/advisory groups to daily lives;
   4) Short-sightedness in terms of planning and implementation of development programmes due to lack of awareness and understanding of SD among planners and implementers;
   5) Access, ownership and control over all resources including knowledge;
   6) Increasing threat to useful indigenous knowledge, practices and wisdom.

IV. How ESD should address issues and concerns of Civil Society?

Appropriate delivery mechanisms should be employed to address the issues and concerns of civil society. These include:

1) Direct or face-to-face interaction between the community and opinion leaders, local leaders, role models, NGOs/CBOs in the form of consultations, meetings, forums and dialogues;
2) Print and electronic media, such as, newspaper articles/features/editorials, TV (reality TV, educational TV, endorsements of ESD messages by celebrities), video films, radio (including community radio), phone (mobile phones through sms or mms, community phones), web network and the internet, EDUSAT in India which is a dedicated satellite channel for education;
3) Documentation and sharing of “good” ESD practices; for instance study tour/visits to demonstration centres/models/sites/projects; writing and publishing of case studies for dissemination and sharing;
4) Legal instruments, for instance Public Interest Litigation;
V. Resources available to address Civil Society issues and concerns

In order to address the issues and concerns of civil society, the group believed that it is important to know the resources available from and within the region so as to capitalise upon and share these resources. The resources include:

1) Community knowledge and skills including craft and performing arts;
2) Technical resources like ICT;
3) Indigenous technology and know-how, for instance composting, natural/organic farming;
4) Traditional practices which are sustainable;
5) Rich body of knowledge within the region, for instance the academic institutions where experiences could be learned and shared;
6) Financial resources like development aids, government allocations, financial institutions for instance banks, corporations and industries;
7) Individual and voluntary contributions in kind like expertise, skill and time as well as fund;
8) Faith-based organisations which could contribute funds and certain expertise as well.

VI. Sustainability

The group identified both Internal and External factors to ensure the sustainability of ESD for Civil Society.

1) In order to sustain the interest of the communities in ESD, it must relate to or be in tandem with the communities’ priorities and needs (that is ESD must be contextual and need-based);
2) To ensure involvement and ownership of ESD by the various stakeholders, there must always be an improved and continuous opportunities for participation;
3) A proper governance mechanism with a strong leadership commitment must be in place;
4) ESD activities/programmes must be adaptable, flexible and relevant to local cultural context, tradition and knowledge;
5) The sustainability of ESD is also very much linked to the availability of resources and technical know-how within the region;
6) There must be policy and administrative support at the macro level to ensure the proper implementation or enforcement of laws/legal provisions on ESD;
7) Within the community itself, there must be continuous provision for conflict management processes;
8) Becoming self-financed and self-reliant would ensure that ESD programmes could be carried out without being highly dependent on external assistance;
9) The continuous collaboration and cooperation with other stakeholders and institutions, for instance carrying out programmes that could create, promote, and enhance awareness and understanding of concepts and principles of ESD, would indeed ensure its sustainability.

VII. Time Frame

A measurable and achievable time line/time frame (3 to 5 years) be used for ESD for Civil Society. In the next 3 to 5 years, the following activities/approaches should be employed:

1) To inform and involve existing networks including the mass media about ESD and to initiate
Voluntary consultation processes with these networks;
2) To carry out stakeholder consultation especially with various government departments/agencies at the local, national and regional levels; with the academia; the community, key opinion leaders and other NGOs/CBOs, as well as with various special interest groups;
3) To initiate web discussions, debates and e-groups while identifying resource organisations for information dissemination and capacity building;
4) To initiate publication of newsletters (electronic and print), wallpapers, posters, manuals and guidelines in all major languages within the region;
5) To initiate the production of audio-visual communication materials including films, TV and radio programmes, as well as to design appropriate mobile phone messages;
6) To carry out training and capacity building of key change agents/communicators, judiciary, mass media, decision makers, planners and implementers;
7) To identify and document examples of “good” practices and to learn and disseminate experiences from these practices to other stakeholders;
8) To engage in continuous monitoring and revisit strategies periodically in all the programmes/activities of ESD;
9) To carry out an evaluation exercise of the ESD programmes/activities after 5 years;
10) To recommend higher investments in human resources development in various countries of the region.

VIII. Monitoring and Evaluation
1) To ensure success of ESD, a continuous assessment (pre, during and post assessment) based on clearly defined and localised indicators should be carried out.
2) There should also be a participatory monitoring and evaluation by various stakeholders using appropriate methodologies (which should be content-based) of the ESD programmes/activities.
3) All the process of monitoring and evaluation should be documented so as to develop ESD strategies.
Action Plan - II
Group II - Guidelines for Developing Teaching/Training Modules for Education for Formal School System

Group Members:

Ms. Le Thi Hoang Cuc, Mr. Pongtep Manattrong, Mr. Shuichi Nakayama, Mr. Devesesan Neshiah, Mr. Haruniko Tanaka, Ms. Eun-Kyung Park, Mr. Lee Soo-Jong and two other members of KONECT,

The above-mentioned members agreed on the following broad Principles, and more specific Recommendations.

I. Principles

1) Every country has distinctive social economic cultural and political features, and different concerns and priorities. These should be reflected in the educational programmes of those countries.

2) Basic Education: This should incorporate environmentally sustainable principles.

3) De-centralized curriculum: This should reflect local conditions and local environment. This will be more feasible in the lower classes.

4) New Learning process: traditional way of teacher-learner relations should be revised for more effective education.

5) New style of teacher training: This should emphasize participatory and learner centered approach. Not only the students, but the teacher too is learning.

6) Partnership among school, community and NGOs; this is very important to implement ESD in each school.

7) Diversified entrance exams: This is the logical follow-up of the above. Again there may be some difficulties in this respect at the higher level.

8) Peace is the base and the final goal of ESD. But peace should be interpreted broadly to the extent beyond no-war to harmonious social economic development and mutual understanding.

9) The state should be committed to promote ESD, especially the Ministries of Education.

10) Local government institutions should formulate their policies and programmes following ESD concept.

11) Though there is broad agreement on the desirability of integrating environmentally Sustainable Development principles in the school system and in the education imparted, in school and out of school, in many developing countries there is acute competition for admission to certain preferred professional courses, and the rat race for such admissions starts in early secondary education. It is therefore important to take this into account by incorporating environmentally Sustainable Development principles into the curriculum of all subjects, and into the examinations at all levels in all sectors.
II. Recommendations

1) One or more Regional Learning Centers of ESD should be established in Asia under UNESCO auspices. This Center should undertake, in addition to its other functions, to collect and disseminate best practices of ESD, co-ordinate and computerize to facilitate access.

2) Every state may need, in the light of ESD concepts, to:
   - revise the school curriculum
   - incorporate in-school and out-of-school programmes
   - train/retrain teachers

   Since this is a major undertaking, international funding should be sought as needed.

3) Training of government officials for ESD. This too may require international funding.
VII. Action Plans (Group Discussion Reports)  119

Action Plan - III
Group III - Guidelines for Developing Multimedia including ICT and Alternative Media

Group members:

Mr. Hiroyuki Yumoto, Chair,
Mr. Jun-Kwan Ahn, Ms. Hye-In Hwang, Ms. Rebecca Kim, Ms. Rosalind Yang Misieng,
Ms. Houth Ratanak, and Ms. Tatiana Shakirova.

I. Definition of Key issues
1) The gap of understanding and knowledge of ESD issue to the mass – media.
2) Lack of understanding of the important role of the media in ESD by the Government.
3) Lack of usages of mass–media by civil society and private sectors in ESD.

II. Goal and Tasks
The Goal of this guideline is to develop multimedia include ICT and alternative media.

1. The tasks:
1) To make the ESD concept understandable and attractive for public through mass media.
2) To develop the capacity of mass – media people, ICT specialists, teachers as the stakeholders.
3) To develop the mechanisms of coordination and interaction (linkages among stakeholders).
4) To advocate through differences media channel (mass-media, printed, and electronic, ICT-tools, internet, CD, VCD, DVD.
5) To exchange experiences

III. Partners
1) Governments:
   -Ministries Environment
   -Ministry of Education
   -Ministry of Foreign Affairs through embassies
2) Local Administrations
3) Educational organizations/centers
4) Academies, Universities and colleges, and schools
5) Libraries – Resources Centers
6) International NGOs – LNGOs
7) Mass Media
8) UN Agencies
9) Private Foundations, and business sectors
IV. Role and responsibility
1) Government should provide the information on ESD concept to the mass – media.
2) Civil society in cooperation with international NGOs, and UN Agencies to sensitize government on the important role of the media in ESD.
3) All stakeholders must aware of usefulness of mass–media in promoting in ESD.

V. Mechanisms of cooperation and interaction.
1) Set up regional center for communication and media.
2) Linkages within all stakeholders in the region.
3) Exchanges information and experiences and good practices.

VI. Delivery mechanisms
Good practices (using web site to distribute the content of ESD to the state level, regional level, national level.

Example:
1) Process of decision making and delivery information on EE and ESD through joint Central Asian working group on EE and ESD established by Ministers of Environment and Education of Central Asia.
2) Sharing Environmental information through website among Korea, China, and Japan www.environasia.info
3) Sharing information related to the community development through web portal www.cambidiacic.org
4) Sharing information related to the ESD through ESDJ www.esd-j.org and DEAR www.dear.or.kr

VII. Sustainability
1) Relevance's contents (ESD)
2) Political Supports (legal support, administration and financial)
3) Compatibility of differences media (radio, newspapers, internet etc…)
4) Mutual interest’s partners.

VIII. Time frame/Additional Point
3 – 5 years
1) First year, to do networking through mailing list, baseline data – planning
2) Second year, Set – up a common website in English, and annual meeting
3) Third year on, is the implementation phase

IX. Identify Current Resources:
1) Technical Resources
2) Human Resources
3) Financial Resources

1. Technical Resources
VII. Action Plans (Group Discussion Reports)  121

1) Internet
2) Web – Portal
3) E-library
4) E-learning
5) Online Database
6) Newsletters
7) Multimedia Programme
8) Video
9) CD, VCD, DVD

2. Human Resources
   1) Media people
   2) ICT specialists:
      - Content developers
      - Capacity Building through training
   3) Governments:
      - Ministries Environment
      - Ministry of Education
   4) Scientific Institutions
   5) INGOs – LNGOs

3. Financial Resources
   1) Governments:
      - Ministries Environment
      - Ministry of Education
      - Ministry of Foreign Affairs through embassies
   2) Private Foundations
   3) Business Sectors
   4) International NGOs
   5) UN Agencies

X. Recommendation
   1) Set up regional center for communication and media.
   2) Linkages within all stakeholders in the region.
   3) Exchanges information and experiences and good practices.
## List of Participants and Workshop Secretariat

<table>
<thead>
<tr>
<th>Name / Organization</th>
<th>Address</th>
<th>Contact Info.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Derek Elias</td>
<td>Mom Luang Pin Maia Kui Centenary Building 920 Sukhumvit Road P.O. Box 967 Prakanong, Bangkok 101100 Thailand</td>
<td>Tel: +66 2 391 0577 Fax: +66 2 2391 0866 E-mail: <a href="mailto:d.elias@unesco.bkk.org">d.elias@unesco.bkk.org</a></td>
</tr>
<tr>
<td>Mohiuddin Ahmad</td>
<td>Saimon Centre Road 22, House 4/A, 5th Floor Gulshan-1 Dhaka 1212 Bangladesh</td>
<td>Tel: +880 2 8826614 / 9892787 Fax: +880 2 8826614 E-mail: <a href="mailto:mohiuddin@iczmpbd.org">mohiuddin@iczmpbd.org</a></td>
</tr>
<tr>
<td>Houth Ratanak</td>
<td>House # 245, Street 51 or P.O. Box 177 Phnom Penh Cambodia</td>
<td>Tel: +885 23 360345 / 721020 Fax: +885 23 360 345 E-mail: <a href="mailto:ratanak@forum.org.kh">ratanak@forum.org.kh</a></td>
</tr>
<tr>
<td>Madhavi Joshi</td>
<td>Centre for Enviroment Education, Nehru Foundation for Development, Thaltej Tekra, Ahmedabad 380 054, Gujarat, India</td>
<td>Tel: +91 79 26858992~9 Fax: +91 79 26858010 E-mail: <a href="mailto:madhavi.joshi@ceeindia.org">madhavi.joshi@ceeindia.org</a></td>
</tr>
<tr>
<td>Hiroyasu Iwasaki</td>
<td>7-1 Uenoshiba 8 Sakai, Osaka 593-8301 Japan</td>
<td>Tel: +81 72 365 0865 Fax: +81 72 365 5628 E-mail: <a href="mailto:iwasaki_h@lit.tezuka-gu.ac.jp">iwasaki_h@lit.tezuka-gu.ac.jp</a></td>
</tr>
<tr>
<td>Shuichi Nakayama</td>
<td>5-37-1, Gion, Asa-Minami-Ku, Hiroshima-shi, 731-0912, Japan</td>
<td>Tel: +81 82 871 9354 Fax: +81 82 871 9354 E-mail: <a href="mailto:s.naka4301@hue.ac.jp">s.naka4301@hue.ac.jp</a></td>
</tr>
<tr>
<td>Haruhiko Tanaka</td>
<td>4-2-3 Nakanedai Ryugasaki 301-0002, Japan</td>
<td>Tel: +81 3 3985 2480 Fax: +81 295 60 2276 E-mail: <a href="mailto:htanaka@rikkyo.ne.jp">htanaka@rikkyo.ne.jp</a></td>
</tr>
<tr>
<td>Itaru Yasui</td>
<td>5-53-70 Jingumae shibayuku Tokyo 150-8925 Japan</td>
<td>Tel: +81 3 5467 1230 Fax: +81 E-mail: <a href="mailto:yasui@hq.unu.edu">yasui@hq.unu.edu</a></td>
</tr>
<tr>
<td>Hiroyuki Yumoto</td>
<td>Tomisaka Christian Centre Annex. 2-3F, 2-17-41 Koshikawa, Bunkyo-ku</td>
<td>Tel: +81 3 5844 3630 Fax: +81 3 3818 5940 E-mail: <a href="mailto:yumoto@dear.or.jp">yumoto@dear.or.jp</a></td>
</tr>
</tbody>
</table>
### VII. Action Plans (Group Discussion Reports) 123

<table>
<thead>
<tr>
<th>Name</th>
<th>Position/Title</th>
<th>Address</th>
<th>Contact Information</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Association and Resource Centre (DEAR)</strong></td>
<td>Tokyo 112-0002 Japan</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Tatyana Shakirova</strong></td>
<td>Manager of Environmental Education Programme</td>
<td>Orbita-1, 40, Almaty 480043, Kazakhstan</td>
<td>Tel: +7 3272 292619 / 296646, 785110, 785022</td>
</tr>
<tr>
<td></td>
<td>The Regional Environmental Centre for Central Asia (CAREC)</td>
<td></td>
<td>Fax: +7 3272 705337</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>E-mail: <a href="mailto:tshakirova@carec.kz">tshakirova@carec.kz</a></td>
</tr>
<tr>
<td><strong>Chul-Hwan Koh</strong></td>
<td>Commissioner Presidential Commission on Sustainable Development (PCSD) Republic of Korea</td>
<td>613-2, Bulgwang-dong, Eunpyung-Ku, Seoul, 122-706, Korea</td>
<td>Tel: +82 2 3156 7300</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Fax: +82 2 388 7986</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>E-mail: <a href="mailto:pcsd@pcsd.go.kr">pcsd@pcsd.go.kr</a></td>
</tr>
<tr>
<td><strong>Samuel Lee</strong></td>
<td>Secretary-General Korean National Commission of UNESCO (KNCU)</td>
<td>50-14 Myong-dong 2-ga, Jung-gu, Seoul, 100-810, Korea</td>
<td>Tel: +82 2 755 0068/69 (Secretary)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Fax: +82 2 755 6667</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>E-mail: hmc <a href="mailto:Chung@unesco.or.kr">Chung@unesco.or.kr</a></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(Secretary)</td>
</tr>
<tr>
<td><strong>Sung-Yong Park</strong></td>
<td>Acting Director Asia-Pacific Centre of Education for International Understanding (APCEIU)</td>
<td>Rm 1010, UNESCO Building, 50-14, Myong-dong 2ga, Jung-gu, Seoul 100-810, Korea</td>
<td>Tel: +82 2 774 3982</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Fax: +82 2 774 3958</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>E-mail: <a href="mailto:sungpark@unescoapceiu.org">sungpark@unescoapceiu.org</a></td>
</tr>
<tr>
<td><strong>Lawrence Surendra</strong></td>
<td>UNESCO-APCEIU</td>
<td>Rm 604, UNESCO Building, 50-14, Myong-dong 2ga, Jung-gu, Seoul 100-810, Korea</td>
<td>Tel: +82 2 774 3936</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Fax: +82 2 774 3957</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>E-mail: <a href="mailto:lsurendra@unescoapceiu.org">lsurendra@unescoapceiu.org</a></td>
</tr>
<tr>
<td><strong>Suk-Jin Choi</strong></td>
<td>Director-General Education Evaluation Research Department, Korea Institute of Curriculum and Evaluation Korea</td>
<td>Daelim Apt. 101-1201 Woomundong 57, Seocho-gu, Seoul, 137-782, Korea</td>
<td>Tel: +82 2 3704 3701</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Fax: +82 2 3704 3720</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>E-mail: <a href="mailto:sjchoi@kice.re.kr">sjchoi@kice.re.kr</a></td>
</tr>
<tr>
<td><strong>Myeong-Su Beak</strong></td>
<td>Senior Researcher Citizen’s Institute for Environmental Studies/ KFEM, Korea</td>
<td>#1009 Pierson BLDG, 89-27 Sinmunro 2-Ga, Chongro-gu, Seoul, 100-761, Korea</td>
<td>Tel: +82 2 735 7034</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Fax: +82 2 733 7017</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>E-mail: <a href="mailto:baekms@kfem.or.kr">baekms@kfem.or.kr</a></td>
</tr>
<tr>
<td><strong>Eun-Kyung Park</strong></td>
<td>Director Environment and Culture Institute</td>
<td></td>
<td>Tel: +82 11 733 9581</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Fax: <a href="mailto:ek_pj@yahoo.com">ek_pj@yahoo.com</a></td>
</tr>
<tr>
<td>Name</td>
<td>Position/Role</td>
<td>Contact Information</td>
<td></td>
</tr>
<tr>
<td>-----------------------------</td>
<td>-------------------------------------------------------------------------------</td>
<td>-----------------------------------</td>
<td></td>
</tr>
<tr>
<td><strong>Yujin Lee</strong></td>
<td>Programme Coordinator</td>
<td>Tel: +82 16 623 4907</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Environment and Culture Institute</td>
<td>E-mail: <a href="mailto:leeyj@greenkorea.org">leeyj@greenkorea.org</a></td>
<td></td>
</tr>
<tr>
<td><strong>Soon-Chul Lee</strong></td>
<td>Secretary Director</td>
<td>Tel: +82 19 349 6523</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hangang Middle School</td>
<td>E-mail: <a href="mailto:leesc314@hanmail.net">leesc314@hanmail.net</a></td>
<td></td>
</tr>
<tr>
<td><strong>Soo-Jong Lee</strong></td>
<td>KONECT Secretary General</td>
<td>Tel: +82 2 308 6618</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Korea Organize Network</td>
<td>Fax: +82 2 376 1534</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ecological Conscious Teachers (KONECT)</td>
<td>E-mail: <a href="mailto:wiget@chol.com">wiget@chol.com</a></td>
<td></td>
</tr>
<tr>
<td><strong>Jun-Kwan Ahn</strong></td>
<td>Director</td>
<td>Tel: +82 2 730 1325</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Citizen’s Information Center for Environment</td>
<td>Fax: +82 2 730 1240</td>
<td></td>
</tr>
<tr>
<td><strong>Hye-In Hwang</strong></td>
<td>Coordinator</td>
<td>Tel: +82 2 735 7000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Citizen’s Information Center for Environment</td>
<td>Fax: +82 2 730 1240</td>
<td></td>
</tr>
<tr>
<td><strong>Kang-Sil Lee</strong></td>
<td>Co-representative</td>
<td>Tel: +82 63 282 8192</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Korea Women’s Associations United (KWAN)</td>
<td>Fax: +82 63 287 1226</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>E-mail: <a href="mailto:kangsillee@hanmail.net">kangsillee@hanmail.net</a></td>
<td></td>
</tr>
<tr>
<td><strong>Jae-Kyung Koh (Staff)</strong></td>
<td>Director, Division of Internatinal Cooperation and Education, Presidential</td>
<td>Tel: +82 2 3156 7390</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Commission on Sustainable Development (PCSD), Republic of Korea</td>
<td>Fax: +82 2 388 7646</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>E-mail: <a href="mailto:kjk1020@pcsd.go.kr">kjk1020@pcsd.go.kr</a></td>
<td></td>
</tr>
<tr>
<td><strong>Hyun-Jung Kim (Staff)</strong></td>
<td>Coordinator, Division of International Cooperation and Education, Presidential</td>
<td>Tel: +82 2 3156 7391</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Commission on Sustainable Development (PCSD), Republic of Korea</td>
<td>Fax: +82 2 388 7646</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>E-mail: <a href="mailto:hjkim@pcsd.go.kr">hjkim@pcsd.go.kr</a></td>
<td></td>
</tr>
<tr>
<td><strong>Kang-Ye Lee (Staff)</strong></td>
<td>Programme Assistant</td>
<td>Tel: +82 2 774 3982</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Asia-Pacific Centre of Education for International Understanding (APCEIU)</td>
<td>Fax: +82 2 774 3958</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>E-mail: <a href="mailto:kylp80@yahoo.com">kylp80@yahoo.com</a></td>
<td></td>
</tr>
<tr>
<td>Name</td>
<td>Position/Role</td>
<td>Address/Contact Information</td>
<td></td>
</tr>
<tr>
<td>-------------------------------</td>
<td>--------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td><strong>Yoon Kim (Staff)</strong></td>
<td>Programme Assistant, APCEIU</td>
<td>Rm 1010, UNESCO Building, 50-14, Myeong-dong 2ga, Jung-gu, Seoul 100-810, Korea Tel: +82 2 774 3982 Fax: +82 2 774-3958 E-mail: <a href="mailto:yoon_kim@hotmail.com">yoon_kim@hotmail.com</a></td>
<td></td>
</tr>
<tr>
<td><strong>Zabariah Haji Matali</strong></td>
<td>General Manager, AZAM Sarawak</td>
<td>Komplex Azam Jalan Crookshank 93000 Kuching Sarawak, Malaysia Tel: +60 82 411799 Fax: +60 82 258372 E-mail: <a href="mailto:zaba@sarawak.com.my">zaba@sarawak.com.my</a></td>
<td></td>
</tr>
<tr>
<td><strong>Rosalind Yang Misieng</strong></td>
<td>Conference Manager, SDI Sarawak</td>
<td>Komplex AZAM Jalan Crookshank 93000 Kuching Sarawak, Malaysia Tel: +60 82 415484 Fax: +60 82 412799 / 419799 E-mail: <a href="mailto:rosa@sarawak.com.my">rosa@sarawak.com.my</a></td>
<td></td>
</tr>
<tr>
<td><strong>Devanesan Nesiah</strong></td>
<td>Consultant, Centre for Policy Alternatives</td>
<td>24/2 28th Lane, Colombo 07, Sri Lanka Tel: +94 11 2565304 / 11 2565306 Fax: +94 11 4714460 E-mail: <a href="mailto:nesiah@palanka.org">nesiah@palanka.org</a></td>
<td></td>
</tr>
<tr>
<td><strong>Pongtep Manattrong</strong></td>
<td>Educational Supervisor, Region Lamphun 1</td>
<td>Lamphun-Pasang Road Tontong, Subdistrict Muang, Lamphun 51000, Thailand Tel: +66 5353 5096 Fax: +66 5351 2005 E-mail: <a href="mailto:Lamphun1@obec.go.th">Lamphun1@obec.go.th</a></td>
<td></td>
</tr>
<tr>
<td><strong>Le Thi Hoang Cuc</strong></td>
<td>Secretary, Head of Education Unit, Viet Nam National Commission for UNESCO</td>
<td>8, Khuc Hao Street Hanoi, Vietnam Tel: +84 4 1993802 Fax: +84 4 8230702 E-mail: <a href="mailto:hoangcuc@mofa.gov.vn">hoangcuc@mofa.gov.vn</a></td>
<td></td>
</tr>
</tbody>
</table>
Workshop Programme

Day One (November 22, 2004)
Open Forum: The Challenges and Tasks ahead for UN DESD

10:00 ~ 10:45 Opening Ceremony
- Opening Message:
  - Dr. Chul-Hwan Koh (Commissioner, PCSD, Korea)
- Welcome Message:
  - Dr. Sung-Yong Park (Acting Director, APCEIU, Korea)
  - Dr. Derek Elias (ESD Coordinator, UNESCO Bangkok Office)
- Congratulatory Address:
  - Dr. Samuel Lee (Secretary General, KNCU, Korea)

10:45 ~ 11:30 Key Note Speech I
  "Sustainable Future for the Asia and Pacific Region and the Challenges to the UN DESD"
  - Dr. Itaru Yasui (Vice-Rector, United Nations University, Japan)

11:30 ~ 11:45 Q&A

11:45 ~ 12:00 Break

12:00 ~ 12:40 Key Note Speech II
  "The Present State and Challenges of Education for Sustainable Development in Korea"
  - Dr. Suk-Jin Choi (Director-General, Educational Evaluation Research Department,
    Korea Institute of Curriculum & Evaluation, Korea)

12:40 ~ 14:00 Lunch Break

14:00 ~ 15:00 Case Presentation
- Central Asia
  - Ms. Tatiana Shakirova (Manager of Environmental Education programme,
    The Regional Environmental Centre for Central Asia (CAREC), Almaty,
    Kazakhstan)
- South Asia
  - Ms. Madhavi Joshi (Programme Coordinator, Centre for Environment
    Education, Nehru Foundation for Development, Ahmedabad, India)

15:00 ~ 15:30 Tea Break

15:30 ~ 16:30 Panel Discussion
Priorities and Themes for ESD in the Asia-Pacific
- Chair: Dr. Shuichi Nakayama (Professor Emeritus of Hiroshima University, Chair of
  the Education Committee, Japanese National Commission for UNESCO, Japan)
VII. Action Plans (Group Discussion Reports) 127

Panelists:
- Dr. Derek Elias (ESD Coordinator, UNESCO Bangkok Office)
- Ms. Zabariah Haji Matali (General manager, Angkatan Zaman Mansang (AZAM), Sarawak, Malaysia)
- Ms. Myeong-Su Baek (Senior researcher, Citizens’ Institute for Environmental Studies / KFEM in Korea)
- Mr. Lawrence Surendra (UNESCO-APCEIU)

16:30 ~ 17:30 Open Forum

Day Two (November 23, 2004)
ESD Implementation Strategies in the Asia-Pacific

09:00 ~ 10:45 Sub-regional Presentations
- Chair: Ms. Rosalind Yang Misieng (Conference Manager, Sarawak Development Institute, Malaysia)
- Presenters:
  - Mr. Haruhiko Tanaka (Chairman, Development Education Association and Resource Centre (DEAR))
  - Mr. Mohiuddin Ahmad (Co-team Leader & Social Development Expert, Integrated Coastal Zone Management Plan, Bangladesh)
  - Mr. Pongtep Manattrong (Educational Supervisor, Thailand)
  - Ms. Houth Ratanak (Director, Open Forum of Cambodia, Cambodia)
  - Mr. Devanesan Nesiah (Consultant, Centre for Policy Alternatives, Sri Lanka)
  - Ms. Le Thi Hoang Cuc (Secretary, Vietnam National Commission for UNESCO, Head of Education Unit, Vietnam)

10:45 ~ 11:00 Tea/Coffee Break

11:00 ~ 12:30 Presentation and Discussion
“The ESD Situational Analysis and Preparations for the Regional ESD Strategy and Workshop in February 2005”
- Presenter & Chair: Dr. Derek Elias (ESD Coordinator, UNESCO Bangkok Office)

12:30 ~ 14:00 Lunch Break

14:00 ~ 15:30 Group Workshop

15:30 ~ 16:00 Tea/Coffee Break

16:00 ~ 17:30 Group Workshops (continuing)

Strategies and Implementation Issues:
- Guidelines for Developing Teaching/Training Modules for Education for Civil Society
128 Asia-Pacific Strategy Planning Workshop on Education for Sustainable Development

- Guidelines for Developing Teaching/Training Modules for Education for Formal School System
- Guidelines for Developing Multimedia including ICT and Alternative Media

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>09:00 ~ 10:30</td>
<td>Group Reporting and Synthesis of Work - Plenary Session</td>
</tr>
<tr>
<td></td>
<td>● Co-chair: Dr. Derek Elias &amp; Mr. Lawrence Surendra</td>
</tr>
<tr>
<td>10:30 ~ 11:00</td>
<td>Tea/Coffee Break</td>
</tr>
<tr>
<td>11:00 ~ 12:00</td>
<td>Continuation of Plenary Session for Synthesis</td>
</tr>
<tr>
<td></td>
<td>(Recommendation and Suggestion for Action Plan and follow-up)</td>
</tr>
<tr>
<td>12:00 ~ 12:30</td>
<td>Closing Session</td>
</tr>
<tr>
<td>12:30 ~ 13:00</td>
<td>Farewell Lunch (Hosted by PCSD)</td>
</tr>
</tbody>
</table>